Pastoralism and Ideological Resistance to Agriculture in Northeast Asia: from Prehistoric to Modern Times

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Abstract: Despite the long historical and archaeological record of interaction between Mongol herders and Chinese agriculturalists, pastoralists in Mongolia and Inner Mongolia have resisted pressure to adopt subsistence economies dependant on the cultivation of plant foods. While some evidence suggests that many of these steppe regions are more ecologically suited to herding than farming, their northern frontiers have proven to be agriculturally Therefore, the persistent resistance to sedentary viable. agricultural modes of production should be traced to long-standing cultural values at odds with sedentism and agricultural toils. By considering several lines of evidence, including environmental limitations and the constraints of pastoralist land-use, Mongol resistance to the adoption of cultivation is seen as having been driven by the development of ideological systems incompatible with the adoption of agriculture.

Keywords: Northeast Asia, Mongolia, agriculture, pastoralism, resistance, ethnicity

The relationship between pastoralists and farmers in Northeast Asia has been historically fraught with economic and political tensions that are testified to as early as the Zhou Dynasty (c. 1050-256 B.C.). Documents from this agriculturalist state refer to foreign pastoralist tribes as having the character of tigers and wolves, full of greed and cruelty, whose insatiable lust for silk and grains led to numerous violent clashes (DiCosmo 1994). Even as late as the early 20th century Chinese writers discussed the problem of "civilizing" their "superstitious" and "anti-social" neighbors, who were typified by low levels of consumption and manufacture (Chen 1936).

The Mongols, to whom the latter record specifically refers, are a particularly powerful steppe-land pastoralist group who are ethnically distinct from the Chinese Han majority in China. They occupy the ecologically marginal frontiers of northern China, the country of Mongolia, and areas of southern Siberia around Lake Baikal and the Altai mountains. There are over twenty different

Mongol groups, nineteen of which are distributed throughout the country of Mongolia (Rinchen 1979). With Chinggis Khan's (Genghis Khan) rise to power, the term "Mongol" became applied to those tribes who were of the same linguistic and ethnic affiliation as the first khan of the Mongol Empire (Grousset 1970). Although Mongol and proto-Mongol speakers were periodically prominent in Northeast Asia and beyond (including the Avars of 6th to 9th century Europe) (Grousset 1970), numerous pastoral groups have inhabited the steppes of Northeast Asia. Those who directly threatened the security and economic well-being of Chinese dynasties were frequently described by historians. Today, Mongols are the primary pastoralist group in Northeast Asia.

Pastoralism, as a major mode of subsistence largely divorced from agriculture, did not spread from the western steppes of Central Asia into the eastern steppes of Northeast Asia until the second millennium B.C. (Christian 1998: 105). Here, Central Asian pastoralists may have mixed with agrarian herders along the northern margins of China (Christian 1998: 106). The adoption of pastoralist livestock, such as sheep as opposed to pigs, was not always incompatible with crop cultivation, but pastoralists north of the more agriculturally viable regions of China are typified by a reliance on pastoral products. The cultivation of crops is archaeologically, historically, and ethnographically attested to, but has always been of minor importance.

In modern times, despite the strong influence of Russian culture in Mongolia during the 20th century, and the availability of more advanced farming techniques, including highly adaptable strains of grains and vegetables, agriculture continues to be of marginal importance in the country of Mongolia (Wiens 1951). In Inner Mongolia, an autonomous zone of the People's Republic of China, agricultural economies are directly at odds with herding economies and this conflict is articulated along ethnic boundaries: Mongols are herders and Han Chinese are farmers (Sheehy et al. 2006).

The longevity of economic and ideological conflicts, as articulated by attitudes of Chinese writers from the first millennium B.C. to as late as the 1930s, highlights how conflicting subsistence practices and differing economic needs may have contributed to the cultural distinctions that arose between these cultural entities. Examining the relative unimportance of crop cultivation among

pastoralists in Mongolia and Inner Mongolia from prehistoric times allows us to approach the issue of why pastoralist groups in Northeast Asia have retained an economic base reliant almost entirely on their herds. It is posited that the despite possible long-term benefits of large-scale crop cultivation, the ideology of pastoral culture in this region has motivated an active resistance to the adoption of agriculture. It is also suggested that this present situation resulted from both original environmental limitations and the development of economic constraints that were shaped by the historical trajectories of pastoralism in Northeast Asia.

ENVIRONMENTAL CONSTRAINTS

While humans in all environments incorporate some degree of plant resources into their diet, the amount varies greatly from region to region. Peak plant biomass is found in tropical environments, while Arctic environments contain the lowest levels of plant biomass. It is generally accepted that this forces humans in higher latitudes to rely less on plant products and more on animal products (Binford 1980; Kelly 1995). On the steppes of Northeast Asia much of the plant biomass is tied up in non-edible grasses, although bulb vegetables, like onions and garlic, can be regionally abundant.

