Alternative Complexities: The Archaeology of Pastoral Nomadic States

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Abstract Almost a century of systematic anthropological research on pastoral nomads has produced significant data and theory for understanding these mobile societies. Substantially less attention has been devoted to complex sociopolitical organization among pastoral nomadic groups and, in particular, to the large-scale polities referred to as nomadic confederations, states, or sometimes empires. This article reviews established ideas for how and why complex organization emerged among nomadic groups and then considers these ideas in the context of recent archaeological theory on statehood and new material evidence for pastoral nomadic prehistory. Revised conceptions of both the state and the nomad suggest that pastoral nomadic polities represent alternative forms of complex organization that were different from classic Old World states but still quite complex in unexpected ways. These organizational differences resulted from the mobile and flexible politics practiced among herding peoples and gave rise to regional polities based on spatial networking, distributed authority, and innovations in transport and exchange.

Keywords States · Complexity · Nomads · Pastoralism

Introduction

"Nomadic" and "state" are two concepts that when combined generally raise numerous questions among anthropologists. What exactly might a nomadic state be like and how would it be supported and governed? How would its dispersed peoples integrate? Could a nomadic state persist over time given a population made up of mobile herders? Such questions are certainly not new and could even be considered a leitmotif of cultural inquiry across regions of the Old World, beginning with the

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appearances of powerful nomadic groups early in recorded history. One such inquiry was Herodotus' examination of the Scythians of the Pontic steppe two and a half millennia ago. The Scythians were a horse-riding pastoral people whose military exploits included resisting the amassed armies of Darius I, the Achaemenid Persian emperor, in 513 BC. Taking advantage of their mobility, these western steppe nomads retreated into the grasslands while continually launching rear action attacks against the pursuing Persians (Herodotus 2003, p. 286). Weary and disorganized, Darius and his imperial army eventually gave up the fight and returned home.

Both classical Greeks and Scythians shared a common enemy in the expanding Persian Empire, which sheds light on Herodotus' interest in the Persian defeat. Acutely aware of the differences between Greeks and Scythians, a central problem for Herodotus in analyzing this event was understanding, from a Greek point of view, this foreign society of nomadic horse riders. According to Hartog (1988), the solution conveyed through the Histories was unique. Unlike many early historians who defined nomadic society as the cultural inverse of sedentary civilization, Herodotus' theory of nomadism was one of positive emphasis on strategy: a mobile strategy that both grew out of and imposed a different way of life (Herodotus 2003, p. 282). Hartog argues that this theory of cultural strategy clarifies how the Scythians dealt with their neighbors and mediated among themselves. It explains the Scythians relationship to their vast territory, to their own form of centralized authority, and to a protracted military resistance in the face of a powerful imperial invader (Hartog 1988, p. 202). This way of life was one in which animals and movement enabled the other critical relationships that defined the Scythian nomadic state (Rolle 2011; Sneath 2007, pp. 123-124).

This idea of pastoral nomadism as an encompassing lifeway rather than an indecipherable cultural "other" is useful for discussing the difficult theme of pastoral nomadic states. I emphasize the difficulty of this topic because both "pastoral nomadism" and "states" are evolving concepts that are debated and variously defined. In each case, typologies have been produced to facilitate communication and to form a basis for cross-cultural comparison, and in each case these typologies have proven controversial and embattled. A focus on pastoral nomadic polities is important because it occupies the peripheries of each of these discourses, i.e., pastoral nomadic complexity does not fit neatly into debates over pastoral nomadism or in debates over sociopolitical complexity. It provides an opportunity to highlight the edges of contentious typologies where the lack of fit requires genuinely new perspectives (Chapman 2003, pp. 40-45). Even though anthropologists have made great strides in reconceptualizing pastoral nomads and states, there is still much work to be done in joining these distinct bodies of theory in order to study the (pre)history of "pastoral nomadic states." This article offers a synthesis of ideas emerging from conversations about nomads and their regionalscale organizations in different parts of the Old World.

My argument begins with a review of dominant models for pastoral nomads, nomadic political economy, and statehood. These models place emphasis on the organizational limits of specialized herding and mobility and suggest that neighboring sedentary states were largely responsible for political complexity among pastoral nomadic groups. These established ideas are out of step with current anthropological inquiries into statehood and pastoral nomads, especially given recent archaeological evidence and new approaches to ethnography and ethnohistory. I review theories of political complexity, specialized herding, and mobility and then propose a "flexible politics" model for nomadic states that synthesizes many of the latest ideas. Archaeological case studies from eastern Eurasia and Greater Mesopotamia demonstrate regionally specific archaeological work on these issues. I argue against the idea that nomadic regional organization is contingent on, and a reflection of, sedentary and agricultural states. Rather, the unique forms of mobilityenabled complexity characteristic of nomadic peoples arise in part due to endemic political volatility and uncertainty, whether generated by interactions between powerful nomadic groups or with sedentary neighbors. Throughout, I strive to convey how a study of pastoral nomadic polities adds an important comparative perspective to the anthropology of political complexity.

Herding economics and the nomadic state

A common perception regarding nomads among settled peoples of many places and times has been one of curiosity or apprehension. The occasion of itinerant herds and their nomadic owners emerging from a desert or arid grassland was, in the view of predominantly sedentary populations, a cultural oddity (see Hole 1978 for a different opinion). To replace the persistent myths and stereotypes of nomads that grew out of such reactions, 20th-century anthropologists placed emphasis on nomadic ecology and economy as a way to explain nomadic lifeways (Dahl and Hjort 1976; Krader 1955; Lattimore 1940; Spooner 1973). According to this perspective, pastoral nomadism can be conceptualized as an alternative subsistence system suited to regions otherwise impractical for plant-based agriculture (Linseele 2010, pp. 45-46; Schlee 2005, pp. 27-28). It follows that herd animals are the means by which these "nonproductive" regions become productive through their conversion of arid land vegetation into meat, dairy, and secondary resources that are then appropriated by human communities (Chang and Koster 1986). Ideally, such a model might account for variation in nomadic practices based on differences in environment, resource distribution, herd composition, and the character of productive risk.

Anthropologists intent on achieving just such an understanding of nomadic variation turned to economic typologies for cross-cultural comparisons of nomadic groups. For archaeologists, the most influential of such approaches has been the work of Khazanov (1994, 2004, 2009; Khazanov and Wink 2001). Khazanov views pastoral nomadism as a food-producing economy based on specialization in animal husbandry and movement regimes involving a community or larger social aggregate (Khazanov 1994, pp. 16–17). He argues that groups more specialized in herding also must depend upon nonpastoral economies to supplement their one-sided and risk-prone production. According to Khazanov's model (1994, p. 85), nomadic peoples accomplish this by acquiring agricultural products from the "outside world," generally represented by classic Old World states. This central relationship

determines many characteristics of nomadic groups, and it especially has great effect on their political regimes. In most cases, indigenous nomadic politics are characterized by low population densities, a capacity to move away from conflict and resist authority, and economic production lacking reliable surpluses; all of these attributes should militate against sustaining complex organization (Burnham 1979; Irons 1979, p. 362; Khazanov 1994). Under certain conditions, however, the economic relationships nomads seek out with neighboring states have the potential to elicit and amplify inequality and hierarchy. Accordingly, Khazanov (1994, pp. 164, 196, 198, 228–229) contends that the external sedentary and agricultural world constitutes the primary foundations for complex organization among nomads.

This model of nomadic political dependency remains current and has been elaborated further by scholars in cultural anthropology, archaeology, history, and world-systems sociology. Treatments of nomadic statehood regularly draw upon Khazanov's work as well as on two other major variations on this theme of nomadic interaction with the sedentary agricultural world. One such variant seeks mainly to explain nomadic states and empires that arose on the eastern Eurasian steppe and suggests that grain and craft goods were not so much a necessity among nomads but were disproportionately beneficial to their economy and therefore greatly desired (Barfield 2001, pp. 15-19; Golden 2001, pp. 86-87; Kradin 2002). This provided a strong incentive for dispersed nomadic groups to organize at symmetrical levels with sedentary neighbors in order to obtain these goods through strategies of raiding, trading, and warfare. If the neighboring society in question was organized as a state, then, accordingly, nomads organized a symmetrical "state-like" polity, or what Barfield has called "imperial confederations." In addition to accessing staple goods, early nomadic peoples also sought to obtain luxury and wealth products in support of nomadic leadership, and these external resources sustained a stratified nomadic elite independent of any internal tribute or taxes from the nomadic population (Barfield 2001, 2003, 2011; Bondarenko et al. 2003; Kradin 2008).

Salzman has proposed another variant on the theme of nomad-state political interaction. In contrast to the above, Salzman (1999) does not view dependency on or desire for external goods as critical; rather he contends that, given pastoral nomadic conditions of production, we should expect mobile herders to favor egalitarian forms of organization. Due to the unpredictability of pastoral environments, Salzman (2004, pp. 68-69) sees mobile herders selecting flexible and collective rights of access to productive resources and discouraging the kinds of unequal control and differentiation that characterize complex societies. On empirical grounds, Salzman argues that ethnographic research demonstrates that when pastoral nomads are not egalitarian in organization, their complexity is usually linked directly to interaction with neighboring states (Salzman 2004, pp. 29, 98–101, but see p. 145). While Salzman draws on ethnographic evidence to support his ideas, archaeologists have proposed somewhat similar versions of this model. A good example is Zagarell's explanation for pastoral nomadic complexity in the western Iranian highlands during the fourth millennium BC. Zagarell (1988, 1989, pp. 298–299) maintains that trade with and political influence from urban state centers in the lowland Khuzestan plain impelled loosely confederated herders to

These approaches have subtle differences, but they all draw on a similar set of underlying propositions. High investment in herding, productive risk, and economic interactions define a political ecology for pastoral nomads that attributes to neighboring states a primary role in the shaping of nomadic organization. These models tend to discount the possibility of indigenous forms of statehood among nomads because of the way in which complexity and states are typically imagined. The classic definition of statehood is an organization that regulates stratified social relations by extracting surplus and monopolizing the use of force. If state organization is contingent on dependable surplus production and the inability of a population to move away from or resist that surplus appropriation, then the above models of pastoral nomadism indeed raise doubts about the potential for nomadic statehood. To my mind, problems emerge when the models developed for nomadic society and those for statehood 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 commonly attributed to external influences. The question arises as to whether this is an adequate appraisal of the nomadic past or the product of overgeneralization of models for both nomads and states.

Reconceptualizing ancient states and complexity

In archaeological research, the term "complexity" is rarely explicitly defined but is still widely used. One notable exception is given by Flannery (1972), who defines complexity as segregation within a society and the degree of centralized integration among its differentiated components. Whether acknowledged or not, this long-standing definition is still at the heart of much sociopolitical research carried out by prehistorians (Chapman 2007, pp. 14–15; McGuire 1983). More recently, archaeologists have developed models for society that are less systemic than those of the 1970s and firmly rooted in social context. Archaeologists have gradually shifted their understandings of sociopolitical process in ways that critique earlier emphasis on hierarchy and centralization as the fundamental constituents of complexity (McIntosh 1999; Wynne-Jones and Kohring 2007). This has led to alternative concepts that attempt to bridge the generality of systems theory and the particularity of historical orientations as a more nuanced way to compare across different societies (Feinman 2012).

