

Ecologies of Gods and States: Theogenic Soils and Forests in the Blang Mountains, China

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Abstract

This chapter traces how relations between Blang communities and their upland environment has changed with the recent arrival of the Chinese state. It begins by analyzing how the change from swidden/shifting to paddy cultivation has transformed soil fertility from being theogenic (caused by gods) to anthropogenic. It then analyzes how these changes have created competing conceptualizations of what constitutes a forest, and the resultant effects on biodiversity. The chapter then explores the underlying change in the logic of how to solve environmental problems, from a relational to a manufacturing logic. Finally, it analyzes how Blang communities' perceived lack of ability to change these relations are related to state curtailment of the previous techniques used to create freedom of action.

Keywords: Ethnic minorities, Zomia, spiritual ecology, Buddhism, ritual ecology.

In China's southwest, in Yunnan province's Xishuangbanna prefecture, lies an upland region called the Blang Mountains, which stretches across both sides of the international border with Myanmar. The area is part of Zomia or the Southeast Asian Massif—denoting interconnected uplands stretching across parts of South, East, and Southeast Asia; a demographic shatter zone, historically beyond the pale of lowland political control (Michaud 2010; Scott 2009; van Schendel 2002). The area is named after a Mon-Khmer speaking group of people who call themselves Blang (布朗族).¹ Like many indigenous communities across the globe, Blang communities historically practiced a form of swidden/shifting cultivation that ensured a high degree of biodiversity while sustaining livelihoods away from lowland states. However, Blang communities are better thought of as maroons than indigenous. Most villages and *gagun* (usually translated as “clans”) trace their histories to different waves of migration from the lowlands, escaping slavery, oppression, epidemics, or war. When the Blang Mountains began to be incorporated into the nascent People's Republic of China in 1953, Blang communities were living in self-governing villages that operated based

on a form of direct, consensus democracy through village general assemblies (*pom yung*). The last seventy years of history has seen great transformations of Blang societies and ecologies. Politically, the Chinese state has begun to exercise increasing influence over villages. Agriculturally, communities have been forced to give up swidden/shifting cultivation for fixed-plot paddy cultivation, while the forest has been turned into a nature reserve. Economically, the arrival of the state was first accompanied by poverty caused by the ban on opium cultivation, but has now been replaced by wealth from Pu'er tea cultivation, which boomed in value in the first decades of the new millennium (see, e.g., Hung 2015, 12; Ma 2021, 93). Ecologically, agricultural changes have led to a great loss of biodiversity and the need to employ fertilizers and agrochemicals, a practice Blang people categorically frown upon.

I have yet to encounter any environmental movements in the Blang Mountains.² In this respect, the chapter differs from the other cases analyzed in this book. In the Blang Mountains most environmental crises are still on the horizon, and have yet to affect communities enough for people to feel the need to organize environmental movements. For the problems that already exist, people in the Blang Mountains do not currently see a way of solving them without running afoul of government policies (and the state's monopoly on violence), the cost of which is still considered too great. The Blang Mountains is not a site for a budding spiritually informed environmental movement directly comparable to the other cases in this book. However, as I argue in this chapter, an analysis of Blang cultivation practices can offer key insights into the benefits such movements have to offer.

James C. Scott and other researchers investigating upland Southeast Asia, and “ungoverned” zones around the world have long noted that everything from social organization to cultivation practices are self-consciously developed in juxtaposition and opposition to lowland modes (e.g., Scott 2009, 29–30). While the lines of schismogenesis—the practice of creating a difference between neighboring groups of people—are more complex in Blang communities than among the upland groups in Scott's study, Blang communities clearly situate their cultivation practices in juxtaposition to lowland modes. Therefore, the historical origins of Blang communities and their pre-People's Republic of China (PRC) social organization and practice of agriculture can be seen as a political and environmental movement—a movement of people consciously leaving behind states and fixed-field plots.

Swidden/shifting cultivation is no longer practiced among Blang and neighboring communities on the Chinese side of the border, but it is nevertheless still invoked to conceptualize problems of soil fertility, biodiversity, and pests. Shifting cultivation can in a sense be understood as a conscious historical movement for

dealing with the environmental crises that would result from bringing lowland modes of cultivation into the uplands. Today, many Blang people continue to locate the origins of budding environmental problems in the recent replacement of swidden/shifting with fixed-plot cultivation. As I discuss below, this transformation was, in effect, a transformation from theogenic to anthropogenic practices. Juxtaposing these two forms of cultivation and forest preservation speaks to the book's theme.

I will begin by investigating methods for ensuring soil fertility. I will show how the transformation from swidden/shifting to fixed-plot cultivation entailed a transformation from theogenic to anthropogenic practices, that is, from soil fertility being ensured by returning land to divine possession, to the addition of man-made fertilizers and agrochemicals. I will discuss how conservation and environmental care are constituted very differently under theogenic and anthropogenic practices—in the latter as a motivation for human activity or inactivity, and in the former as an essential condition of the cosmos—and how climate change is forcing us to think less anthropogenically. Then I will turn to the question of forest conservation and biodiversity, showing the differences in what constitutes a forest under both theogenic and anthropogenic practices. I will show how local narratives suggest that the loss of biodiversity during the last decades might in part be the result of an impoverished conception of what constitutes a forest, and I will argue that this indicates the importance of a diversity of knowledge systems informing conservation efforts and environmental movements.

