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Exploring the changing plant agencies and ontologies, and how they are represented in Blang life world in Jingmai Mountain, China

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Leiden University Faculty of Social and Behavioural Sciences
Department of Cultural Anthropology and Development Sociology
Visual Ethnography

Final Thesis

**Exploring the changing plant agencies and ontologies, and
how they are represented in Blang life world in Jingmai
Mountain, China**

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Chapter 1 Introduction

It was a hot summer day in 2023 and also my 30th day living alone in Jingmai Mountain. On this morning, I still woke up with the aroma of arbor trees and the sound of birdsong, but unlike previous days, I heard a drumming sound from far away. The drumming came and went, but the rhythm was so clear that it seemed to be guiding me to go and find out what was going on. As I walked in the direction of the drums, I came across a Blang grandmother with a large bamboo basket full of banana leaves on her back. I asked her where the drumming was coming from and what was being done over there, and instead of answering my questions, or perhaps because she didn't understand the language I was speaking, she just waved her hand and gestured for me to follow her. Though a bit puzzled, I began to follow her footsteps as we walked slowly together, encountering several more women carrying banana leaves in the same direction, and then we arrived at the Temple of the Tea Ancestor. There were about twenty Blang women there, divided into five groups in all, wrapping glutinous rice into banana leaves. One of them, who looked like the leader of the group, explained to me that tomorrow was the middle festival of the Blang ethnic group, a festival of ancestor worship, and that everyone was now preparing a kind of vegetable bun to be offered to the ancestors and the deities to eat. I followed this up by asking her why they were wrapping vegetable buns in banana leaves. She smiled mysteriously and said, banana leaves are special, they help us bring blessings to our ancestors.

I was a little surprised to hear her answer, but also found it understandable and worth documenting. This is because during my month-long stay in Jingmai Mountain, I had already heard many stories about plants being able to communicate with spirits and witnessed local people's practices, which included using plants to call one's soul, using plants to cure spiritual illnesses, and so on. Jingmai Mountain is located in the mountainous region of southwestern China, and the Blang people, the indigenous people of the mountain, have formed a variety of deep relationships with the wild plants there. The previously mentioned spiritual communication is just one of the many functions of plants. And this spiritual function is also a manifestation of the Blang people's feeling of plant agency. Thus, my first research question is what role does plant agency play in the Blang life world.

This question is also relevant to my methodological intervention and leads me to my second research question, how should we present plant agency? Descola's (2014) critique of Kohn suggests that we often focus on the descriptions and evaluations of plants by indigenous people and document them in the linguistic texts of anthropologists, rather than presenting the plants themselves directly. This echoes the phenomenon of so-called "plant blindness" that has long existed in anthropology. This, I think, is where multi-media expression enters, through the presentation of films and plant sounds that perhaps go some way to exploring the agencies of the plant and helping people to think about the voice of the plant as a subject.

In addition to the function of spirituality, some plants have an economic function, for example, tea is the most important cash crop in Jingmai Mountain and is becoming the only one there. And with the development of the tea economy and the dilemma of the Blang cultural inheritance, the relationship between plants and the Blangs is changing. As the young Blangs no longer recognize the spiritual nature of plants, the ontologies by which plants are perceived, as well as the forms of plant agencies, have changed. Thus, my third research question is, how is the ontology of plants changing across Blang generations?

This thesis will centre on the three research questions mentioned above and make some contributions to the relevant theories and research methods. In terms of theory, my research combines studies on plant agency and plant ontology, and places the relationship between the Blang people and wild plants in the economic-political perspective, rather than focusing solely on the qualities and ontology of the plants themselves. In terms of methodology, my research experiments with a multimedia approach, presenting the role of plant agency in the Blangs' lifeworld through filming and plant sounds, and feeding this documentation back to the locals by way of artistic events.

1. Introduction to the Blang ethnic group

The Blang people are an ethnic minority group inhabiting the border of Myanmar, Laos and the Yunnan Province of China (Wang & Anikó, 2022). The Chinese government renounced any indigenous people in China and used the term ethnic minorities instead (Hathaway, 2016). However, some authoritative organizations like the United Nations (UN) include these Chinese ethnic groups as indigenous peoples (Hathaway, 2016), and the Blang people are one of these ethnic minority groups.

If we start from the Paleolithic “Pu people”, the Blang people have a history of about 8000 years. As early as the Shang and Zhou Dynasties in China, the Pu people, the ancestors of the Blang people, were already widely distributed in the vast land of the ancient Yongchang (now Baoshan) County. Later, the ancient Pu people continued to migrate, integrate and divide. Nowadays, the Blang people are only distributed in the cities and counties of Yunnan province, such as Menghai, Shuangjiang, Shidian, Yunxian, Zhenkang, Yongde, Changning, Gengma, Lancang, Mojiang, Nanjian, Jinghong, Jingdong, Simao, Mengla, etc., with a total population of about 90,000 people (Mu, 2003). In addition, they are also found in Myanmar, Laos and Thailand, but the population is not known because no statistics have been found.

The Blangs are ethnically close to the Deang and Wa, and linguistically belong to the Wa-Deang branch of the Mon-Khmer group of the South Asian language family (Yang, 2004). In the long process of historical development, they have passed through matrilineal and patrilineal clan communes, and up to the founding of the People's Republic of China, the Blangs were still in a slave society under the rule of the Dai feudal lords. After the founding of the People's Republic of China in 1949, the state determined the name of the ethnic group to be the Blang people according to the will of themselves. Moreover, the Blang society made a direct transition to a socialist

society, and thus also belongs to the category of “ethnic groups with cross-stage development”, crossing over feudal and capitalist societies. (Xie, 2017).

2. Introduction to the Blang people in Mangjing Village in Jingmai Mountain

The majority of the Blang people in China live in the mountainside area, where there are dense forests and a typical subtropical and temperate climate. I chose to situate my study on Jingmai Mountain, which is located at longitude 99° 59'14"~100° 03'55", north latitude 22° 08'36" ~22° 13'7". It is subordinate to Huimin Town, Lancang Lahu Autonomous County, Pu'er City, Yunnan Province. The altitude of Jingmai Mountain is between 1250 and 1550 meters high. The mountain belongs to a subtropical mountain monsoon climate with distinct dry and wet seasons. The annual average temperature is 18 centigrade and the annual rainfall is 1800 millimetres. I chose Jingmai Mountain because it is known for its botanical diversity. The world's largest, oldest, and best-preserved ancient arbor tea (*Camellia sinensis* var. *assamica*) ecosystem also situates on Jingmai Mountain (Chen et al., 2013). The ecosystem has three main layers: the arbor tree layer, the shrubs and herbal plant layer, and the vertical spatial stratification of flora is obvious. The ecosystem provides a variety of wild plants for the physical and spiritual world of the Blangs, allowing them to form diverse and complex relationships with plants (Su et al., 2017).

There are four Blang villages (Manghong, Mangjing, Wengji, and Wengwa villages) at Jingmai Mountain (Luengo, 2021). I conducted my research mainly in Mangjing Village. There are 603 households in Mangjing village, with an average of 5 people per household. The village has 2,290 acres of paddy fields, more than 7,000 acres of terrace tea, more than 3,000 acres of cultivated land, and more than 5,000 acres of ancient tea plantations. According to the record of Mangjing Village Committee, the annual per capita income was only 800 RMB in 2003 (Su, 2009), but with the rapid development of tea economy, the annual per capita income increased to 12,000 RMB in 2022. In September 2023, the ancient tea plantation in Jingmai Mountain was selected as a World Heritage Site by UNESCO, and the tourism industry in the local area has rapidly boomed, with the average annual per capita income reaching 20,000 RMB in 2023.