During the mid 20th century only 10% of the Mongol herder's diet was derived directly from agricultural products (Wiens 1951). It has been noted that modern Mongol herders subsist primarily on milk products during the summer months (at one afternoon meal in the Gobi Desert, I had the pleasure of eating, in one sitting, at least five different kinds of solid milk products or "white foods" – tsagaan idee – this did not include the most famous "white food" an alcoholic drink made from mare's milk - airag), relying on meat, fat and wheat products during the winter (Nelson 1925; Di Cosmo 1994).

My own experiences during several summers of extensive travel in Mongolia, suggest that Mongols do make use of imported or locally grown wheat and root vegetables. Some families maintain plots in communal gardens, where they may grow various root vegetables, cabbages, and cucumbers. One family, who runs a produce stand at their town market sold vegetables that they had grown in one of these communal gardens, as well as cheaper imported vegetables that they bought at a wholesale market in the

city and resold for a profit. But these examples relate to individuals living in towns or cities. In general, vegetables and grains are harder to obtain in poorer and less heavily populated regions, particularly in areas where crop cultivation is not viable. As foreign travelers in the southern Gobi Desert will attest to, mobile pastoralists in more isolated regions may use dried grains in the form of rice, wheat flour, and pasta, but vegetables are rare.

This difference in the distribution of vegetable foods is due not only to developed trade networks in more densely populated regions, but the unsuitability of climate and soil to crop cultivation in Inner Mongolia and most of Mongolia (Geisler 1959; Lattimore 1938; Sneath 1998; Williams 1996). Much of the steppe is unsuitable for agricultural development. Over the past century, Chinese settlers in Inner Mongolia have quickly discovered that although the steppe seems fertile, the soil is very easily eroded and production decreases dramatically in a short time (Sheehy et al. 2006; Sneath 1998). Arid steppes with shallow development of topsoil cover much of Mongolia and Inner Mongolia, and while they are wellsuited for pasture, their conversion to crop lands in Inner Mongolia has proven disastrous (Sheehy et al. 2006). The limitations of local cultivation in highly arid zones are further compounded by higher levels of mobility. Since pasture is more quickly depleted in areas of sparse growth, pastoralists must move herds several times a year (Fernandez-Gimenez 1999, 2006). This prohibits both small scale farming and the strict division of lands necessary for larger scale cultivation (Fernandez-Gimenez 1999, 2006; Sheehy et al. 2006).

However, in some regions of Mongolia and in southern Siberia, where water is more plentiful and there are richer soils, decreased mobility is characteristic and some herders are able to spend much of the year in or near towns (Fernandez-Gimenez 1999). The influence of Russian settlers is certainly partially responsible for the increase in large scale cultivation during the later 20th century (mostly of barley, potatoes, carrots and wheat) (Wiens 1951). There is also some evidence for agrarian-minded influences prior to this. In the late 1920s, Danish adventurers took advantage of what they perceived to be potentially rich, "virgin" soils in northern Mongolia and began an experimental farm utilizing contemporary irrigation techniques. Their rather successful attempts seemed to draw interest and amusement from local herders, but before long, turbulent political upheavals forced them to leave the country (Haslund 1934).

The farm was abandoned without having had any apparent influence on the local population.

It is notable that archaeological and early historical evidences of agricultural practice within pastoralist states come mostly from northern Mongolia and southern Siberia, which are regions currently under cultivation. Although the archaeological record supports the notion that some regions of the steppes can support a degree of longterm agricultural production, this appears to have been true only at a highly regional level. The unsuitability of certain crops to the Mongolian environment is also clearly reflected in the widespread rejection of certain domesticates like pigs, chickens, certain fruit trees, rice and melons. Moreover, these species, which thrive in humid environments or under irrigation, tend to be incompatible with a mobile existence. The important role that mobility plays in the adoption of certain species is clearly illustrated by the fact the pigs, and to some extent chickens, are much more common in northern Mongolia, where a greater percentage people live in settled village communities. In general, Mongolian pastoralist culture centers upon herd maintenance of horses, cows, camels, sheep and goats.

ARCHAEOLOGICAL PERSPECTIVE ON AGRICULTURE AND HERDING IN NORTHEAST ASIA

In most parts of the world, agriculture developed thousands of years before pastoralism. Pastoralism is considered to have evolved first in the Near East. Here, agricultural communities of fully or semisedentary farmers began managing wild herds of animals, such as sheep and goats, in a way that produced long-term changes in behavior and morphology (Garrod et al. 1996; Hole 1996). Similarly, herding practices in East Asia are also supposed to have originated in agricultural villages (Chang 1987). Scholars in both regions have speculated that an increased focus on herding arose when agricultural populations expanded and marginal farmers were forced to adopt strategies that allowed them to survive in more arid environments (Christian 1998; Chang 1987; Garrod et al. 1996). Pastoralism, a subsistence economy devoted primarily to herding, became possible with the "Secondary Products Revolution", when the use of secondary products like wool and milk allowed herders to be more independent of agriculturalists (Krader 1959).

