

Pastoralism after culture: environmental governance and human-animal estrangement at China's ecological frontier

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In the name of 'ecological civilization', the Chinese state has sought to adjust the ecologies of its degraded northern grasslands, using market instruments, such as payments for ecosystem services, to induce ethnic minority pastoralists to pursue non-herding livelihoods. In the far west of Inner Mongolia, the resultant decline in the availability of rural labour has meant that most domestic camels that remain on the rangelands are now left largely unmanaged throughout the year. Local Mongol officials and intellectuals have long regarded extensive animal husbandry as a bulwark against Mongol dispossession through Chinese agricultural expansion. This article shows how they now make use of dominant ecological and market rationalities to articulate their defence of this form of land use, by figuring these 'semi-wild' camels as providers of ecosystem services. In doing so, however, their proposals bypass the figure of the culture-possessing rural minority subject, which in this region is associated with training and working with camels, and which has been fostered by the cultural heritage policies of the reform era. Divergent understandings of the 'wildness' of nonhumans thus reveal tensions between ecological and cultural politics at China's margins, and anxieties surrounding the rural minority subject in the context of new modes of environmental governance.

Baigal's¹ office is on the fifth floor of the Bureau of Agriculture and Animal Husbandry, with a commanding view over the semi-desert rangeland of Alasha, in western Inner Mongolia. Our focus, however, is on a computer screen. He pulls up a map of the area to the north of this small city of Bayanhot. The red dots indicate the locations of herds of domestic Bactrian camels; the signal is sent from a tracking device worn around a camel's neck. Baigal is also working on a plan to introduce watering troughs which can be operated remotely via mobile phones. Soon herders will not need to live in the countryside, he tells me proudly.

Since Alasha's pastureland is now divided up between individual households, I wonder out loud how herders will control the movement of these animals and prevent trespass. 'They won't!' explains Baigal happily. 'You shouldn't control camels; controlling them is like putting a human in prison! You should let them wander freely' (Chinese [C.] *zìyóu zóu*). The rationale for affording such licence to livestock is more ecological than ethical, Baigal makes clear. In the last couple of decades, Alasha has become infamous as the source of the dust storms which sweep across northern China

in the spring (Zee 2020). Drawing on the powerful, globally circulating narrative of desertification (Davis 2016), the state has blamed this unruly ecology on the excessive number of livestock herded by the largely ethnic Mongol pastoralists, and adopted a variety of policies which target pastoralist land use. Baigal, a Mongol himself, does not think it is fair to blame livestock, particularly camels. 'They know when to eat what kind of grass. Camels won't choose to browse degraded grassland'. Camels in this region, Baigal tells me, are now 'semi-wild' (*C. ban yesheng de*). Baigal will go on to describe a scheme that seeks to embrace this 'wildness' in the interests of defending extensive animal husbandry on unenclosed rangeland, a scheme which he refers to as 'the nomadism of livestock'.

However, not everyone is so enthusiastic about this wildness. Even as herders move into the city in increasing numbers, the countryside, together with the forms of interspecies engagement associated with it, is still seen to be central to Mongol identity (Khan 1996); this association is nourished by the local state's sponsorship of certain forms of ethnic cultural heritage. Several months earlier, I had attended a large festival of 'camel culture' on the outskirts of Bayanhot. To the side of the stands was a giant fibreglass replica of a nose peg (Mongolian [M.] *buil*), the small piece of wood which is inserted through the nose of the camel, to which a guide rope or tether is attached, allowing the animal's movement to be directed.

Even at this event, there were hints of the increasing wildness of Alasha's camels. During the final race, one of the camels suddenly stopped and began to run in the opposite direction around the track, ignoring the desperate attempts of its rider to get it to revert to its original course. The man sitting next to me, a herder from northern Alasha, sighed and explained that camels are now increasingly 'wild' (*M. zerleg*). In the past, he said, camels had been allowed to roam freely during the summer, before being corralled and used for transportation and riding in the autumn and winter. While the ability of camels to live independently of humans during the summer was respected, it was their willingness to co-operate with humans during the colder months that herders prized.

However, urbanization and the resultant decreasing pool of rural labour, as well as the availability of motorized transportation, means that such forms of interspecies co-operation are now rare. Younger herders are increasingly moving to the city to find work, as the degraded pastures, now subject to grazing bans and stocking limits by the state, no longer provide much of a living. These days, my neighbour explained, before they are sheared for their wool, many camels have to be pursued on motorbike, lassoed, and pinned down by several men, all the while protesting with angry bellowing. Such camels are 'impossible to tame' (*M. nomhruulaj diilehgui*). My neighbour looked back fondly to a past when camels had been 'truly tame' (*M. yostoi nomhon*) and would stand patiently tethered while they were sheared or loaded with sacks; now such camels, he lamented, 'no longer exist'.

Alasha camels have become 'estranged' (*C. mosheng*) from herders, according to Baigal. While it is embraced by some Mongol officials and intellectuals in Alasha, this estrangement is to be distinguished from active 'de-domestication' through back-breeding, which has been incorporated into some 'rewilding' projects in Europe (Lorimer & Driessen 2016). It is more akin to the loss of control over reindeer in Siberia attendant upon the socioeconomic upheaval that followed the collapse of the Soviet Union (Anderson 2000). I refer to this as the 'wilding' of livestock, rather than 'feralization', since the former term conveys the local reference to the 'wild' behaviour

of these domestic animals, which are still the property of herding households, and in many cases are rounded up once a year to be sheared, or sold for slaughter.

This article explores the hopes and anxieties that are stimulated by the loss of control over a charismatic species of domestic animal. Drawing on eighteen months of fieldwork between 2012 and 2014, and subsequent visits in the summers of 2015 and 2017, I compare the divergent attitudes to the wilding of camels on the part of certain ethnic Mongol officials and intellectuals² with those of rural camel herders. Both these groups are opposed to the ‘accumulation by desertification’ (Davis 2016) which they perceive in the state’s environmental policies, seeing them as preparing the ground for the eventual replacement of pastoralism with other forms of land use, such as mining and industry. However, they have differing conceptions of the various roles of herders and their animals necessary to maintain pastoralism in the region.