3. Introduction to the Blang belief and the deity of forest

The Blang people in Jingmai Mountain practice a form of religion that has been called original religion, manifested by the existence of seven deities in their living space, of which the deity of forest, who is in charge of forests, is the most honored. In this regard, most of the plants are considered to have divine powers. For example, the weenie tree can lower the sound of thunder during thunderstorms, the banyan tree is the sacred tree and protects Blang villages from harm, and banana leaves are spiritual mediums that help the Blangs to communicate with their ancestors and with the deities.

In August 2023, I came to Jingmai Mountain for the first time and stayed there for half a month in the company of local residents. I was not only impressed by the

warmth and hospitality of the Blang people, but also learnt and was amazed from the Blang elders how they felt the spirituality and agency of the plants. Impressed by each interesting story, I decided to return to Jingmai Mountain in January 2024 for two months of fieldwork to document and film this human-plant relationship. I used Plantwave, the recording equipment, to explore plant agency and organized an experimental plant concert in Mangjing village in order to elicit Blang descriptions of and reflections on the role of plants in their life world. However, during my second fieldwork, I realised that not all Blang people maintain original relationships with wild plants. My interviews with local Blang youths revealed that they no longer believe in or even understand the agency of plants, that the associated Blang culture is facing a loss of transmission, and that the ontology of the plants they perceive is changing.

Therefore, in this thesis, I will answer three research questions: what role do plant agents play in the lifeworld of the Blang people in Jingmai Mountain; how has the ontologies of wild plants changed among young people with the disappearance of the Blang script and the development of the Pu'er Tea economy; and how can we use multimedia methods (film and sound) to present the agencies of plants. The first chapter of the thesis is a general introduction to the Blang ethnic group of Jingmai Mountain; the second chapter is a literature review in which I will sort out anthropological research on the concept of plant agency, the multiple ontologies of plants, and the corresponding multi-modal research methods; the third chapter is on the methodology of my research; and the fourth chapter is on the description of the Blang people's view of the forests and the specific plants that are endowed with divine powers. Here I will tell the personal stories of one Blang elder in charge of rituals and the most famous Blang herbalist; in Chapter 5, I will describe the individual stories of two Blang youths, including the impact of cultural loss and the development of the Pu'er tea economy on their lives and beliefs, which changed their perceptions of the agency of the plants; chapter 6 is about how I practiced the multi-modal methods with people and plants and my reflections on it, which will be divided into the filming methods and sound-recording methods; and the final chapter concludes the thesis.

Chapter 2 Literature review

In this section, I will follow two separate strands, one on plant agency and the other on the multiple ontological perspective on human-plant relations. My review includes the development of each concept and its corresponding critique, which is where my research enters. Since my first research question is to explore the roles that plant agency plays in the life-worlds of indigenous Blang people, I will sort out the concept of vegetal politics and its associated empirical researches; my second question is to present a multiplicity of plant ontologies as perceived and practiced by different groups of Blang people, and therefore I will primarily follow Mario Blaser's approach. A common criticism of the above concepts and research perspective is that their presentation lacks a pluralistic multi-media approach and relies solely on anthropologists' written accounts, which will be where I will dialogue in Chapter 3, Methodology.

1. The plant agency

There is an emerging “plant turn” in anthropology that focuses on plant life (Tsing, 2015; Hartigan, 2015; Chao, 2018), arguing that plants have become more than domesticated, cultivated and consumed objects for humans, and that plants and human communities have interrelationships with each other. A focus in “planthropology” (Myers, 2017) has been to understand plant agency: How do plants exert influence on the social world of humans? (Sarah, 2021)

There are some anthropologists focusing on the plant agency in the perspective of vegetal politics (Head et al., 2014; Sheridan, 2016; Fleming, 2017; Sarah, 2021), a concept first articulated by Head et al. (2014), which is defined as “collaborative and conflictual relations between humans, plants and others” in political spheres. Vegetal politics, in this vein, means how the “plantiness” - the set of characteristics and capacities specific to plants - shapes political landscapes and changes political identities (Head et al, 2012). Some botanists and post-humanists argue that plants may be autonomous, communicative and intelligent, but this does not mean that they are politically equal to humans. Plants are lacking in intention and voice, and are therefore easily manipulated by people as tools. Sarah (2021) attempts to explore plant agency on a methodological level based on the concept of vegetal politics, pointing out that plant agency is relational, embodied between people and plants. By identifying plant time, engaging with plants, and expanding the scope to observe the agency expressed by plants through groups rather than individual plants, he was able to identify the plant politics of Regent's Park. While Sheridan (2016) focuses on boundary plants that lie at the intersections of landscape ecology, illustrating how boundary plants such as *Dracaena* in sub-Saharan Africa and *Cordyline* in the Caribbean, have a particular sort of vegetative agency to turn space into place in culture-specific ways.

Some have focused on the roles plants play in indigenous areas, particularly the role of plants in constructing indigenous cosmologies (Kohn, 2013; Chao, 2018; Miller, 2019). As Kohn (2013) says, the Runa (indigenous people) lives in relation to the forest's vast ecology of selves which includes plant selves, and their spiritual realm is also a product of their contact with the forest, which speaks to the Runa through the shamans. And Chao (2018) confers subjectivity on the oil palm. She explores how, for the indigenous Marin people of West Papua, the reluctance of the oil palm to participate in symbiotic societies with other species jeopardizes multispecies well-being, including humans, arguing for greater attention to other-than-human species themselves. The above two scholars show the roles that plant agencies play in the indigenous lifeworld. The study by Miller (2019) further considers plants as kin, for the Canela people, plants are nourished and cared for throughout their lives, and people believe that plants have emotions, which is another manifestation of the way in which plants constitute the lifeworld of indigenous peoples.

However, the ensuing critique is that anthropologists have simply self-interpreted the roles that plants play in indigenous life worlds, which is very discursive and lacks

elaboration from other botanical perspectives (Descola, 2014). For example, in Kohn's (2013) approach, the lack of a real investigation of how nonhuman life forms actually deal with iconic and indexical signs leaves the audience with little choice but to rely on what anthropologists refer to as the Runa's view of non-human semiotics. This is in some ways the entry point for my research on plant agency. In my project, I documented perceptions and practices of plant agency by elderly people within the Blang cosmology, as well as the Blang views of the forest, and connected them to the interpretations of Blang herbalists, linking the biological and spiritual characteristics of plants.

