

Tibetan Buddhism, Wetland Transformation, and Environmentalism in Tibetan Pastoral Areas of Western China

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Abstract

Alpine wetlands occupy a considerable area of the Tibetan Plateau, a region that is characterised by diverse but fragile ecosystems, including alpine wetlands, which are reported to have shrunk by 29% over the last several decades. This article explores the contradictory practices of Tibetan pastoralists regarding these alpine wetlands and examines how Tibetan pastoralists conceptualise and understand wetlands as well as how state policies, market forces, and religious norms work together to produce Tibetan herders' practices vis-à-vis their livestock and the wetlands. The analysis will first challenge the common notion that Tibetan Buddhism plays a decisive and consistent role in conservation and environmental protection, an idea that has been proposed by academic scholars and promoted by many non-governmental organisation practitioners. As an alternative to the attempt to measure indigenous people and their culture against the criteria set out by western conservation, I argue through this case study that Tibetan pastoralists' relationship with wetlands informs their negotiation with competing forces including state policies, market logics, global environment movements, religious resurgence, and traditional nomadic practices.

Keywords: Environmentalism, indigenous knowledge, market economy, state policies, Tibetan Buddhism, Tibetan pastoralism, wetland conservation

INTRODUCTION

Referred to as the Third Pole and widely known as the 'water tower' for the population of Asia, the Tibetan Plateau is characterised by fragile and diversified ecosystems (Foggin 2000; Li et al. 2003; Zhang et al. 2004). Alpine wetlands occupy a considerable area of this region and play a critical role in maintaining the ecological stability for the region and its neighbouring areas (Miller 1998, 2005). The wetlands have a high capacity for water conservation and storage because they sustain rich biodiversity and mitigate soil erosion and flood

damage; they also nourish many migratory birds and native animals (Smith and Foggin 1999) and support the livelihoods of two million Tibetan pastoralists, who have distinctive religious beliefs and cultural practices.

However, mainstream discourse suggests that the total area of alpine wetlands on the plateau has shrunk by 29% over the last several decades (Wang et al. 2007; Li et al. 2011; Zhang et al. 2011). Some interpret this to be the result of global climate change (Zhao et al. 2004; Frauenfeld et al. 2005; Chen et al. 2006), whereas others attribute this to 'overgrazing' resulting from increases in human population and livestock densities (Cao et al. 2005; Cui et al. 2007; Harris 2010). Yet, in contrast to mainstream assertions of overgrazing, many pastoralists do not believe that overgrazing leads to rangeland degradation in grassland areas (Goldstein et al. 1990; Klein et al. 2005; Mieke et al. 2008).

This is relevant to wetland conservation as rangeland degradation means the loss of water on the surface of pasture. For many Tibetan pastoralists, wetlands constitute an important part of the pastures that sustain the livestock from which they

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make a living. They do not associate the water loss with the livestock population growth. Not only that, for over the last 10 years, a small number of herders in the pastoral regions of the southeastern Tibetan Plateau have been draining water from those wetlands in an attempt to expand their pastures (Yan and Wu 2005: 112).

Tibetan herders' relationship with the alpine wetland cannot be separated from the social political changes of the last half century. Three types of changes have been particularly significant to wetlands conservation and utilisation. The first is associated with the economic reform of Tibetan pastoral regions, which started with the livestock privatisation of the early 1980s and the grassland use rights privatisation of the late 1990s (Yan and Wu 2005; Yan et al. 2005; Richard et al. 2006). This was followed by the general integration of the southwestern Tibetan populated pastoral regions into the much larger economic cores in western China, namely Chengdu in the southeastern Tibetan Plateau, and Lanzhou and Xining on the northeastern Tibetan Plateau. Through this market integration into larger Chinese cities, Tibetan herders' livestock herding became more market-oriented and Tibetan pastoralists increasingly think about their pastures through capitalist calculative logics of investment and profit (Gaerrang 2015b). Thirdly, the economic development of the region in the early twenty first century has also witnessed a 'green movement' at both the state and grassroots levels. At the state level, the 'greening' of state policies was triggered by the floods in the downstream areas of Yangtze and Yellow rivers, leading to a halt to timber logging in Tibetan populated regions and the implementation of various ecological programmes including *tuimu huancao* (Yeh 2005; Yonten 2012), the more recent *shengtai buchang jizhi* (Ecological compensation system of pastoral regions) (McAfee and Shapiro 2010; Yonten 2012), and the very recent setting up of wetland conservation zones in much of the southeastern Tibetan Plateau. In these efforts at ecological conservation, the overstocking issue that is associated with Tibetan pastoralists' supposedly irrational herding practices has become the primary target to change.