In theoretical terms, the article straddles the divide between two distinct analytical perspectives which have been adopted in recent studies of reform-era China and of pastoralists in North and Inner Asia, respectively, one of which is grounded in theories of governmentality, while the other challenges conventional understandings of domestication. In what follows, I begin by contextualizing the article’s arguments in relation to these literatures. I then describe how the camel has become enrolled in the defence of ‘nomadic’ land use by Mongol officials and intellectuals in Alasha. This proposed experiment in governing recomposes elements of the state’s environmental governance, embracing the wilding of camels and conceiving of camels’ ecological agency in market terms, while de-emphasizing the skills and knowledge of rural ethnic subjects. The latter part of the article contrasts this conception of wildness with that of herders, for whom it involves the transformation of these animals into ‘soulless’ objects to be sold for slaughter. I thus argue that divergent conceptions of human and nonhuman subjects reveal an emergent political terrain, where environmental governance using market instruments is both appropriated and critiqued by those who seek to defend a stigmatized form of land use.

Grasslands as infrastructure

In recent decades, China’s pastoral regions have been targeted by the state as sites of extensive environmental degradation which threatens the country’s development. The worsening condition of Inner Mongolia’s grasslands has been blamed particularly on excessive numbers of cashmere goats, which proved lucrative for herders following China’s integration into the global economy in the 1980s (Bulag 2004). Attempts to combat the degradation of the grasslands have been framed as part of an emerging discourse of ‘ecological civilization’ (C. *shengtai wenming*), as the Chinese state has sought to distance itself from the ‘war against nature’ of the Maoist years (Shapiro 2001) and the rampant extraction and exploitation of the early reform era. Inner Mongolia’s grasslands have become infrastructuralized as an ‘ecological security shield’ (C. *shengtai anquan pingzhang*) (Xinhua 2019), designed to serve as a windbreak preventing dust storms from reaching the nation’s capital (Zee 2019; cf. Carse 2012).

The environmental problems in China’s pastoral regions pointed to the failure of the system of rangeland management instituted as part of the market reforms of the early 1980s. While herds had been collectively managed during the era of the people’s communes, which were established in 1958 (Sneath 2000), in the early 1980s, at beginning of the reform era, they were assigned to individual households. This was followed by the contracting out of pastureland use rights, which happened in Alasha in

1996 (Zhang, Li & Fan 2013). The decision to break up formerly collectively managed pastureland was influenced by Hardin's 'tragedy of the commons' thesis (Sneath 2000: 131). Scholars of pastoralism have suggested that the worsening condition of China's grasslands is related to this policy of 'household responsibility', which has had the effect of restricting the mobility of livestock (e.g. Humphrey & Sneath 1999; Zhang *et al.* 2013). However, the Chinese state has instead focused on reducing stocking rates and on moving a significant proportion of herders away from the grasslands, who thus become 'ecological migrants' (*C. shengtai yimin*).

Other policies include the enclosure of large tracts of state forests (*C. gongyi lin*) with fences to prevent grazing; the provision of payments calibrated with reduction of herd sizes; the promotion of stall rearing with fodder instead of grazing; and also payments for those who choose to give up herding and instead plant desert-fixing shrubs (Zee 2019). Such payments for ecosystem services (PES) have analogues in many parts of the contemporary world, where market instruments are being employed in a range of conservation programmes (e.g. McElwee 2012). Ever concerned with social stability in this ethnic minority-inhabited border region, the local state in Alasha has tended to prefer economic incentives over forced resettlement. Inner Mongolia in recent years has not witnessed the scale of unrest and crackdowns seen in Xinjiang and Tibet, though large protests did occur in 2011 after a Mongol herder was killed by a coal truck (Baranovitch 2011).³

Much anthropological scholarship on reform-era China, including its pastoral regions, is characterized by engagement with theories of governmentality. This literature has focused on the transformations of the human subject which 'socialism from afar' (Ong & Zhang 2008) is supposed to produce. China's market reforms are seen to represent a 'deliberate shift in governing strategy to set citizens free to be entrepreneurs of the self', albeit within the political limits set by the Chinese state (Ong & Zhang 2008: 2). In the context of China's pastoral regions, Emily Yeh (2009) has examined the ways in which environmental policies are designed to create 'environmental subjects' who orientate themselves towards the state's ecological vision (cf. Agrawal 2005). With the 'neoliberalization' of China's pastoral regions, herders' subjectivities are said to be increasingly market-orientated (Kabzung & Yeh 2016; Yeh 2009). More recently, Jerry Zee (2019) has argued that that PES schemes in pastoral regions do not in fact seek to produce environmental subjects but instead merely to elicit desired behavioural responses through market incentives.

However, environmental governance in Alasha does not work through modulations of human subjectivity and behaviour alone. Instead, a regime of 'socio-natural governance' (Zee 2020) has been implemented, in which the propensities of plants as well as humans are enrolled in the transformation of Alasha's pasturelands into windbreak infrastructure to quell the dust storms. The local state, for example, deploys tax breaks to attract the buyers of medicinal plants that grow on the roots of certain desert-fixing shrubs; these medicinal plants then act as an economic incentive for herders to give up their animals and engage in afforestation (Zee 2019).

It is in the context of this socio-natural governance that the politics described in this article has emerged, as Mongol officials and intellectuals seek to defend a form of mobile pastoralism on unenclosed rangeland by constructing camels as vital components of this windbreak infrastructure. Rather than providing a critique of the production of environmental subjects, my article documents an experimental politics in which

technologies of government are reappropriated and deployed to defend stigmatized land use.

follow James Ferguson's suggestion (2011) that anthropologists should not only critique techniques of government but also recognize the possibility for the creative appropriation of these techniques and their deployment to unexpected ends. In the case I describe here, such appropriation involves the reconceptualization of the agency and subjectivity of domestic animals. However, I suggest the need to remain ambivalent towards such appropriation, since it involves conceptions of both humans and nonhumans which are at odds with those of camel herders who remain on the grasslands.