I believe that plant agency can also be presented through multi-media means as a response to the above criticism, because media allows us to probe beyond discourse of our interlocutors, and beyond the interpretations of anthropologists, to show the world of plants directly, and to bring the world of plants as presented by anthropologists back to the human life world in which they are embedded. Though many scholars are exploring methods for conducting research with multiple species, as Locke and Paul (2015) write, "research practice does not yet match our theoretical conviction." Studies using multi-modal methods to describe human-plant relationships are even fewer and are still in the early stages of development, reflecting the so-called plant blindness (Wandersee & Schussler, 2001). There are scholars observing (Gibson, 2018) plants and interviewing (Hitchings and Jones, 2004) residents in plant-ruled areas like gardens and forests. For example, Hitchings and Jones (2004) focus on the specific settings of plants in private gardens, walking and talking with the gardeners as they moved through and engaged with their plants. Some scholars use multi-modal methods including photography to capture plant time (Pitt, 2015), and filmmaking to depict people's close connection with plants (Ika Muru Huni Kuin, 2012), which are pioneering shifts in perspective, as the plant world is presented directly, without recourse to human language as the embodiment of an anthropocentric perspective. Among them, the perspective of the film *shuku shukuwe* (Ika Muru Huni Kuin, 2012) is very innovative, which does not just depict the world of plants, but also directly considers people as plants. For example, the indigenous people in the film often dress in plants that they look like plants and live in the forest for long periods of time, gradually adapting to and being assimilated into the growth rhythms of the plants; there are often still shots of humans in the forest for extended periods of time, mimicking the growth time of the plants. Therefore, it provides new insights on the human-plant relationship, and the ways in which plant agency is presented in multiple media.

In my project, I go further than merely with human interlocutors, and collaborate with Blang residents to communicate with plants, record and film the plants' agency, and return the presentation to the Blang botanical and human worlds. As discussed above, the direct presentation of the plant world in multimodal methods can somewhat go beyond traditional anthropological accounts of the relationships between humans and plants, and so I am thinking about how videos and sounds can be used to directly

present plant agency in the indigenous Blang world, which will be detailed in Chapter 3, Methodology.

2. The multiple ontologies of plants

Since my research also focuses on young and old Blang people's understanding of plant ontology, I am going to review the development of the ontological turn, as well as the related critiques, and where my research can be in dialogue with them. There are two streams of ontological development, one of which derives from Latour's actor-network analysis, which to a certain extent deprives human beings of their hegemonic position as social subjects. The other, starting with Lévi-Strauss and co-developed by Viveiros de Castro and Philippe Descola, breaks down some of the traditional anthropological dualisms - such as nature versus society, individual versus collective, and body versus mind. Despite the many differences between these two separate streams, their premises are the same, namely that the plurality of beings and regimes of existence are rooted in deeper socio-cultural dimensions than those traditionally studied in anthropology (Descola, 2014).

Mario Blaser's (2016) approach, which combines the two streams mentioned above, asks how different practices and networks bring into existence different material-semiotic beings. The multiplicity she refers to is not exactly the same as that envisaged by Latour or Descola; she sees it as the result of material semiotic assemblages including various networks and collections of actors. For example, Ati[^]ku/caribou is multiple. Ati[^]ku emerges from an assemblage that involves atanukan, hunters, the sharing of meat, and a spirit master; caribou emerges from an assemblage that involves the discipline of biology, wildlife managers, predictive modeling, and economic concerns, and so on (Mario, 2016). In my project, as I would like to focus on the ontological differences of plants as reflected in the Blangs' view of plants as subjects and objects, I will build on Mario's analytical approach. The multiplicity of plant ontologies in Jingmai Mountain is based on the networks that the diverse Bulang groups share with plants and their practices.

Anthropologists studying human-plant relationships have begun to apply an ontological perspective (Descola, 2013; Kohn, 2013; Chao, 2018) to explore the agencies of plants by analyzing ontological multiplicity and difference. However, there are also scholars who are critical of this perspective. Critiques include its neglect of local political issues, and its reliance on the linguistic and discursive documentation of anthropologists alone. As for the first one, Beshear and Bond (2014) argue that ontological anthropology suffers from a severe lack of critical and historical sensibility, arguing that a preoccupation with ontology ignores complex economic, political, and historical relationships in favour of a commitment to "purify the concerns of ethnography and philosophy so they can more perfectly coincide" (Bessire & Bond, 2014). Although it has been criticized as impolitical, Haraway's (2008) insistence on including other more-than-human beings in our anthropological studies with the hope of enacting an ethic and a politics has been expanded upon in many multi-species ethnographies (Mario 2009, de la Cadena 2010, Pedersen 2011,

Tsing 2015). Kohn (2015), on the other hand, points out that politics does not necessarily have to be local, and that there are a number of important ontological projects that are precisely about politics in a global context.

As for the second critique, using Kohn's (2013) research as an example, Descola (2014) argues that "As Kohn says, he was led by the Runa to infer that an organism was interpreting a sign, and we would also have liked to know what investigations on, say, animal ethology, cognition, and perception, or on biomimeticism, or on plant communication, had to say about it. I would have liked Kohn to follow in the stride of a new generation of young scientists who straddle the frontier between human ethnology and animal ethology, and see him study in effect how reciprocal interpretations of behavioral and environmental signs have built up the respective knowledge of co-evolving humans and animals." We can see from Descola's critique that Kohn relies solely on local people's understanding and interpretation of indigenous beliefs and cosmologies, which can therefore lead to misinterpretations. This also stems in part from the fact that Kohn chooses only the written record to paraphrase, rather than using multi-modal media to bring back the indigenous and multi-species world.

In fact, there are ontological forms of anthropology that are exploring multiple modes of presentation called "ontological poetics" (Kohn, 2015). The experimental ethnographic film *Leviathan* by Lucien Castaing-Taylor and V' er' ena Paravel (2012) is an example of this. Multiple cameras are attached to human bodies, inserted underwater, or mounted on different parts of a boat, disrupting the single human perspective. This way of presenting multispecies perspectives, and relationships between human and multiple species, dismantles the misconceptions of anthropocentric perspectives created by anthropologists' verbal records, and allows us to visualise the unexpected entities and powers of multispecies (Kohn, 2015). This also echoes my concerns in the first part of literature review about the neglect of the presentation of plant agencies in a multi-modal way.

In my research in Jingmai Mountain, plants used to be regarded by the older generation as divine, spiritual, and influential subjects, but they are increasingly seen by the young generation as objects of human activities, serving people's lucrative and edible purposes. Since seeing plants as subjects is ontologically different from seeing them as merely objects, I have employed a multiple ontology perspective in my research, and try to dialogue with criticisms of the ontological turn in the following two ways. Firstly, I situate the relationship between the Blangs and wild plants within a historical, economic-political perspective, focusing on how the development of the Pu'er tea economy in China has impacted the relationship between the Blangs and plants. Thus, my research hopes to incorporate political, economic, and historical dimensions into an ontological perspective, rather than focusing solely on the qualities and ontology of the plant itself. Secondly, my research experiments with a multi-media approach to present the agency of plants and the interactions between the Blangs and plants through filmming and sound-recording methods, incorporating the ways of knowing from Blang herbalists and shamans in a sort of attempt to present

how plants have framed the Blang indigenous cosmology, and to return this record to the local people by way of an artistic event.

Chapter 3 Methodology

In this chapter, I focus on two aspects of the methods used in my research. The first is the participatory observation and semi-structured interview method oriented towards plant interlocutors, and the second is the filming and audio-recording method of presenting plant agency.