When Inner Eurasian pastoralism emerged around the fourth millennium B.C., the numerous hunter-gatherer groups and the few scattered agriculturalists that lived on the steppes were already tending domesticated herbivores as livestock. At this time, subsistence strategies were fairly flexible and peoples of the Srednyi Stog culture in the Ukraine and southern Russia were known to have participated in fishing and hunting, as well as stockbreeding and agriculture (Christian 1998). It was in the middle of the fourth millennium B.C. that these populations appear to have become more mobile. The first burial complexes in the region contain evidence of warfare, perhaps from horseback (Dergachev 1989). At this time there appears to have been frequent interactions between pastoralists and agriculturalists, but the presence of fortified settlements suggests that this relationship was fraught with tension As Christian (1998: 84) suggests, horse-riding (Christian 1998). pastoralists would almost certainly have been capable of posing a greater threat to agricultural villages than their hunter-gatherer predecessors.

During this time, pastoralists in the western steppes relied on agricultural produce to varying degrees. Pastoral society developed and spread throughout southern Siberia and the steppes of Central Asia as a unique complex of widespread cultural traits were emerging to define pastoralist societies from agriculturalist neighbors. Pastoralists depended primarily on livestock. Over time they became more highly mobile, built distinct mounded burial complexes, began smelting native ores for needles and knives, and developed wheeled vehicles to aid in migrations (Dergachev 1989). Numerous evidences suggest "an expanding zone of pastoralism, originating in the west, and dominating the western and central steppes" by about 2000 B.C. (Christian 1998: 101).

It was these distinct nomadic pastoralist societies that most heavily influenced the pastoralists of Northeast Asia. Bronze Age mortuary complexes, artworks and monuments appear to have evolved locally (Jacobson 1988, 2002), but share numerous attributes with their contemporaries further west (Christian 1998). Despite the apparent influence of western steppe cultures, nomadic pastoralists are not archaeologically visible until much later than those in the west – as late as second millennium B.C. (Christian 1998: 105). Central Asian pastoralists may have mixed with agricultural "barbarians" – those practicing a mixed herding and farming

economy – who were already coming into frequent conflicts with people practicing irrigation agriculture along the more fertile Huang He (Yellow River) valley and its tributaries (Chang 1987; Christian 1998: 106). Whatever the case, pastoralism as it first emerged in the archaeological record of Northeast Asia was distinct from that culture represented by emerging agriculturalist states in China.

Central Asian pastoralist societies arrived late in Northeast Asia. Both agriculture and animal domestication was already wellestablished by this time. The earliest substantial evidence for agriculture in North China dates to about 7,000 B.C. (Crawford 2006), but the practice of cultivation probably began much earlier (Crawford 2007). Agriculture spread more slowly north of the fertile river valley of the Chinese Central Plains. Shelach (2000) contends that soybeans and millet may have been domesticated locally in Inner Mongolia, independent of influences from the south. Despite this, it was not until about 3,000 B.C. that groups in what is now the Inner Mongolian Autonomous Region, show evidence of a culture partially reliant on agriculture (CICARP 2003; Guo 1995). Semisedentary, using agricultural tools and domestic cultigens, these groups were focused along watercourses at the very margins of traditional pastoralist territory. These individuals were ancestral to fully-fledged agricultural communities, although some practiced a mixed economy of herding, hunting, gathering, and farming (Guo 1995).

Some scholars have suggested that agriculture also developed southern reaches the Gobi Desert and was of contemporaneous with the first settled agricultural communities in China (Cybiktarov 2002; Derevianko and Dorj 1992). The presence of painted pottery in southern Gobi Desert sites does suggest that those sites may be contemporaneous with early agricultural communities in North China (Okladnikov 1962). Despite this possible affiliation, the assertions that the inhabitants were agriculturalists has been challenged because they were rather tenuously based on the presence of one or two grinding stones, and between 50 and 300 pottery sherds, found among undated lithic assemblages (Janz 2006). More evidence for cultivation comes from the middle of Mongolia, around the northern periphery of the Gobi desert and may date to the late Bronze Age. Here, the presence of grinding stones, pestles, and other utensils led the researchers to believe that the inhabitants were settled agriculturalists (Di Cosmo

1994). Unfortunately, the complete lack of dates for such sites makes it difficult to assess their role in the trajectory of subsistence economies in Mongolia. The most that can be said with certainty is that pre-pastoralist inhabitants of the Gobi Desert may have had some contact with agriculturalists from northern China.

At Tamsagbulag, near the border of Inner Mongolia in eastern Mongolia, there is somewhat more convincing evidence for agriculture – or at least for the semi-sedentary lifestyle that seems to have been present among early agriculturalists in neighboring Inner Mongolia and Manchuria (Northeast China). Numerous pestles, grinders and graters, and what may be hoes and millstones were uncovered, which suggests a reliance on grains. Fish also appears to have been an important resource for these people (Derevianko and Dorj 1992).

The appearance of numerous cattle bones is intriguing and suggested to Soviet archaeologists that cattle-breeding was one of the main occupations of the inhabitants (Derevianko and Dorj 1992). Despite these assertions, it has not been established whether or not these cattle were domesticated or wild (D. Tumen, personal communication, August 2005). Evidence for sedentary and semisedentary communities focused on cattle, horse, and sheep have been found on the verdant steppes of Manchuria (Guo 1995; Liu 1995) and the occupants of Tamsagbulag may have been participants in a broadly similar adaptation to other groups in the far eastern Although there are no chronometric dates for the Tamsagbulag site, one Manchurian site with both horse and cattle remains has been dated using ¹⁴C on cattle bone to 4726 + 79 BP (uncalibrated) (c. 2700 B.C.) (Liu 1995). The remains are presumed to have been from domesticated animals, but Liu (1995) is unclear about how this determination was made.