As I explore the underlying logics of technology involved in theogenic and anthropogenic practices, I will further argue that Blang theogenic practices are based on a relational logic, while anthropogenic practices are based on a manufacturing logic. From this perspective, what made theogenic practices successful in maintaining biodiversity and soil health was not their cosmology as such, but the logic of using relationality, as opposed to the use of manufacturing to solve certain problems. This begs the question of whether spirituality or religion is necessarily the important point of comparison. Finally, I analyze Blang narratives about the impossibility of action, suggesting that one of the main problems Blang communities face is that the tools and means they previously employed to ensure the freedom to organize and reorganize their relations with the surrounding world—the ability to escape historic states—has been lost to the current state's encroachment, and that communities have yet to find new tools and means to ensure this freedom. I argue that this reflects a broader problem: maybe what the world needs is not new spirituality, motivations, or visions of the future, but rather new tools for ensuring the freedom to reorganize social relations.

Theogenic Soils

The following conversation took place on June 23, 2023. I had gone to visit the *dazhan*, the person appointed by the village to manage the temple and dispatch ghosts. We chatted as he cooked lunch:

- DMB: Do you use any agrochemicals (农药) when you grow corn and paddy rice?
- Dazhan: Usually we don't use agrochemicals for corn and paddy rice, but if there's a lot of pests you have to use it, even though it's bad for you, because if not, you don't get any corn.
- DMB: What about back when people grew hill rice? There were no agrochemicals back then.
- DZ: Yes, back then we would just do some *mixin* (迷信).³ We would invite the abbot (大佛爷) to recite in the field for two days, then it would rain and the pests would stay away. People still do it and there are fewer pests afterwards but they don't stay away, there are still some ... There's a lot of illness (病毒高); therefore the pests are still around after we do *mixin*. It's like with salt and msg. Now old people have all these illnesses. In the past the old people lived until they were ninety years old—now at fifty they already have illnesses. It's the same with the land. These days people use fertilizers and agrochemicals so the land is sick and that causes the pests. Before it was caused by ghosts and gods....
- DMB: Is there a way to change the illness [of the land]?
- DZ: There's no way (没办法). If it's caused by gods or ghosts you can change it.

In the *dazhan*'s narrative, the illness of the land is rooted in the use of fertilizers and agrochemicals; just as human health has declined because of food additives (salt and MSG), soil health has declined because of artificial additives. The use of fertilizers and agrochemicals is, for my Blang friends and interlocutors, deeply rooted in the switch from swidden/shifting to fixed-field cultivation.⁴ When I ask about fertilizer use, a common response is “now that we are not allowed to shift anymore, we have to use fertilizers.” The *dazhan*'s final response is important. For him, soil fertility, pests, and telluric illness can be affected if it is caused by gods or ghosts, but not if it is caused by the use of fertilizers and agrochemicals. While Blang communities have tools for interacting with gods and ghosts to ensure relations of “mutual aid” between themselves and these non-human others, removing the illness of the land would entail abandoning fertilizers and agrochemicals, something communities cannot do because they are not allowed to shift. This statement really captures the crux of the problem. Gods can be influenced, the state cannot. To understand this, we have to first investigate how Blang communities ensured soil fertility before the arrival of the state.

One of the most important developments in ecology was the realization that many places previously thought of as untouched wilderness were actually created by indigenous practices. In places like the Amazon, historical ecology traces human impact by studying what is called “anthropogenic soils:” that is, soils created by human activity. These studies have shown the positive impact on biodiversity by indigenous practices like swidden/shifting agriculture (see, e.g., Balée and Erickson 2006; Bruun et al. 2018; Cairns 2015; Fa et al. 2020; Levis et al. 2020; and Padoch and Pinedo-Vasquez 2010). However, the concept of anthropogenic soils and ecologies makes little sense in the Blang context. The soils and ecologies surrounding Blang communities might better be described as “theogenic,” because soil became fertile not through human but divine activities. Let me explain.

When the ancestors of Blang communities first moved to the mountains to escape oppression, pandemics, and calamities in the lowlands, they left behind a domain ruled by an earthly king; but the mountains were not *terra nullis*. Instead of living within the domains of earthly kings, they established their new villages within the domains of divine kings. The earliest research into Blang communities can be found in a series of Chinese ethnographic reports collected in the three-volume work *Bulangzu shehui lishi diaocha* (BSLD) penned between 1956 and 1984. These reports unanimously describe the land as communally owned, with possession rights annually distributed by the village. However, my fieldwork shows that this is not how Blang communities view land ownership. According to my friends and interlocutors, all land surrounding a Blang village is owned by the local mountain god (*devara gong*) who is “like a king.” The exact process of land allotment differed from village to village, but the general steps were as follows:

First, divination was employed to select the land to open. The BSLD reports that in one village, the abbot would divide rice received from the laity into three bamboo containers and place a piece of banana leaf with the name of a mountain inscribed into each. The exact selection method is unclear—we are simply told that he recited a sutra asking the gods which direction to cultivate in (Yao and Huang 2009, 33). In another village, it reports that the *daman* would look for land that made a good combination of “cold and warm,” and had been fallow long enough. He would then bring offerings to the abbot who would divine based on seven bamboo containers of rice. Selection was made by measuring the rice as “sufficient” or not (Yang, Wang, et al. 2009, 5). The text is unclear but it likely describes *but me*, a common form of rice divination whereby an elder or monk recites a prayer and takes out an amount of rice which is then tallied to see if it forms an even number of pairs, meaning a success, or an odd number, meaning failure. After the direction of cultivation had been selected, the villages would call a general assembly (*pom yung*) and divide the land among themselves. In a third village, the process was reversed. First, the entire adult population would select land, then they would

consult the *bomo* or *buzhan* (Blang: *dazhan*) to divine whether the selected land would be fortuitous, and if not they would re-select (Yang, Zhou, et al. 2009, 49).