1. Participant observation and semi-structured interview

Most ethnographers usually participate in the daily routines of a social setting which is not previously known in an intimate way, develops ongoing relations with the people in it, and observes all the while what is going on (Emerson et al., 2011). This is what “participant observation” means in the traditional sense, which is one of the basic research methods of doing traditional ethnography oriented towards human interlocutors. However, since I would like to explore how Blang people historically perceived the agencies of wild plants and how this perception has recently been changed, I have observed the interaction between the elderly Blangs and wild plants in daily activities and rituals, inspired by Julie Soleil Archambault (2016), who observed the intimate emotional contact between people and plants in her home garden landscapes through her intimate and frequent interactions with houseplants. During my fieldwork, I carried out three participatory observations, one of which was a hike through the forest, with a local Blang herbalist, Dr Sue, and together we observed and recorded the characteristics of the wild plants themselves. I learnt from him the connection he sees between these biological features of plants and the spiritual life of humans.

In my research, I conducted 20 interviews with Blang people. I began by interviewing Blang groups who had previously been able to feel or experience the spirit/agencies of wild plants. The interviewees shared mainly personal stories and memories, and the interviews mainly consisted of 2 ceremony leaders (kupia and nanpia), 2 experienced herbalists (Dr Su and Wuding Nang), and 6 Blang elders. I also interviewed 5 Blang youths about their views on plants, which differ ontologically from those of the elders.

2. Filming and sound recording

As for the filming methods, due to the inter-species differences between the researcher and the multiple species, traditional filming methods, which have often been used in the past to depict the activities and emotions of human beings, may fail in situations oriented towards non-human species. Some films blur the boundaries between humans and flora by anthropomorphising plants and thus ascribing human physical and psychological attributes to plants (Vieira, 2022). For example, the short film *Flowers and Trees* (1932) transforms plant temporality to adapt it to the perception of human viewers. Some films are human-centred in that they mention plants but focus on the existential crisis of human society, for example, the crisis of

co-operation between humans and plants, environmental pollution, the loss of botanical diversity and so on. Tarkovsky's *Stalker* (1979), for example, a film that alludes to the environmental harm caused by nuclear waste, focuses on damaged plant diversity. In the film, the wildness plants play an important role, both in the ruins of the city and in the Zone (likened to the Anthropocene). But instead of focusing on the subjective perspective of the plants, the film still captures them from the human gaze.

In recent years there has been a gradual increase in the number of films focusing on the subjectivity of multiple species, breaking the anthropocentric perspective, in terms of both filming methods and subjects. I take the film *Golden Snail Opera* (2016) as an example here, and present what my research methodology draws from it. *Golden Snail Opera* shows subject perspectives of creatures in the rice paddies, including the golden treasure snail (金寶螺) in the water and dogs on land, by focusing on them in an experimental way. And by presenting the perspectives of two friendly farmers, two filmmakers and two anthropologists and their relationship with snails, the team has built a performance format for multispecies performances (Tsai et al. 2016), reflecting not only on the ontology of snails from different human perspectives, but also on the ontological status of their actual interactions with each other and with the world. What I took away from the documentary is that it's possible to tie together the visual perspectives of different subjects to tell a story of multi-species coexistence and collaboration, to break the narrow perspective that human-orientated observational film puts us in. So I incorporated different perspectives into my film. The first is my observational perspective, in which Blang people walked with me and introduced me to their feelings and perceptions towards plants. I also followed them in an intimate and observational way, documenting their daily life with plants and performing ceremonies with them. For the second perspective, I experimented with the camera to capture the changing state of plants from their point of view, showing their agencies. Instead of placing the camera on the bodies of the plants, I filmed their sound waves.

This leads to the sound part. There has been some exploration of the presentation of multi-species sounds. Meijer (2019) argues that in current human legal and political systems, and in many cultural practices, animals are seen and used as objects, and that learning about the languages of other animals can help humans to understand them better and build new relations with them. However, in contrast to animals, most plants do not have languages, or the sound they produce is beyond the range that the human hearing can capture. In his book *Phenomenology of Sound*, Ihde (2007) writes, "The voices of things are not the voices of language. For what the voices of things bespeak is a kind of direct sound of their natures: materiality, density, interiority, relations within experienced space, outward hollows and shapes; complex, multi-dimensioned, often unheard in potential richness, but spoken in the voices of things." This means that all things have voices and that we can think of the voices of multiple species (especially plants) as "a community of sense and multiplicity" (Ihde, 2007). As I write in the previous section, there is currently a "plant blindness" in anthropology, and through the expression of sound, we will be able to hear the expression of plant states

and subjectivities, but this will require us to translate or transduce the sound of the plant through some technical means.

There are many forms of presenting plant sounds, with some people using contact microphones and hydrophones to record plant sounds directly. For example, in David Dunn's project, "The Sound of Light in Trees" (2021), he recorded the internal sounds of a conifer tree, aiming to illustrate how trees make sounds similar to human breathing and how they interact with the ecosystem and human world around them. There are also eco-acoustic artists who wish to detect the subterranean biodiversity through the complexity of sounds in the soil, which includes a variety of animal, plant and microbial sounds. For example, the eco-acoustic sound work *Soil Sounds* by David Vélez (2020) recorded sounds from a pot planted with Victorian rhubarb (*Rheum Rhabarbarum*). In addition to listening to the sound directly, since the sound of an object is a reflection of its internal state, if we think of the sound of a plant as a kind of music, it will vary from place to place and from time to time (Ihde, 2007). There's also a lot of literature on sound technology and how it translates or transduces. Among them I found Stephen Helmreich's (2015) transduction the most inspiring. He had detected gravitational waves, converted the data from the fluctuations recorded by their sensors into sound waves, then recorded them, and told the public that we could now listen to gravitational waves, to the movement of the universe. What this experiment has inspired me is that because the plant creates fluctuations and currents as its internal state changes, I can similarly use transduction to convert plant waves into plant sounds.

Therefore, I chose the device "plantwave" to record the sound of plants. What I did exactly was to attach the detectors of the device to the leaves of the plant and switch on the "plantwave" device, which immediately converts the electrical currents inside the plant into coherent music, and then I recorded them with a Tascam recorder. As I have learnt that the wild plants of Jingmai Mountain play different functions for the Blang people, including spiritual healing function, economic function, medicinal function, edible function and so on. So I found a total of 15 types of plants with corresponding functions and collected their respective plant music. Afterwards, I organised a concert in the ancient tea forest, presenting my collection of plant music with the plants and the Blang people as the audience.

Since I am curious about what will happen when such scientific ways of knowing and indigenous perception encounter and intertwine, I invited the Blang participants to feel the plant music themselves and to talk about their feelings and thoughts on plants. In the film, I also used the idea of "dialogue editing" (Feld, 1987)- which means that the director makes the work by having a real dialogue with the interlocutors - and added the process of my dialogue with the Blang people to my film. Thus, plant music serves two main purposes here, first as an elicitation that leads the Blangs to share their ways of knowing about plants, but rather as a way of presenting the agencies of plants to the film's audience. During the plant concert, Blangs from different backgrounds and age groups had different thought to share with me, which inspired

me about the different ontologies that people endow plants with and the possible reasons for this phenomenon.