Rethinking domestication

Recent anthropological work on pastoralist societies has sought to distance itself from the alleged anthropocentrism of earlier studies, and from the notion that pastoralist societies are characterized by human 'domination' of domestic animals (Ingold 2000). Ethnographers of North and Inner Asian herding societies, for example, have suggested that the relationship between herders and domestic animals should be thought of in terms of 'symbiosis' (Beach & Stammer 2006) or 'reciprocity' (Fijn 2011). Other scholars have also sought to reconceptualize domestication, understanding it not as an epochal moment linked to narratives of civilization and progress, but rather as an ongoing process of 'becoming with' (Haraway 2008), in which humans and animals transform each other (Cassidy & Mullin 2007; Lien, Swanson & Ween 2018).

This rethinking of domestication is related to a broader analytic foregrounding of 'entanglement' in multispecies ethnography (Kirskey & Helmreich 2010; cf. Candea 2010). In a recent article, however, Charles Stépanoff and his colleagues argue that animal husbandry in North and Inner Asia is characterized less by 'symbiosis' than by 'intermittent co-existence', and an oscillation between human control and animal 'autonomy' (Stépanoff, Marchina, Fossier & Bureau 2017). Such insights are valuable in the case of camel husbandry in Alasha. But rather than seasonal 'oscillation' between control and autonomy, my ethnography concerns a case in which control over animals is understood to be progressively decreasing. Even as discussions of 'rewilding' enter the political mainstream in Europe (Jørgensen 2015; Lorimer 2017), the wilding of animals has hitherto received little comparative, anthropological attention. I thus attend here to the ways in which domestication is 'not always unidirectional' (Lien *et al.* 2018: 15), but also ask how this is related to the governing of pastoralists in the interests of the environment.

In comparing the conceptions of intellectuals and those of herders, this article might on the face of it appear to be repeating typological contrasts between naturalist and animist ontologies (e.g. Descola 2013). Indeed, accounts of the transformation of animal husbandry according to the principles of economy and ecology often describe a process of 'rationalization' which turns animals-as-persons into animals-as-things (e.g. Beach & Stammer 2006; Kabzung & Yeh 2016). However, in Alasha, rural herders and urban intellectuals alike are capable of apprehending animals as subjects. Instead, the contrast I make in this article is between the alternative conceptions of animals (and humans) as subjects which emerge in the context of divergent responses to the market-based governing of pastoral regions.

Using camels to defend pastoralism

Between 1981 and 1999, the number of camels in Alasha Left Banner,⁴ the region where I conducted fieldwork, decreased from 190,793 to 46,842. Media reports began to talk about the impending 'extinction' (C. *miejue*) of the camel, which was blamed not only on the worsening environment, but also on the 'profit motive' (C. *jinji liyi de qudong*) which had induced herders to sell off camels in favour of more lucrative cashmere goats (Jiang, Yin & Chai 2002). It is this profit motive that the PES policies attempt to redirect towards actions that are supposedly beneficial for the health of the grasslands, such as destocking and afforestation.

The plight of the camel in Alasha came to epitomize the perceived disappearance of the Mongol way of life, which is strongly associated in Inner Mongolia with pastoralism (Humphrey 2001; Khan 1996). While 'minority nationalities' (C. *shaoshu minzu*), as they are referred to in China, enjoy putative rights of territorial autonomy within the People's Republic of China, processes of settler colonization in Inner Mongolia means that Mongols are significantly outnumbered by Han Chinese in the region,⁵ a demographic imbalance reflected in their political representation within the Inner Mongolia Autonomous Region (Bulag 2004). The increasing minoritization of Mongols throughout the twentieth century is bound up with the loss of land available for pastoralism. The stigmatization of pastoralism is reinforced by the Soviet-inspired social evolutionism which was baked into the nationality system in China at its inception.

Ethnic politics in Inner Mongolia has thus long been dominated by the question of land use, and Mongol officials have adopted various strategies to defend pastoralism against the threat of agricultural reclamation, mining, and, more recently, environmental policies (Bulag 2004). As Stevan Harrell has argued, ethnic minority officials in China are far from being 'stooges for the majority' (2007: 226). In Alasha, many officials had themselves grown up in herding families, and often had relatives who were still herders. At the same time, they were proficient in the Chinese language, and had a keen sense of shifting political winds. From the early 2000s, discourses of cultural heritage and ecology began to provide possibilities for Mongol officials who sought to defend pastoralism against the threats posed by marketization and environmental governance.

As Alasha's officials were swept up in the cultural heritage 'fever' that raged across China, Mongols working in cultural administration developed a discourse of 'camel culture' (C. *luotuo wenhua*; M. *temeen soyol*). In 2002, the 'camel husbandry customs (C. *yang tuo xisu*) of the Mongol nationality' formed part of Alasha's contribution to China's national-level intangible cultural heritage in 2002 (Huqun 2010). As recently as the turn of the millennium, official publications could criticize the 'primitive, nomadic' (C. *yuanshi youmu*) nature of traditional pastoralism in Alasha, which was said to hinder economic development (*Alasha Zuoqi Zhi* 2000); however, some elements of pastoralist life now increasingly enjoyed the status of valued 'culture'. As the reform era created space for the positive valuation of certain markers of ethnic difference, local governments in China began to promote forms of 'ethnic culture' (C. *minzu wenhua*) which create exotic spectacles appealing to tourists whose desires have been shaped by China's 'internal orientalism' (Schein 2000). Alasha's 'camel culture', practised in the region's photogenic landscapes with exotic animals that are rarely seen outside zoos in other parts of China, lends itself to this development strategy.

This revaluation of what had only recently been stigmatized as ‘primitive’ was part of a broader trend in reform-era China towards recovering, celebrating, and inventing the traditions of China’s ethnic minorities, after these had been subject to violent persecution during the Cultural Revolution (Chao 1996). Camel racing, for example, once an informal sport that took place during New Year’s celebrations, was institutionalized and codified in the 1980s, when teams from Alasha began to participate in China’s Minority Nationality Games. But whatever the degree of ‘inventedness’ and tourist-facing spectacle involved, camel culture also involves the production of valued human and nonhuman subjects, as I discuss in the latter part of this article.

