

Numbering Land: The Mathematics of Geography and Subjectivity in Agrarian Reforms

by

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Abstract

Numbers are too often considered objective and unbiased, while my work shows that they are ethical, embodied, and spiritual. My dissertation, *Numbering Land: Ethical Measures of Geography and Subjectivity in Agrarian Reforms*, is an ethnography of numbers in land reforms and everyday agriculture. It examines the contribution and vulnerability of rural landholders in the state's statistical governance of agrarian resources.

The dissertation investigates the Land Right Authorization (*tudi quequan*) from 2016 to 2019, the first and most comprehensive digitization of all arable land in the country, a project designed to further the privatization of rural land in China. *Numbering Land* examines how China's agricultural data, and especially the land data, has been produced. My research demonstrates that rural residents, who account for more than one-third of the population, have provided the measurements and calculations for agricultural administration and land reforms throughout China's recent history. The data they reported have formed the basis of the government's statistical reports. Drawing on these documents, the government formulated and implemented policies that eventually came back to the peasants. Based on fieldwork and archival research in a Hakka speaking area, Meizhou, in Guangdong Province, I found that when rural residents engaged in national land surveys, they confronted the "false numbers" they had

generated from past land reforms. Land Right Authorization offered people the opportunity to create new data, but it was also a trade-off between the benefits of future land sales and the risks of taxation and land grab. Their reckoning of land has been intertwined with kinship, ethical ideologies, and popular sciences such as numerology and geomancy (*fengshui*). The dissertation traces the social life of numbers that is entangled with people's pragmatic consensus on social relations and historical knowledge of geography.

Numbering Land will be among the first monographs on China's Land Right Authorization, a privatization land reform and GIS cadastral survey. The dissertation explores what gains and perils rural residents have incurred by providing data to the government, particularly numbers about their land and agricultural properties. The dissertation shows that landholders have produced the first-hand data about their own properties, which, in turn, is subject to changing legal definitions of land. I then extend the discussion of numbers as part of larger social reforms to their implications in everyday agricultural production, demonstrating how numbers mediate people's ethical judgments, political ideologies, and bodily experiences. By looking at the circulation of data, I view rural inhabitants beyond mere "research subjects" of state's statistical projects, but rather reconceptualize their agency in historical and contemporary terms. The dissertation thematizes numbers as an unsettling actor in both routine life and techno-scientific projects, questioning the power dynamics in technologies invented by government and giant corporations.

Introduction

One morning, over twenty household representatives were assembled at the meeting room of this Village Committee Hall in Meixian, Southeast China. They were listening to the cadres from the town government and GIS technicians explaining what the Land Right Authorization was. Some representatives asked questions loudly, maybe indignantly, some were whispering, head-to-head, on and on. Back then, the meeting room was imbued with voices in Hakka and Mandarin. They were dealing with the most comprehensive land survey and technoscience project, the granting of new land certificates, in China's recent history. It was a thorough inspection to validate the land de-collectivization reform and pave the way for the oncoming land circulation reform. Land issues rooted in history, corruption of land expropriation in the village, lotus ponds that used to be farmlands for tourism development, long-uncultivated lands whose boundaries ended up indiscernible because of great exodus, etc. placed the participants in a dilemma to survey the lands. As the town cadres decided to talk to the production team cadres first and persuaded the others to get home, a middle-aged man got up from the seat and, with his eyes on the town cadre, asked, "Is there any compensation for work loss?" These words dragged the dissatisfied people back. They stopped and kept asking the same, "Is there any compensation

for work loss?" What they received was a short, disappointing silence. They turned around and went out of the room.

I had often heard the question—Is there any compensation for work loss?—from rural residents in the meetings, and none gave a firm answer, ever. As for rural residents, they, in fact, did not expect too much, and asking the question was nothing short of a habit, a desperate hope. The term, compensation, reflected the old same understanding of the landholders on their roles, as well as the hard work they made, during the Land Right Authorization. And they had been committed to asking the same question only to express their dissatisfaction and that they were tired, which, in turn, unveiled their sincere and helpless acknowledgment of the importance of this mission. In China, the compensation, prevalent during the collectivization era after the socialist reform, meant the compensation for loss of working hours. It was usually dispensed, in the form of “labor points,” to make up for the public or primary-level cadres’ losses due to some collective tasks. In many other cases, the subsidy also was an extra payment for base-level rural cadres for their daily management work. (Of course, the charge for work loss is a legal term for compensation, but it differs from what Chinese rural residents considered.) The most common case was that the participants of a town or village meeting should have received a subsidy for loss of working hours.

The Requisition of Numbers

It seems that people are, all of a sudden, plunged into the Big Data era, when any group, company, organization, even individuals could garner and process large sets of data. "Big Data" was actually present in history before it got its current name, but accessible exclusively by states

or governments. National or local authorities collected data from people's self-reporting for a long period of history.