Chapter 4 Plant agencies viewed by older generations

1. Blangs' view of the forest deity

The Blang people in Jingmai Mountain generally believe in original religion, and “all things in nature have spirits” is one of its distinctive features. In Blang life world, all entities or phenomena in the natural world, such as forests, rivers, thunder and lightning, the sun, the moon and the stars, etc., are all dominated by deities, and run according to the will of the deities. If people offend the deities, they will retaliate, make people sick and unlucky, and even let their families die. According to statistics, there are more than 80 kinds of deities in the Blang area that can only be named (Mu, 2003), and there are even more that cannot be named, which is also the case in Jingmai Mountain. To survive in this “world full of deities”, people have to be careful at all times and pay attention to the deities and live in harmony with them. People seek the blessing and understanding of the deities through sacrifices, prays and bribes, so whenever there is a major production activity, such as before planting tea leaves, people will make sacrifices to get the approval of the deities, and whenever there is a natural disaster or disease, people will also sacrifice to ask for the forgiveness of the deities. Generally speaking, most of the important deities of the Blang people are attached to the mountains and forests, and therefore the Blangs are in awe of the forests and believe that many trees have souls and agency.

In the vicinity of every Blang village, there is a lush and gloomy forest called “Longlin”, where “Ya” (the deity in charge of the forest) and “Daixona” (the deity of the village) reside, which determines the rise and fall of this land and blesses the peace of the village. Although the trees in the Longlin are thick and sturdy and well suited for building houses, every tree and blade of grass here is sacred and inviolable. Not only that, but people must offer sacrifices to them from time to time to pray for their own peace. In Longlin, all productive activities other than sacrifices are forbidden, such as hunting and gathering, and people are not allowed to chase prey that escapes into Longlin, collect dead trees and wild fruits that naturally fall to the ground, and so on. The consequences of offending the deities in Longlin are very serious. According to the Chronicle of Mangjing Village, in June 1932 (Dai Calendar), there was a big fire in Mangjing Village, and all the houses and properties in the village were destroyed to ashes, and the people who urgently needed to rebuild their homes chopped back part of the wood from the Longlin to make beams and pillars. However, in November of the Dai calendar, a plague broke out in the village, killing 34 of the 86 families in the village, and the remaining 52 families also had family members who died of the disease. After the divination, it was known that the reason for the disease was that the people destroyed the place where the “deity” lived, which made the deity lose its shelter, so it took revenge on the people. When cutting down a tree and the tree crushes a person to death, the Blangs will think that the “tree deities” does not like them to do so, so they will immediately give up and choose another tree

elsewhere. If someone comes back from the Longlin and gets sick, people will think that the “tree deities” are playing a trick on him, making the patient possessed by a ghost, and they will need to make a table of food (if there is no pork, they will have to kill a chicken instead), and ask the shaman to help him get rid of the ghosts.

Before the mass cultivation of paddy rice and the cash crop of tea in Jingmai Mountain, the original way of livelihood of the Blang people was slash-and-burn cultivation, that is, to cut down and burn down large tracts of forests to make the soil fertile, and then abandon them after cultivation to wait for the growth of new forests. Of course, these actions of cutting down trees and developing arable lands can only take place outside the Longlin. Therefore, in the past, in the twelfth month of the Dai calendar, people in Mangjing village would hold a collective ritual in Longlin. The Blangs believe that there is a “Segaku” ghost in the forest who is in charge of the souls of the trees, and that he controls people's lives and the growth of crops. Therefore, every year, before cutting down trees to make lands for planting, the leader of Mangjing village will ask a shaman to choose an auspicious day and a direction for sacrifice, and assign two suitable people to go up the mountain to choose a plot of land according to their time of the birth, cut down two trees (with an even number as a symbol of good luck), and then “call out the souls” of the trees, and bring them the wax strips and rice offerings. The whole village can officially cut down the trees only after the souls of the trees have been sacrificed and offerings are brought to the village.

In short, before the development of the tea economy in Jingmai Mountain, the main form of livelihood for the Blang people was slash-and-burn agriculture, but they strictly differentiated between sacred forests and forests that could be cut down. They also believe that trees have spirits and agents, which is mainly reflected in the fact that firstly, there are deities living in the forests which mainly belong to the Longlin, and secondly, the trees themselves have spirituality, which originates from the original belief of the Blang people that there are spirits in everything, which is recorded through oral transmission and village records in Dai script.

2. The views of a Blang shaman and a herbalist on plant agency

In addition to the behaviour of Longlin worship, the Blang people also believe that certain special plants have unique and different agencies, which is manifested in the fact that the weenie tree can change the weather, and the banyan tree may be the embodiment of the Blang ancestors, so it is very sacred and untouchable. These agencies stem from their belief that plants also have spiritual qualities, echoing their original beliefs.

My first interlocutor was a Blang shaman named Kupia. Kupia is a 70-year-old man, and this is not his real name, but because he is the host of the rituals in village, he is respectfully called "Kupia" by the other people. No one actually knows his original name, and even he himself has forgotten it. Kupia told me the story of how the old Blangs used a weenie tree to diminish the sound of thunder. Regarding the weenie tree (*Cassia fistula* L.), it is a tall tree whose fruit is dark brown and cylindrical, with seeds

separated by a diaphragm. In my conversation with Kupia, I learnt that the Blang people believe that the weenie tree has the ability to communicate with the celestial deities, and that this ability needs to be demonstrated in specific conditions and rituals. Kupia told me that when he was a child, his mother would put the fruit of the weenie tree on the fire and burn it, while reciting some spoken words (kougong), and something magical would happen, the thunder would slowly become less loud. The reciting method of the “kougong” was recorded in the scriptures in Dai language. Because the Blang language is only spoken and does not have its own characters, the Blang ancestors borrowed the characters of the Dai people, who were their neighbours. Regarding the story of the weenie tree, Kupia is not the only one who said so, I asked five old men in the village and they all gave me similar replies. Some of them had experienced it themselves, while others had heard about it.

In addition to the weenie tree, Kupia also spoke of another tree, the banyan tree, which also has its sacred power and agency. The difference between the banyan tree and the weenie tree is that the agency of the weenie tree is in helping to reduce people's fear of nature, while the agency of the banyan tree is in punishing people for crossing the boundary with the banyan tree because it is a sacred tree that the Blangs must honour and protect. Kupia told me a story he had personally experienced. There was a family in the village who, after breaking a branch of a banyan tree, came back at night with back pain and had nightmares while sleeping. After going to many doctors who were unable to cure the pain, he found Kupia to diagnose the problem, and Kupia told him that the reason was that the banyan tree had detained his soul in the forest, and that Kupia could help him call it back. So Kupia went to four places, the beginning of the village, the end of the village, the edge of the Longlin and the river to call back his soul. Not only from Kupia, I also heard from many old people in Mangjing village that the banyan tree is not allowed to be touched, even though some of it is a legend they heard rather than their own experience. In sum, what the traditional Blang shaman told me about his feelings about the agency of the weenie tree and the banyan tree was mainly from the perspective of his own experience of religious rituals. As Mario Blaser's (2016) study of different practices and networks bring about different material-symbolic presences, and multiplicity encompasses material-symbolic assemblages including various networks and collections of actors. In my study, at Jingmai Mountain, the agency of trees not only participates in material assemblages, which form part of the ecology, but also interacts with the incorporeal, such as souls and deities, thus exerting influence within Blang lifeworlds.