The social and economic changes and the emergence of the 'green state' are simultaneous with another force, namely the Tibetan Buddhist revival since economic reform and its association with the rise of the 'green Tibetan' (Yeh 2014a, b). Tibetan Buddhism is particularly important in the way that it has increasingly become synonymous with environmentalism, and its teachings interact with conservation in many complicated ways (Yeh 2014b; Woodhouse et al. 2015). Using a case of wetland transformation and conservation on the Tibetan Plateau and its relationship with the Tibetan Buddhist rituals surrounding *klu* (nagas, underwater serpentine deities), this article explores the complex interactions of these changes, and how they inform Tibetan pastoralists' wetland practices.

The majority of the wetlands in eastern Tibet are formed by springs and streams running from hills and mountains, which Tibetans believe are home to *klu* (=nagas), one type of living being from the eight realms (*lha srin sde brgyad*) in Buddhist teachings that are materially reflected in the forms of snake,

frogs, fish, and other living beings in the water (Woodhouse et al. 2015). It is believed that *klu* often guard great treasure and the expression of the *klu*'s discontent, and agitation can be felt as skin diseases, various calamities and so forth. As *klu* are easily offended living beings, Tibetans are sensitive about springs and try to avoid disturbing or polluting the spring water that form wetlands that the government is now trying to preserve. Yet, as the wetland itself is not associated with any other type of offensive spiritual deities, a small number of herders have been draining their wetland despite the fact that this goes against not only the state's wetland conservation goals but also the Buddhist teaching of cause-and-effect, in which the draining practices lead to a dislocation of living beings in the wetlands.¹

LITERATURE REVIEW: POLITICAL ECOLOGY OF WETLANDS OF THE TIBETAN PLATEAU, TIBETAN BUDDHISM, AND INDIGENOUS ENVIRONMENTALISM

By exploring the complexity of Tibetan pastoralists' relationship with wetlands, this article contributes to three bodies of literature: 1) on the political ecology of wetlands on the Tibetan Plateau; 2) on the relationship between Tibetan Buddhism and the environment; and 3) on indigenous peoples and environmentalism. Tracing the history of major state development programmes in Zoige (Ruoei gai) county, Aba Prefecture, Sichuan², Hayes (2010) observes that state development programmes have had major impacts on the ecology of the Zoige Wetland Zone even though mainstream discourse has primarily blamed Tibetans pastoralists for rangeland and wetland degradation. He suggests that the recently emerged force of indigenous people's participation in conservation should be further encouraged in state conservation work. Like Hayes, Yeh (2009) also traces major historical changes associated with a wetland, in this case the Lhalu wetland near Lhasa city, but uses a different perspective. Incorporating the idea of 'nature', an idea that both Chinese state and Tibetans in-exiles have framed as pristine and 'out of history' (2009: 34), she suggests that both parties view indigenous Tibetans as without historical agency. This has become the same ground in their discursive contestations over the legitimisation of control over Tibet. In particular, for the Chinese state, wetland transformation both during and after Mao works to 'secur[e] state sovereignty over Tibet' (Yeh 2009: 37), a project that separates nature from the social.

Similarly, this article also considers the political, social, and economic factors in wetland management, and in Tibetans' relationship with wetlands, but I include important aspects of religion. While Yeh mentions religious rituals associated with Lhalu wetland, including the circumambulation of springs, offering to *klu*, and the story of *mtsho-glang* in the lake,³ her primary concern was the question of nature, the erasure of historical agency, and the territorial consolidation of state power. This article focuses on wetland conservation and the complex process of Tibetan pastoralists' engagement with their

environment. My work explores, in further detail, the extent to which Tibetan Buddhist rituals around *klu* play a role in wetland conservation within the context of social and political economic changes.

Bringing religion into dialogue with conservation practices requires paying attention to another body of literature, namely academic discussion about the role played by Tibetan Buddhism in conservation. This article aims to destabilise the common notion that Tibetan Buddhism plays a decisive and consistent role in conservation and environmental protection, an idea that has been proposed by scholars and promoted by many NGO practitioners (Gross 1997; Huber 1997, 2005; Coggins and Hutchinsn 2006; Salick et al. 2007). With a case study of an agro-pastoral community in the Kham Tibet region, Emily Woodhouse et al. (2015) present a complicated situation in which the role that Tibetan Buddhism plays in the Tibetans' relationship with environment is compromised by commodifying practices, such as the harvesting of *yartsa gunbu* (=caterpillar fungus). Focusing on three aspects of Tibetan Buddhist traditions of local deities (*yul lha*), Buddhist teachings of *karma* (=cause and effect basis one's deeds), and Buddhist moral doctrines, Woodhouse et al. argue that the idea of 'green Tibetans' is much more complex in ordinary Tibetans' everyday practices, suggesting that a gap exists between representation and everyday practice. In line with this study, my article also argues that ordinary Tibetans (and their religious beliefs in Tibetan Buddhism) have a much more complex relationship with their environment than is often assumed. I argue that these are informed by not only state policies and market forces but also by different elements of Tibetan Buddhism in their everyday lives. My article pays particular attention to tracing the specific connections where religious forces, state policies, and the market economy work together in Tibetan pastoralists' wetland drainage.