The Afanasevo culture is considered to have been the first pastoralist group to inhabit the region of southern Siberia and northern Mongolia. They were dispersed as far west as the southern Ural mountains and parts of Kazakhstan, but were primarily focused around the Minusinsk Basin, which is in southern Siberia. They were the first Central Asian steppe culture to use bronze (Christian 1998). The emergence of this group has been suggested to date prior to 2200 B.C. (Anthony and Vinogradov 1995; Dergachev 1989) or even earlier than 3000 B.C. (Mallory 1989). Skeletal remains suggest a western, Europoid, origin for the Afanasevo culture, but by the

second millennium B.C. pastoralists of an eastern Asiatic type became more prominent in southern Siberia (Gryaznov 1969; Mallory 1989). This indicates the increasing influence locally evolving pastoralist communities in Northeast Asia. Pastoralists of the eastern steppes began a westward expansion in the middle of the second millennium B.C. (Christian 1998). Among some of these groups, winter settlements indicate seasonal sedentism. Their artifacts belong to family groups who wove vegetable fibers for clothing, cast bronze, and relied heavily on livestock. It is possible that they planted crops around their winter settlements and returned to harvest them in the fall (Gryaznov 1969).

The most noticeable trend among early pastoralists in Northeast Asia is the incorporation of small scale crop cultivation and foraging into a greater pastoralist strategy. Eastern pastoralists, like their counterparts further west, were developing a distinct set of cultural and economic adaptations that did not preclude the incorporation of agriculture, but was reliant primarily on herding. Attention should also be drawn to the fact that all examples of credible evidence for intentional cultivation are found along a similar geographic distribution to regions were agriculture has been successfully practiced in recent history.

Our understanding of the exact relationship between agriculture, pastoralism, and foraging in the steppes of prehistoric Northeast Asia is lacking, but the absence of clear economic and cultural influence from prehistoric Chinese agriculturalists indicates that these groups were characterized by a unique process of development. Steppe peoples focused their attention on the care of livestock and would have adjusted their mobility and material culture to best suit such an existence. In turn, agricultural life would have been centered around the yearly cycle of crop production. While herd animals need to move seasonally to take advantage of changes in pasture, crops must be tended year-round to remain productive. The seasonal, small-scale and semi-sedentary dwellings of those focused on animal products is culturally at odds with the permanent village communities and burgeoning urban centers arising on the Central Plains of China.

By the end of the first millennium B.C., the lack of evidence for cultivation suggests that what farming had evolved in earlier times had been largely replaced by a subsistence economy even more firmly entrenched in mobile herding (Christian 1998). Among the

Xiongnu (Hsiung-nu), a major pastoralist state that first appears in Chinese records at the end of the third century B.C., cultivation appears to have been practiced occasionally by a few semi-nomadic pastoralists who used simple wooden implements (DiCosmo 1994). In the Orkhon valley, a fertile and well-watered region 360 km west of the modern day capital of Mongolia, the Xiongnu established farming communities near major winter camps (Christian 1998). Just as prehistoric evidence for cultivation is more prevalent in southern Siberia, so to was a reliance upon agriculture more common among the Xiongnu of that region. The Ivolga settlement, about 16 km south of modern Ulan-Ude, served as a frontier garrison where inhabitants lived permanently and grew crops of millet, barley and wheat (Christian 1998; DiCosmo 1994). It has been suggested that these farmers were an ethnic minority under the control of the Xiongnu state (Di Cosmo 1994).

These farming communities would have helped fulfill the dietary needs of a state where many members of the population did not produce their own food. They may also have alleviated some of the dependency the Xiongnu were developing as a result of trade relationships with the Chinese state. The Xiongnu were somewhat dependant on agricultural products and prestige goods imported from China during the Han dynasty (202 B.C. – A.D. 220) (DiCosmo 1994). The importation of prestige goods was necessary for the nobility to maintain power over the larger population; however, the distribution of adequate food surpluses during times of need may have been even more instrumental in preserving civil peace. The availability of locally grown produce would have made the Xiongnu less susceptible to political manipulation by the Han.

When cultivation was employed, ecological considerations were key to the establishment of agricultural fields. Today, the ruins of Türk and Uighur fortified administrative centers and irrigated agricultural fields can still be seen in Orkhon Valley and the surrounding regions. The repeated use of the Orkhon Valley as a center of agricultural production for pastoralist states would have been ecologically motivated. Here, along the Khangai mountains, pastoralists can find different types of pasture close together and seldom move more than a total of 30 km a year (Christian 1998; Fernandez-Gimenez 2006). An environment supporting lowered herd mobility would have allowed inhabitants to engage in both herding and agriculture. The potential of river irrigation, along with

highly fertile soils, would have contributed to the viability of crop cultivation.