My second interlocutor was Dr Su, a 60-year-old man who is the most respected herbalist in Mangjing village. There are usually 1-2 folk doctors engaged in medicinal activities in each village of the Blang ethnic group, and most of them have inherited the relevant knowledge from their ancestors. In the past, due to the closed traffic in the Blang area, people did not have access to the outside world, so they could not understand the so-called scientific medical methods, and therefore cured people by calling the souls, sacrificing to deities, and practising divination. Also, because western medicines have not been introduced to the Blang area, local herbalists mainly

use indigenous herbs to treat some common diseases. The villagers call these herbalists “Moya”. However, unlike the traditional herbalists, the Dr Su first studied modern western medicine because of the central government's “Barefoot Doctors System” in 1968, in which the central government organised a group of village doctors to teach them modern medicine, with the aim of improving the backwardness of the rural medical situation at that time. Despite his education in the modern medical system, Dr Su not only rejected Western medicine, but also rejected the so-called scientific cognitive system, and instead told me in the interview that, “I used to be blinded by science”. Dr Su also talked about the banyan tree's punishment of people and analysed the phenomenon from the perspective of his own experience and the root of the Blang language. Dr Su said to me, ‘In the past, I absolutely did not believe in the story about the banyan tree, but in the 1970s I was blinded by science, and I preferred to use this tree to build a house, and the result was that the house was struck down by lightning right after it was built. Because I experienced it first hand, I tell this story to young people all the time.’ In addition, Dr Su believed that the relationship between the Blang ancestors and the banyan tree can be explained from the perspective of the etymology of the Blang language. He said in the interview, ‘In our language, the banyan tree is called kangwang, and the word means that this tree is the place where winged animals are going to perch. I sometimes ponder why the Dai people call us wang, which is very similar to the pronunciation of kangwang, the tree that I just said we can't cut down. So I wonder if the ancestors of the Blangs must have had something to do with this banyan tree, so that our clan name has the same sound as this tree.’

In short, although the personal experiences and perspectives of the Blang shaman, Kupia, and the educated Dr Su are different, both recognise to varying degrees that some plants have divine powers. The education in the Western medical system, on the contrary, also promotes Dr Su's belief in the Blang cosmology. These two interlocutors are not the only ones who have such perceptions; I interviewed 10 Blang people over the age of 55, and all of them believe that they are able to perceive the spirituality and agency of the banyan tree, the weenie tree, and a few other trees, and practice their perceptions faithfully through religious rituals. In this chapter, I document the role of plant agencies in the Blang life-world, i.e., not only participating in forming part of the ecology, but also interacting with intangibles, such as souls and deities, and thus exerting the power of tree spirituality. But my documentation of the agency of plants in this chapter, while including the shaman and the doctor educated in western medicine, two radically different perspectives, still rests on indigenous interpretations of their lifeworld. The direct interpretation and multi-media presentation of the plant world will be presented in Chapter Six.

Chapter 5 The changing ontology of plants across generation

1. The impact of Pu'er tea economy

One of the very important cash crops in Blang areas is tea, and in recent years it is becoming a mono-crop. Jingmai Mountain has the world's largest, oldest, and

best-preserved ancient tea forest (Chen et al. 2013) and is the largest tea plantation, manufacturing, and trade center of Pu'er tea in China with 17,704.50 ha ancient tea plantation (Luengo. 2021). Since 2003, when the American 101 Company moved into Jingmai Mountain and began to package and promote the local Pu'er tea, the locals gradually began to make money from the tea. Due to 101 Company's promotion and sales, Jingmai tea has gradually become known to the world. According to the records of the Mangjing Village Committee, the annual per capita income in 2003 was only 800 yuan (Su, 2006), but by 2022, the annual per capita income had already increased to 12,000 yuan.

Tea is not only a very important cash crop in Jingmai Mountain, but also originally a plant that grows in the middle of the ecological structure, living in harmony with its upper tree layer and lower herb layer. However, with the development of the tea economy, ancient tea tree has gradually been over-appreciated, affecting the growth of other wild plants. The original ecosystem of the Jingmai Mountain forest has a three-dimensional structure, including the tree layer, the tea tree (shrub) layer and the herb layer, with each type of plant occupying its own ecological niche, contributing to and constraining the growth of tea. Firstly, the arbor layer, which reflects and absorbs a large amount of light, has a certain water-saving function in dry and hot weather, and protects the growth of tea trees. But the growth of the arbor also shades the tea from light, thus limiting the growth of the tea. Secondly, the herbal layer is composed of complex flora, and this plant diversity can effectively prevent pests and diseases of the tea tree, but it can also compete with the tea leaves for nutrients in the soil. Therefore, when people begin to cut down trees and weed excessively in order to increase the amount of tea planted for economic benefits, it seems feasible and profitable in the short term, but in the long term it destroys the local ecological balance. Nan Junjie, the secretary of Mangjing village, told me that during the time I was doing fieldwork, there was another very serious pest infestation on Jingmai Mountain, which had something to do with the mono-cash-crop planting pattern. Because the original diversity of herbs that were able to resist the expansion of the pests became an obstacle to the growth of tea and were mostly removed by the people. Therefore, the relationship between the people in Jingmai Mountain and the wild plants began to change. Plants used to be regarded by the older generation as divine, spiritual, and influential subjects, but they are increasingly seen by the young generation as objects of human activities, and creatures that hinder the growth of Pu'er tea and thus need to be gotten rid of.

Here I would like to use the story of one of my interlocutors, Hongqing Ye, to tell the story of the changes that the development of the Pu'er tea economy has brought to a family, and her recognition and feelings of wild plants. Hongqing Ye is an 18-year-old Blang girl who is currently studying in high school in Lancang County and is about to enter university. According to Hongqing's memories, the most popular time for Pu'er tea was when she was a child, when she was only 6 years old, and she had to follow her parents up the mountain to pick tea when it was time for the tea picking season. As tea picking is a very time-consuming job, Hongqing's family

needed to go up the mountain at 6 a.m. when the sun was just rising, and worked until the sun went down and then returned home. They would bring a few steamed buns from home for lunch, and then they would pick the ingredients grown in the tea fields for their meals. Hongqing told me that in her memory, when she was very little, there were many kinds of edible grasses in the tea field, which tasted very good, and some of which could be used as toys, like balloons for them to blow up and play with, and there was also a kind of plant called *Sapindus* that could produce foam like soap, which they used to wash their hands. But when she grew up, none of these plants mentioned were seen anymore. And their tea plantation is getting denser and denser, requiring a lot of grass removal to contribute to the growing space for the tea. In addition, Hongqing said, many large trees have been cut down to build houses and make place for growing tea. When I asked her if she had ever heard stories about the weenie tree and the banyan tree, Hongqing said that she seemed to have heard the old people in her family mention them, but that few young people of her generation believed in them, thinking that they were all superstitious talk.

In addition to Hongqing, I also asked ten young Blang people what they thought about wild plants. Some of them would remember the belief of Longlin and the legend of the weenie tree, but some had never heard of them and said they didn't believe in them at all, with the latter making up the vast majority. It is clear that the Pu'er tea economy has led the Blang youth to view wild plants as an obstacle to the development of the local economy rather than as an agent of divine power, and that the Blang youth have less and less contact with wild plants.