Lastly, this study contributes to the discussion of whether or not indigenous people can be thought of as 'noble environmentalists'. Questioning the aspiration of indigenous people to live in perfect harmony with their environment, a group of scholars (e.g., Callicott 1982; Hughes 1983; Booth and Jacobs 1990) suggest that there is a huge gap between indigenous people's real lives and the stereotypical image of ecological nobility conceived by Westerners (Martin 1967; Butzer 1993; Krech 1999). These scholars mostly focus their research on what indigenous people 'do not do' or how they depart from the concepts of environmentalism and conservation that are based on western culture and values. Paul Nadasdy (2005) contributed to this criticism by suggesting that, rather than the focus on measuring what indigenous people 'do not do' according to western conservation values, it is important to examine 'what they do', and how this is different from the norms embedded in Euro-American 'environmentalism' and 'conservation'. Nadasdy (2005) furthermore suggests that indigenous people have a very different agenda for their interaction with the environment and for their participation in conservation projects, which can only be understood in the context of their own lives and culture.

Following Nadasdy's insight, Yeh (2014b) employs a concept of 'reverse environmentalism' in her study of leading Tibetan environmentalists' concepts of environmental protection, which depart from the Western idea of environment protection, but are grounded in various Buddhist philosophies. Yeh suggests that rather than measuring Tibetans and their culture (Buddhism) against the western standard of environmental protection, we should consider how Tibetans perceive the environment in their own cultural terms. These insights by Nadasdy and Yeh are important for understanding how indigenous people relate to environmentalism by providing indigenous people with more agency in their articulation and conceptualisation of environmental protection.

However, I also argue that paying excessive attention to the uniqueness of indigenous culture as ontologically different neglects the complex relationship between indigenous peoples and the broader political, social, and economic changes they have always been a part of. Thus, I suggest that it is more interesting to explore the process of how indigenous people and their traditional practices encounter new social arrangements, and how this has led to the expansion of the scope of their traditions (religious beliefs and practices, livelihoods, and social relations) as well as the meanings of new discourses (environmentalism, conservation, development, etc.) (Dove et al. 2003). My article studies indigenous people and their practices not merely in relation to environmentalism, but by examining a complex process in which multiple forces combine to produce new practices for Tibetan pastoralists that have environmental consequences. Concerning Tibetan pastoralists and their relationship with the wetlands, rather than questioning whether wetland use/transformation has a traditional or more modern motivation or whether indigenous people and their old herding practices are rooted in noble ecological ideas (Nadasdy 2005; Xu et al. 2005; Luo et al. 2009), it is more productive to investigate how the interaction of the traditional concepts of wetlands (*na*) and herding practices (discussed in Section 4) with new social arrangements (both, state policies and market economy) produced new practices of wetland use/transformation (Section 5) in which Tibetan Buddhism plays a complex role (Section 6) and that reflects Tibetans' complex relationship with recent secular environmentalism (Section 7).

To explore this process, I introduce a state wetland restoration programme and its study site. This is followed by an ethnographic study of Tibetan pastoralists' adoption of wetland transformation in relation to both, Tibetan herders' traditional pastoral practices and state development policies since the 1980s. In Section three, I further contextualise the herders' wetland transformation within larger Chinese market-oriented economic developments, a process that has motivated herders to transform the wetland. In Section four, the article explores Tibetan pastoralists' spiritual relationship with the wetlands, a complex relationship that is both, new and old. Relating to state wetland conservation and locally-initiated environmental movements, the last sections of the article explore how Tibetan pastoralists respond to the state wetland restoration programme and discuss the extent to which Tibetan pastoralists' concern

with their environment is in line with a secular western idea of environmentalism mostly held by Chinese state decision makers, conservation practitioners, and biologists.