In addition to culture, the increasing emphasis in official discourse on ‘ecology’ also provided an avenue for the defence of camel husbandry. In 2005, Baigal, along with several retired Mongol officials, established the Alasha Inner Mongolia Society for the Conservation of Camels, Ecology, and Environment, more commonly known as the Alasha Camel Society (*C. Alashan Luotuo Xiehui*). As a ‘nongovernmental organization’ (*C. minjian zuzhi*), it was required to have an institutional sponsor: this was initially the Bureau of Environmental Protection, before later becoming the Bureau of Agriculture and Animal Husbandry, where Baigal worked. When asked about the name of the society, Baigal explained that ‘our aim is to protect the ecology of the grasslands; camels are also part of this ecology’. The members of this society have established connections with Chinese ecologists and invited them to Alasha to conduct research. This has resulted in the publication of works which argue that camels are a vital part of the ecosystem whose absence contributes to desertification (e.g. Liu 2012).

This society lobbied on behalf of the camel in Alasha, with the result that three ‘camel conservation zones’ were established across the region, and the stocking limits on camels were relaxed. Camels thus became the exception to the general push towards destocking, and indeed the camel population in Alasha has increased slightly in recent years (Batuchulu & Siqinbielige 2017: 316–21). In 2012, Alasha was officially declared ‘China’s Camel Country’ (*C. Zhongguo Luotuo Zhi Xiang*) by the national Bureau of Agriculture. In what follows, I show how the defence of pastoralism using the discourse of ecology involves embracing the increasing wildness of camels and experimenting with market instruments, while at the same time de-emphasizing the skilled rural ethnic subject foregrounded by ‘camel culture’.

The nomadism of livestock

Despite the adoption of these policies favourable to camel husbandry, the market for camel products (milk, hair, meat) has remained relatively small, and herding camels is still fraught with difficulties, given the privatization of land use rights and the proliferation of fencing, which restricts the browsing range of camels.⁶ What is more, PES continue to incentivize herders to plant and fence plots of shrubs (Zee 2019), thereby decreasing the land available for camels to browse. In the early 2000s, swathes of rural Alasha had also been transformed into ‘industrial zones’, as it became more difficult for polluting industries to operate in densely populated eastern China. However, in 2014, chemical firms in one of these industrial zones were found to be dumping waste in the middle of a desert, prompting intervention from President Xi Jinping and the sacking of numerous local officials. This scandal provided an opportunity for Mongol intellectuals to assert the environmentally friendly credentials of pastoralist land use.

While camel culture valorizes certain aspects of rural life which had once been stigmatized as 'backward', it does not speak directly to the thorny questions of land use, property regimes, and PES. In this section, I discuss an experimental rangeland management scheme formulated by some of the intellectuals associated with the Alasha Camel Society, which seeks to stop the proliferation of fencing and to recalibrate PES in order to ensure the viability of camel husbandry. In a recent article (Wunimenghe 2015), published in a small academic journal based in southwestern China, one of these intellectuals provides a detailed outline of what he terms 'the nomadism of livestock'. This article explains that 'the laws of nature (*C. ziran guilü*) dictate when [the camel] moves to a particular piece of pasture'. Allowing the camels to follow these laws, the author claims, is the best method for restoring the degraded grasslands. In moving long distances across the grasslands, camels exercise benign ecological agency by spreading their dung, which acts as 'fertilizer' for the grasses, while their broad flat hooves crush the rats which damage desert shrubs.

While in such descriptions camels appear to be merely acting according to instinct, members of the Alasha Camel Society often ascribed intentionality to camels. One of them, for example, told me that camels were the most 'environmentally friendly animal' (*C. dui huanjing zui youhao de dongwu*), because they deliberately 'selected' (*C. xuanze*) grassless areas in which to lie down. According to Baigal, camels not only moved over a large distance every day; at certain seasons, they also migrated of their own accord. This movement was not instigated by the herders, according to Baigal, but was a conscious decision by the camels themselves. 'They know when to eat what grass', he emphasized.

Here camels appear similar to Tim Ingold's reindeer, which were said to 'take decisions concerning matters such as pasture access [and] migratory movements' in his parody of transactionalism (1974: 523). Like the transactionalists, Baigal and others associated with the Alasha Camel Society apply a 'market model' (Asad 1972) to understand behaviour. Back in his office, in between checking camels on his screen and answering multiple phone calls, Baigal explained to me the principles behind the 'nomadism of livestock'. 'If camels are allowed to act according to their own will (*M. sanaa*), they go wherever the grass is good. It's the same with people. They go wherever there is money to be made, of their own free will'. Here Baigal links the movement of camels to the economic migration which has characterized China's reform era, and models the behaviour of camels on the market agency of humans.

The article which sets out the proposal for the nomadism of livestock compares the removal of controls on animal movement to the relaxation of controls on cross-border trade: 'Every country in the world has developed economically by respecting the fact that the laws of the market economy transcend national boundaries; likewise, the management of livestock must respect the fact that the laws of nature transcend the boundaries of enclosed pastureland' (Wunimenghe 2015). Allowing camels to move freely is thus understood as akin to the 'opening up' (*C. kaifang*) of China to global export markets, which has characterized the reform era. Both ecology and economy appear as systems which function best when actors are left to pursue their own interests.

The 'nomadism of livestock' invites comparisons with recent 'rewilding' experiments in Europe. These involve free-roaming, 'de-domesticated' herbivores, which are valued for their role as 'ecological engineers' (Lorimer & Driessen 2016). The geographer Jamie Lorimer (2017) argues that the popularity of rewilding is part of a broader turn to 'probiotic environmentalities' at scales ranging from the human microbiome to nature reserves. These have emerged in response to the widespread sense that the

Enlightenment emphasis on human mastery and control of nature has produced its own pathologies, rather than securing human life. Analysing similar modes of governing that have arisen in response to the threats posed by climate change, Bruce Braun writes of ‘a doubling of neoliberal forms of government’, whereby both the ‘naturalness’ of society and that of nature are to be ‘let alone’ (2014: 59; cf. Foucault 2007). I suggest that we can see an analogous ‘doubling’ in Baigal’s vision of granting ‘freedom’ (*C. ziyou*) to animals so that they can contribute to the healthy functioning of ecosystems.