Of recent frameworks, those focusing on heterarchy and adopting neural networks as an effective metaphor for social dynamics have had strong influence on archaeological thinking (e.g., Crumley 2001, 2007). Heterarchy and network analysis focus useful attention on horizontal forms of complexity and raise the question of whether hierarchical centralization is indeed a primary characteristic of complex organization or just one among many (Brumfiel 1995, p. 130; Neitzel 2000). Other important approaches have looked at long-term trajectories of sociopolitical communities in terms of resilience, collective action, and

organizational learning (e.g., Cioffi-Revilla 2005; McIntosh 2005; Redman 2005). Many archaeologists have turned to more detailed relational approaches that embed questions of organizational process within the day-to-day relationships perpetuated or modified by interactions carried out among individuals and groups (e.g., Brumfiel 1992; Feinman 2001; Smith 2010; Stein 2002). Each of these frameworks tends to place emphasis on different ranges of social scale and time elapse, but all share a common interest in process as opposed to structure.

Although the topic of statehood per se involves a different but related set of concerns, it nevertheless has been impacted by these developments in complexity theory (e.g., Feinman and Marcus 1998; Yoffee 2005). Prior ideas conflated complexity and "the state" by positing a rather narrow definition of statehood that was then assumed to be the epitome of complex organization (Chapman 2007). This classic conception of the state links the process of surplus capture and population control to the institutional structures of centralization and stratified hierarchy. As such, centralized power and oversight ensure that wealth and staple surpluses are extracted and redirected in support of a stratified social order (Claessen and Skalnik 1978; Cohen 1978; Fried 1967; Khazanov 1981). The state is therefore synonymous with these institutions, and as such the state stands outside social relations as a structure that supports and enforces internal differentiation. In fact, this description of statehood defines "the state" according to a relatively limited sample of largescale complex polities, all of which are sedentary, intensively productive, hegemonic, administrative, and centrally integrated (Smith 2003, pp. 90-94). Because sociopolitical complexity is so often linked to these sets of criteria, regional forms of complexity among nomadic peoples have tended to be underestimated and only tentatively associated with the condition of statehood.

Ironically, as researchers of nomadic societies have attempted to struggle with this received definition, anthropological understandings of "the state" have slipped out from under these attempts, becoming something of a moving target. States have been commonly viewed as powerful and consolidated engines of development across large-scale geographical regions. However, decades of archaeological research undertaken within the traditional heartlands of state emergence have gradually revealed a very different view. More recent discussions suggest that early states were probably less unified and hegemonic than usually thought (Adams 2001; Stein 1999, 2001, 2002), and the process of maintaining early regional polity was not one of stable institutional domination as much as on-going negotiations among diverse factions (Brumfiel and Fox 1993; Stein 2001). This is not to say that early states were peaceful; in fact, political negotiation was firmly rooted in inequality and differential advantage. Acts of repression, threat, and terror were often as much a part of the negotiative process as was monumentality, collective ritual, and degrees of power sharing (Yoffee 2005, pp. 33–34).

The effect of these newer ideas in archaeology has been to move analysis away from documenting the classic and restrictive definition of "the state" toward consideration of variability in political process over space and time (Feinman 1998, p. 96). These recent approaches do not as yet offer a unified set of ideas, but reappraisals of the archaeological record of early states in Mesopotamia, China, Egypt, Mesoamerica, and the Andes have brought forth a number of common

themes that archaeologists are now attempting to operationalize. One of these is an emphasis on political relationships as situational, agenda based, and multiscalar, i.e., drawing on individuals, family, local community, faction, and polity as scales of reference (Smith 2003, pp. 102–104; 2010, pp. 6–13). Another is the opportunistic suspension of terms like "state" or "chiefdom" in favor of more flexible concepts like "polity" or "political community" (Campbell 2009; Honeychurch 2012; Pauketat 2001). Unlike the monolithic term "state," which conjures up images of contemporary nations, the term "regional political community" begs the question of precisely what processes involved so many people in the daily work of political community building, i.e., what perpetuated differentiation and inequality across large social scales? Moreover, in those instances where regional political communities emerged by including smaller preexisting polities, how did those same processes change in order to support a much larger political collective? In relation to better understanding such interactive processes, archaeologists have developed ideas on leadership that go far beyond traditional exploitative and managerial models and instead recognize that politics could have been both asymmetric and participatory in ways that established forms of negotiated but conflicted consent (Feinman 2012, p. 33; Kanter 2009; Roscoe 2000).

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 macroregions in the form of multiple and often differentiated political traditions. Wright (2006) has considered these patterns in Mesopotamia and argues that multicentric dynamics were important experiments in political process that produced a kind of organizational learning over time. 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 and experimentation as well as numerous political failures. In other words, the "art" of multiparty negotiation (both top down and bottom up) had to be figured out before a large-scale organization could endure 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; these phases of organization include modes of dispersion, power sharing, and factional division as an intrinsic part of statehood. In line with this thinking, Pauketat (2007, p. 192) believes that even though we may conceptually distinguish certain structural properties representing state emergence, political process on the ground was probably much more gradual and continuous. This implies that instead of an instantaneous shift in leadership strategies, there would have been several decades of negotiated innovation to figure out the foundational political relationships of statehood. These constituted a new sociopolitical context in which subsequent generations of constituents would be socialized according to the sharply differentiated behaviors expected of rulers and commoners (Honeychurch 2012, pp. 56-58).

Given this theoretical ferment, it is all the more difficult to offer a straightforward definition of what is meant by the term "state." Nonetheless, it is at least possible to provide some working parameters for the purpose of discussing pastoral nomads and

their regional polities. I begin with the idea that the state is a social relationship characterized by ongoing negotiations between individuals who continue that relationship more or less day to day as a tentative and unstable consensus (Dietler 2003, pp. 271–272; Sneath 2007, pp. 185–186). States are also organizationally "complex," which according to McGuire's much cited model is characterized by vertical differentiation (inequality) and horizontal differentiation (heterogeneity) (McGuire 1983, pp. 101-104; cf. Smith 2003, p. 104). McGuire sees such differences in terms of structural and preexisting social positions that then configure relationships as they play out between individuals. Structure and relationships also can be considered the other way around. In other words, the manner in which relationships are continuously negotiated determines differences between people and consequently forms the social "groupings" by which they collectively understand those social differences (cf. McGuire 1996). To put it simply, an "elite" individual is not elite unless everyone else participates in behaving with him or her as an elite personage. Social order, therefore, is a minute-by-minute state of contingent affairs that might be dynamic or conservative in the way interactions either reinforce or subvert categories of social difference (Bradburd 1997, p. 900). Social organization can be thought of as an averaged outcome of these shifting negotiations over some period of time and at some prescribed social scale. As such, sociopolitical complexity is not a formalized structure at all but a collective propensity (or susceptibility) to engage in negotiations of exclusive differentiation over time, with enough consistency to yield an observable modal pattern of social difference.

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 ideology, and the bestowal of titles, ranks, and wealth to incur loyalty, as well as factional alliances of opposition (Baines and Yoffee 1998). Collective negotiation of these exclusive and unequal differences over very large social scales and long time frames is certainly an organizational feat but also one with real human costs. This condition is in no way better or "more advanced" in some manner, but it does assume an investment in political technique on the part of all participants, whether commoner or elite. Based on this idea, "statehood" pertains to polities that sustain negotiations of exclusive and asymmetric differentiation over regional social scales and over generational time periods. While "generational" time should be clear enough, "regional" scale must be defined according to prior political contexts. Generally, it involves an integration of previous political communities resulting in a large-scale polity across which face-to-face interactions no longer interrelate all constituents. Much of the organizational "work" of statehood therefore involves enacting social differences that usually rely on face-to-face negotiations across a political community so large that it can never entirely convene. This explains the importance of symbolic representations, ideology, and partial and episodic participation in statesanctioned collective events. The logistical challenge of size and integration also clarifies the problem of factioning and local resistance, both of which can be organizationally addressed by systems of protected delegation (i.e., administration)

and forms of power sharing (multiple seats of authority, aristocratic assemblies, and plebiscite).

Finally, in place of the spatial metaphors of "horizontal" and "vertical" differentiation (i.e., heterarchy and 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 deference that permits a sorting of individuals into groups of either "deferred to" or "deferring to." These groups we imagine 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. In effect, the terms hierarchy/ heterarchy and centralized/distributed are only approximate configurations that express how numerous interactions register inequality and exclusion over time. In my opinion, inequality and exclusion are the main characteristics on which to focus; the more structural terms can be seen as temporal expressions of how consistently agents acted on or accepted these characteristics. Over time, expressions of hierarchy and heterarchy and centralized and distributed authority will be mixed, multiple, and compounded and can be expected to shift relative to conditions (Feinman 2012; LeCount and Yaeger 2010; Zagarell 1995). In other words, hierarchy and centralization, or the absences thereof, are not absolute criteria for statehood; rather they must be qualified in relation to time, process, and context.

Drawing on these ideas, statehood can be assessed according to (1) the quality of constituent political relationships in terms of exclusive and unequal differentiation, (2) the social scale at which these pertain, (3) how long they persist, and (4) the amount of social negotiation and input to negotiation (i.e., technological, material, ideological, and symbolic) needed to maintain these relationships on a day-to-day basis. This approach encompasses classic centralized, hierarchical, and administrative states but also makes room for a wide range of variation in the way regional political complexity might be manifested. In particular, this approach to sociopolitical complexity and early statehood makes possible full consideration of the kinds of regional polities that emerged within areas long inhabited by peoples of pastoral nomadic lifeways and traditions.

Rethinking pastoral specialization and nomadic mobility

In addition to a narrow conception of statehood, most discussions of herders and complexity also focus on a narrow view of specialization as the basis for pastoral production and political economy. Pastoral specialization is a condition that many anthropologists have attempted to account for and is often thought of as being a truer or purer form of mobile herding. The term "pastoral nomad" already indicates a substantive investment in animals and movement, so determining an arbitrary threshold at which high investment in herds becomes "specialization" per se is not a simple task. To complicate matters further, the definition of specialization itself is neither singular nor uniform. In the simplest sense, to specialize is to concentrate effort within a particular activity, but the concept of specialization assumes a much wider range of meanings and applications. The most common version has been an economic understanding that combines a series of associated ideas including singularity of occupation, division of labor, exchange and dependence on exchange, and prescribed modes of interaction surrounding that exchange (Bates and Lees 1977; Lees and Bates 1974; Linseele 2010, p. 45). When applied to pastoral nomadic lifeways, this definition implies high mobility, limited opportunity to develop or to engage in other activities, and dependency on agricultural supplement by way of external interactions and trade. Moreover, these economic dependencies also are viewed as major ingredients for enhancing military organization, leadership and integration, and wealth extraction on the part of nomads (Lees and Bates 1974, p. 191).