After the land had been selected and divided among the households, the village would have to ask the local mountain god for permission to “open” land for cultivation. The village would collectively present offerings to the mountain god, who in return would allow them to use his land. While Blang people describe the mountain god as being “like a king,” the village’s relations with him are not described as ruler-subject, but rather, in terms of “mutual aid” (互相帮助; Blang: *u zhoi mi, mi zhoi u*) or “mutual care” (互相照顾). Rather than conceiving of the gifts presented to the god as a form of tribute, Blang people instead say that “we are good to [the god], so [the god] is good to us.”

After land is cultivated for one or two years, soil fertility declines. Therefore, people would return it to the mountain god, allowing it to become forest again, restoring its fertility. Calling these soils anthropogenic only makes sense within an ontology that divides the forest and human habitation along the lines of society and nature (cf. Descola 1992; [1986] 1994; 2006; [2005] 2013); if the village is understood as society and the forest as nature, then human intervention in the forest must be understood as anthropogenic. However, such a division does not make sense for many of the world’s people, including Blang communities. As Descola has famously described, for many Amazonian communities, the forest is a continuation of social relations, rather than a separate space of nature (e.g., Descola [1986] 1994). While this could also be said for Blang communities, the more important concept to think with here is possession. While the *BSLD* argued that Blang communities primarily practiced communal ownership of the means of production, that is not how Blang communities conceive of it. From their perspective it would be more correct to say that Blang communities live under divine ownership of the means of production. Yet despite divine ownership, land can be in the possession of humans.

Due to the decline in soil fertility, the land would fluctuate between human and divine possession. This makes for a very different way of perceiving the forest. The phenomenological difference in perception (cf. Merleau-Ponty [1945] 2002) between myself and my friends and interlocutors is indicative and instructive of this difference. When foraging in the forest with elders, they would often point at some patch of forest and say something like “over there I used to grow corn,” or “that is where Da Sam Di’s son used to live in a small hut.” In what I perceive as a contiguous space of forest, Blang elders see a varied patchwork of historical fluctuations between human and divine possession. Within this fluctuation, human activity is understood to deplete the soil, which is restored when land returns to the mountain god’s possession. From this perspective, the soil and biome cannot be conceived as “natural,” nor as anthropogenic, but is best described as theogenic, since it is the result of divine activity and ownership.

When juxtaposing theogenic soil practices with fixed-field cultivation, the concept of anthropogenic soils becomes pertinent again. In the *dazhan's* narrative, it is human practices—such as the application of fertilizers and agrochemicals—that have replaced divine activity and resulted in a previously unseen problem, namely illness of the land, causing pests which cannot be removed through appeasing the gods—an illness caused by the transformation from an alternating anthropogenic and theogenic process into a purely anthropogenic one. We can thus reconceptualize this recent transformation as one from theogenic to anthropogenic soils.

Understanding the recent changes to cultivation practices through the lens of theogenic soils highlights something very important for the topic of this volume. Under anthropogenic soil practices, soil fertility, conservation, and biodiversity (discussed next), are the result of either human intervention—different discourses usually define some form of intervention as preferable to others (whether that is indigenous, alternative, or industrial practices)—or as a result of human non-intervention (e.g., nature reserves). Under such conditions, the role of spirituality or religion is simply as a motivating force, determining whether human action (or inaction) is beneficial or harmful. But theogenic practices collapse the boundaries between nature and culture, and between science and religion. What are constituted as human actions under an anthropogenic practice are instead constituted as parts of cosmological interactions. The role of the mountain god is not primarily to motivate humans; instead, they constitute a key agency which the village has to navigate and negotiate with. What constitutes conservation or environmental movements under one practice, constitutes an aspect of the world itself under the other. Does this not to some extent define the present moment? It is a strange paradox that the anthropocene is characterized not by humans, but by climate change. Though it might be caused and exacerbated by human actions, climate change also acts on humans. Living in a world where there is another agency, a hyperobject (cf. Morton 2013), an ontologically alter-other that acts on humans and that humans are forced to relate to, is in fact much more similar to theogenic rather than anthropogenic practices. In such a world, what Danowski and Viveiros de Castro wrote of “Amerindian collectives” rings as true for China’s upland collectives and for theogenic practices: they “are a ‘figuration of the future’ ... not a remnant of the past” (emphasis removed; Danowski and Viveiros de Castro 2017, 123).

Biodiversity and the Forest

Another topic of concern often intimated by my Blang friends and interlocutors is biodiversity loss. According to elders, tigers still roamed the forests in the late eighties, and many reminisce about animals and birds now disappeared. While the

forest is a place of non-human dwelling, it is still a deeply familiar place for Blang communities. Not only were many parts formerly their fields, but people often venture into the forest to forage for wild herbs, mushrooms, and vegetables, digging for crabs and catching fish. Foraging is both an important subsistence skill—"in the past, if you didn't know how to find wild vegetables (野菜), you would go hungry" as one interlocutor phrased it—and an enjoyable pastime—"Ai Zhoi (my Blang name) are you afraid of sleeping in the forest? We should go out, forage, make a fire, and spend the night there, it will be fun" as a friend suggested. Because the forest is so familiar, the radical loss in biodiversity is evident.