STATE WETLAND RESTORATION PROGRAMME AND STUDY SITE

The ethnographic field research for this study was conducted in three wetland sites in Hongyuan County, a nomadic county with a population of 40,000 located at an altitude of 3,500 m in northern Sichuan Province, China, situated at the southeastern edge of the Tibetan Plateau. In 2009, wetlands under the administration of Hongyuan County, that are part of the largest area of alpine wetlands on the eastern Tibetan Plateau, were included in the national wetland preservation zone of the China Zoige Wetland Zone (Hayes 2010). This is a startling contrast with the widespread drainage of alpine wetland during the commune period, when the state wanted to transform the 'wasteland' as they saw wetlands, into productive pastures or use them for newly introduced agricultural practices (Yeh 2009; Hayes 2010; 2013a). With higher-level government funding, the local government of Hongyuan County initiated the wetland restoration projects in combination with the promotion of wetlands as tourism sites in a pasture that had been titled to four households during the state's grassland allocation policies of 1996. Yet, the size of wetland that is covered by the state investment of RMB 30 million is about 20 sq. km, which is tiny in comparison to the wetland size of 2,060 sq. km in Hongyuan County.⁴ Thus, the most important aspect of the wetland restoration projects of Hongyuan County is not so much the material achievement of the wetland restoration in the area, but rather the resulting discourse that highlights the important shift in how the state views wetlands.

The research team consisted of the lead investigator (the author of this article), one Chinese student, and several local assistants, all of whom conducted research for a period of two months in July 2014 and July 2015. The author and lead investigator was born and raised in a nomadic family in Hongyuan and is, thus, fluent in the local Tibetan dialect, and familiar with the people and the landscape. Two sites were selected where pastoralists drained (or were draining) the wetlands, and where the author had previous experience of herding. The first site was a small and isolated wetland shared by seven households near Hongyuan County town. The second site was located 15 km away from the county town. Another site, located over 40 km away from Hongyuan County town, was selected because it is the site where the Hongyuan government has implemented a wetland restoration project. Using semi-structured interviews and informal conversation with local herders, the team interviewed over 30 households at these three sites about wetland degradation and management, herding practices and religious norms, overgrazing, and state interventions. The 30 interviewees included 17 herders who herd where wetlands have been drained, the heads of four households participating in state wetland restoration projects, and another nine herders neighbouring the drained wetlands.

Our team observed the pastoralists' everyday herding practices and made on-site observations of the surface water and grass condition at the three sites.

Tibetan pastoralists who make their living by herding yaks constitute the majority of the population in Hongyuan, and 30%–50% of their annual income comes from selling livestock to slaughterhouses, while the other half is derived from selling dairy products. But an increasing number of households with medium and lower incomes, who make their living from livestock herding, are supplementing their incomes with state subsidies and part-time jobs of family members in towns. These part-time jobs include construction, working in restaurants, local transportation, small factories, and herb collection. An increasing number of herders settle in towns, where their lives are supported by fees they receive for renting out their pastures and by working part-time jobs. Like in other parts of Tibet, Tibetan herders are still actively involved in religious rituals and practices. These practices include making donations to monks and lamas, constructing Buddhist facilities (chanting halls, statues, *stupas* (=a dome-shaped building erected as a Buddhist shrine), mani prayer wheels, and putting up religious flags), prostration, practicing simple meditations, making offerings to Buddhist deities and mountain deities, and recitation of Buddhist scripts.

TIBETAN PASTORALISTS AND WETLAND TRANSFORMATION

In the pastoral areas of Aba Prefecture, Sichuan, many Tibetan pastoralists received wetlands of different sizes as part of their grasslands allocated by the state in 1996 (Yan and Wu 2005; Yan et al. 2005; Richard et al. 2006). Within their traditional pasture categories, wetlands, particularly alpine marsh meadows, are called *na*. Tibetan pastoralists graze yaks and horses on the majority of the wetlands⁵ in summertime and reserve them during wintertime, as vegetation grows higher and denser in wetlands, which makes it inaccessible to the livestock in harsh weather conditions in wintertime. Indeed, Tibetan herders distinguish two types of wetlands: 1) the wetlands that contain less water and are an indispensable source for their herds, and 2) the wetlands that contain too much water for herding. The majority of the second type of wetland was included in the wetland transformation movement (widespread drainage) during the commune period (1958–1978), but many of them have since recovered as a wetland. Herders do not cherish this second type of wetland, as it is inconvenient for them in several ways, including the fact that it causes livestock deaths in wintertime, makes transportation difficult, and because this type of wetland sustains fewer grasses than the first type. For instance, one herder told us that the wetland that divided his pasture into two had been causing a lot of trouble. The inconveniences include the difficult access to the pasture from the other side of the wetland, which is hard for livestock to cross. Second, the livestock need to cross the wetland to access the grasslands, and this makes them very dirty, which contaminates the milk that the herders collect from the yaks.