This region was an important center of state in the sixth to ninth centuries. During the reign of pastoralist Türk empires in Northeast Asian steppes (A.D. 552-734), individuals too poor to own horses were resettled as farmers in small villages. Tellingly, their social hierarchy placed farmers one level above slaves (usually female war captives whose labor helped support the warrior classes) (Christian 1998). The Uighur Empire (A.D. 744-840), which replaced the Türk empires, built their capital in the Orkhon region and another major city along the Selenga River to the north. Unlike previous pastoralist empires, the Uighurs established extensive agricultural communities, growing such crops as wheat, barley, millet, rice, apples, apricots, and gourds (Christian 1998). One Arab traveler spoke of traveling twenty days across sparsely inhabited grasslands before he came to a vast region of densely populated agricultural tracts and villages. It took him twenty more days of travel through this region to reach the capital of Ordu Balik (Karabalgasun) (Christian 1998).

The development of agriculture under the Uighur Empire could be related to the abundance of western influences that they incorporated into their state. Not only was Manichaean religion imported from Iran, but the Uighurs developed their own script based on the Sogdian alphabet of that same region (Grousset 1970). Despite the apparent popularity of agricultural endeavors among Uighur pastoralists, settled village communities were eradicated with the fall of the Uighur Empire. In A.D. 840, the Kirghiz, pastoralist Turks from southern Siberia, overthrew Ordu Balik and gained control of the Orkhon Valley for the next 80 years (Grousset 1970). Under the Kirghiz, the valley grasslands were returned to pasture.

In the periods following this, pastoralism remained the dominant form of subsistence in the steppes. Many pastoralists also engaged in hunting, fishing, reindeer herding, and some farming (Christian 1998), but it is the culture of dedicated pastoralism that has dominated state societies since that time. This does not mean that the use of grains was completely unimportant in pastoralist economies. Not only did pastoralists rely on trade with settled communities, but small-scale cultivation by herders appears not to have been unusual. For example, some Mongol herders would

broadcast cereal grains by hand in winter pastures before they abandoned them for the summer, returning in the following fall to collect the grains (Di Cosmo 1994; Williams 1996). These crops were sometimes harvested by hand and it is probable that the returns were very low and largely unreliable. This type of cultivation is not comparable to agriculture, but rather a form of incipient cultivation, which could have originated much earlier among non-sedentary foragers using small numbers of grinding stones.

On the steppes of Northeast Asia, a lack of agricultural development characterized a primarily pastoral world. This does not preclude the occasional foray into large-scale crop cultivation in those regions most amenable to agriculture. The requirements of a state society, particularly when trade is negotiated between hostile partners, certainly played a role in periodically encouraging agricultural production. Despite these occasional forays into cultivation, evidence that agriculture has played a strong role in the Mongolian culture is almost non-existent. Evidence of prehistoric agriculture comes mostly from the Mongolian frontier: along eastern fringes of the Inner Mongolian Autonomous Region; northern Mongolia, near the Siberian border; the fertile Orkhon Valley in central Mongolia; the forest-steppe transitional zones of southern Siberia; and in Inner Mongolia and Manchuria, along the frontier of Despite occasional evidence for the existence of North China. agriculture on the steppes of Northeast Asia, this form of production has been limited and intermittent.

Throughout time the political division of land in Mongolia, the only country in this region which is not ruled by an agricultural state, has been ordered based on pastoralist concerns. While broader political motivations have sometimes determined how large areas of land are distributed amongst the general population, local herding communities have retained the right to control primarily access to pasturage as they see fit (Fernandez-Gimenez 1999, 2006). The strict division of land-use based on the specific seasonal needs of herders, as described by Fernandez-Gimenez (1999, 2006), would inevitability make managing the dedication of viable pasturelands to cultivation a difficult task.

ACTIVE RESISTANCE TO AGRICULTURE IN MODERN TIMES

Despite the perceived incompatibility of certain types of subsistence strategies, hunting and gathering and crop cultivation are two viable ways for pastoralists to obtain additional resources, particularly vegetal foods. Archaeological studies of hunter-gatherers in southern Africa suggest that the relationship between food producers (pastoralists and farmers) and hunter-gatherers was more ambiguous in the past than at present (Kusimba 2005). Kusimba (2005) suggests that the current situation may be the result of recent political developments that have encouraged more distinct divisions between farmers, herders, and foragers in Africa. This situation probably mirrors that between pastoralists and farmers in Northeast Asia. Archaeological evidence suggests that the first pastoralists in southern Siberia and northern Mongolia employed a range of subsistence strategies to compliment the returns from their herds. Fishing, hunting, gathering and cultivation were all employed to some extent (Christian 1998). But more recently, political tensions have focused attention on opposing subsistence economies as representative behaviors of the people who employ them most frequently.