As with every other human society, pastoral nomads engage with, are influenced by, and influence the outside world around them; these interactions are indeed critical to the ways in which nomadic peoples build polities and express complex organization. Specialization has played a prominent role in the question of nomadic complexity precisely because it necessitates forms of regional and interregional interaction that are defined by external economic dependency. These anticipated interactions provide a convenient solution to the problem of pastoral nomadic polities and one that is familiar to most archaeologists, namely, interaction with socalled centers of civilization and established states elicits higher levels of complexity among peripheral societies (Champion 1989; Price 1978). One question, however, is: Can something as nuanced and contingent as intercultural or intergroup contact be expected to consistently conform to modes dictated by pastoral specialization, productive risk, and the need for exchange? In my opinion, a deeper understanding of interaction with neighbors requires more attention to the ideological, relational, and knowledge-based lifeways associated with pastoral nomadism. Just as ideas about statehood have changed because of evidence for well-documented organizational variation, archaeological and new ethnographic evidence has likewise exposed substantial variation in the ways nomads invest in their animals and movement given different contexts. Developing a sense of this cross-cultural range begins with some simple questions: How important is exchange with farmers and does specialization always imply dependency? What different expressions of specialized herding are recognizable? And, in addition to productive mobility, what other roles does mobility play among pastoral nomadic groups?

The archaeological record leaves little doubt that high-investment pastoral nomadism was sustainable over the long term without external agricultural supplement. This has been a major finding by archaeologists in East Africa (Bower 1991; Gifford-Gonzalez 2005, p. 214; Lane, in press; Marshall 1990, 1998) and in parts of the western and eastern Eurasian steppe where research has explicitly tested and rejected a dependency hypothesis (Anthony and Brown 2007; Frachetti 2008; Houle 2010). In fact, on a cross-cultural basis, the role of farming and domestic grain in pastoral nomadic economies is, as we would expect, quite diverse. Prehistory and history offer a wide range of variations on this theme, including examples that indeed fit the standard model in which exchange for domestic grain was a central part of the pastoral nomadic economy (Abdi 2003; Gilbert 1983;

Linseele 2010; Sadr 1991). Other examples demonstrate that hunting, gathering, and fishing often accompanied primary investments in herd animals (Marshall and Hildebrand 2002) and that herders could invest heavily in animal production and opportunistically practice small-scale horticulture on their seasonal rounds (Hole 2009, p. 263; Levy 1983). Still other cases document members of a single corporate group circulating fluidly between the two distinct economic sectors of village-based farming and intensive mobile herding (Salzman 2004, p. 33; White and Johansen 2005, pp. 416–417; Zagarell 1989, pp. 284–285). Pastoral nomads of the eastern steppe even organized intensive irrigated cultivation systems for their own internal consumption while also maintaining high investments in their herd animals (Di Cosmo 1994; Honeychurch and Amartuvshin 2007; Rogers 2012).

Turning to the question of specialization in animals for economic exchange, we also encounter variation in trade formats, targeted products, and herd makeup, none of which mandate a critical dependency on trade. The cross-cultural conditions that supported trade varied dramatically from place to place and over time. These have been documented both archaeologically and ethnographically as ranging from market or marketlike exchange in Greece and Iran (Bradburd 1996; Halstead 1996) to ritualized and ethnicized forms of exchange in the Central Andes and West Africa (McIntosh 1993; Parsons et al. 1997). The kinds of pastoral products and services exchanged in the past also were diverse as indicated by the archaeological record. Herd animals were given priority in situations where secondary products like dairy, wool and other fibers, skins and leathers, and traction and transport had high value among both pastoralists and nonpastoralists (Galvin 1987; Greenfield 2010; McCorriston 1997; Sherratt 1981). These specializations came in varying degrees of investment and in many cases did not rule out more diversified herding or other subsistence practices. One example of this is the lucrative horse trade between Mongolia and China, which led pastoralists to invest in large-scale horse herds as early as the mid-first millennium AD and probably earlier given faunal and equine DNA evidence (Cai et al. 2009; Linduff 2003). Notable in this respect are the mobile and dispersive techniques Mongolian herders developed to place emphasis on horses while still keeping sufficient small stock in tow for family and community consumption (Humphrey and Sneath 1999, pp. 225–228). Despite a specialization intended for external exchange, pastoral communities in Mongolia did not incur increased productive risk, instability, or dependency.

Nor did pastoral specialization promote only economic forms of transfer. Trade with nonpastoralists was certainly one motivating factor for increased herd production, but "exchange" per se is only a small subset of the kinds of interactions that encouraged higher investment in pastoralism. Specialization also can depend on the social value of herds, which corresponds to the potential for converting animals and pastoral resources into other cultural forms, including symbols, materials, information, relationships, and capacities—each having importance to herders and often for their neighbors as well (Swidler 1973, pp. 28–29). This concept of conversion does a better job of capturing what herd animals actually represented to pastoralists rather than just assuming their value was based upon a functional kind of economics. In addition to their being used as food and for secondary products, herd animals in many societies were essential for constructing social relationships,

representing social capital, for offerings in ceremonies, as indicators of status and prestige, and as ideological links to the divine (Bonte 1981, pp. 40–41; Comaroff and Comaroff 1991; Denbow 1999; Di Lernia et al. 2013; Hutchinson 1992). The conversion of animals into such socially and symbolically meaningful categories often bestowed social value on herds far in excess of their economic exchange value. As such, this capacity to translate pastoral assets into other realms of importance was another good reason for high-investment herding but one rarely considered in models for pastoral nomadic prehistory.

These examples all suggest that instead of understanding pastoral specialization as a threshold condition with constant characteristics, it is better seen as a continuum of greater or lesser investments in herds that does not necessarily include or exclude other productive practices, exchanges, or interactions. In this respect, Salzman (1972) offers a useful alternative approach that he calls multiresource and multipurpose nomadism. In this model, a wide variety of pursuits are made accessible by circulation across the landscape, but they are backed up by a core investment in animal herding. Depending on the local setting, combinations of production might draw on agriculture, hunting, gathering, fishing, specialized crafts and services, exchange, and even participation in the labor market-all tethered to the pastoral economy and its capacity for movement and choice. Moreover, the practice of multiresource nomadism does not exclude the potential for herders to invest in higher degrees of animal specialization on a routine or continuous basis. This model shifts the focus of specialization away from an economic metric of onesided production to an altogether different focus on the specialty of being flexible, i.e., maintaining the flexibility to readily adjust resource emphases, intensification, and degree of mobility relative to shifts in the local environment and social setting (Anderson and Johnson 1988, pp. 10–11; Salzman 1971, pp. 105–106). In support of Salzman's approach, archaeology provides ample evidence for this alternative version of flexible specialization (Frachetti and Mar'yashev 2007; Gatto 2011; Gilbert 1983, pp. 114–115; Honeychurch 2010; LaBianca 1990; Rosen 2003, 2008; Spengler et al. 2013).

Expertise and variability-seeking adaptations

Other nuances of the specialization concept also have remained relatively unexplored in most discussions of pastoral nomads. This is particularly apparent when it comes to herding expertise and knowledge, since these are topics that also pertain to the idea of being a specialist (Agrawal 1993, pp. 262–263; Fernandez-Gimenez 2000; Homann 2005; Sneath 2003; Sullivan and Homewood, in press). Models of the boom–bust herding economy and high productive risk rarely address the depth of skill herders possess in managing animal communities, environment, and spatial and temporal change. One notable exception has been archaeological work on specializations in the Middle Niger River region of West Africa (McIntosh 1993, 2005). This region has long been characterized by unpredictable and radical shifts in the makeup of productive resources; yet, archaeologists have documented long-term specialized economic communities rather than the diversified ones that we might expect. One explanation is that ritualized exchange between ethnically differentiated specialists, including pastoral nomads, cultivated the kinds of deep knowledge needed to sustain production despite substantial variability in resources and conditions (McIntosh 1993, pp. 205–206).

A similar pattern can be seen in today's WoDaaBe cattle nomads, a subgroup of the Fulani in southern and eastern Niger. The WoDaaBe are market-oriented specialists who utilize in-depth knowledge of their animals and animal requirements for optimal health and reproduction in an extremely marginal environment (Krätli 2008; Loftsdóttir 2001; Schareika 2001). By virtue of such expertise, the WoDaaBe consistently maintain substantial herds of one of the largest breeds of African cattle on pastures that, as one ethnographer puts it, could barely sustain small stock given conventional herding practices (Krätli 2008, p. 11). Knowledge in this case is not generalized but specific to a herd and its genealogical history through a process of pre-inheritance, whereby a herder grows up working with and observing the very animals that he will inherit in the future (Krätli 2008, p. 19). A herder therefore has direct experience with different lineages of cattle and how they perform over varying conditions in what is a very close partnership between animals and human beings.

Given the unpredictable and transient vegetation patterns in WoDaaBe territory, information gathering, itinerary planning, and pinpoint accuracy in movement are all critical factors for cattle herding. However, a deep knowledge of the animals themselves, their walking capability, their grazing habits, likes and dislikes, and even the social interactions between animals that govern the order of grazing is just as critical in selecting the best pasture suited for a specific herd at a particular time (Krätli 2008). In contrast to an attempt at buffering variability and risk (Halstead and O'Shea 1989), the WoDaaBe intentionally exploit variation by way of their knowledge, expertise, and movement in order to maximize herd production (Krätli 2008, p. 19). This strategy is an example of a nonequilibrium approach to pastoral nomadism in which targeting a steady state of conditions is abandoned in favor of exploiting rapidly changing circumstances and environmental heterogeneity as a reliable resource (Roe et al. 1998; Sandford 1982). The underlying logic is that where unpredictability and change are the only constants, expertise in change can be profitable and perhaps the only good alternative.

By emphasizing the intrinsic dynamism of herding rather than its limitations, the nonequilibrium treatment of productive risk places pastoral nomadism in a very different light in terms of expectations for stability and sustainability (Humphrey and Sneath 1999, pp. 270–272; Sullivan and Homewood, in press). While pastoral nomads are indeed faced with a productive cycle that tends to emphasize extremes in accumulation and losses over time (i.e., a boom–bust pattern), knowledge, skills, and cultural traditions compensate for, or even profit from, productive variability. The assumption that high investment in herding necessarily incurs detrimental risk and instability is not born out by the archaeological, ethnohistoric, or ethnographic evidence; nor is the shape of herder interactions with neighbors rigidly defined by specialization in pastoralism. Given varied circumstances, high investment in herd animals is but one mode in a wide array of options that nomads draw on and shift in and out of (Chang 1993, pp. 699–700; Marx 2006). Expressions of specialization will therefore be as diverse as the respective settings and traditions of the pastoral

nomads in question and the same can be expected for modes of interaction with nonpastoral groups (Salzman 2004, pp. 10, 139–140).

Strategies of movement

High mobility also is included in the definition of pastoral specialization. The logic for this is straightforward: investment in animals creates larger herds that require greater spatial circulation to access sufficient pasture. There is certainly an important relationship between higher investment in animals and movement, but it is not a simple or a linear one (Frachetti 2008, pp. 368-372). Many variables must be considered in this formula, especially alternative purposes and contexts for moving (Barth 1973; Schlee 2005, pp. 22-23). For example, to understand diachronic phases of movement and production in the Tell Hesban region of Transjordan, LaBianca and Witzel (2007) found that they had to adjust an earlier emphasis on food systems as a defining context for sedentarization and nomadization. Decades of excavation and survey in the Hesban region contributed extensive material evidence that pointed to flexible shifts between mobile and less mobile lifeways around the central tell during the Bronze Age through the Islamic period. From this evidence, LaBianca and Witzel argue that these shifts cannot be interpreted without compounded scales of context. In their opinion, it is the intersection of regional and local scales of tradition, politics, religion, and food economics that best explain the observed changes in regimes of movement around the tell site (LaBianca and Witzel 2007, pp. 64-65).