Because, the second type of alpine marsh wetland constitutes a significant portion of many Tibetan herders' pastures, some have drained water to achieve better usage of these pastures.⁶ Paldan, a pastoralist who heard that other herders had drained the wetlands, was also considering draining one part of the overwhelmingly wet part of his wetland pasture.⁷ "I may want to drain these overly wet grasslands for livestock grazing, as it is a pity to not use these pastures with water on it. Plus, some of these large ditches killed dozens of my livestock during winter time," said Paldan. He also states that the availability of digging machines makes it very easy to transform the wetland through a small amount of investment, a task that would have been impossible to complete in the past without a large amount of collective effort. However, the social and economic changes that took place during the livestock decollectivisation of the 1980s and the grassland allocation of 1996 have incentivised wetland use and transformation.

Paldan recalls that when livestock were distributed in 1980, his family of seven had only about 50 yaks. This number has now expanded to 300 yaks owned by what are now six households with about four family members each, that have branched out from his parents' tent (household). The change is associated with the recent improvement in living standards of Tibetan herders and their participation in the market economy, which has generated ever-greater needs and expenditures for Tibetans on the one hand (Gaerrang 2012), but on the other hand, has marginalised Tibetans in major sectors of economic development (Fischer 2005).

Recently, Paldan was excited about the news that his daughter had been accepted by one of the best schools in a nearby city, as he has been one of very few herders who sent their children to top schools in the bigger cities. Simultaneously, this news also means an additional financial burden for him, as he already needs to pay off his loan from the bank for the construction and decoration of his houses. He needs to decorate both, the house he built with the State Housing Project for Tibetan Herders in 2010 (Gaerrang 2015b) and the house built in 2014 on his winter pasture. This is part of a larger trend where a small number of herders increasingly own multiple houses that are not only for accommodation but also for investment. As investment, the houses present an alternative to livestock accumulation for savings (Yonten 2014). To some extent, Tibetan pastoralists are currently not struggling for basic needs, but are entrained in a social relationship of competition for wealth, social status, and reputation. There is much competition between households for houses, decoration, cars, horses (for racing), and for better education. In Buddhism, individual Tibetans (particularly monks) may be ascetic but this can co-exist with the aspiration of wealth accumulation in contemporary Tibetan society (Woodhouse et al. 2015). However, this tradition is being modified by another layer of newly emerged consumerism in the recent boom of the market-based economy. Now, herders' consumption is not only limited to their basic necessities and traditional forms of consumption including religious expenditure, luxurious clothing and ornaments (such as gold, silver, coral and others),⁸ but also to

education, health care, and new means of transportation and communication.

With all of these changes, the size of the grassland that Paldan contracted from the state in 1996 remains unchanged, and yet his livestock has reached the maximum number that his pasture can sustain⁹, and the annual expenses for his family have reached far beyond the level of income gained from livestock herding. To augment the income from livestock herding, he has also been engaging in a transportation business after purchasing a van. In this situation, the drainage of overly wet pastures would support more livestock, which could generate more income to contribute towards the education fees for his daughter, and with which he can pay back his loan. Thus, we can see how the wetland transformations are deeply related to livestock privatisation, grassland use rights privatisation, and herders' market participation.

MARKET-BASED SOCIAL ARRANGEMENTS AND MORAL DILEMMAS

After the privatisation of livestock to individual households in the early 1980s, Tibetan pastoralists not only gained ownership of livestock but also decision-making power over their grasslands, time, labour, livestock herding, and market exchanges; decisions that were previously controlled by the communes (*gong she*) and production brigades (*da dui*) during the collective period. Livestock decollectivisation was fundamental for the state to establish market-based social and economic arrangements. With the introduction of this policy, Tibetan pastoralists entered into a social arrangement, whereby they need to raise and sell more livestock to cope with their new needs not only for making a living but also for the needs generated by competition among individuals, households, and communities (Gaerrang 2015b). The market theoretically makes everything accessible to everyone. It also, however, generates competitive social arrangements, which make people struggle over resources and capital, wealth and social reputation, and over powers within and outside of the state apparatus (Gaerrang 2012).

In 1996, thirteen years after the livestock decollectivisation of 1983, the Pasture Contract System was introduced in many parts of pastoral northern Sichuan, in which, winter and summer pastures were allocated to individual households based on number of family members (Yan and Wu 2005; Yan et al. 2005). The government guaranteed that their grassland usage contracts would remain valid and unchanged for 50 years, providing each household with a certificate. In other words, the grassland usage right allocation system has entitled individual households with an exclusive right to use the land that they received from the state. This Pasture Contract System has to some extent changed Tibetan herders' understanding of and their relationship with the pastures, pushing herders not only to transform the wetland but also leading to a frequent exchange of wetland (as pasture) usage rights among Tibetans.