Biodiversity loss is reflected in different ways. On the one hand there is the nostalgia for the animals themselves ("I really miss the sound of this bird, you used to hear them all the time"), and on the other hand there is nostalgia for the joys of hunting. When I ask people about biodiversity loss, they will often echo the local government narrative, which attributes biodiversity loss to excessive hunting by "the common people" (老百姓); however, something does not add up with this arithmetic because the same person will explain that these animals are still plentiful on the Burmese side of the border, where communities still actively hunt, both for subsistence and income from the illegal wildlife trade. Likewise, it seems that biodiversity had already begun disappearing on the Chinese side before the great expansion of tea cultivation and deforestation (another commonly attributed cause). What had changed was that most communities had been forced to abandon swidden/shifting cultivation.

This is also the major difference between the Burmese and Chinese sides of the border: swidden/shifting cultivation is still practiced on the Burmese side, but banned on the Chinese. Is there a connection between swidden/shifting cultivation and biodiversity? While an understudied topic, there are clear signs in the scholarly literature that swidden/shifting cultivation plays a key role in maintaining and increasing biodiversity (e.g., Padoch and Pinedo-Vasquez 2010). I am not aware of any studies comparing biodiversity under different cultivation practices on the Chinese and Burmese side of the border, but Blang narratives certainly suggest the urgency for such a study. In the meantime, Blang communities are intimately familiar with the forest, and they can offer insights into the possible connection between cultivation practices and biodiversity. One possible connection between the ban on shifting cultivation and the loss of larger wildlife was intimated by the new village head (村长) of Man Lik. Between sips of tea, he explained:

It's an economic problem. People need income so they grow tea. Before you would plant for one, two, three years, then the soil would run out of fertility and you had to shift. Tea trees you can plant, then have the same [plot] year after year. But when shifting there's some forest with big trees and some with small growth. Now there's a lot of forest, but it's

all big trees. On the ground there's nothing. So there are no animals anymore, just birds at the top of the trees, and big trees, there's nothing for them to eat.

The village head's narrative highlights two important findings. Firstly, it suggests that one important aspect of the connection between swidden/shifting cultivation and biodiversity is the cultivation of a varied ecology of many different ages and types of forest. Secondly, it points to an important difference in what constitutes a forest, as well as what kinds of forests are considered important to the ecology. In the village head's narrative, forests of different ages are important, since they provide different types of growth for different types of animals. For the state, however, only primary growth forest appears to be of importance. It protects the forest from all human intervention, attempting to transform secondary growth forest into primary. Blang communities and the government thus have very different conceptions of what constitutes a forest. For Blang communities, the forest is a space they often venture into to forage, and in the past to hunt, collect firewood, and fell trees for construction or to open fields. Shifting/swidden agriculture meant that the difference between fields and forests was temporal. Still, some forest always remained forest. The most notable examples of this are the forests on mountain tops that belong to the mountain god and cannot be felled. If people try to fell trees too close to the mountain top, the god will retaliate with violence. Apart from the mountain tops, however, people were allowed to open swiddens (after presenting offerings to the mountain god, as described above). According to the *BSLD*, villages generally maintained a twelve-year cycle of land use. Most forests then, were in different stages of waiting to be fields again, and all fields were temporary, waiting to be returned to forest.

For the government, the difference between forest and field is absolute and essential. Likewise, the forest constitutes an important environmental asset. Yunnan (where the Blang Mountains are located), is the Chinese province with the highest amount of ethnic and ecological diversity (Liu, Yang, and Yin 2021), its mountains a refuge for forests and wildlife. For the government, agricultural land and forest represents a dichotomy. Historically, the state began imposing this dichotomy on Blang villages as the collectivization era ended in the early eighties. The government divided up the land and issued deeds to individual households. Land for which no one was issued a deed, the state instead claimed for itself. This created an essential divide between forest, which was always forest, and protected from human activity, and agricultural land, which was always agricultural land, and possessed by individual villagers.⁵ Having divided the land into two halves, the state then spent the coming decades restricting human activity in the forest. Hunting, which had been both an important source of food, joy, and leisure, was banned by the prefectural government in 1996 (PGMT [1996] 2016), which confiscated hunting

rifles. Then, in 2009 the local government established the Bulong Prefecture Level Nature Reserve (布龙州级自然保护区), banning all tree felling.

By claiming ownership of the forest, the government has attempted to establish an overlapping sphere of sovereignty with Man La's mountain god. Now both these invisible, powerful others claim sovereignty over the forest. Both claim to own the forest, and both retaliate with violence against unsanctioned tree felling. But there is also a great difference between them: the mountain god allows human access to most of the forest if they present offerings and ask him for it; while the government does not allow anyone access to hunt or fell trees, regardless of how many gifts they provide.

The fact that the government's effort at forest conservation has not resulted in a return of larger mammals, "just birds at the top of the trees" suggests that its conservation ecology is based on too simplistic a notion of what constitutes a forest. By this conception, there is only one type of forest that matters, and that is forest which is always forest. Wild forest, primary growth forest, not anthropogenic or theogenic forest, not forest that is sometimes a field.