Studies like this have led a number of scholars to question the priority of animal needs as the basis for movement; instead they make the case that the benefits of mobility could be a primary reason for maintaining a herding lifeway (Barth 1961, p. 149; Chatty 2006, p. 2; Irons 1974; Lancaster and Lancaster 1998, pp. 25-26). Nomadism is one way to mediate complex interactive and political arenas, and these political uses of movement among herding groups have been well documented by ethnographers. The best known account is the detailed study by Irons (1969, 1975) of the Yomut Turkmen in northeastern Iran. He 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 over much of the 20th century (Irons 1974, pp. 647-653). The Yomut 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, pp. 182–185). Similar uses of strategic mobility have been reported for nomadic groups in Afghanistan (Shahrani 1979, pp. 220-221), Tibet (Ekvall 1961), Pakistan (Ahmed 1981), and Greece (Chang 2006, pp. 31, 34), among many others.

There is one problem, however, with the way this important set of observations has been applied to nomadic societies in prehistory. Based on ethnographic perspectives, the strategic deployment of pastoral mobility is most often a form of political action resisting centralized authority. Salzman (2004, pp. 29, 68–69) 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. This capacity to move out from under authority has consistently been referenced to explain why pastoral nomads did not organize complex polities unless they were in some way impacted by a neighboring state (Barfield 1993, 2001; Burnham 1979; Salzman 1979, 1999). Keep in mind that during the mid-20th century, when much ethnographic work was in progress, pastoral nomadic populations were largely integrated within (or struggling against) powerful postcolonial nation states; these were conditions that had significant consequence for pastoral nomads' lifeways, organizations, and actions but that were not necessarily indicative of their historic or prehistoric past (Barnard 2009, p. 21; Bradburd 1997; Gellner 1973, p. 7; Hole 1978, p. 134; Rowton 1981, p. 26).

The capacity to "vote with one's feet" has long been a factor in pastoral nomadic organization; however, when it comes to politics within a mobile society, mobilityrelated techniques for negotiating political relationships were likely as much about contesting, asserting, or consenting to authority as about evading it. Far from being intrinsically antiauthoritarian, mobility was an important part of factional negotiations that both assembled nomadic polities and, at other times, resisted their emergence. A 17th-century example of such "mobile politics" from the Kalat khanate, a nomadic polity of western Pakistan, demonstrates how central rulership can influence movement for political objectives. Mountainous terrain and a strongly embedded local aristocracy created circumstances in which the khan and his supporters could not militarily coerce or easily access many areas within khanate territory. Nonetheless, a major source of income for local aristocracy was the 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).

Cultural expertise in mobility, managing relations over space, and involvement in mobile conflicts all gave rise to a pastoral nomadic politics built on a substantially different architecture. Some characteristics of this mobile strategy are well known from historical accounts and include monitoring and controlling pathways of movement, 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 many nomadic groups conducted politics among themselves as well as with non-nomadic communities (Honeychurch 2015). I would expect that unpredictable, rapidly transforming, or confining sociopolitical regions, whether made up of competitive nomadic groups, rising and falling sedentary states, or imperial frontiers, would have been the kinds of settings in which pastoral nomads drew on these traditions of mobile politics. Accordingly, the pastoral nomadic deployment of flexible social formations and mobility as a way to manage the vicissitudes of sociopolitical fortune is a specialization in regional

dynamics rather than in herd animals (Chang 1993, pp. 689, 699; Pastner 1971, p. 183).

To approach the question of nomadic statehood, a broader perspective on pastoral specialization and nomadic mobility is clearly needed. I have focused on the noneconomic side of pastoral nomadism in order to reveal the importance of variation over time and space. In response to a model of high-investment herding that stipulates greater mobility, limited opportunity to develop or to engage in other activities, and dependency on agricultural supplement, my analysis emphasizes a series of contrasting points. First, pastoral nomadic specialization has variable forms, and different forms are practiced in different regions; therefore, the range of interactions engaged in by nomadic communities also is varied and cannot be defined by simple economic need. Second, specialization is not a steady state; instead, it shifts and modulates according to conditions, and this shifting back and forth does not necessitate a loss of other knowledge and practices. Furthermore, "specialization" is itself a variable concept; while high investment in a productive sector is sometimes associated with interdependence, necessary exchange, and division of labor, these ideas need not be emphasized at the expense of other aspects such as expertise, knowledge, and social value. Finally, movement is associated with many kinds of goals in addition to sustaining animals, not least of which is facilitating the kinds of political negotiations that configured complex pastoral nomadic polities.

Statehood, nomads, and political flexibility

When writing about a topic like "nomadic states," it is tempting to argue against older definitions and conclude one's argument by providing a new definition without ever questioning the underlying assumptions that such terms imply. In attempting to clarify the relationships between complex organization and pastoral nomads, I do not suggest that a number of polities created in different places and times were all examples of a single organizational pattern that we should call the nomadic state. Instead, it is more productive to recognize the many ways that states involved peoples with pastoral nomadic traditions and propose some organizational influences that these traditions might have introduced to the character of statehood in different regions.

Four processes stand out as major ways that pastoral nomadic traditions and statehood coalesced (cf. Khazanov 1994, pp. 231–233; Paul 2003, p. 29). The first and most obvious case is that of nomadic peoples creating their own states by primarily involving pastoral nomadic populations as state constituents. The most compelling and best-known examples of this process are the many states and empires that emerged within parts of the Eurasian steppe zone. The second case comprises states that emphasized functional derivatives of pastoral mobility and culture, such as the development of long-distance trade and transport networks. In these states, nomadic technologies, values, social relationships, and ideologies were not incompatible with new formats of organization that often included urban centers and intensive agriculture. Over time, however, pastoral nomadism in such polities

had the potential to become a less represented sector within a more diverse assemblage of state-supported pursuits and practices. Two examples of this process are the Garamantes polity of southern Libya (Di Lernia and Manzi 2002; Liverani 2005; Mattingly 2003) and the Nabataean state in the southern Levant (Politis 2007).

The third case involves an organizational synthesis of pastoral nomadic and nonnomadic political systems. This process results when nomads conquer and occupy an existing non-nomadic state or when political groups with long histories of integrated nomadic and sedentary sectors construct their own state. Good examples of such polities with combined nomadic and sedentary traditions include the Parthian empire (Olbrycht 2003; Trinkaus 1987; but see Hauser 2005), the Kushan state (Liu 2001), the Yuan empire (Louis 2009; Rossabi 2009), and the Kalat khanate (Swidler 1972). The fourth and final case involves the process of nonnomadic state expansion that integrates substantial pastoral nomadic populations in such a way that their economic, military, or ritual attributes become a critical part of state structure. Such roles have been assumed by pastoral nomads in the Nubian kingdom of Kerma (Gatto 2011; Honegger et al. 2009) as well as in the Andean state of Tiwanaku (Janusek 2006; Lynch 1983; Webster 1993) and the Incan empire by way of its incorporation of the Lupaqa kingdoms (Murra 1968; Stanish 2000).

Pastoral nomadic participation in the making of a state meant that political negotiations were shaped in part by respective pastoral nomadic politics and cultural capacities. Although the above examples span the Old and New Worlds and represent substantially different cultures, one underlying nomadic influence worth investigating is the organizational effect of movement and flexibility. Flexibility is not a necessary part of pastoral nomadism, but under conditions of uncertainty and especially given a competitive political environment, a wider range of options provides distinct advantages, and mobility helps afford those options (Hole 2009). When called upon, mobile herding is particularly well suited for supporting flexibility, and this can contribute distinctive qualities to nomadic political organizations or to those polities in which nomads played a significant part (Chang 2006, pp. 31, 34; Lancaster and Lancaster 1998, pp. 25-26). Three practices, mentioned above and widespread among many herding groups, demonstrate how movement and flexibility might have influenced nomadic statehood. These practices are multiresource and multipurpose nomadism, malleable social architectures, and expertise in conversions of value. I am specifically interested in how these pursuits introduced dispersal, flux, and diversity into the politics of nomadic peoples.

Dispersal over space

Pastoral nomadism can be approached as a lifeway in which the cultural capacity for adjustment is developed, elaborated, and idealized around a core investment in herd animals (Casimir 1992, pp. 16–19). As discussed above, Salzman's model of multiresource and multipurpose nomadism underscores the importance of flexibility and movement in terms of pastoral production. It describes herders as possessing skills in a range of productive pursuits and the expertise to contextually adjust the degree of investment according to conditions. As such, pastoral nomadism is an

ideal tether for grounding diverse capabilities, skills, and knowledge that make possible multiple options for herding communities. Nomadism facilitates these options by making the location and period of residence a matter of choice and by bringing households into new resource zones that offer alternative productive opportunities. Yet this form of production requires more than simply moving between locations at the right time; it must be supported by social relationships with other groups at different sites of activity and also by social ties within the pastoral community despite its dispersal. Geographic circulation implies that internal and external relationships are mediated by space, distance, and dispersion; therefore, an important part of this strategy is a cultural and social facility with spatial networking and the capacity to maintain a variety of relationships over distance (Khazanov 1994, pp. 139, 142; Porter 2004, p. 69; Schlee 2005, pp. 35–36).

Movement supports multilayered strategies to enhance household productivity; in turn, mobility as a deeply embedded practice is supported by malleable social configurations that accommodate the often far flung networks structured by pastoralists. In comparison to more sedentary organizations, pastoral nomadic communities are particularly notable for their fluidity, transformation, and recombination (Ingold 1984), although such propensities obviously have limits and occur within a framework of socially accepted practices. Examples can be found across social scales of nomadic organization, beginning with the remarkably fluid coresident groups of herders in which household partners change seasonally (Ingold 1986, pp. 177–178; Tapper 1979, p. 46). Contingent shifts in larger corporate groups also have been documented, such as the tribal realignments described generally by Lindner (1982) and in specific terms by Beck's (1990) descriptions of the Qashqa'i. Recombinations are likewise apparent in those cases where nomadic groups incorporate sedentary and urban sectors and facilitate the opportunistic movement of households between these different community segments (Alizadeh 2008, pp. 90-91; Humphrey and Sneath 1999, pp. 300-301). If flexible production, geographic circulation, and the maintenance of far-flung networks are one side of pastoral flexibility, the other side clearly involves social forms that are pliable, inclusive, and synthetic in support of these endeavors.

These points suggest a relationship among geographic expanse, a preference for maintaining options (i.e., flexibility), and the articulation of movement, scheduling, information gathering, and communication. Clearly, the motivating factors behind movement and flexibility exceed the requirements of provisioning herd animals. Instead, what is remarkable is the extent to which a life of maintaining herds enables these diverse cultural and social capacities so well suited to negotiating uncertain sociopolitical environments (Ahmed 1981; Bates 1971, pp. 127–128). As a political adaptation, these lifeways produce forms of negotiation that treat movement, space, and flexibility in very interesting ways when it comes to regional organization. Since one of the major problems of statehood concerns the creation of political relationships over large spatial scales in the absence of face-to-face interaction (i.e., dispersal), this kind of nomadic spatial expertise would seem almost preadapted for supporting social and political expansiveness.