Since the privatisation of livestock and grassland use rights, the gap between rich and poor has increased. Wealthy herders

who own a large number of animals need to rent pasture (many parts of which are wetlands in Hongyuan) from those poor herders who own fewer livestock (Yeh and Gaerrang 2011). In addition, they may need to sell their livestock to slaughterhouses to reduce the number of livestock to the level that their labour and pastures can sustain. “I have to sell these male yaks every three to four years, not only for the income, but also due to the shortage of pastures,” says one of richest herders in Hongyuan, who owns over 500 yaks. The shortage of grass is the main concern for rich herders. Another herder states that he had to sell approximately 20% of his livestock every two to three years because his pasture could not sustain the increased number of livestock, even though he had been contracting some pastures every year from other herders with fewer livestock. In fact, the increase in livestock numbers is a dilemma for many herders because selling animals to slaughterhouses goes against the core Buddhist idea of avoiding killing any animals, as the act of killing is considered to be one of the most serious sins in Buddhist thinking (Gaerrang 2015a).¹⁰

In this context, the decisions made by Tibetan pastoralists regarding wetland, livestock, and other issues cannot be separated from current political and economic structures or from their past experiences and memories. While livestock decollectivisation and the grassland allocation policies are significant for wetland use/transformation, Tibetans’ traditional perception of wetland as a type of pasture for livestock is also relevant to the work of wetland conservation, as the herders graze their livestock in these wetlands.

At the same time, the state that incited the transformation of wetland for the purpose of increasing productivity during the commune period has led herders to do a similar thing through its market-based economic reform. However, practices that were encouraged in the past, now initiated by herders themselves on a small scale, now go against the state in the current discourse on wetland preservation in the region, which is aimed to ensure the ecological security of rivers that run downstream from the plateau. The motivations of Tibetan herders for the deployment of such practices are based on various factors, including the need to mitigate the challenges brought by the wetland and to expand their herd sizes because of their participation in modern life.

BUDDHIST NORMS AND RITUALS RELATED TO WETLAND TRANSFORMATION

Tashi has recovered from a skin disease and his life is back to normal, as he is herding his yaks and taking care of his family on the eastern Tibetan Plateau of China.

A few days ago, both of his hands had been seriously affected by a disease that made it totally impossible for him to work. He believed that his illness was related to one of his previous misconducts; namely, he believed that he must have offended spring deities (*klu*) by digging a hole at the head of a spring where he had to collect water. Relating the disease to his misconduct, he did not search

for either Western or Tibetan medical treatment, but instead he asked his cousin, who is a Tibetan Buddhist teacher, for help. He believes that it was his cousin’s Buddhist ritual that cured his skin disease.

—narrative by a Tibetan Khenpo (religious scholar) during fieldwork

Almost anyone in Tibetan communities can share one or more similar stories of how someone offended a deity and recovered through a Buddhist ritual. They see the link between diseases and offended spring deities as a fact that does not need evidence. The waters from the springs and small streams are the main source for the formation of the majority of the wetlands and the availability of water from the springs is a key for the sustainability of the wetlands. In Tibetan culture, all of these springs, particularly the head or sources of springs, regardless of size, are believed to be inhabited by deities that they call *klu* (nagas) or *gnyan*,¹¹ and Tibetans have a very special relationship with these invisible and sensitive beings. Tibetans informed me that every water spring (the starting point of streams and rivers) accommodates *klu*, and that they are very *gnyan*, meaning powerful or vengeful. This means that if people offend the *klu* by disturbing the water, for instance through digging, washing, or polluting the source of the spring, these people will get sick, mostly with skin diseases and mental disorders. When Tibetans get a sickness that is hard to diagnose and hard to heal with either Western or traditional medicine, they will ask Buddhist teachers to tell their fortune to see if they have offended any *klu*. The performance of rituals, including hanging Buddhist scripture flags and chanting Buddhist scriptures, is meant to demonstrate one’s apology and correct for one’s misconducts. Many Tibetans confirmed that sometimes some of these strange sicknesses, mostly when people suffer from depressive mental disorders and skin diseases, go away after these rituals. Yet, many Tibetan herders in Sichuan, Gansu, and Qinghai provinces, do not relate the deities to the lower parts of streams, rivers, and wetlands. In other words, Tibetan herders believe that disturbing the lower parts of streams, rivers, and wetlands does not offend the deities, despite the fact that these waters also accommodate frogs, fish, and other living beings that Tibetan herders believe to be *klu*. In this context, wetland transformation is not as serious as the disturbance of sources of springs would be.

Our interviews with herders about drainage of the wetland and religious faith led to discussions about another Buddhist norm: *karma* and the negative deed of killing living beings. Although Tibetans do not believe that draining wetlands will offend the *klu*, some are concerned about the evil deed of disturbing or killing other small living beings through drainage. When I asked whether drainage goes against any religious rules, many herders expressed that they were not sure or stated that they had never thought about it. But when I asked whether the drainage would dislocate the water and whether this would affect or kill the living beings previously living in the water, a herder who had already drained small parts of wetland said:

I have never thought about this before, but if we think carefully, the practice of drainage also involves evil deeds (*sdig pa* in Tibetan), because if there is not enough water on the ground, then the living beings that inhabit the water on the wetland will die or be dislocated. However we have no other option, as we do not have other skills and job options as an alternative to herding.