Why do these intellectuals and officials such as Baigal conceptualize the increasing ‘autonomy’ (Stépanoff *et al.* 2017) of camels using a market model? I suggest that one reason is that they seek to render their proposal legible to other officials by substituting the herder-as-gardener (which involves enclosure and fences) for the camel-as-gardener (which involves open-range grazing), while maintaining the framework of PES, which operates according to market theories of agency. At the same time, the use of such idioms can be seen as a kind of temporal politics, a response to the stagist evolutionism which has guided the modern Chinese state’s policies towards ethnic minority land use practices. By making analogies between the nomadism of livestock and two key aspects of the reform era, namely China’s opening up to global trade, and the reduction of restrictions on labour migration, these intellectuals argue that extensive animal husbandry should not be thought of as a ‘backward’ mode of production, but instead one that is compatible with market-infused modernity.⁷

However, it is important to realize that this conceptualization of the nomadism of livestock using certain market logics coexists with a critique of the policy of dividing rangeland among individual households. Together with the incentives for (fenced-off) shrub plantations, this has led to the fragmentation of the open range and the increasing conversion of herders into gardeners. These intellectuals emphasize the need to combine individual plots of pastureland, and to remove fencing, to allow camels to move freely. In addition, they argue that camels should be allowed to browse freely in shrub plantations, where they can ‘simulate wild animals’ (*C. mosi yesheng dongwu*) and ‘prune’ (*C. xiujian*) these windbreaks to assist their healthy growth. They claim that shrubs which are not browsed by camels soon wither and die.

The increasing wildness of camels is thus embraced as a sign of their ‘naturalness’, and of them following their own ‘will’, with the positive effects that this produces. Wilding becomes a means of challenging the privatization of pastureland and the fencing of shrub plantations. The nomadism of livestock proposal is thus a ‘hybrid assemblage’ (McElwee 2012), combining market rationalities with the defence of ‘nomadic’, open-range grazing in the face of the state’s attempt to manage the ecology of the grassland through enclosure.

This is politics as experimental socio-natural governance: the nomadism of livestock proposal reimagines pastoralism by rearranging the elements of Alasha’s windbreak infrastructure in order to render ‘nomadic’ land use compatible with Inner Mongolia’s status as an ‘ecological security shield’. Instead of rural Mongols abandoning herding and tending to shrubs because of the economic incentives provided by medicinal plants, this proposal suggests that they should be subsidized for keeping their camels, while the camels themselves are incentivized by the removal of fences to act as gardeners, ‘pruning’ windbreak shrubs and crushing the rats which damage them.

In his work on cash payments to the poor in Southern Africa, James Ferguson (2011) argues that market mechanisms conventionally associated with neoliberalism are being put to ‘pro-poor’ political uses. Rather than merely critiquing government, then, he

encourages us to attend to ‘Foucauldian politics’, which involves the turning of arts of government to new political ends. I suggest that we can conceive of these intellectuals as engaging in an analogous form of political experimentation. However, we must also attend to the erasures produced by such experiments. In what follows, I show how this emphasis on the agency of animal subjects is accompanied by a conception of the Mongol subject evacuated of distinct skills and knowledge, a conception which is complicit in the state’s project of modernization and urbanization.

Disappearing rural subjects

This is evident in a local news item which circulated on social media in Alasha in 2015, and which contained the following boosterist description of the new herding technology, such as the tracking devices and automatic watering troughs: ‘times change, technology advances. Today you can laze around at home (C. *zhai*) and order takeaway online. But did you know you can now also herd animals from home?’ Herding animals is thus made to appear as part of an internet-enabled urban lifestyle. Baigal told me that now that herders would no longer have to ‘waste time’ on the labour of animal husbandry, they could choose to engage in business, such as selling precious stones from the Gobi which are much sought after in eastern China. Or they could just stay at home. It was their choice.

With the introduction of tracking devices, the labour of herding is not only dramatically reduced but also fundamentally transformed. The article on the ‘nomadism of livestock’ describes how herders will be able to ‘observe the movements of camels from a computer in the city’. The term ‘observe’ (C. *guance*) suggests the monitoring of natural phenomena using scientific instruments. What little remains of the labour of herding thus allows herders to perform their scientific modernity. This is a strikingly ‘thin’ conception of the ethnic subject, which makes no reference either to ‘culture’ or to ‘indigenous knowledge’. Herders become ‘modern’ urbanized subjects through estrangement from their camels, as ‘intermittent co-existence’ (Stépanoff *et al.* 2017) is replaced by observation at a distance.

Recent anthropological work has shown that while the Chinese state officially denies that the notion of ‘indigeneity’ is relevant to China (Elliot 2015), ideas of ‘indigenous knowledge’, and the notions of environmental stewardship suggested by them, became established in parts of China in the 1990s (Hathaway 2010). This worked to counter the characterization of the land use practices of farmers and herders as ‘backward’ and destructive. In recent years, the notion that China’s minority nationalities have a particular affinity for nature has been promulgated in literature and music (Baranovitch 2016).

However, with the ecological reimagining of pastoralism by some Mongol intellectuals in Alasha, emphasis on the agency of the camel has been accompanied by the disappearance of the Mongol subject possessed of knowledge about, and attachment to, the natural environment. Instead, this subject has become one who responds to economic incentives, seeks a ‘modern’ urban existence, and merely monitors their camels remotely as these animals participate in ecological processes. Open-range grazing is thus figured not as reliant upon the ecological knowledge of herders or their traditional rangeland management institutions (Fernandez-Gimenez 2000), but rather as a natural result of the decision-making of camels.

In the following section, I show how the conception of the rural ethnic minority subject as possessor of distinct skills and knowledge continues to be reinforced by the

discourses and practices of ‘camel culture.’ This informs a very different understanding of the wildness of camels on the part of herders. Here camels appear as subjects not in terms of their rational self-interested decision-making; instead their possession of a ‘soul’ is regarded as the product of human domestication practices, which enable them to enter into a co-operative working relationship with humans. The wilding of these animals thus emerges as the unhappy sign of the proliferation of market subjectivities, which are understood to be characterized not by entrepreneurialism but instead by laziness.

The work of culture

The camel culture festival on the outskirts of Bayanhot in many ways resembled other festivals of ‘ethnic culture’ (C. *minzu wenhua*) in reform-era China. It involved parades of children in traditional Mongolian dress in front of unsmiling officials; camel races featuring riders also wearing this dress; speeches from officials celebrating ‘ethnic unity’; and groups of wealthy tourists from eastern China, identifiable by their expensive outdoor gear and telephoto lenses. But rather than viewing camel culture merely as tourist spectacle and state theatre, I argue that it involves a set of discourses and practices that valorize pastoral work and skill. In the context of the general wilding of camels, this valorization is heightened by concerns over the transformation of rural subjectivities.