On the other hand, such spatial expertise does less well at sustaining strong centralization, micromanagement, and coercive political techniques. Relationships carried out across spatial expanses require greater latitude; likewise, as the spatial extent of a polity increases, political negotiations should become increasingly strategic, opportunistic, and flexible. What then are the implications of these spatial processes for nomadic statehood? I would anticipate a willingness to distribute decision-making responsibility and the capacity to tolerate higher levels of autonomy in outlying centers. In addition, an ability to maintain flexible organizational structures would make sense along with a political emphasis on inclusiveness and an ability to synthesize cultural differences. Finally, instead of political techniques for comprehensive micromanagement, statecraft among nomadic peoples would certainly emphasize strategic methods of control that require limited expenditure and act as deterrents or incentives (i.e., probabilistic control) rather than as directives enforced by constant monitoring (i.e., determinative control).

Flux over time

The pastoral nomadic capacity for contextual change and the systematic incorporation of multiple options is not haphazard but has diachronic patterning. Once again, Salzman (1978) offers yet another intriguing model for understanding flexibility as a cultural phenomenon through time. He proposes that nomadic societies, as part of their flexible makeup, retain alternative modes of organization that can be enacted when circumstances are appropriate (Salzman 1978). These various modes are retained as social models of suitable relationships in the form of what Salzman calls "ideologies in reserve." He argues that among pastoral nomads, changes in conditions could evoke "alternations in organizational emphasis [between] replicate and specialised, nomadic and sedentary, segmentary and hierarchical, network and group, centralised and decentralised" (Salzman 1978, p. 624; cf. Tapper 1990). Therefore, given time, the pastoral nomadic propensity to modulate in relation to dynamic settings would likely produce these modes of relationship and behavior, socially remembered and embedded as part of a group's long-term tradition. This multimodal shifting is not unique to pastoral nomads (e.g., Fowles 2002; Gearing 1958) but represents a more general approach to the organizational dynamics of flexibility. It emphasizes "heterostasis," or the propensity to shift between several states of organization rather than "homeostasis," a tendency to maintain a single state with tolerance ranges around it (e.g., Adams 1978; LaBianca 1990, pp. 20-21).

Multiple modes of organization help explain ethnographic and historical accounts of nomadic "dispositional leadership" in which political authority can at times be highly centralized and at other times distributed among regional factions (Khazanov 1994, p. 166). Some scholars view this potential for flux between centralized and decentralized forms of authority as further evidence that pastoral nomadic peoples could not sustain regional scales of complex organization; but seen in this light, it may indicate just the opposite—an exceedingly realistic approach to integrating a large-scale complex polity. The anthropological discourse over these flexible propensities among pastoral nomads usually assumes that in order to enact such strategies, egalitarian organization would have been required by default. Others claim that these cultural inclinations for flexibility do not conform to any single kind

of organization but in fact are expressed in both egalitarian and stratified nomadic groups (Cribb 1991, pp. 39–43). From a perspective of statehood, there is much to learn about mobility-enabled and flexible politics when the focus is on negotiation and process instead of structure. If, as suggested above, the expansion in scale of any polity must incorporate greater latitude to support that expansion, then flexible organization must be an intrinsic part of complexity rather than its antithesis. The real question to answer is: In what variety of ways can such latitude be sociopolitically configured?

Diversity over scale

Tasked with explaining the very large empires built by east Eurasian nomads, Barfield (2001) makes the intriguing case that these polities utilized their size to exploit spatial and cultural diversity for political ends. In my opinion, this is a good description of many political economies built by pastoral nomadic groups across the Old World. By virtue of their mobility and propensity to network across space, nomads often became aware of and culturally adept at managing variation to their advantage. One way to do this is by sustaining a system of conversions that makes animals, goods, services, skills, and information interchangeable, so that underlying value might be preserved or even enhanced in multiple forms despite variation over space and time. Given uncertainty in resources, production, and sociopolitical environments, the possibility of converting between different forms of value creates significant options and flexibility for pastoralists. The simplest conversions of course are reinvestments of surplus between forms of capital, e.g., from pastoral wealth in animals into land ownership or from other forms of wealth into animals (Barth 1961, pp. 103–104; Dyson-Hudson 1972, p. 14; Khazanov 1994, p. 158). These kinds of conversions are important because they lock in animal surpluses that might otherwise fall victim to the next drought, unseasonal snowfall, or nomadic raid.

However, in discussing pastoral specialization above, I pointed out that conversions of value can be construed in much broader terms to include transfers between materials, nonmaterials, symbols and ideas, and relationships. Such conversions enable greater options within communities but also have the potential to structure asymmetries and political orders based on relationships between "haves" and "have nots" (Salzman 1981, p. 161). For example, conversions of labor and service enable households with herd losses in need of daily subsistence to end up working for households with herd gains in need of labor. In this way, those with losses continue their viability within the herding community but as a dependent part of a patron-client system. These asymmetric transfers also can be embedded within larger political economies that take advantage of their geographic size and scale to produce additional conversions through exchange and thereby, potentially, even greater inequality. I emphasize such conversions between forms of value and between different regions as part of a dynamic, flexible, and mobility-enabled political economy that could and certainly did support complex organization among many nomadic groups.

An example of such a nomadic political economy is described in Sáenz's (1991) account of the Saharan Tuareg. The Tuareg are a nomadic camel-herding

confederation distributed across North and West Africa and well known for their social hierarchy, slave holding, military and transport prowess, and their lively music and verse. The Tuareg polity has roots that stretch back over four centuries in the arid Saharan environment, infamous for its marginal conditions and unpredictability. Among these desert camel herders, the conversion of productive mobility into military and spatial control over the desert caravan routes resulted in the accumulation of nonpastoral wealth from caravan tribute in the hands of a warrior aristocracy. This nonpastoral wealth could then be partly converted into pastoral wealth through the purchase of additional camels and the enlargement of elite herds.

Tuareg animal holdings were divided up spatially in order to buffer against local environmental downturn; these distributed subherds were then cared for by impoverished commoners who had lost their own herds. The labor expended in tending elite-owned animals entitled client households to use the subsistence products of the animals, but any herd increase from calving belonged to the owners. Surplus male camels could then be sold, exchanged or gifted, and otherwise further converted into nonpastoral forms of wealth such as weapons, riding equipment, prestige goods, alliance ties, and so forth. This series of conversions between mobility, nonpastoral and pastoral forms of value, and basic labor perpetuated elitecommoner inequality in a continuous cycle favoring the elite (Sáenz 1991, pp. 103–106). On the other hand, this system also established a social safety net by retaining poorer households within the pastoral community and providing them time and support to recover their own herds and regain productive autonomy. Interestingly, similar patron-client relationships have been documented for nomadic groups across the Old World from northwestern Africa to Mongolia, though there has been little comparative work on these systems of indigenous nomadic inequality (Beck 1980, pp. 334–335; Khazanov 1994, pp. 154–155; Shahrani 1979, p. 179; Sneath 2007, p. 17).

In addition to the Tuareg's transformation of productive mobility into spatial control and military prowess, their involvement in long-distance exchange was another generator of nonpastoral wealth (Claudot-Hawad 2006). Nomadic trade is generally viewed as an almost mechanical function of conveying materials from one point to another, but an emphasis on the nomadic affinity for conversions allows us to see this widespread activity among mobile communities in a very different light. In fact, long-distance trade has less to do with simple conveyance than with the recognition of differing systems of value across geographical space and an understanding of how the movement of goods, materials, and ideas converts and augments their value. Nomadic movement across landscapes increases knowledge and experience of geographic and cultural variation and promotes culture contact (Bonte 1981, pp. 46–47). This "mapping" of spatial diversity is something that can occur at regional or even macroregional scales depending on the transport capabilities available to nomadic peoples; in either case, it promotes a kind of knowledge that does not just facilitate trade but actually identifies trade as a possibility in the first place. In keeping with Barfield's definition, these capabilities provided nomads like the Tuareg with the opportunity to exploit geographic and cultural diversity as a major part of their political economies.

Pastoral nomadism and regional complexity

Spooner (1973, p. 33) suggests that the fluidity of nomadic societies renders them ideal subjects for the study of politics. That same fluidity structures politics in interesting ways, especially as the size and scale of political organization expand. Given a working definition for statehood that highlights negotiated political relationships, the state can be thought of as an ongoing process that is not at all incompatible with the flexibility, dynamics, and mobility upon which the politics of many pastoral nomadic groups are founded. Just like sedentary complex polities, those states drawing on pastoral nomadic traditions also were characterized by sustained social inequality and exclusion, but contrary to classic conceptions of statehood, they did so by systematically incorporating aspects of dispersal, flux, and diversity. How these nomadic states maintained integration and differentiation over time and across large social scales is what makes them organizationally significant; in that respect, emphasizing a flexible version of politics was an effective approach to nomadic statecraft.

Based on the above discussion, I offer some expectations for pastoral nomadic complexity that can be assessed on a case-by-case basis. First, I expect that complex regional polities of pastoral nomads should emerge in regions of dynamic and competitive political makeup, whether they comprise nomadic groups entirely or nomadic and sedentary groups intermixed. Partly as a response to these regional dynamics, mobility takes on organizational importance beyond its functional use for provisioning animals. Consequently, nomadic polities will tend to exploit cultural expertise in the technological, logistical, and military aspects of movement and transport. Furthermore, mobility shapes social and political process, and a proficiency in sociospatial relationships is expressed in nomadic methods of integration, negotiation, and control. In terms of integration, for example, despite the relatively low population densities characteristic of many pastoral nomadic groups, regional nomadic polities tend to form at large geographic scales through effective spatial networking, alliance building, and a cultural capacity for synthesis of different lifeways and cultures. The shape of political negotiations also adjusts to these more expansive scales of organization, and therefore I would expect collective understandings of political relationships as playing out by way of, rather than in spite of, mobility. Finally, the question of how nomadic rulers might control a mobile populace has long been a stumbling block to theorizing nomadic complexity. Scholars sometimes forget that nomadic rulers were themselves nomads; by understanding the contextual use of movement and exercising control over the logistics of movement, nomadic elite could gain political influence over productive resources, factional loyalty, and wealth promulgation.

Patterns of differentiation and sources of political finance also will be substantially different from those found in sedentary and intensive agricultural states. A tradition of political negotiation that enables flexibility will very likely allow relationships to play out in a broader range than would be the case in a rigid and highly formalized political environment. As such, pastoral nomadic polities tend to make trade-offs in the ways exclusion and inequality are expressed. Hierarchical patterns of stratification might be strongly adhered to while political practices of distributed authority serve to temper social inequality by sharing power across broader segments of political society. These power-sharing arrangements often produce multiple seats of authority and more heterarchical patterns within a nomadic polity. Higher levels of centralization are not at all uncharacteristic; instead, the nature of political negotiation enfranchises corporate and centralized combinations of authority with modal shifts in the form that leadership takes over time. Large-scale polities with such characteristics will have a strong incentive to innovate unique forms of delegation, administration, and consensus building in order to manage this more fluid approach to politics and organization. Finally, I expect that political finance will take various forms, but among them conversions of value will play a major role in supporting polities of expansive scale. This should be most obvious in the creation, promotion, and control of long-distance trade relationships and networks.