This concern was echoed by many herders who expressed that any type of digging or disturbing of land (*sa sko rdo slogs*), including wetland, is considered to be misconduct that may cause misfortune or disasters to the place where they live or to the individuals who carried out the misconducts. Yet, an important point here is that compared to the influence of state policies and desires for economic development, Buddhist teachings of *karma* and evil deeds are insignificant for Tibetans in their decisions about wetland drainage.

Relating to the question of whether indigenous people are inherently ecologically wise, three aspects need to be highlighted here. First, the self-initiated practice of wetland drainage is new to Tibetan herders, to Tibetan Buddhism, and to the state. Indeed, because this is a new experience for Tibetan pastoralists, they expressed in our interviews that they had never thought about the issue before, but after we discussed it they started to think about it and responded according to their knowledge of Buddhist teachings. This means that, rather than seeing indigenous knowledge as a static entity from the past, we should regard it as living, modern knowledge in constantly changing situations. Moreover, in this case, the question of whether indigenous people are environmentally benign seems less meaningful than the question of by what process their indigenous knowledge and traditions are constantly being reinvented in new situations.

Second, there is a potential contradiction between wetland drainage practices and Tibetan Buddhist concerns about the evil deeds of dislocating land and/or killing living beings. However, the contradiction has not been an obstacle to their practice of draining the wetlands. In other words, for them the involvement of evil deeds is different from offending the *klu* in the springs and other mountain deities.¹² This is because the *klu* and the mountain deities are easily offended and the consequences of the misdeeds come back to the person in very visible ways such as in the form of diseases or disasters. In contrast, Tibetan herders are less sensitive about evil deeds that follow the logic of Buddhist reincarnation, or *karma*, even though they are firmly rooted in Tibetan people's worldview. For example, Gaerrang (2012) observed that the recent slaughter renunciation movement that suggest herders stop selling livestock to meat markets because of the sin of killing has led to an accumulation of livestock in some pastoral areas that put greater pressure on the pastures. That is, different elements of religious teachings have different roles to play in regard to conservation. Moreover, as Tibetan pastoralism enters new social arrangements, different elements of Tibetan Buddhism have come together in contingent ways, leading to different responses by herders. What is important is

to explore whether these teachings are effective, and whether the effectiveness of these norms is compromised by new social forces, including state policies and market logics (see also Woodhouse et al. 2015).

Third, we found among our interviewees that the fear of disturbing/polluting the springs was the same regardless of age, gender, and affiliation with different schools of Tibetan Buddhism. However, concerns about the negative, evil deed of drainage were taken more seriously by elderly people than by the younger generation, and more by those with stronger religious beliefs than by those who are less influenced by religion. Despite the fact that the majority of Tibetans believe in Buddhism and practice elements of Buddhism, we observed that some households in the nomadic communities have stronger connections with religious figures because they have monks or lamas in their family or among their close relatives, while others have fewer religious connections (Gaerrang 2012: 190).

CONCLUSION: TIBETANS HERDERS' RESPONSE TO STATE WETLAND RESTORATION

Despite its small area, the Hongyuan County wetland restoration programme is part of both, a larger global movement of environmentalism and recent Chinese state policies that emphasise ecological stability and environmental protection. Tibetan pastoralists respond to state wetland restoration in very complex ways that demonstrate how indigenous people's knowledge about environment is in constant formation. "Since the restoration of wetland, more and more birds are coming back to the wetlands," a herder said when he showed us the state wetland restoration project on his pasture. He and another herder in the restoration project have shown their appreciation for the project, which may be related to the fact that they earned a large sum of money from the project as compensation for the restoration of wetland for the purpose of tourism.¹³ In addition, some pastoralists value the wetland restoration from a religious perspective, as they believe that the restoration programme will lead to more water on the ground that will support more living beings in the water.

The small number of these herders who have taken part in restoration are a part of trend, in which, Tibetans have become environmentalists or those "for whom the environment constitutes a conceptual category that organizes thought and practice" (Yeh 2014a: 205, 2014b). Within this process some Tibetans have increasingly become aware of, and deliberately protect, their environment. Yeh (2014b) observed that these Tibetan environmentalists participate in the "Green Tibetan" movement for the sake of environmental protection as well as their own cultural revival, a motivation conjured by their encounters with trans-regional Chinese environmentalists and other forces.