This is not unique for Chinese conservation efforts, nor is the conflict between state conservation projects and indigenous land management. The Intergovernmental Panel on Climate Change (IPCC) reports conclude that land use and deforestation are key to catastrophic climate change mitigation (IPCC 2019, 21, 22, 49). Studies suggest over a quarter of forests are located on indigenous land (Fa et al. 2020). Maroon and indigenous communities live in no less anthropogenic environments than other populations, yet have outsized contributions to biodiversity and forest cover, because they developed different livelihood technologies (cf. Danowski and Viveiros de Castro 2017; Viveiros de Castro 2019). However, instead of considering swidden/shifting cultivation as an asset that indigenous and maroon communities have employed successfully, resulting in greater forest cover on their lands, the IPCC report singles out shifting agriculture as a major cause of deforestation and suggests promoting permanent agroforestry to replace shifting cultivation (IPCC 2019, 367, 383).

While the climate change impacts of swiddens require further study, clear indications exist that swiddens constitute a superior land use for carbon capture (e.g., Bruun et al. 2018; Cairns 2015). These studies primarily focus on how swiddens bind carbon in trees and soil, but the positive climate impacts of shifting cultivation are certainly compounded by the contextual effects, usually left out of these studies. For example, contrast the technologies employed in shifting and paddy cultivation: when Blang communities cultivated hill rice, the only tools imported from the lowlands were the long knives employed to fell trees. All other tools were fashioned from local wood and bamboo. When cultivating paddy, Blang communities depend on tractors to plow the fields, as well as fertilizers and agrochemicals; all of which are dependent on fossil fuels for production and transportation into the mountains.

Blang perspectives on biodiversity loss in the last decades highlights the need for conservation efforts informed by a plurality of knowledge systems. The biomes that are home to indigenous and maroon communities are deeply shaped by what might best be thought of as a “science of the concrete.”⁶ As Lévi-Strauss wrote, while a science of the concrete might not produce the same results as natural science, “it [is] no less scientific, and its results [are] no less real” (Lévi-Strauss [1962] 2021, 20). The difference between state and Blang knowledge and forest conservation, is reminiscent of James C. Scott’s distinction between state and popular measures for legibility. Whereas popular measures were dependent on detailed knowledge of specific fields—for example, how much seed is needed to sow this particular field—state measurements were based on a precise knowledge of generalized distance (Scott [1998] 2020, 25–33). In popular measurements, field sizes differ, but quality (such as cropping and yields) is commensurable. In state measurements, field size is commensurable, but land quality differs. A very similar process of changes to measurements took place with the coming of the People’s Republic to the Blang Mountains.⁷ In contemporary forest conservation, the state sees only acreage of forest conserved, while local knowledge still emphasizes the different qualities of forest. This highlights the need for environmental movements based in alternate knowledge systems, and for the importance of “sciences of the concrete” in conservation practices.

Relational Technologies and Manufacturing Technologies

Continuing to think with “sciences of the concrete,” and juxtaposing anthropogenic and theogenic approaches, we can make use of Viveiros de Castro’s discussion of “ecobricolage,” in which he employs Lévi-Strauss’ dichotomy between the engineer and bricoleur to think about the Amazon and possible climate futures (Viveiros de Castro 2019, S301). This is useful also for thinking about the difference between anthropogenic and theogenic practices. While “the engineer always seeks to open a way through and situate himself *beyond* the constraints” of the environment, the bricoleur makes “do with ‘whatever is at hand’” (original italics Lévi-Strauss [1962] 2021, 21, 23). From this perspective we can see that theogenic soils employ what is at hand: depleted soils are returned to the god that owns it to be replenished, whereas paddy cultivation instead begins with a determined spatial diagram of land deeds, and adapts the soil to that schema through the addition of fertilizers and agrochemicals, produced elsewhere and imported. However, one of the key differences has to do with what is at hand for theogenic practices.

The two practices are structured on two different technological logics. Paddy cultivation solves the problem of soil cultivation through the addition of fertilizers

and agrochemicals and through the use of plows and tractors. In contemporary practice, these tools are all created through industrial manufacture. We could call this a manufactural logic. We have a problem, so we manufacture a tool to solve it. Like all humans, Blang communities routinely employ this logic. However, to solve the problem of soil fertility, theogenic soil practices also employ a different logic. Rather than employing the Haber-Bosch process to manufacture fertilizers, the theogenic process relies on sustained relations between humans and non-humans. We could call this a relational logic. One of industrial societies' biggest mistakes was thinking that other societies were at a lower level compared to themselves. When cadres from the nascent People's Republic entered the Blang Mountains to introduce industrialized agriculture, they believed themselves to be witnessing a meeting between advanced and primitive technologies. In fact, it was a meeting between two highly developed forms of technology, structured around different logics; and what they believed to be the modernizing of primitive modes of production, was actually the replacement of relational technologies by manufacturing technologies.

The question of biodiversity is a prime example of a problem that could perhaps be better solved by a relational rather than manufacturing logic. The manufacturing logic has divided the land into places for production that are meant to maximize output by the use of manufactured tools, and places for protection that are supposed to be the antithesis of manufactured as they are supposed to be completely non-manufactured, completely natural. From the perspective of technological logic, the society-nature divide can be conceived of as idealized spheres of manufacture and non-manufacture. With the previous relational technology, all land was instead part of a single system of relations, but divided into temporary places of more or less usage by one or the other part. Land would, for short periods of time, be more entangled with humans, and for long periods of time be more entangled with non-humans, but there was no difference between manufactured and non-manufactured places. In fact the logic of manufacture does not fully make sense in the relational logic. From the manufacturing logic we could say that the question is who is currently manufacturing the land, humans or gods; but this makes no sense in Blang narratives that instead discuss the forest in terms of possession and use: have humans managed to temporarily gain the possession rights to use the land from the god? This is again why theogenic is a better term than anthropogenic when thinking about swidden/shifting cultivation: anthropogenic extends the manufacturing logic from society to nature, while theogenic highlights the relational basis of this form of cultivation.