In keeping with my working definition of statehood, these characteristics imply different but not necessarily less complex organization for those regional polities involving pastoral nomads. Spatially expansive and mobile statecraft certainly has its difficulties, especially in the form of factional challenges, problems with reliable delegation, and frequently unstable political successions (Feinman 1998, p. 106). On the other hand, as Crumley (2001, p. 24) argues, statecraft that enfranchised multiple models adjusts more readily to changing circumstances by maintaining a reserve of alternative solutions to organizational problems. In an argument similar to Crumley's, Adams (1978) explicitly connects these organizational characteristics with pastoral nomadic polities. He describes highland pastoral nomads of Greater Mesopotamia as having maintained a long-standing tradition of organizational resilience. He proposes that these traditions of political flexibility, harbored in the background among powerful nomadic factions, came to the fore and became organizationally influential when classic states faltered and collapsed (Adams 1978, p. 334). These ideas demonstrate 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 major participants in the shaping of civilizations.

The above framework for flexible and mobility-enabled politics certainly does not pertain to all pastoral nomadic traditions; nor does it pertain only to pastoral nomads. These features have relevance for any polity faced with solving the logistical problems of sustaining political practices at large social scales (Feinman 1998, p. 112). Such problems are usually associated with techniques of political imposition, communication, transport, factionalism, resource control, and so forth; all are among the standard issues confronted by nomadic polities because of their reliance on movement and networks. Moreover, since spatial expanse and increased heterogeneity are directly related, the challenge of managing and exploiting diversity for political ends is always a problem faced by any large state or empire. In fact, many of these organizational issues persist even today among modern nation states. For this reason, mobility and flexibility in large-scale organizations has pertinence as a general theme that can contribute broadly to our understanding of sociopolitical complexity (e.g., Redman 2005). As a case in point, nomadic states provide some of the best examples from history and prehistory for this kind of inquiry.

Archaeological examples

Here I present two examples—one from eastern Eurasia and the other from Greater Mesopotamia (Fig. 1). Each case shows how archaeologists have examined the material record in order to further research on early political organization among pastoral nomads. To some extent, both draw on historical sources of information that are relatively limited in scope and quality; therefore, I am most interested in what the archaeological record has to say about nomadic activities. For the Xiongnu polity my primary focus is recent research in Mongolia and surrounding areas (e.g., Chang 2012; Frachetti 2012; Hanks 2010; Honeychurch 2015; Rogers 2012). In the second example I examine nomadic polities on the peripheries of Mesopotamia in western Iran and northern Syria. Although my synthesis for this example is less detailed than that for the Xiongnu, I cover the critical findings of this research on nomadic political prehistory. In these two examples, I pay particular attention to political settings prior to state formation and the degree to which political uncertainty and dynamism were prevalent. I also examine the evidence for social differentiation and spatial expertise in politics, as well as for conversions of value. Though separated by time and space and founded upon entirely different cultures, both studies support some of my key expectations for nomadic regional complexity.

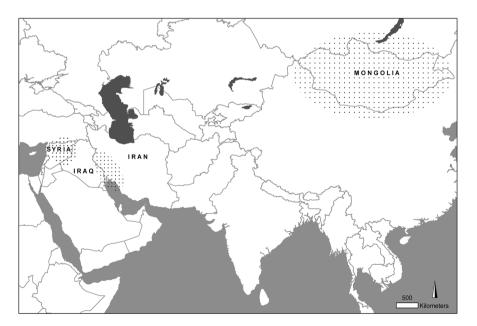


Fig. 1 Core regions of Greater Mesopotamia and the eastern Eurasian steppe in which states with pastoral nomadic traditions emerged. From east to west, stippled areas indicate the formative territories of Xiongnu, Elamite, and Amorite polities, respectively

The Xiongnu polity of the Eastern Eurasian steppe

The Xiongnu polity was a dynamic and changing organization with major political rearrangements during its textually assessed time period of 209 BC to c. AD 150. The Shiji historical document, authored by Sima Qian (c. 140-86 BC), provides the earliest contemporaneous information about this nomadic polity from the perspective of the neighboring Han Dynasty of China. Sima Qian describes the Xiongnu state as a large-scale, stratified, and centrally integrated organization (Watson 1993, pp. 136-137). The ruler of the polity, known as the Shanyu, was a figure who combined political authority, divine right, military leadership, and elite lineage (Di Cosmo 2002, pp. 176–178). The text reports on the initial development of this polity under the steppe leader Maodun at the end of the third century BC (Watson 1993, pp. 134–136). Maodun was a younger member of an existing elite lineage but was disenfranchised from attaining the highest political positions. He usurped power by assassinating his father to acquire a position of leadership, innovated new military and organizational techniques, and then rapidly expanded against neighboring groups (Watson 1993, pp. 135-136). The polity eventually encompassed a substantial territory stretching east to west from Manchuria to the Tian Shan and Altai Mountains and north to south from Siberia to central Inner Mongolia (Figs. 1, 2).

The material culture, labeled as "Xiongnu" by Mongolian and Russian archaeologists, can be found across these regions dated to the period reported in the texts. Xiongnu archaeology has been an academic discipline for almost a century, although recently scholars have raised questions regarding the link between the material record and the historical accounts (Di Cosmo 2011; Goldin 2011). There is little doubt 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, pp. 184–185). The heartland of the Xiongnu state was most likely in north central Mongolia and south of Lake Baikal in Siberia, a region defined by some of the major river drainages of eastern Eurasia. This area holds the majority of prominent Xiongnu cemetery sites and most of the known settlements. Absolute dating has expanded the periodization of Xiongnu material culture and organizational patterning from the fourth/third century BC to second/third century AD. These archaeological dates precede and postdate the period of the Xiongnu state as known from the historical sources (Honeychurch 2012).

Xiongnu regional complexity emerged from a setting of intense local politics involving competing elites and small-scale polities. These processes began more than a thousand years before the rise of the Xiongnu state. Some of the earliest traces of social differentiation on the eastern Eurasian steppe are in the form of impressive stone monuments and burials dating to the Late Bronze Age (late second to initial first millennium BC) (Frohlich et al. 2009; Hanks 2010, pp. 477–478; Littleton et al. 2012; Wright 2007). Herding lifeways of the Bronze Age were quite different from those of the Early Iron Age (early to mid-first millennium BC) and initial Xiongnu period (Houle 2010; Machicek 2011). Although environmental and technological changes certainly transpired during the intervening centuries, a major

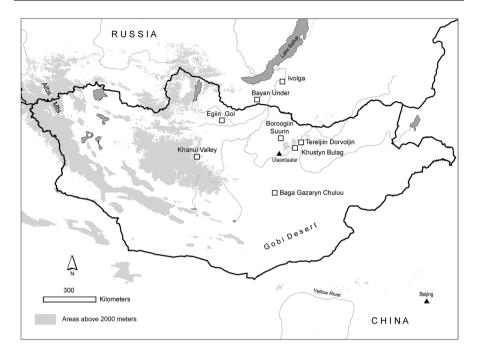


Fig. 2 Major archaeological sites and survey areas in Mongolia and southern Siberia with material evidence related to Xiongnu-period political organization

factor was the dynamic political history that began to embroil nomadic households and communities in issues of territory, alliance, loyalty, and political ideology. These conditions transformed pastoral nomadism, not just as an economy but also as a set of strategies for negotiating a novel sociopolitical existence (Honeychurch and Amartuvshin 2007; Honeychurch et al. 2009; Murphy et al. 2013). Prior to Xiongnu state emergence, violent conflict was endemic in many regions, while in others, especially north-central Mongolia, there are still no definite signs of warfare (Honeychurch et al. 2009; Shelach 2009a; Torbat et al. 2007). Nevertheless, competition among political groups in central Mongolia certainly included other activities such as raiding and burial desecration (Nelson et al. 2011).

Evidence from Mongolia and surrounding regions indicates that during the Early Iron Age, burial practices gradually became more elaborate and included larger assemblages of wealth items (Chugunov et al. 2004; Derevianko and Molodin 2000; Tseveendorj et al. 2007). Exchange and alliance networks facilitated down-the-line movement of prestige goods across the eastern steppe, and these long-distance items began to figure prominently in the process of negotiating local political relationships (Erdenebaatar 2002; Shelach 2009b). Survey evidence also indicates major landscape patterns and reorganizations during the Early Iron Age. Site inventories along the central Mongolian desert steppe of the Gobi show major construction zones spaced at intervals of approximately 100–200 km, while similar centers of monumental activity were located closer together at 30–40-km intervals in the forest

steppe of the north. In many of these northern centers, monument building ceased by the mid-first millennium BC; thereafter only a few major areas experienced monument construction and expanded elite activities (Gardner and Burentogtokh, in press; Honeychurch et al. 2007b; Houle 2009).

Wealth concentration, monument elaboration, buffers between activity zones, and the rise of select centers while others declined all point to a process of consolidation around fewer central places, which then integrated outlying communities into a number of larger multilocal polities. Evidence suggests that these growing political organizations in the north were involved in networks with the more stable centers along the fringe of the Gobi Desert. 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 (Honeychurch and Amartuvshin 2011). These new material patterns mark the beginning of the period archaeologists refer to as Xiongnu. Their initial appearance was followed by a process of expansion that came to include all of present-day Mongolia and many bordering regions as well.

Mortuary, settlement, and economic differentiation

Archaeologists working on state formation in Mongolia have provided evidence for what Barnes calls "material stratification" (Barnes 1986, pp. 83, 88, 2007). Barnes defines this as distinctive material patterns involving rare items, labor-intensive architecture, and significant locales, all representing activities of an interacting subgroup of society capable of accessing and mobilizing such resources. Good indications of such patterns come from Xiongnu-period mortuary research. Two basic types of burials define the Xiongnu mortuary record, each involving significant surface constructions overlaying deep burials pits with predominantly north-south orientations. One of these has a ring-shaped surface feature made of stone and soil, and the other is a large platform-like mound with several levels of deeply interred construction (Miniaev 1985; Torbat 2004). While there are similarities between these two sets of mortuary practices, they differ with respect to size, chronology, distribution, and association. Both forms have been identified at sites across Mongolia and southern Siberia, and ring burial cemeteries also are known from Inner Mongolia (Bunker et al. 1997, pp. 76-98; Linduff 2008; Polos'mak 1990).

Both kinds of burials are labor-intensive, contain rare and precious materials, and occupy prominent cemetery locations (Konovalov 1976; Miller et al. 2009; Tseveendorj 1985). In addition to elaborate decorated wooden coffins and substantial domestic herd animal remains, furnishings for these burials include a wide variety of long-distance exotic products. The most impressive among these are Han Dynasty horse-drawn carriages interred in their entirety within the burial pits of the largest burials (Yerool-Erdene and Gantulga 2007). In the few cases where demographic and genetic analyses have been done, results suggest that relatively few members of society, likely representing an elite class, were given either of these mortuary treatments. For example, in the Egiin Gol Valley of north-central

Mongolia (Fig. 2), Xiongnu-period cemeteries located by regional survey represent a total of a little more than 100 individuals out of an estimated population in the thousands (Honeychurch et al. 2007a).

Based on ancient DNA analysis of the Burkhan Tolgoi cemetery at Egiin Gol, a significant number of interred individuals shared genetic relationships, and in the earliest burials the genetic lineages represented were quite few in number (Keyser-Tracqui et al. 2003, p. 258). Common people were likely provided with other methods of burial, which might have included cremations, unmarked burials, or surface exposure of bodies. Otherwise, commoners may have been interred in shallow pits marked with just a few unobtrusive stones, as has been documented at the Gobi Desert site of Baga Gazaryn Chuluu (Fig. 2) (Amartuvshin and Khatanbaatar 2010; Nelson et al. 2009). From this growing body of mortuary research, archaeologists argue that material evidence for Xiongnu-period social stratification is entirely consistent with reports from the historical texts (Kradin et al. 2004).