According to Batbagan, a herder from northeastern Alasha, ‘not everyone can learn how to ride a camel; you need talent (M. *aviyaas*) and skill (M. *chadvar*): Preparing camels for races involves tethering them and restricting their food intake (M. *sööh*) in the week before the race. Such practices required significant expertise (M. *ih erdem*), which Batbagan compared to the skills in education possessed by my teachers at university. It was noticeable that on meeting another camel herder for the first time, people often asked, ‘Do you tether and ride them?’ (M. *uyaj uralddag uu?*). Whereas large herds are an index of herding skills in other parts of the Mongolian world (High 2008: 6), here in Alasha, at a time when herd sizes were subject to restrictions, it was instead the capacity to work with camels that predominated in assessments of herders’ assessments of each other’s capabilities.

This emphasis on working with camels emerges against the historical background of divergent valuations of pastoral compared to agricultural labour during the high socialist period. This was a time when the reclamation of rangeland for agriculture was justified on the grounds that this was ‘wasteland’ (C. *huang*) which embodied no labour (Williams 2002: 66). In the 1960s, pastoralists were criticized for consuming grain which they did not themselves produce, which was known as ‘grain of bad conscience’ (C. *kui xin liang*). Nomadic herding was portrayed negatively as merely a matter of aimless ‘wandering in pursuit of water and grass’ (C. *zhu shui cao er ju*) (Williams 2002: 66), and herders were said to rely on the whim of nature in order to survive (C. *kao tian chi fan*). Following the establishment of people’s communes in 1958, the state sought to co-ordinate and increase the amount of labour performed by pastoralists (Sneath 2000: 91).

These ideas remain sedimented within the self-understanding of Mongols in Alasha. It is common to hear Mongols here self-deprecatingly describe themselves as ‘lazy’ (M. *zalhuu*) in contrast to the ‘hard-working’ (M. *ajilch*) Chinese, many of whom fled to Alasha during the early 1960s, after the Great Leap Forward contributed to famine in nearby Gansu. Oyunchimeg, Batbagan’s wife, told me that ‘wherever Chinese people go, they plant things’. When I asked her why she thought Mongols did not tend to plant

things, she said that ‘they don’t know how to. They’re lazy. They just get drunk and sleep’.

In fact, the ability to work hard, and the skills involved in animal husbandry, are much valued among Mongols in rural Alasha. Participation in camel culture is, I argue, one of the main ways of demonstrating commitment to this value, and of showing that Mongol pastoralism, not just Chinese agriculture, requires skill and hard work. Oyunchimeg, for example, insisted that Chinese people were unable to ride camels. When I mentioned the plans for herders to move to the city and herd remotely, Batbagan was dismissive: ‘There is still lots of labour (*M. hödölmör*) needed to look after camels!’

Camel culture also valorizes certain historical forms of labour. As we passed strings of camels arranged in caravan formation at the festival site, Batbagan described the journeys his father and grandfather used to make with others, transporting salt by camel for wages from the lakes in the desert to trading posts on the Yellow River. This form of labour continued well into the socialist period, before trucks and trains rendered it obsolete. It was hard work, often undertaken in the depths of winter. But there was a pride in and nostalgia for this work too, as evidenced by the strings of pack camels at the festival, and in the several private museums which have sprung up in recent years, exhibiting the paraphernalia associated with caravans.

Camel culture and rural community

Batbagan hails from Ulaan Elis in northeastern Alasha, a region known for its camel racing. Ulaan Elis village (*M. gatsaa*) was, until 1983, Ulaan Elis ‘production brigade’ (*C. shengchan dadui*), the administrative unit beneath the people’s commune. These high socialist administrative-territorial units today continue to shape identity in the region (White 2016). Before decollectivization, the production brigade was responsible for co-ordinating pastoral labour. Brigade members frequently worked together on the various tasks involved in animal husbandry, and people remembered this era as one in which hard work was rewarded and laziness punished. I was told that ‘collective labour was very powerful (*M. hüchtei*)’. However, everyone agrees that since the privatization of the pastureland, people have become more ‘selfish’ (*M. huvia bodson*), and that there is little ‘unity’ (*M. bülhmedel*) among fellow villagers.

This decline in co-operation among neighbours in pastoral regions of Inner Mongolia has been noted by several ethnographers (e.g. Humphrey & Sneath 1999: 169; Williams 2002: 50). Camel husbandry in Alasha, however, is an exception. Given the size of these animals, domestication practices such as gelding and breaking in frequently involve co-operation between several camel-herding neighbours. These neighbours also engage in a provisional form of commoning: in the case of camels, they act as if the rangeland had not been enclosed and allow animals belonging to other households to browse on ‘their’ pastures.

These neighbours then travel together to camel culture events, where competitors from the same village are regarded as being part of a team, even when they compete individually. Their attendance at these events is often co-ordinated by officials from the local town (*C. zhen*; *M. balgas*), the administrative unit which grew out of the people’s commune. Such events therefore involve subjectivities and social organization quite different from the individualized market actor conjured up by PES.

The work of ‘camel culture’ thus has echoes of high socialist-era labour co-operation between members of particular administrative units. Analysing the folk culture revival in nearby Shaanxi, Ka-ming Wu argues that rather than merely being a commodified

spectacle designed to attract tourists, folk culture allowed for the ‘rebuilding of a dislocated community’ and ‘a radical self-reevaluation of rural values and experience’ (2015: 66, 79). I am arguing that camel culture in Alasha similarly has become a site at which the value of pastoral work is asserted, thereby countering long-standing ethnic stereotypes. At the same time, the domestication practices which make camel culture possible require collaboration between neighbours, while the herding of camels relies on provisional commoning among these neighbours, both of which go against the grain of the privatization of pastoral production since the 1980s.