However, except for a small number of herders who participated in the wetland restoration project and who showed awareness of the importance of wetlands for biodiversity, we found, very few herders who showed appreciation for

the abstract ecological values of the wetland. Instead, they expressed the importance of moderately wet grasslands for their livestock and the need to tame the grassland with too much water on it. Some herders even misunderstood our interview with them as an opportunity to help them solve the challenges that the wetlands have brought to their life and herding. Similarly, many herders said that they did not know why wetlands need to be protected, particularly the wetlands with too much water on them. Tibetan herders' responses suggest that unlike the recently-emerged and educated Tibetan environmentalists (Yeh 2014a), ordinary Tibetan pastoralists do not adapt their practices to the deliberate protection of wetland and grassland. Rather they are motivated by other benefits, including the cash incentive of state environmental programmes, religious and moral values such as accumulation of merit, and their own herding practices—for instance, better grassland for their livestock.

With top-down policies and financial incentives, Tibetans are participating in state-driven ecological construction programmes like the recent ecological compensation programme and wetland restoration programmes. During our field research, I have also observed several cases in another pastoral community where Tibetan herders have been actively participating in many locally-initiated conservation programmes. These local movements have either been initiated by religious figures or educated lay Tibetans, who have mobilised local Tibetans to participate in programmes, like planting trees, cleaning garbage, and preventing desertification. For many ordinary Tibetans, these practices are deeply rooted in the belief and practice of Tibetan Buddhist teachings, including the collection of positive *karma* (=merit), avoiding evil deeds, and practising various rituals. That is, for the majority of Tibetan pastoralists, their participation in the plantation of trees and to avoid disturbance of the springs are religious practices rather than a deliberate protection of the environment that is rooted in the modern western form of environmentalism.

Tibetan herders' different responses to wetland conservation show the complexity of ordinary Tibetans' relationship with their wetlands. This relationship is ultimately connected to interrelated and competing forces, including their sensitivity to powerful spring and mountain deities, their belief in Buddhist norms of *karma* and the sinfulness of killing, their participation in the market economy, and their involvement in global and trans-regional environmentalism. A full consideration of this complexity requires one to reconsider the question of what indigenous people 'do not do' or how they depart from the concepts of environmentalism and conservation (Callicott 1982; Hughes 1983; Booth and Jacobs 1990) or how unique (or better) indigenous people and their traditions are in relating to their relationship with the environment (compared with the western idea of environmentalism) (Nadasdy 2005; Yeh 2014b). Within this complex process, it is hard to make any definitive statement about whether Tibetan pastoralists 'are' or 'are not' ecologically noble; nor can we clearly distinguish indigenous culture from new discourses such as environmentalism.

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NOTES

1. Tibetan herders believe that some wetland-dwelling living beings such as frog and fish are the *klu*, whereas others, such as small insects, are not.
2. Zoige (Ruo'er gai) county is the core area of Zoige Wetland Zone, and my research site is the other major component of the zone.
3. In Tibetan, this refers to a cow-like animal that lives in the ocean/large lake.
4. Data is based on an interview with a government official of Hongyuan County.
5. Tibetans pastoralists in this area generally do not herd sheep on the wetland, only yaks and horses.
6. During our field research, we encountered three cases of wetland drainage in one village and over 20 households were involved. Yet, the significant point of the current practice of wetland drainage is not the size and proportion of households, but Tibetan herders' understanding of the practice and the social and cultural forces driving it.
7. Pseudonyms are used throughout this Section.
8. Among other things, the wearing of traditional clothes with animal fur has been given up with the recent anti-animal-fur movement in Tibet, see Yeh 2013b.
9. This is based on his own assessment. The state also has its own standard for the livestock limits per mu of pasture but it has not been implemented thus far.
10. This has become a particularly serious moral issue for Tibetan pastoralists as many of their religious leaders, particularly the Nyingma masters, have recently promoted an anti-slaughter movement, in which they have asked herders to stop selling their livestock to meat markets, as that goes against Buddhist teachings. Some but not all Tibetan herders responded positively to their call.
11. *gnyan* as an adjective means fierce, powerful or wrathful, and as a noun, it means a wrathful deity of the land or water. In this context, it means the deities of the spring.
12. Tibetans believe that some mountains are inhabited by deities called *gzhi bdag* (territorial mountain deities, "owners of the base") for which Tibetans make offerings for the sake of protecting their own communities.
13. One herder stated that he earned over RMB 500,000 cash as compensation from the state. The other herders received less than that, but the majority of their pastures in the wetland restoration area can still be grazed despite the greater amount of water on their surfaces. If not for the cash compensation, they would not support the project because the restoration has led to higher water levels on their grassland than they are comfortable with.

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