Habitation and activity sites of the Xiongnu period also show substantial differentiation in size, composition, and function, although up to now only a small number of these settlements have been systematically studied (Wright et al. 2009). Archaeologists have identified a range of sizes in seasonal habitation sites, including large encampments that may have been associated with elite activities (Honeychurch and Amartuvshin 2007; Houle and Broderick 2011). Seasonal campsites are characterized by little or no architectural investment with the exception of hearth features. This patterning would be consistent with the kinds of portable dwellings that are found inscribed on Xiongnu-period wooden containers from burials (e.g., Miniaev and Sakharovskaia 2007, p. 51). Artifact distributions across living sites are sparse and deposits are usually shallow with poorly developed stratigraphy. Moreover, the locations of campsites fit distinctive seasonal parameters; for example, sites in open river valleys would have been very difficult to inhabit during the winter given wind and snowfall. When analyzed, the faunal assemblages from these sites indeed confirm that they were warm-weather camps (Honeychurch and Amartuvshin 2007, p. 52). Finally, these habitations have a variety of subsistence evidence, with faunal remains of herd animals being dominant. Faunal assemblages from both habitations and burials provide evidence of culling and foddering that argue for a mobile pastoral lifeway (Houle and Broderick 2011; Makarewicz 2011). Wheat and millet remains point to grain cultivation, and there also is evidence for hunting and gathering (Honeychurch and Amartuvshin 2007).

In addition to seasonal campsites, larger-walled settlements have been investigated in both Siberia and Mongolia. Many of these have planned layouts and include semisubterranean houses, workshop areas, large central architectural structures, and very different kinds of use histories. The prominent settlements of Boroogiin Suurin in Mongolia and Ivolga in south Siberia (Fig. 2) are clearly village-like occupations where multiresource production, including farming, herding, and craft specializations, was practiced (Davydova 1995; Pousaz et al. 2007). Other walled sites, such as Tereljiin Dorvoljin and Bayan Under (Fig. 2), may have been elite residences or ritual centers (Danilov 2011). This range of site structures, arrangements, and sizes indicates a great deal more functional and economic differentiation than is generally assumed for steppe pastoral nomadic societies (Rogers et al. 2005).

Additional evidence for differentiation comes from a number of recent studies on Xiongnu craft production in metals and ceramics. During the lead up to the Xiongnu state, craft technologies transformed dramatically, and archaeologists now know that craft production was carried out at both specialized workshops and at seasonal campsites. These patterns have been documented at the recently excavated ceramics and iron manufacturing center at Khustyn Bulag and by the discovery of small-scale iron working at seasonal camps in the Khanui Valley (Fig. 2) (Amartuvshin et al. 2012; Houle and Broderick 2011). The newly discovered sites complement the already extensive evidence of craft production from the Ivolga site in Siberia. Some scholars, however, attribute the presence of these craft industries not to steppe peoples but to displaced laborers from the Han Dynasty (Kradin 2005, pp. 80; Park et al. 2011). This argument needs to be revisited since in the case of iron metallurgy, the iron-working process employed at Xiongnu sites was quite different from contemporaneous methods in China (Park et al. 2010). Ceramics manufacture also was well developed in the Xiongnu polity. Fragments recovered from the kiln site at Khustyn Bulag include not only remnants from a wide range of pottery vessels but also ceramic building materials used at walled settlements 50-80 km away (Eregzen 2011, pp. 94–95).

Spatial expertise and political integration

These patterns of differentiated social and productive sectors raise questions about the integration of the Xiongnu political community. What forms of integration connected these different segments of Xiongnu society and to what degree was central authority involved? While archaeologists have only begun to devise ways to focus on these questions using material evidence from Mongolia, historians have long debated the makeup of Xiongnu political fabric. The Shiji historical account describes Xiongnu organization as centralized and based on regional hierarchy, local area integration, and some version of administration. This textual description contrasts with secondary historical research that views centralized integration within the polity as underdeveloped and intended mainly for military action or coercive threat against China (Barfield 2001; Yamada 1982). As with many archaic states, and in particular, very large ones, there is good reason to believe that central authority was neither stable nor absolute but instead varied between greater and lesser modes of centralization over time (Honeychurch 2012; Rogers 2012, p. 212; Sneath 2007). Nonetheless, archaeological patterns suggest that the exercise of centralized power was indeed a very important part of political integration among Xiongnu-period steppe communities.

In archaeological terms, this question can be addressed by looking at evidence for structured interactions between geographically distinct regions. Specifically, interactions revealing interdependence can provide evidence that local groups and leaders were not as autonomous or "confederated" as some historical models would argue (e.g., Barfield 2001, p. 13; Di Cosmo 2002, pp. 224–227; Kürsat-Ahlers

1996). Studies of local and nonlocal materials at the Egiin Gol and Baga Gazaryn Chuluu sites give some indication of the importance of these intrasteppe interactions. For example, chemical composition analyses of ceramics and clays from the Egiin Gol Valley and major sites in Siberia along the Selenge River basin demonstrate the transport of pottery over fairly long distances (Hall and Minaiev 2002; Hall et al. 1999; Honeychurch 2004, pp. 172–203). In the largest Egiin Gol habitations, where distinctive artifacts such as coins from China, armor plate, and horse gear were recovered, there also was a disproportionate number of these nonlocal ceramics. This pattern might indicate visitation, gifting, feasting, or other activities that relied on the use of transported vessels at what were probably the sites of local elite encampment. Elsewhere, I contend that this evidence, combined with the unique locations of these very large sites along the main routes of travel, may be associated with the itinerant circulation of nomadic leadership as a technique of regional integration (Honeychurch and Amartuvshin 2007).

Steppe rulers understood the impracticality of monitoring a mobile population from a fixed geographical point. Historical passages describe mobile courts during the Xiongnu period and provide evidence that one strategy for negotiating a nomadic political environment was for elites to be mobile as well (Honeychurch and Amartuvshin 2006; Kürsat-Ahlers 1996, p. 34). Since the large encampments at Egiin Gol were located at critical junctures for thoroughfare and because this particular valley controls major river fords for long-distance north–south movement, this site pattern likely indicates close attention to the political implications of local and regional movement (Honeychurch et al. 2007b; Rogers 2012, p. 213).

Mortuary contexts from Baga Gazaryn Chuluu in the Gobi Desert make another good case for inter-area connections and dependencies. Xiongnu-period burial practices in the Gobi region conform closely with those known from northern Mongolia and Siberia, including the lavish use of wood and other forest products. Substantial amounts of expertly worked pine and birch bark have been recovered from burial assemblages in the form of coffins, coffin covers, and containers (Amartuvshin and Khatanbaatar 2010). One burial of an adult male even contained a degraded but complete set of elk antlers (*Cervus canadensis sibiricus*) (Amartuvshin and Khatanbaatar 2010, p. 233). These tree and animal species belong to forested environments farther north and were not present in the arid plains that surrounded Baga Gazaryn Chuluu over two millennia ago. Their appearance in the desert zone indicates that local Gobi individuals of some prominence depended on northern groups to provide politically and symbolically important materials from the forests several hundred kilometers away.

Additionally, the Gobi burial patterns provide yet another example of the exercise of central authority. The use of nonlocal woods for coffins and burial furnishings is a good example of the sumptuary codes that Xiongnu burial practices adhered to despite the immense spatial distribution of this mortuary culture. These codes changed over time and show some degree of local variation (Brosseder 2009; Miller 2011; Yang 2011), but what is most striking about both burial structures and furnishings is an overall conformity in pattern. Since Han Dynasty products were an integral part of marking status, a model of local political autonomy would suggest that groups closer to the frontier would have surpluses of such products and greater

representation of these items in their burials. In step with this argument, Fletcher (1995, p. 21) makes the case that, "(Xiongnu) tribes forfeited very little of their autonomy (to central leadership)...just enough to seem united for the sake of extorting wealth from the Chinese...and in warfare each person kept what plunder he seized." Based on the mortuary record, however, the very opposite seems to be the case. Data from several Gobi sites, including Baga Gazaryn Chuluu, reveal that sumptuary codes were maintained despite proximity to the frontier. The southernmost Xiongnu cemeteries in Mongolia fit a pattern of controlled distribution of prestige goods better than one of autonomous acquisition directly from the frontier zone (Amartuvshin and Khatanbaatar 2010; Honeychurch 2015).

Site distributions at the macroregional scale also provide preliminary support for central authority. The historical accounts describe the Xiongnu polity as organized into a tripartite structure comprising a central zone with eastern and western subsections (Watson 1993, p. 137). The first national Mongolian database of Xiongnu sites was created in 2001 and has been added to significantly over the past decade. These site data have been mapped and analyzed by Mongolian archaeologists who argue for a distinct tripartite clustering across Mongolia and southern Siberia (Yerool-Erdene 2011). They also note clear differences in site size, density, and diversity within the central zone when compared to the western and eastern flanks (Yerool-Erdene 2010, pp. 26–28). As a textual-material hypothesis, this spatial pattern requires a great deal more testing by way of fieldwork in eastern and western Mongolia. However, if correct, such a geographical layout of the polity would not only imply a dominant political core, but given the polity's breadth, it would suggest a capacity to delegate authority and engage in power-sharing arrangements as well (Honeychurch and Amartuvshin 2011).

Macroregional conversions

From textual accounts of nomadic raiding along the frontier, historians have long assumed that eastern steppe nomads had little of value to offer neighboring civilizations; instead they took every opportunity to obtain resources from sedentary societies. Nomadic peoples were portrayed in Han Dynasty texts as greedy, parasitic, and covetous of wealth and by later historians as poor and needy due to a presumed instability of pastoralism (Di Cosmo 1994). Lattimore (1962, pp. 481-483) 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 societies, not to the deficiency of a nomadic economy. Recent archaeological finds and analyses demonstrate that, like most states, the Xiongnu political economy depended on both internal production and external acquisition (Brosseder 2007; Davydova 1995). On the external side, excavated artifacts reveal exchange relationships with groups in Central Asia and Siberia as well as with China. Besides lacquer ware and bronzes from the Qin and Han empires (Park et al. 2011), other early evidence for long-distance exchange includes glass beads and pendants from Mediterranean workshops dating to the third century BC (Lankton et al. 2012). These artifacts probably arrived via the Greek polities in Bactria, and they document a continuation of contacts that had begun during the Early Iron Age and then increased dramatically with Xiongnu state emergence (Rogers 2007, pp. 253–254; Rubinson 1992).