This same problem is apparent in the notion of anthropogenic climate change. This concept simply extends the notion of manufacture: industrial society does not just produce goods, it also produces climate change. From a relational logic, earth's biosphere is the result of all the beings on this planet, and the difference is not that the climate is now anthropogenic: as long as humans have been around it has been

anthropogenic, but also botanogenic, fungogenic, entomogenic, zoogenic, and so on. What has changed is that the anthropogenic part of the relations have grown negative and outsized. The manufacturing logic solution is to either manufacture a solution or to not manufacture as a solution. A relational logic solution would be to transform the relations between humans and surrounding beings, just as Blang communities return land to the mountain god when soil fertility is reduced.

The notion of relational technologies complicates the themes of this volume. From this perspective it is not the fact that theogenic soils involve beings that in a secular knowledge system would be defined as religious or spiritual that accounts for its ability to balance human livelihoods with a biodiverse, carbon positive biome, but rather the fact that it is based on a high degree of relationality to solve problems. Are these technologies more similar to a spiritually informed manufacturing technology or a non-spiritually informed relational technology? This is perhaps not an answerable question, but it helps situate the problem, namely that different questions constitute problems and solutions differently. Questions about religion and spirituality in relation to environmental crisis locates the problem within the world of knowledge, cosmology, ontology, belief, and motivation, while the question of relationality locates the problem within the world of interactions between beings, regardless of which beings are involved. These are of course not unrelated; however, it does make a difference to how problems and solutions are constituted.

Take Blang relations to mountain gods. While the question of epistemology and ontology is important, it is only the first step. Blang communities are deeply concerned not just with questions about whether mountain gods exist, but how to relate to them, such as through mutual aid. Do Blang communities have more in common with secular movements focused on mutual aid, or with religious movements with hierarchical divine relations? The Blang case highlights something very important: what has changed is not the cosmology, people's beliefs, or motivations—what has been transformed is the types of relations that people have with what surrounds them. This suggests that the question of the role of spirituality in environmental movements is much less important than the relations environmental movements make with others, be they human or non-human, secular or spiritual.

Conclusion: Political Impossibilities

This chapter has analyzed the shift from swidden/shifting to fixed-plot cultivation in the Blang Mountains to elucidate what this transformation can teach us about how religion and spirituality motivate communities in Asia to engage in environmental activities. First, we saw how this change can be understood as a transformation from theogenic to anthropogenic soil fertility practices. The analysis highlighted

the beneficial ecological role of deities. This suggests that if religion is not purged from the world into a separate domain of motivating human beliefs, deities can be active agents in local ecologies. I then interrogated the effect of this change from theogenic to anthropogenic practices on biodiversity and forest conservation. We saw that more varied conceptions of what constitutes a forest might be the key to increased biodiversity, thus highlighting the importance of a plurality of knowledge systems informing conservation projects. In the last section, we discussed the underlying logics of theogenic and anthropogenic practices. We saw that anthropogenic practices operate on a manufacturing logic, while theogenic practices operate on a relational logic. This made me question whether religion and spirituality is the important category of comparison: are theogenic soil practices more similar to divinely inspired manufacturing practices, or to atheistic relational practices? But there is one important topic which has been calling for our attention since the beginning, and that still needs to be addressed: the question of political (im)possibilities. As we shall see, what Blang communities seem to lack is not motivation (religious, spiritual, or otherwise) but new tools for reshaping social relations.

The *dazhan* in an earlier quote noted that “there’s no way (没办法) [to change the illness of the land]. If it’s caused by gods or ghosts you can change it.” This highlights an interesting question about the possibilities for action. Why can gods and ghosts be affected, but not unhealthy soil? I think we can take the Chinese term 没办法 quite literally here. The *dazhan* has many means (办法) of handling ghosts and gods. He has a library of powerful words (*katha*) and ritual implements that he can employ to appease, coax, coerce, and compel these ontologically alter-others to leave humans alone. But he does not have any method for appealing to or expelling the government so that Blang communities can resume swidden/shifting cultivation. The following exchange I had with Ai Zham Di of Man Lik, is indicative of a general disposition:

Ai Zham Di: These days life is getting easier and easier, but we also have less and less freedom. The *chao pianling* (the king of Sipsongpanna) and the Kuomintang wanted money and things from us, but they didn’t care about what we did. If you wanted to move you could move, whatever you wanted to grow, you could grow, and so on. The Communist Party got rid of the Kuomintang, so people love them.

DMB: So the Communist Party doesn’t want your things and money? I have noticed that no one seems to be paying taxes.

AZD: Exactly, they don’t want our money, what they want is for people to follow the law.

DMB: Do you think people agree (同意) with having less and less freedom or do they just not see a way to oppose it (没办法反对)?

AZD: There’s no way to oppose it (没办法反对), if you do you will be put in prison.