The disruption caused by agriculturalist intervention in pastoralist land tenure is best illustrated by events of the 20th century. The Chinese held political sway over both Mongolia and Inner Mongolia from the founding of the Manchu empire in the 17th century until the 1900s (hence the term "Outer Mongolia", which refers to the area of the modern country of Mongolia), but ruled through their interactions with the established Mongol aristocracy. Through Chinese political interference a sort of feudal system had been established. This system was composed of a ruling class of princes and a majority sector of lamas, who neither married nor labored. Although pastoral subsistence economies remained the primary mode of existence, traditional tribal systems were weakened (Lattimore 1936).

Inner Mongolia was most subject to Chinese colonization because of the proximity to agricultural settlements. By the early 1900s, Chinese colonization of areas which had previously been reserved for Mongol herdsmen, was disrupting the local economy due to the use of grazing lands for agricultural endeavors in Inner Mongolia (Hyer and Heaton 1968). A similar situation occurred to a

lesser extent along the arable lands of Outer Mongolia, especially along the Siberian border (Ewing 1980). Not only was colonization contrary to the original agreement with the Manchu Government, but it was accompanied by problems related to money-lending activities among the Chinese, which further eroded Mongol control of pasture lands in both Inner and Outer Mongolia (Ewing 1980; Williams 1916). Financial hardships, in conjunction with an increasingly corrupt and Manchu dominated government, led to general unrest which resulted in an official challenge to the Chinese government that focused upon burgeoning colonization of Mongolia (Lattimore 1936).

Mongolian nationalist movements occurred first along the Chinese-Mongolian frontier, where tensions between the Chinese and Mongol populations were strongest in the face of conflicts between agriculturalists and pastoralists (Li 1989). These and the earlier large-scale migrations led to deep resentments among ethnic minorities who saw that the Han (the Chinese ethnic majority) tended to occupy not only the best farmlands – ostensibly these were also the best pasturelands – but also the best jobs (Lattimore 1936; Li 1989). Even in the latter half of the 20th century, complaints on the part of Mongols against the Communist administration centered around the government's preferential treatment of agriculturalists (Hyer and Heaton 1968).

The preferential treatment of agriculturalists has been a source of continuing problems between Mongol and Han peoples living in Inner Mongolia. During the initial stages of these colonization efforts, it was recognized that greater returns could be expected among landlords from Chinese peasants than Mongol herders (Lattimore 1936). Herdsman maintained a higher standard of living in terms of work, leisure and per capita wealth, but under the feudal system Chinese provincial landlords were able to acquire greater monetary wealth than local Mongol princes (Lattimore 1936). While Mongols saw this difference in power as related to ethnicity, the vulnerability of their social structures and economic systems were similarly at fault. Rather than choosing to change their lifestyle and economy, the Mongols strove to find ways of elevating the power of Mongol princes through either liberation or a modification of their hereditary power (Lattimore 1936). Despite these attempts to reassert their power, nationalist movements in Inner Mongolia

resulted in hopeless rebellion and the flight of many Mongols to Outer Mongolia (Lattimore 1936).

After the fall of the Manchu government, Outer Mongolia gained independence from China and the Mongolian People's Republic was established with the aid of the Soviet Union. With the establishment of a communist government in China in 1949, attempts at economic reform encouraged the further colonization of Inner Mongolia (Hyer and Heaton 1968; Li 1989; Sneath 1998; Williams 1996). By the initial stages of the Communist period in the 1950s, agricultural land reclamation programs were extending the scope of migration, foreshadowing even more intensive migration and agricultural development during the Great Leap Forward (Li 1989).

The attitude towards traditional pastoralism appears to have quite negative. There is some indication that nomadic pastoralism was actively discouraged by granting grazing lands to farmers. In addition, during the latter half of the 20th century, the Chinese attempted to force herdsmen to divide pastures amongst the community and graze their animals in enclosures, raising hay in the surrounding areas to supplement the animals' diets (Williams 1996). Sneath (1994) discusses the experience of one Mongol community, where Maoists took charge of the commune in 1967 and harassed local administrators and officials. Further action was taken to force local herdsman to farm grasslands just beyond the district center. In one case Mongol herders reacted to such measures as collectivization by slaughtering their herds in protest (Hyer and Heaton 1968).

Incorporating Mongols into the agricultural economy may have served as a way for the Chinese government to exert force beyond the frontier, something which might have seemed more pressing after the establishment of the Mongolian People's Republic. Li (1989: 522-523) suggests that the Chinese government has been more successful in controlling ethnic minorities who have been assimilated into Chinese society. In many cases, sedentary agrarian governments are unable to effectively control mobile populations, be they pastoralists or hunter-gatherers (Layton et al. 1995; Lightfoot and Martinez 1995). As might be expected in such a situation, colonization efforts of China in the 20th century were generally focused around nucleating these populations into more easily controlled sedentary communities (Hyer and Heaton 1968; Williams 1996).

THE IDEOLOGY OF PASTORALISM

Environmental limitations in most of Mongolia and Inner Mongolia shed some light on our understanding of why agriculture did not arise indigenously in pastoralist regions of Northeast Asia. It may further explain why economic reforms implemented by the Chinese communist government were met with such disfavor. Even severe cultural and economic pressure upon Mongol herders did not force them to abandon their traditional way of life. Neither indigenous cultural evolution nor colonialist coercion succeeded in widely promoting crop cultivation among pastoralists. While the lack of arable land is an expedient explanation, it does not fully explain why the northern regions of Mongolia have remained largely indifferent to agriculture, or why resistance among pastoralists in Inner Mongolia was so fierce. Despite the apparent benefits of becoming farmers or simply restructuring pastoralist systems, Mongols often refused to undertake such measures even under extreme pressure.