Producing souls

According to Batbagan, camels that had not been broken in and thus could not be put to use in riding or transportation were just ‘meat camels’ (M. *mahnii temee*), fit only to be sold for slaughter (cf. Vitebsky & Alekseyev 2014: 416). It was only the camels that had been broken in and could be ridden to which he gave names.⁸ Breaking in camels is thus thought to involve the simultaneous production of valued human and nonhuman selves. In the case of camels in Alasha, the key domestication practice is the insertion of the nose peg which allows them to be tethered and to have their movement directed. In addition to basic verbal commands, it serves as a vector of communication between herder and animal. Rather than an instrument of domination (Ingold 2000), herders regard the nose peg as a ‘social infrastructure’ (Anderson, Loovers, Schroer & Wishart 2017), which affords the possibility for herder and animal to work with one another.

Charles Stépanoff reports that the Tozhu of southern Siberia regularly tether reindeer at the campsite, which is done with ‘no other goal than to support the relationship of intimacy between reindeer and herders’ (2012: 299). According to the Tozhu, ‘you teach by tying up’. In rural Alasha, the insertion of the nose peg similarly fosters what Stépanoff calls a ‘cooperative context’, transforming the camel into a being with whom the herder can enter into a relationship. Inserting a nose peg, said Batbagan, was like ‘giving someone a name’.

Scholars have argued that the ascription of personhood and subjectivity to all domestic animals by Mongols is rooted in an ‘animist’ cosmology (e.g. Fijn 2011; Stépanoff *et al.* 2017). In the case of the camel in Alasha, however, such ascription also depends upon the domestication practices which enable interspecies work. I came to appreciate this after hearing one herder bemoan the fact that the statues of camels that had been erected in Bayanhot did not have nose pegs, since camels without nose pegs ‘had no soul’ (M. *sünsgui*). This man’s comment thus shows how herders in Alasha have come to distinguish between ‘meat’ camels, whose status is that of mere objects, and the dwindling number of camels with nose pegs, which are still able to work with humans.

It was this ability that herders emphasized when asked what was special about camels. Batbagan said that they had a particularly high degree of ‘merit-fortune’ (M. *buyan*),⁹ because of their willingness to carry heavy loads for humans. ‘Horses can’t carry things, you can only ride them’, he told me. Importantly, Batbagan suggested that camels were not merely vessels which contain or exemplify the merit-fortune accumulated by the household, as livestock have often been characterized in the Inner Asian context (e.g. Empson 2011), but intentional *producers* of merit-fortune, by virtue of the work that they did. Intentionality in this instance is conceived of not in terms of self-interest, as it was for Baigal, but in terms of willing participation in collective labour. Here Batbagan drew on another sense of *buyan*, which referred to doing a good deed for someone (M. *buyan hiih*). The word was commonly

used by herders when they requested help from neighbours without the promise of remuneration. The particular use of this word to apply to the camel thus worked to frame this animal as a participant in social relations based on co-operation in work.

In this context, assessments of the increasing wildness of camels in Alasha were bound up with anxieties over the figure of the rural herder and the breakdown of rural communities. In 2014, the year following the camel festival, Batbagan struggled to find neighbours who could help him break in a gelding (*M. ata*), as the lives of these herders increasingly orbited the city. Very few households now tethered camels for riding in the winter. 'With these payments, people have become lazy; they just sit at home watching television', Batbagan complained. He noted that it was becoming harder to find riders to race in camel culture events; few young people were willing to ride camels anymore. 'These young people don't even know the proper name for a nose peg', he expostulated, 'they just call it a "bit of wood" (*M. mod*)!'

There was widespread concern that herders who moved into the city attempted to live off PES, while not engaging in work. These former herders now had 'nothing to do', which led to them filling their days with drinking and gambling. They had 'chaotic' (*C. luan*) sexual relationships and became 'hooligans' (*C. liumang*). In Bayanhot, one of the residential neighbourhoods where ex-herders live is popularly referred to as the 'alcoholic's neighbourhood' (*C. jiugui xiaoqu*). Rather than producing civilized urbanites, then, as the intellectuals hoped, the estrangement of humans and animals is here seen to lead to moral decline. The increasing wildness of camels in the countryside finds its complement in the errant behaviour of former herders in the city, untethered from rural multispecies communities.

Several scholars have recently sought to draw our attention to 'animal work' (Porcher 2017) and 'nonhuman labour' (Barua 2017), encouraging us to see that 'animals are working subjects, not just worked objects' (Haraway 2008: 80). The ethnography I have presented here shows how this work is conceptualized by herders according to particular histories of labour, and in the context of the deployment of market instruments to manage the environment. In Alasha, camels can both embody human work and become working subjects themselves. The idioms through which these animals are conceived of as subjects thus reflects opposition to the logic of PES, which target herders through the profit motive and reward them for reducing their pastoral labour.

Conclusion

In a variety of contexts across the world, nonhuman nature is increasingly conceived of in terms of the services it provides. In some cases, once-persecuted wild animals, such as wolves, are welcomed back as 'ecological engineers', whose presence is now thought to have benign effects on entire landscapes (Lorimer 2017); in others, nonhuman actors are called upon to mitigate the effects of climate change, such as in the case of oyster beds in New York, deployed as a natural buffer which adjusts to flood events and sea-level rise (Braun 2014).

In recent decades, China has become notorious for its extractive approach to nonhuman nature, particularly in Inner Mongolia, a region rich in mineral resources. However, this region is also the frontier of China's 'ecological civilization', and is officially designated as an 'ecological security shield' whose role is to protect Beijing from dust storms. The construction of this 'security shield' has involved experiments in governing which work through the 'ecosystem services' of both human and nonhuman

actors, diverting herders away from pastoralism and encouraging them to move to cities, or to engage in afforestation projects.

With this article, I have sought to develop an anthropological approach to such experiments, situating them in the context of local politics and histories of land use. In Alasha, rather than merely being merely a manifestation of neoliberal governmentality, governing through nonhuman nature also presents certain possibilities for members of an ethnic minority who seek to defend a stigmatized form of land use. A particular species of livestock is reimagined as an integral part of the natural infrastructure which constitutes this 'security shield'. This involves embracing, and indeed increasing, through the use of new technology, the estrangement of herders from camels that has accompanied rural depopulation. Semi-wild camels are enrolled by minority intellectuals in an ecological defence of pastoralism that deploys market conceptions of agency, while at the same time seeking to counter the privatization of pastureland, which has led to the fragmentation of rangeland and the transformation of herders into gardeners.