Ai Zham's analysis of the current situation highlights something very important. Blang communities were founded by people who were able to establish consensus democracy governed autonomous communities that cultivated a diverse and healthy biome through mutual aid relationships with the gods and ghosts that surrounded them. This was made possible by their ability to escape lowland states. As James C. Scott has shown, this was a common practice across Zomia (Scott 2009). As David Graeber and David Wengrow conclude in their vast account of human history, this "freedom to move" was something characteristic of most of the world's population until at least "around a half-millennium ago." Graeber and Wengrow defines it as one of the "primordial freedoms" together with "the freedom to disobey, and the freedom to create or transform social relationships" (2021, 4, 426, 446). In the case of Blang communities, it was this freedom that made the other two possible. The ability to move away from states were the means they employed both to establish and maintain their alternative, autonomous communities. Representatives of lowland states might come and ask for money, but if their requests were too burdensome, villages would simply move away, something Xin Man E village did as recently as 1949 (Yang, Zhou, et al. 2009, 48), and which many individual Blang people also resorted to in 1958 when the government began closing monasteries and enacting repressive policies.⁸ Of Graeber and Wengrow's three "primordial freedoms" it was the "freedom to move" that enabled all other freedoms in the Blang Mountains.

This "freedom to move" has been curtailed in several ways. Firstly, it is no longer possible for a village to simply up and leave for the other side of a mountain to avoid state extractive campaigns. To escape the Chinese state they would have to move across the border into Myanmar. Such prospects were made more difficult by the erection of a border fence during the coronavirus pandemic, and the fact that there is a state in the separatist region on the other side of the border that is considered far more extractive and unjust than the Chinese. Secondly, it would mean leaving behind a lot of wealth. With tea becoming the main source of income instead of opium, people have become much more tied to a place. The one form of escape that would still be possible is taking to the forest. This is a technique Blang individuals have employed for as long as anyone can remember, and it is always a real possibility. But this has always been intended as a temporary solution: to weather a storm.

When people in the Blang Mountains say that there is no way to oppose the government, that there is no way to deal with problems caused by telluric illness, as opposed to problems caused by ghosts and gods, what they are saying is that they lack the tools to make a change. While the local government, both at the township and prefectural level, is supposed to be part of an ethnic autonomous region, people in the Blang Mountains do not consider the government to be something

they are in control of. Their understanding is that the local government represents the national government through its top leader (领导), who they say is always Han Chinese. My own very limited experience with the local government supports my friends and interlocutors' interpretation. While the village heads and other representatives can raise certain issues, most interactions that I have experienced was with cadres coming to "explain the laws of the nation" to the village and to make sure the laws are followed.

Despite this, people in the Blang Mountains still enjoy the freedom "to do as one pleases" (随便), to a high degree, and they are aware of the difference between what one can get away with in the mountains as opposed to the lowlands. The slow eroding of this freedom helps explain most of the friction between the government and the villages, as well as why Blang communities have yet to develop new tools for affecting their situation. Between the improvements in material wealth and the high degree of autonomy that Blang villages still retain, people do not feel much need to develop new tools of resistance—at least not at the moment; but if freedom and autonomy keep eroding, and if material well-being continues to be threatened by the recent nose-dive in tea prices, the situation might change.

Roughly speaking, there are two general approaches that Blang communities could pursue in developing new technologies for allowing them to act on the ecology. Firstly, they could attempt to work with the government to carve out a larger sphere of movement. As the chapters by Chen and Li, and Qian, Liu, and Svarverud have shown, environmental concerns can be removed from the sphere of politics and find a space of action in China. It is even possible that the state's narrative of "ecological civilization" could be enrolled to create a larger space of action for Blang village communities. There is a recent trend in Chinese scholarship on the nation's ethnic minorities that focuses on how aspects of "ecological civilization" can be found in their "traditions."⁹ The following excerpt from a recent journal article highlights both its deeply colonial features, but also the space of negotiation it could afford: "due to their relative backwardness in economic development, every ethnic group retains a great degree of traditional ecological conservation customs. Although these customs might appear backward in some ways, they actually promote ecological conservation in Yunnan's southwest" (Gao 2020, 42). If theogenic soil practices and their role in promoting biodiversity could be re-framed to fit this narrative, it is possible that a space could be negotiated for them under the guise of "traditional ecological conservation customs." This highlights something very important for the questions this book grapples with. The "environmental civilization" trend in Chinese scholarship suggests that the path open for working within the system would be dependent on playing into Han Chinese colonial imaginings of the ethnic minorities as primitive and backward, and utilizing the relationship between environmental civilization and tradition in order to create a space of

action. Taking such a path would involve the transformation from, for example, spiritually or religiously informed environmental movements into “traditions” or “customs.”

Since Blang communities appear to have run out of places to escape the state by moving, the other approach would be to go against the government. Such a scenario seems highly unlikely; however, as scholars across the border in Myanmar have reported, what seemed impossible one day can seem self-evident the next (e.g., Edwards 2023). In Myanmar, nascent scholarship is highlighting the confluence of environmental protection and religion in relation to the Ethnic Armed Organizations (e.g., Kiik 2020; Kim 2024; Munive and Stepputat 2023). Instead of focusing on how to carve out a space of action within the confines of the Chinese state, such an approach would instead focus on again carving out a space of autonomous self-governance away from the state where alternative modes of ecology could be experimented with. Such a scenario helps highlight the possible avenues for a spiritually informed environmental movement in the Blang Mountains, were one to develop in the future. Either it can adapt to Chinese state rhetoric and bureaucracy to make a space within, or it can formulate itself in opposition in order to make a space without.