In Inner Mongolia, this resistance is especially meaningful. Archaeological evidence suggests agricultural that settled communities in these frontier regions were displaced by mobile Although both pastoralists and herders (Di Cosmo 1994). agriculturalists have been dwelling on the steppes of northern China since prehistory, the domination of this region has intermittently exchanged hands. A long history of interaction between the two political entities is represented by the Great Wall, a symbolic division between China and the pastoralist tribes since its construction beginning in the Chin Dynasty (221-208 B.C.). Lying beyond the Great Wall, Inner Mongolia might be viewed as a sort of frontier where shifting dominances were most severely felt by frontier inhabitants (sensu Lightfoot and Martinez 1995). Divergent ideological understandings of acceptable forms of subsistence have insured that the Great Wall is both a physical, and a symbolic boundary between opposing cultures.

The frontier of Inner Mongolia has been home to both agriculturalists and pastoralists, but as changeable as the land-use of the region has been, firmer boundaries exist in the minds of the inhabitants. Intended to serve as a defense for the Chinese against invading barbarians, the Great Wall serves as the ultimate symbolic division between civilization and the animal state. A wall maintains boundaries for those that build them, a symbol that is enacted over

and over again in Chinese architecture (Williams 1996). On the other hand, the pastoralist expression of boundary is much more fluid and what lies between the wall and the pastoral domain is of greater importance. The moral and physical fragility of the Chinese is held at bay by the open steppe. A lack of centralized government, a lack of roads and a lack of dependence on anything except the weather, vast pastures and the constantly moving herds were what kept the Mongols free from Chinese subjugation. For that reason, the abandonment of this lifestyle would not only have been unsustainable in a practical sense, it would have opened the region up to Chinese colonization as a decline in mobility did during the first years of the 20th century. In this context, the frontier of Inner Mongolia becomes a zone demanding fervent defense, for it is here that the land is valuable for both pasturage and agriculture.

Inner Mongolia served as the frontier throughout millennia of conflict and it is here that ethnic identity seems to have been used as an especially important tool in strengthening convictions related to traditional economic practices (Hyer and Heaton 1968; Sneath 1994; Williams 1996). While ecological impacts have more recently drawn attention to the lack of sustainability that agriculturalist control of pasture lands seems to entail (Sheehy et al. 2006), it may well have been the cultural importance of herding, as definitively Mongol and appropriately non-Chinese, that bolstered resolutions to retain pastoral subsistence as a way of life.

If the boundary between pastoralists and agriculturalists is as much an emotional and cultural construct as it is an ecological one, there is no room in Mongol tradition for farmers. Mongol ancestors were fierce horse riding warriors who conquered the steppes. With a population of no more than a million people, the Xiongnu had been capable of tapping the wealth of an agrarian state 50 times as large (Christian 1998). Through their descent from great Chinggis Khan (Genghis Khan), the proud heritage of Mongol pastoralists was secured. The inherent pride in a mobile pastoralist way of life is daily reiterated. Traditional folk songs praise wide-open spaces and the beauty of eagles, horses, the sky and Mongol women. Even urbanites associate themselves with this tradition and Mongolian television is filled with images of herding, migration, women in traditional garb, and historical figures. Even today Mongol masculine identity remains focused on martial skills. One of the two most important festivals among modern Mongols is the Naadam

celebration, which takes place in early July and focuses on competitions in wrestling, horseracing, and archery – the "three manly sports".

Williams (1996) reiterates the observations of several authors in his discussion of the Mongol identity as it relates to subsistence practices. The distaste among Mongols for the dirt-digging and back-breaking work typical of agriculturalists in pre-industrial societies was embodied in their use of the long-handled sickle, which was used to harvest grains and symbolized their aversion to bending their backs in slavery to the earth (Jagchid and Hyer 1979). Likewise, the Chinese are seen as slaves to the tilled land and to their material wealth. They are "soft", unlike the Mongols, who are morally as well as physically "hard" (Lattimore 1934). Perhaps more importantly, the suitability of certain domesticates is intertwined with the Mongolian identity. This was so much the case in the 19th and early 20th centuries that the traditional headdress of married Mongol women from the Khalkh tribes (the ethnic Mongol majority) was designed to resemble the horns of cattle (Haslund 1934). The horse figures most largely in Mongolian culture and they are the most expensive and prized of herd animals.

The compatibility of cereal grain cultivation with a mobile lifestyle is eloquently illustrated by the early historic use of hand-broadcast grains among highly mobile pastoralists (DiCosmo 1994). Crop cultivation may be an unavoidable necessity after the establishment of a state-level government, but a continuingly limited exploitation of grain and vegetable foods among modern herders is indicative of the small role that plant foods play in daily life. Considering this, it is conceivable that agriculture need not ever have developed among the Mongols until populations reached limits that could not be sustained by the immediate resources of pastoralist food producers. Recent expansions in urbanization and corresponding increases in the importation of fruit, vegetable and grain products exemplify this trend.