What novel conceptions of the human subject accompany these emergent modes of government? Jerry Zee remarks that socio-natural governance in Alasha does not make reference to the categories of belief or care on the part of human subjects (2019: 62). The 'nomadism of livestock' proposal similarly makes no reference to the rural ethnic subject possessing distinctive culture, 'traditional ecological knowledge', or commons management institutions; instead it seeks to transform herders into urbanites with time on their hands, via the mediation of new technology.

However, I have shown how this experimental form of governing, which seeks to embrace the wildness of camels, has been proposed in the context of a local 'camel culture' which foregrounds domestication practices. The development of camel culture, which has been encouraged by the local state's desire for regional cultural brands to attract tourists, has sutured the vision of the ideal rural ethnic subject to the ability to train, ride, and work with camels. Camel culture involves forms of work, social organization, and provisional commoning that are in tension with the logic of the market instruments through which the state has sought to turn pastureland into infrastructure. For those camel herders who remain on the grasslands, the wilding of camels thus represents an unfortunate consequence of the proliferation of market logics, as younger people are incentivized to move to the city and leave any animals that remain in the charge of elderly parents.

Anthropogenic environmental change is prompting new ways of managing ecologies which enrol nonhuman actors, rather than being predicated on human mastery and control. Instead of seeing this merely as an emerging global response to the shared crisis of the Anthropocene, I have suggested that the ecological reimagining of pastoralism by Mongol intellectuals in Alasha must also be understood as part of a longer history of contested land use in Inner Mongolia. At the same time, I have shown how novel conceptions of nonhumans as 'ecological engineers' exist alongside, and in tension with, powerful understandings of the human not only as possessor of 'ethnic culture', but also as a subject which 'becomes with' domestic animals (Haraway 2008). This article has enquired into conceptions of the human subject as it 'becomes without' such animals, when intimacy gives way to estrangement. From the vantage point of Inner Mongolia's degraded landscapes and fraying rural communities, the instability of domestication gains particular significance, as the loss of control over animals becomes a site of hope for some and anxiety for others.

NOTES

This article benefited greatly from the comments of the anonymous reviewers of the *JRAI*. I am also grateful to Joseph Bristley, Natasha Fijn, Branwyn Poleykett, Michael Vine, and Jerry Zee, who all provided very useful feedback on various earlier versions of the article.

¹ All names of informants in this article are pseudonyms.

² I use the term 'intellectual' here to refer to those minority elites in Alasha, all of whom are either serving or retired government officials, who advocate for camel husbandry through their contacts with other local officials, but also through participating in scientific conferences across China and publishing books and articles.

³ In the early autumn of 2020, as this article was going to press, there were protests in Inner Mongolia over reforms to Mongolian-language education in the region, which involved replacing Mongolian with Chinese as the medium of instruction for certain core subjects.

⁴ Alasha League (C. *meng*; M. *aimag*) is divided into three 'banners' (C. *qi*; M. *hoshuu*). This administrative unit is unique to Inner Mongolia and is equivalent to the 'county' (C. *xian*) in other parts of China.

⁵ According to official statistics, at the end of 2018 there were 4.6 million Mongols in the Inner Mongolia Autonomous Region, out of a total population of 25.3 million, the vast majority being Han Chinese. See <http://www.nmg.gov.cn/col/col118/index.html> (accessed 10 November 2020).

⁶ Subsequent to the main period of fieldwork on which this article is based, the local government in the westernmost part of Alasha (Alasha Right Banner), in collaboration with a Chinese dairy company, has sought to encourage herders in this region to produce camel milk for the market (see White 2020). Such efforts have so far been concentrated in Right Banner, rather than Left Banner, where I conducted the fieldwork for this article.

⁷ The 'freedom' of Mongolian livestock can also be understood with reference to different political economies. In 2016, the then Prime Minister of Mongolia Saikhanbileg sought to explain to investors in Hong Kong that the delays to mining projects in his country were a sign of its 'vibrant democracy'. He then encouraged investment in the livestock sector, quipping that 'we have the most democratic livestock in the world. Why do we say democratic? Because they are free to choose where to go and what to eat' (Bumochir 2017: 30). We can note that the Alasha intellectuals, by contrast, make reference to economic rather than political freedom.

⁸ Charles Stépanoff and his colleagues note that it is common for working animals in North Asia to be given a name (2017: 66; see also Vitebsky & Alekseyev 2014: 416).

⁹ *Buyan*, which often appears together with *hishig* in the compound *buyan-hishig*, derives ultimately from the Sanskrit *punya*.

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Le pastoralisme après la culture : gouvernance environnementale et éloignement humain-animal aux frontières écologiques de la Chine

Résumé

Au nom de la « civilisation écologique », l'État chinois cherche à adapter sa politique environnementale à la dégradation des prairies du nord du pays. Il fait appel à des mécanismes de marché tels que la rémunération de services rendus à l'écosystème, afin d'encourager les bergers des minorités ethniques à se tourner vers d'autres moyens de subsistance. À l'extrémité occidentale de la Mongolie-Intérieure, avec la diminution de la main-d'œuvre disponible qui en a résulté en milieu rural, la plupart des chameaux domestiques restés dans les pâturages sont désormais essentiellement livrés à eux-mêmes tout au long de l'année. Les fonctionnaires et intellectuels mongols locaux ont longtemps considéré l'élevage extensif comme un rempart contre la spoliation de leur peuple du fait de l'expansion agricole chinoise. Cet article montre comment ils se saisissent aujourd'hui des logiques dominantes de l'écologie et du marché pour défendre ce type d'utilisation des sols, en envisageant ces chameaux « semi-sauvages » comme rendant service à l'écosystème. Leurs propositions ignorent la figure de la minorité rurale porteuse de culture, associée dans cette région au dressage et à l'élevage de chameaux, et promue par les politiques de patrimoine culturel

de l'ère des réformes. Les divergences de compréhension concernant le caractère « sauvage » des non-humains sont ainsi révélatrices des tensions entre politique écologique et politique culturelle aux confins de la Chine, et des angoisses des minorités rurales dans un contexte de nouveaux modes de gouvernance environnementale.

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