Regardless of whether Blang communities choose to adapt, or to attempt to make a space (within or without the Chinese state) for a locally informed ecology, they have one powerful tool at their disposal: consensus-based village general assemblies (*pom yung*). While consensus deliberation functions as a form of prefigurative political experimentation in many parts of the world (see e.g., Graeber 2009, 235, 242; Oba and Özsoy 2023, 2), in Blang communities it remains the default way of decision making. Being founded as a form of alternative political and ecological societies, Blang communities are already organized in ways that elsewhere constitutes prefiguration. Thus, whatever path Blang villages choose to adopt, they have the methods for rooting this decision in shared consensus.

Finally, the problem of finding methods to create a space of action for reshaping the local environment highlights something very important for the theme of this volume. For Blang communities, what is missing is not new knowledge, sources of motivation, or ideas of what the world could be like, but the tools to transform social relations. The important change from the perspective of an “anthropology of freedom” (Wengrow 2022) is precisely the access to and loss of tools to ensure the three “primordial freedoms.” Blang communities have for longer than anyone can remember used escape as a tool for ensuring freedom, but with the state encroaching into the scatter zone of refuge that is the Blang Mountains, they see nowhere to escape to. The future of the Blang Mountains is dependent on the ability of upland communities to find new tools for ensuring the freedom to transform social relations and thus ensure both autonomy, freedom, and a sustainable biome. They are not alone in this

problem. This suggests that what the world needs to face climate and environmental catastrophe is not new spirituality, knowledge, or visions of the future, but new tools to enable “the freedom to create or transform social relationships.”

Notes

- ¹ According to official Chinese statistics, Yunnan is home to a population of 127,345 Blang people (NBSC 2023). However, this includes several groups that employ other autonyms and whose languages belong to other branches of Austroasiatic. The population of people who call themselves Blang is approximately 22,764, of which 14,935 live in Bulangshan township, and 7,829 in Xiding township (PGBBT 2020; PGMC 2015).
- ² I first conducted fieldwork as part of my first Master's degree in the Blang Mountains in 2014. I then visited again in 2019. Stymied by the pandemic, I was not able to begin fieldwork for my doctoral dissertation until February 2023. Across my stays in 2014, 2019, 2023, 2024, and 2025, I have spent roughly eight months in the Blang Mountains.
- ³ *Mixin* is usually translated as superstition, but for Blang people, like many in rural China, the term does not necessarily indicate something negative. Often, as in this case, it is used to denote non-temple rituals for a specific purpose, such as dispatching ghosts. While my Blang is gradually improving, I primarily conduct interviews in Chinese, which is slowly transforming into a strange pidgin of Mandarin and local dialect, interspersed with Blang words and concepts.
- ⁴ I use the term “Blang friends and interlocutors” for a very specific reason. At the beginning of my doctoral fieldwork, I had a meeting with the abbot and the *dazhan* of Man La, in which they agreed to help me with my research. They expressed one demand and one caveat. They asked that I make sure that what I write about their practices is accurate, and that I ask them if I am unsure about anything. They also explained that “what we tell you goes for Man La [and its two related villages], but we cannot speak for other villages, they might do things differently.” Having visited and conducted interviews in at least twelve Blang villages, I have come to understand the magnitude of this caveat. Every Blang village differs to varying degrees linguistically, ontologically, cosmologically, and in terms of social organization, from its neighbors; even within the same village there is great diversity. The term “according to my Blang friends and interlocutors” is thus my own humble caveat that what I relay in these pages is based on what people I have spoken to have told me, “nothing more—but nothing less” (Viveiros de Castro 2004, 4). It is also a methodological meditation on the importance of different types of relationships developed during fieldwork. Time spent with my friends in the Blang Mountains has been at least as important to my understanding of Blang communities as more formal interviews.
- ⁵ Arboculture, such as rubber and tea plantations, is only legally carried out on agricultural land.
- ⁶ For Levi-Strauss a “science of the concrete” was a structured system of knowledge resulting from bricolage (employing what is available at hand). Viveiros de Castro employs the notion of bricolage to conceptualize how indigenous communities work with what is at hand to shape their ecologies, a process he calls “ecobricolage” (Viveiros de Castro 2019).
- ⁷ The *BSLD* reports that quality of land and the amount of seed required to sow a field was the key measurement in pre-PRC land allotment (the reports employ 挑, a measure word for loads carried on a pole; though Blang communities tend to employ large woven baskets carried with a forehead strap). In state allotment of land and in contemporary reports, acreage (亩)—a spatial measurement—is instead employed.

- ⁸ In official historiography 1958 marks the beginning of the Great Leap Forward. In Man La historical discourse, the year 1958 is often used by itself to define the beginning of state repression and control. For some elders it marks the beginning of the Cultural Revolution, while other elders distinguish between this longer period and the actual Cultural Revolution (1966–1976), and refer to 1958 as the year the government closed the temples. In both periodizations the era from 1958 until the temples were reopened in the early eighties constitutes an era of state repression. For many elders, 1958 marks the year they went from not having a state to having one.
- ⁹ I should note that I am not suggesting that this form of colonial, romantic approach to ethnic minorities is recent. What I am pointing at is its current, specific iteration within the narrative of “ecological civilization.”

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