The emotional reality of the pastoralist identity became very real in the face of the economic tensions of the 20th century. Beginning with the Manchu period and reaching a height with the rise of a communist system, the industrialization and political expansion of the Chinese government began to effect large-scale colonization and economic reforms within the Inner Mongolian Autonomous Region. Negative reaction among ethnic Mongols to

these reforms is evidenced by the rise of nationalism and the concurrent failure of various strategies aimed at reducing mobility and promoting agriculture. These failures are herein attributed, on the part of the Mongols, to a conscious ideological resistance based on their ethnic identity, which is historically at odds not only with that of the Chinese ethnic majority, the Han, but with the lifestyle of toil, hardship and slavery which they associate with that identity. Several lines of evidence from both historical and archaeological sources show that even when plant agriculture became more viable in this northern climate after the introduction of modern farming technology in the Soviet and Manchu periods, that Mongol herders continued to resist agricultural advances.

CONCLUSION

The apparent resistance to a fully agricultural lifeway can be related to both the pasturage needs of pastoralists and the cultural significance of nomadic pastoralism. The latter was no doubt contributed to by the long-standing rivalry between pastoralists and agriculturalists in Northeast Asia. While these traditions may be connected to a latent understanding that neither agriculture nor sedentary stock raising is as ecologically sustainable on the arid steppes as nomadic pastoralism, the primary reason for the rejection of these subsistence alternatives is that they are not only incompatible with, but actually at odds with, ideological beliefs and social structures already in place. In fact, the lifestyle and ideology of Mongol nomadic pastoralists is in direct opposition to that of settled Han Chinese agriculturalists. Northward incursions and retreats have, throughout history, been linked to the accrual and cessation of power amongst pastoralist empires. The very foundation of political and social tensions between opposing sides of the Great Wall should be seen as being inextricably linked to the fierce protection of long-standing subsistence economies. these subsistence economies are connected to ethnic identity rather than merely ecological sustainability, the Mongol rejection of agricultural practices can be viewed as ideological resistance.

Furthermore, throughout the history of pastoralism, an adherence to mobility and pastoral economy was frequently focused on periodic raids of sedentary agricultural communities (see Christian 1998). The mobility maintained by pastoralists was

especially useful during times of war because it did not allow for return attacks upon a civilian population or center of administration. Throughout the history of the steppes, the mobility of pastoralist tribes allowed them a decisive military advantage over their sedentary neighbors. Farmers who lived within the domain of the steppes were frequently considered of very low status and were subject to the extraction of tribute in the form of agricultural products and labor (Christian 1998). Considering the traditional role between agriculturalists and pastoralists, it is not surprising that the Chinese experienced repeated opposition to reforms aimed at reducing mobility among pastoralists. Despite apparent ecological reasons for the failure of these measures (Lattimore 1936, 1938; Sheehy et al. 2006; Sneath 1998; Wiens 1951), it is also apparent that in the minds of ethnic Mongols, the adoption of either agriculture or bounded property is at odds with their traditions and ideology (Williams 1996).

Notably, the occasional employment of cultivation was not necessarily spurned by pastoralists in Northeast Asia. Evidence of small-scale cultivation as a means of supplementing pastoralist diets is not unusual in the archaeological record. Even large-scale agriculture is known to have been employed periodically by pastoralist states in the region. What distinguishes ideological resistance to agriculture in the 20th century from the periodic adoption of agriculture is the voluntary nature of farming practices in earlier periods in the earlier history of pastoralist states. In the case of Chinese colonization, political pressure to undertake farming was directly exerted upon civilian populations by foreign powers. Such efforts by the Chinese government could easily have been seen by pastoralists as a method of conquering long-time enemies through assimilation. At the same time, the "reclamation" of pasture lands for cultivation has caused severe economic handicaps among pastoralists (Sheehy et al. 2006). Inevitably, the shallow topsoil on most of these steppe land pastures in Inner Mongolia is quickly eroded and depleted, leaving the land not only unsuitable for agriculture, but devoid of appropriate and adequate vegetation for pasture (Sheehy et al. 2006).

Therefore, while environmental constraints have limited the range of agrarian practice in Northeast Asia, ideological factors have also affected the willingness of pastoral peoples to adopt agriculture. Despite the periodic employment of crop cultivation throughout the

prehistory and history of the Northeast Asian steppes, inhabitants in this region have also repeatedly abandoned such methods. While agriculture may have been of occasional use to pastoralists, successive pastoralists groups continued to maintain a subsistence economy that revolved primarily around the needs of their animals. Over thousands of years a distinct identity arose amongst the people of the steppes. This identity is largely at odds with agricultural modes of existence. As examples from the 20th century illustrate, pastoral life in Northeast Asia is both a means of economic security and a cultural concept of extreme importance to an extremely fierce and historically powerful minority people living on the edge of a vast agrarian empire.

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