Moreover, Xiongnu elite were not only on the receiving end of these exchange networks, they also played a substantial role in building them as well. Textual and archaeological evidence both suggest that as early as the mid-second century BC, Xiongnu expansion and diplomacy had already influenced groups far to the north and west of the state and that these interactions predate the Han Dynasty's involvement with the western Silk Roads (Christian 2000). For example, in western Siberia archaeologists have recovered prestige objects in elite contexts that originated in Xiongnu and Han Dynasty workshops, including Xiongnu-style weapons and ornate belt plaques and Han silks, lacquer ware, and bronze mirrors (Brosseder 2011; Koryakova and Epimakhov 2007, pp. 310-311; Linduff 2012). These goods had political value among the Xiongnu elite, and their appearance in distant regions was not the result of common trade but probably supported a process of political alliance-building in the west. In turn, gift-giving between elite entourages made products like Mediterranean glassware available to Xiongnu leadership, and these had substantial value internally and along the frontier with the Han Dynasty (Christian 2000, p. 18; Rubinson 1992, pp. 71-72). Contrary to the notion that the steppe nomads had nothing of value to exchange, this evidence argues for an early and far-reaching system of wealth transfer and conversion. Critical to the success of such a network was the geographic expanse of the Xiongnu polity and organizational experience with long-distance movement and transport.

Based on these ideas, it makes sense that steppe nomads would desire Chinese luxury items, which had substantial political value among Xiongnu constituents and groups farther westward. On the other hand, this model also explains the commensurate frontier trade from the Chinese side that Yü (1967, pp. 200–201) describes as the pursuit of "barbarian wealth" by Chinese of all social classes, often despite state sanctions. The Xiongnu political economy did not just bridge different systems of value; thanks to their political example and the use of certain materials to represent leadership and political status, the Xiongnu elite probably helped create and define those systems of value as well. In other words, the western desire for eastern products such as silk may have initially been cultivated through a Xiongnu model of political prestige as symbolized by such materials (Honeychurch 2014). Silk took on social value not just as an intrinsically attractive textile but specifically as a fabric associated with the highest levels of political leadership. By promoting new systems of value and then moving products between distant regions, Xiongnu rulers managed a wealth-based political economy not dissimilar from that of many sizable imperial states (Honeychurch and Amartuvshin 2011, pp. 211-213; Kradin 2011).

Greater Mesopotamia

Similar inquiries into pastoral nomadic polities of West Asia help support the crosscultural arguments I have put forth in this discussion. I have been encouraged by the innovative ideas of two Near Eastern archaeologists: Alizadeh (2010), who studies the nomadic precedents of Elamite statehood in southwestern Iran (c. fourth and third millennium BC), and Porter, (2012) who focuses on pastoralists of the Euphrates River basin in Syria (c. third and early second millennium BC). Both researchers draw upon and refine a series of influential models for nomad–sedentary interaction and state formation in the Near East articulated by Rowton (1973, 1974, 1977), Wright and Johnson (1975), and Zagarell (1989). Based on material and textual evidence and a reconceptualization of pastoral nomadic lifeways, Alizadeh and Porter suggest alternative ways of understanding long-term relationships between sedentary and nomadic groups. In both cases, these approaches recast pastoral nomads as central contributors to the founding of Greater Mesopotamian states and empires.

Although Alizadeh and Porter study herding societies on opposite frontiers of the Mesopotamian world, both describe their regions as having long-term indigenous nomadic and political traditions that were substantially different from the lifeways and political practices of southern Mesopotamia. These nomadic traditions came about in competitive settings in which small-scale polities, and subsequently largescale states, emerged and collapsed time and again (Alizadeh 2010, pp. 361-363; Porter 2002, pp. 24–25). In their respective regions of the Zagros highlands and the grasslands of Syria, pastoral nomadism had substantial developmental histories prior to the first experiments in political complexity, and pastoralists often were capable hunters, gatherers, farmers, and traders. In both cases, the developmental time depth of pastoral nomadism, macroregional interaction, and nomadic expertise in managing spatial relationships produced a flexible capacity for integrating sedentary and agricultural populations within nomadic "tribal groups." As Alizadeh describes it, highland mobile herding and settled agricultural production were two sides of the same coin and practiced by people having a shared identity. The ability of households to shift between these productive activities as suited their circumstances and still be encompassed by tribal membership promoted maximal flexibility within an often uncertain political setting (Alizadeh 2010, pp. 355, 357, 360). Porter likewise describes the capacity of nomadic networks to associate herders, farmers, and urban dwellers into broad horizontal collectives knitted together by ideologies of socially constructed kinship (Porter 2002, p. 25, 2004, pp. 69-70).

Nomadic skill in spatial integration contributed to what Alizadeh describes as "enclosing nomadism," a concept that could be applied to both the Iranian and Syrian regions. Enclosing nomadism describes a sociopolitical environment in which nomadic groups are dominant. Moreover, central places and sedentary lifeways are embedded in and take part in the surrounding mobile culture (Alizadeh 2010, p. 354). This is a reversal of Rowton's (1974) "enclosed nomadism" in which nomads are secondary actors situated within a pervasive urban and agricultural landscape usually occupying the interstices between urban territories. For Porter and Alizadeh, sociopolitical complexity, and eventually statehood, took root in these regional settings of pastoral nomadic networking, differentiation, and authority.

In Alizadeh's model (2010, pp. 360–361), highland nomadic groups developed significant levels of indigenous complexity as early as the fifth millennium BC. These early pastoral polities governed by "khan-like" elite figures became increasingly involved in political competition over trade routes and resources that

led to attempts to control lowland agricultural zones. Regional-scale competition culminated in an expansion of nomadic power and the direct integration of lowland agricultural communities and urban centers into a number of nomadic confederated polities having combined highland and lowland sectors. Alizadeh points to three major factors contributing to the support of these larger-scale polities. First, the combination of lowland agricultural and highland nomadic economies provided dependable subsistence and surplus production on which nomadic rulers could draw. Second, the management of lucrative trade routes further enriched and empowered these elite groups. Lastly, highland polities retained prior forms of "tribal" political loyalty, which stabilized relationships between elite and commoners despite the broad geographical extent of political networks. Experimentation with these political traditions underwrote a system of power-sharing and alliance that gave rise to a powerful but confederated form of statehood by the mid-third millennium BC (Alizadeh 2010, pp. 373–375).

In a related but different scenario proposed for the Tell Banat region of northern Syria, Porter argues that pastoral nomadic populations, oriented toward specialized exchange with Uruk-period settlements, reformulated the basis of their society when Uruk-sponsored trade declined. Long-term exchange had encouraged various communities in the upper Euphrates basin to specialize their production and to become increasingly differentiated, which meant that the eventual trade collapse created opportunities for a different arrangement of regional articulation between communities. Traditions of networking among pastoral nomads supplied a new model for integration and promoted collective ties among dispersed groups of pastoralists, farmers, and traders. The resulting social collective and its corporate identity were tethered to the Tell Banat central place where integration was supported by way of ritualized descent systems, ancestor commemoration, and public mortuary ceremonies. Gradual control by resident caretakers over this ritually significant central place became a pivot for social distinctions, political authority, and the capacity to mobilize labor for large construction projects. This process led to a period of incipient urbanization at Tell Banat and gradually produced a unique synthesis of "tribe and town" as an expression of nomadic regional organization (Porter 2004). This regional polity had a dominant elite, a developed urbanized center, and networks extending far into the north Syrian steppe (Porter 2002, pp. 24-28).

The organizational shapes of Syrian and west Iranian polities were generated from these early and predominantly nomadic political precedents of the fourth and third millennia BC. Porter and Alizadeh both express skepticism about clear-cut differences between these regional-scale organizations and those that might be called states per se (Alizadeh 2010, p. 369; Porter 2004, p. 73), but they agree that these initial forms of large-scale political complexity involved characteristics different from those of the state societies in Mesopotamia proper. In a sedentary, agricultural, and urban form of statehood, politics were transacted as a part of daily life in a more nucleated setting that reinforced asymmetries by way of constant commoner and elite juxtaposition (Smith 2003, p. 202; Yoffee 2005). By contrast, mobile and dispersed forms of politics could not be enacted on a daily basis by way of frequent collective interaction. Therefore, confederated and distributed forms of

politics with power-sharing and based on indirect and ritualized ways of maintaining political allegiance contributed to a looser form of complex organization. As Porter and Alizadeh suggest, these nomadic polities represented alternative versions of political complexity that gave rise to the later Amorite and Elamite states of Mesopotamia. Largely due to these precedents, these subsequent states were synthetic polities that successfully combined sedentary and mobile versions of statecraft (Alden 2010; Alizadeh 2010, pp. 373–375; Fleming 2004; Porter 2007, pp. 107–108).

Conclusion

Clearly, we can expect nomadic regional polities, or "states," to take very different forms from their sedentary counterparts. States and empires that draw significantly on pastoral nomadic traditions have the potential to share organizational commonalities as a result of a cultural investment in animals and lifeways that emphasize flexible and mobile political strategies. I have provided overviews of two very different conceptions of the pastoral nomad as state builder. The traditional model sees nomads as highly specialized, productively unstable, politically autonomous, and organizationally limited, but militaristic and predatory. Nomads conceptualized in this manner do not build complex regional polities unless confronted by neighboring states of sedentary, urban, and agricultural origin. Nomads, according to this view, are fundamentally "tribal" in organization; moreover, nomadic tribes are seen as the antithesis of the state, encapsulated by the state, or sometimes as conquerors of the state—but certainly not as originators.

In contrast, more recent theory, including that presented here, views nomadic groups as adept agents who are quintessentially political and organizationally innovative. They certainly did build complex regional polities, and while political process among mobile peoples may have had a different foundation, the basic organizational challenge of maintaining large-scale integration and asymmetric relationships are common to all states. In constructing large-scale polities, nomadic groups confronted the same problems as did their sedentary neighbors, but their negotiated outcomes were shaped by mobile cultures and flexibility. Therefore, they expressed complex organization in a different way. As a result, regionally complex nomadic polities assumed distinctive forms but were not incompatible with the incorporation of urbanism, specialized crafts and metallurgy, and long-term traditions of sophisticated political economy.

Some may regard this reconsideration of pastoral nomadism and political complexity as a relatively easy way to derive the "nomadic state." Without doubt, redefining the state just to be able to claim that nomads created states is not my intent nor would that be a productive exercise. Instead, I argue in favor of bringing the anthropology of early nomads in line with the empirical results of archaeological fieldwork and with changes in comparative political theory, all of which indicate the need for a much broader understanding of both statehood and pastoral nomadism. This need reflects the power of the material record to disprove existing explanations and elicit new models in light of the latest data and analysis. Pastoral nomadic

societies offer significant variability for anthropologists to explore, and the way to capture that variability is to focus on process within contextualized and historical settings rather than on fixed typological categories (Fowles 2002). In this spirit, a more vital and promising question archaeologists might ask about nomadic regional polities is not how complex were they in comparison to some ideal model of statehood but instead how were they complex (Nelson 1995, p. 599)? Such an approach contrasts with the typological rigidity anthropologists so often overlay upon pastoral nomads and their sociopolitical organizations.

In conclusion, I find little basis for the argument that pastoral nomadism as a lifeway excludes nomads from any particular kind of activity, organization, or interaction. This important point problematizes the oft-repeated theme that pastoral nomads do not experience internal processes of complex development but are only complex through external adaptation to neighboring states. A review of evidence does not support the contention that nomadic complexity is defined by its externality while other human groups become complex through some version of "internal" transformation. Rather, all complex societies—whether small polities or empires, more mobile or more sedentary, whether of herders or farmers or both—all become complex by way of diverse, multiscalar, and cross-cutting interactions carried out over time (Adams 2001, pp. 13–14; Wolf 1982, pp. 17–19).

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