2. The impact of the loss of Blang culture

The Blangs in Jingmai Mountain are also experiencing cultural loss, for example, the loss of the Blang script has stopped many young people from learning the Dai scriptures. Many of their plant-related rituals require the host to recite the Dai scriptures and understand the meaning of the scriptures, so as to communicate with the deities and ancestors and pray for the well-being of their people. When young people are unable to understand and learn the scriptures, they then no longer believe in the agency of plants either. Here I'm telling the story of a culture carrier and his son, and the contradictory attitudes of these two towards learning the Blang script reveal the dilemma of Blang cultural transmission and the changing perceptions of plant agency.

The Blangs have their own spoken language, which belongs to the Blang branch of the Mon-Khmer language family of the South Asian language family, but they do not have their own script, and they use Mandarin and the Dai script as a common language. Therefore, they mostly borrow Dai script to record and pass on the history and culture of their own ethnic group. In rituals such as sacrifices, the Blang elders chant and read out messages written in Dai script. Therefore, being able to read the Dai script is an important virtue for the participants to understand the contents of the rituals. However, according to my interview with Ni Bin, the inheritor of the Dai script, there are only three to four young people in the village who still know the Dai

script, which is a very small number compared with the previous generation. This is due to the fact that this generation of young people has to be educated in the mainstream Chinese language, Mandarin, from primary school onwards, and must use Mandarin to communicate and write in their daily lives. Therefore, the study of their own script takes up their time and does not help them to advance to higher education.

The loss of the Dai script has also affected the relationship that Blang youths have with wild plants and how they feel about them. For example, according to Kupia, the Blang shaman, burning the fruits of the weenie tree during a thunderstorm requires reciting some sutra (known as kougong), which are recorded in Dai script. In addition, when worshipping the deities in the Longlin, it is also necessary for someone to recite the Dai scriptures for the village, thus communicating with the deities. Once the Dai script is not passed on, young people will no longer understand the meaning of the Dai sutra, and these rituals will be reduced to mere formality. I also interviewed Ni Bin's son, Xiankang Ai, a 22-year-old university student studying physical education in Kunming, the capital of Yunnan province. He told me, 'Since I am the son of a Dai script transmitter, I must learn it, which is the mission given to me by the whole village. But this will actually affect my personal development, because my dream is to enter the national team through playing basketball, and I even want to go to the United States for further study.' Talking about his dream with me, Xiankang was exuberant and full of enthusiasm. During the time I was doing fieldwork, there was another very serious infestation of insects on Jingmai Mountain, and the people still chose to solve the problem by worshipping the deities of insect and forest. During the ceremony, I met Xiankang once again, who followed Ni Bin as if he was learning to read the Dai scriptures. But unlike his father, Xiankang's face was expressionless and his thoughts seemed to have drifted away, in great contrast to his father's state of concentration and devotion.

This shows that the gradual loss of the Dai script is having a huge impact on the relationship between the Blang people and wild plants. Young people are reluctant to learn the Dai script and even the Blang language due to the national education system, and are no longer devout in rituals, and naturally no longer believe that there are many deities of plants watching over them and protecting them in the land where they live.

Indeed, the loss of knowledge, language, and culture among the Blang youths also means that their ability to feel the agency of the plants in the Blang world is diminishing. In the literature part of the thesis, according to Kohn's theory (2013), the forest constructs the spiritual realm of the Runa (indigenous people) and dialogues with the Runa through the shaman. And Kohn (2015) argues that presenting a multispecies perspective and the relationship between humans and multiple species can be done in a poetic way that transcends speech and thus breaks down the misconceptions of anthropocentric perspectives created by anthropologists' verbal recordings. And in Jingmai Mountain, finding a way for the Blangs to hear the voices of plants again is important, given their declining sensibility to plant agency. This ties in with my attempts at methodology in the next chapter.

Chapter 6 Reflections on the plant agency presented in audio-visual media

As I analysed earlier in Chapter 2, much of the current research on human-plant relationships is documented by anthropologists using linguistic texts. This approach is one of the places where the research of the ontological turn has been criticised, and where the multi-media approach can enter. Therefore, I have explored filming and audio-recording methods in this study in the hope of mitigating the view of anthropocentrism reflected in human linguistic expression to some extent, and instead using multiple medias to present the agency of the plant, as well as returning that presentation to the indigenous people themselves. One thing to note is that, in contrast to the other chapters, part of this chapter is a dialogue with my own film and an explanation of certain aspects of the film, the latter of which is also part of this Master's project.

The first is the filming method. In the course of my fieldwork, I captured footage from two perspectives. The first is my observational perspective, which consists mainly of my observation of how my interlocutors live with plants in their daily lives and how the subjectivity of plants is represented in their rituals. The former focuses on people's use of herbs as Blang medicine, in conjunction with the traditional Blang medical system. Regarding the latter, I filmed two ceremonies, one in which the Kupia use the branches of the guandai tree to sprinkle sacred water in the soul-calling ceremony to draw people's souls back to them, and the other in which the Blangs wrap glutinous rice in banana leaves to honour their ancestors and spirits during the "Open Door Festival" of the Dai Calendar, using the leaves as a medium for communicating with their ancestors. In this observational perspective, as an observer, I tried my best to record people's behaviours and interview participants about their feelings. In addition to this, I thought I should present a filmic approach to the perspective of the plants, as the old Blang people viewed plants as individuals with agency, and this was a challenging task.

As I mentioned earlier in Chapter 3, current presentations of plant agencies through films present more of a characterisation of plants as human. For example, some creators use time-lapse photography to record the growth time of plants (Vieira, 2022), film the interaction between gardeners/researchers and plants (Hitchings and Jones, 2004), or place the growth crisis of plants in the context of a human crisis (Tarkovsky, 1979), which is still essentially photographing plants from a human perspective. And I thought it was important to present the state of the plant itself directly. So I have found a device that converts the electrical currents in the leaves of plants during photosynthesis into plant waves, creating a kind of sonogram that becomes a visual representation of the changing state of a plant's life. I then filmed the sonograms of the plants, and the reactions of the Blang people when they interacted with the plants. When I was picking tea in the ancient tea forest with Hongqing, the Blang girl I mentioned above, I showed her the device and let her feel the plant waves and the music generated, and she expressed her excitement, 'I've never felt the plants in this way before, and I felt as if they were talking to me!'

Then comes the recording method. In my research, I used the plantwave device to convert the fluctuations of the plants' time-to-time changes into a kind of plant music and then recorded the plant music. In the form of a plant concert, I invited the Blang people to come inside the forest to listen to the recorded plant music and then let them attach the device's detector to the plants themselves so that the plant music could give them instant feelings. Here the plant music played two main roles, the first one was for the Blang people to provoke them to share their indigenous way of knowing plant agency, which is very different from what is represented from the western technological means I used, as well as to provoke them to reflect on their original relationships with plants. The second effect was for the audience of my film, who, during the discussion session after the screening of my film, began to feel the dynamism and agency of the plants themselves when the audience from the city heard the music of the plants that changed in response to the changing nature of the plants.

The first role about plant music, allowing the agency of plants presented by western technology to draw out Blangs' indigenous ways of knowing, stems from my thinking about my own positionality. As an outside researcher immersing myself in the world of Blang people and the wild plants in Jingmai Mountain, the ethics must be considered when designing my methodological framework and conducting fieldwork. As a Han Chinese, I belong to the mainstream ethnic group in China. The Blangs are one of China's ethnic minorities and are located in an economically underdeveloped region of Yunnan Province. And I also brought the plant wave device into the Blang settlement as a way of representing scientific discourse. Thus, I entered the Blang community not only as an outsider, but also as a scholar from a developed region who represents modernity and so-called scientific discourse. My reflection on this was that I could not take my own interventions and experiments for granted and as the only way of presenting the subjectivity of the plants, let alone allow this form of knowing to overshadow the Blangs' own voice and ways of knowing. Therefore I organized and filmed a plant music experiment, which is represented in the second half of my documentary. The Blang people I invited in this experiment were from different age groups, who held various perceptions about plants. I had my assistant film me collecting the music from the plants before this experiment, and played these videos and music to the Blangs so they could share their feelings. In this section, my intention was not to inform people that this is the music that plants make, nor to simply show them the results of this high technology. My intention was to use the technology to make people feel the inner botanical fluctuations of the plants, which would help them remember their own historical connection to the plant and provoke a discussion.

I was pleasantly surprised by how much the Blang people were interested in plant music. But rather than trying to figure out the science behind it, they found it relaxing, which led them to start remembering their own intimate relationships and interactions with plants. For example, when one of the Blang women (An Yao) heard the sound of LungSan (a type of plant) and saw me putting a patch on it, she couldn't help but share with me the story of how they used to use this plant for healing. An Yao said

that this herb used to be all over the place around their house. When her daughter was nine years old, her cough had been bad, so An Yao picked some LungSan for her and boiled it in water, and after a while her daughter was cured. At that time, western medicine had not yet impacted the Blang medical system, so the people of Jingmai Mountain could not buy western medicines, so they had to try all kinds of herbs and familiarise themselves with the therapeutic effects of various herbs. In those days, they paid great attention to the protection of all kinds of herbal plants, protecting their roots from being pulled out when collecting them, so that they could sprout again the following year, said An Yao. Participants in the plant music experiment also recalled their own childhood memories of plants, and young people began to remember plants that had disappeared when they grew up. For example, a Blang boy, Xiankang, who is currently attending university, recalled that when he was in primary school, he would climb a tree in the mountains with a group of classmates after class and pick a fruit called "binguo". But this fruit is no longer found. They also lamented the fact that the Blang language names of many plants have been forgotten, while which often contain valuable plant knowledge from their ancestors. Therefore, my experiments with plant music elicited memories of my interlocutors, but these memories could not have been provoked by walking around and observing plants, because the plants in question are no longer there.

In other words, the Blang people's way of recognising the agency of plants is often embodied in some children's memories of living with plants, their use as medicines to cure illnesses, and in legends. My use of plant music to allow them to feel the immediacy of the changing state of the plant is another western way of recognising the agency of plants. It is interesting to see how the Blangs react when these two systems of knowing meet. They were very curious about the sounds made by each plant, especially those tall trees that they usually have little contact with. As a result, they even helped me move my chair so that I could attach the plant wave patch to the leaves of the tall trees. One Blang woman said she wanted to hear the sound of the banyan tree. She also mentioned that in their legends, the banyan tree is highly respected by the Blang elders, which has divine powers to protect the villagers, and that people who cut down the banyan tree will be punished by the deities. The fact that a Blang woman wishes to hear the sound of the banyan tree implies that she wishes to utilise technology within the traditional cognitive system to feel the spirituality of the banyan tree. Thus, instead of colliding with each other, the Blang cognitive system and the cognitive system under modern technology helped the Blang people find their own connection with the plants, which is what my plant music experiment demonstrates.

In the ending part of my film, I took inspiration from the ending of *Golden Snail Opera*. I wrote my thesis on the relationships between the Blangs and plants, but dropped it into the water and dirt in forests of Jingmai Mountain so that they were covered over by the wild plants. The moral of this shot is that although I, as an outsider in the documentary, guided them to reflect on their perceptions about plants, I was not dominant in any way, and the system of scientific discourse that I represented

was not a substitute for their own system of perception. The Blangs and the plants are the masters of the piece of land. This is the reflections on my positionality and echoed the effect of my multi-media approaches, namely that Blang elders and young people shared and reflected on the ways in which they perceived plant agency through plant music. Through my filmic and audio-recording methods, I not only viewed plants as subjects and demonstrated their agency, but also brought my presentation of the multiple relationships between people and plants back to the Indigenous Blangs in an attempt to theoretically dialogue with criticisms of ontological research and to practically revive and preserve more entangled visions of local worlds by exploring the roles that plants play.

Chapter 7 Conclusion and reflections

As I reach the end of my thesis, it has been almost three months since I left Jingmai Mountain and my interlocutors. I miss my time on the mountain very much, including the stories I have heard about animistic and Longlin beliefs, about plant agencies, and about the deep connections between the Blang people and a variety of wild plants. But at the same time, like many indigenous regions around the world, the Blang community of Jingmai Mountain has inevitably been affected by modernisation, such as the impact of the Pu'er tea industry in the area. Although this has brought considerable economic income to the local people and improved their standard of living, it has also had a negative impact on local beliefs and the transmission of indigenous culture. According to my interlocutors, in the long run, excessive cultivation of Pu'er tea will disturb the ecological balance of the area, and people's disloyalty to the beliefs and rituals of the forest deities will make it impossible for them to protect the forests in accordance with the wishes of their ancestors.

I've seen these stories with my own eyes, these multiple relationships between people and plants and their changes. In Jingmai Mountain, young people's perceptions of wild plants have become different from those of the older generation. They no longer believe that the weenie tree can change the weather or that the banyan tree can protect the village, and thus do not see plants as having agency, and even treat some wild plants as obstacles to the growth of tea and want to get rid of them. I think this is a great pity, so I used a multi-media approach, including film and audio recordings, to document the relationships between the old generations and the plants, as well as the agency of plants, and showed these presentations to the locals (both the young and the old), to help them reflect on the changes in their own relationships with the plants. In order to film and record the agency of plants, I chose the sound device plant wave, recorded plant sonograms and plant music, and invited Blang locals to participate in a plant concert. As a result of the concert, the agency of plants translated by western technological means, such as plant music, met with traditional Blang ways of knowing, and the Blangs began to remember and share their original relationships with plants and how this relationship has changed in recent years. The audience for my multi-media work is not only the Blang people, but also the inhabitants of non-indigenous areas. I edited the footage into a 30-minute documentary and

organised several screenings in modern cities in China, in which the audience generally reflected on how they felt the agency of the plants.

In conclusion, my research has not only practical implications, but also theoretical and methodological significance. At the theoretical level, my research dialogues with anthropological critiques of ontological turn theory; at the methodological level, my research reflects on and develops ways of presenting plant agency. However, there are also shortcomings in my study: firstly, although my study analyses the role of plants in the Blang cosmology from the perspectives of both a herbalist and a shaman, it still lacks a scientific perspective to explain the phenomenon of plant agency; secondly, I am not able to be fully aware of the scientific principle of the chosen device for presenting the plant music, which prevented me from further analysing the changes in the state of the plants, and thus the relationship between plant agency and human activities. In the future, I will continue to explore multi-media methods to translate or present plant sounds, plant spirits, and these relationships with humans, and present them to indigenous and urban audiences, continuing the dialogue on the theories and methods of multi-species anthropology, and thus advancing the reflection on how humans and multi-species can coexist in public and in the academia.

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