How has been China's agricultural data, land data in particular, generated? My research shows that it is the rural residents, who make up more than one-third of the population, that have provided required land data through measurements and calculations for agricultural management and land reform throughout China's modern history. The raw data they reported formed the basis of the government's statistical reports, upon which the policies developed and implemented by the government ultimately came back to the peasants. This is the process of self-datafication: people themselves become carriers, creators, and transmitters of data. For rural residents, their personal information is sporadic, but such raw/initial data can be aggregated and processed to become part of a large statistical database. The irony of this datafication process is that the more detailed people are required to report, the more it demonstrates the ignorance and incompetence of the state/government, that is, the state's limited knowledge in what is happening in their realm. While the state's information collecting methods and techniques are getting increasingly sophisticated and comprehensive, the raw data obtained are still from the millennium old logic, i.e., from the self-reporting of the subjects. The self-reporting, or rather, this confession, tends to be in a disguise of voluntariness, out of a systematic recruitment and collecting mechanism with clear incentives and penalties, even though the authenticity is questionable. The state is developing its means of control over everything, improving its procedures and techniques to make it more effective and proactive to get people involved, and more difficult for people to escape from such self-reporting. The so-called state is both powerful and incompetent. The state is not omniscient.

Quite the contrary, the state knows little about what is happening on its territory. Despite the seemingly powerful polity and huge bureaucratic teams, the state hardly captures people's moves. The centralized government invented and perpetuated the techniques of gathering data, mainly for tax collection, bureaucratization, and grid management. Historian Arunabh Ghosh described in his book *Make it Count* that the framework of the Statistical Bureau of People's Republic of China was directly influenced by that of the Soviet Union and India in its design (Ghosh 2020). From the upper-tier design to the statistical departments at other levels, the book unfolds the bureaucratization in "modern" statistics and its increasing reliance on it. This book, however, does not explain how and where these data came from in the first place. The county-level statistic staff is not the initial end of the statistical data. My dissertation shows that during the collectivization period, the rural "production team" established by the government was mainly responsible for the original data creation. The cadres of such teams, who collected and reported data, received no payment from the government. This mode of self-reporting returned to people's lives in the Land Right Authorization. People involved in the Authorization considered the large-scale survey project not to be the norm, but rather a historical evaluation, a reckoning of established land relations.

The more sophisticated the state's procurement system for food and currency, the more precise the control of the population is (Verdery 2003). Built on top of this levy system is the state's more covert expropriation of the data that is used to count these taxes and properties. A major part of the government's inventions and improvements revolve around how to make this requisition system legitimate and efficient. In this process, the people who are absorbed in it—the primary producers of taxes and data—bear the main responsibility for creation and submission of these objects. That is, the state is not only “rule of experts” (Mitchell 2013) but

also the rule of the requisition of data from people. This national datafication of people and material environments comes often in conjunction with bureaucratic expansion. Bureaucratic documentation is designed to involve bureaucrats in the transmission of graphic/textual artefacts and constructs a co-authorship that oversteps individual responsibilities (Hull 2003).

Between my first visit to Meixian in 2012 and December 2019, I conducted a total of over 27 months of research. In the summer of 2016, the fourth year after I first came to Meixian, the state launched a comprehensive Land Right Authorization. This nationwide land survey was the first and most comprehensive one in Chinese history, aiming to digitizing every piece of agricultural land in the country. Before the work team had entered Sanxiang Town, Meixian, the news had already become a hot topic among villagers at their leisure time. As most of the genealogies of lineages tell, the ancestors of these villagers came from the central plain to this mountainous region of southeastern China about three to four centuries ago. They survived the changes of dynasties and cultivated the land here for generations. Having experienced the reshuffles after the founding of New China and the rural exodus after the Opening-up, people faced a hometown, which was once exploited for almost every inch of land, that had the fields largely deserted and the mountains restored to green. In line with the ecological overgrowth, there was a history of entanglement and haunting with these farming lands.

The reason for the state to launch the Land Right Authorization was that it was on the threshold of a major land reform, more than twenty years after the de-collectivization movement that established the contractual land rights. In the 1990s, the state policy stipulated to maintain the land contractship for thirty years. Then in the 2010s, it was time to re-affirm the time and issue new land licenses. What made the Authorization imperative for the state was that a considerable amount of people who were familiar with their land had passed away, while the

younger generations had little knowledge of farmland in their rural hometowns. In the past two decades, China witnessed a massive exodus from rural to urban areas, a super large-scale migration in human history. The rural exodus left a great number of fields abandoned and made it extremely challenging to identify the land plots' locations, boundaries, and ownership. If the state did not conduct a thorough nationwide land survey in the mid- to late 2010s, it might be impossible to carry out this task in the future, so the Authorization was at such a crucial historical point for the state.

What exactly did the Land Right Authorization mean was a question many rural landholders had wondered about. People in Meixian often chatted about this topic after they heard the news of this national project coming up. While doing fieldwork in Sanxiang area, I have participated in numerous such conversations among villagers. Middle-aged and senior rural residents were familiar with what land surveying in general looked like, even though such large-scale surveys only occurred once in many years. The conversations harkened back to the previous reforms, often relating to the de-collectivization of more than thirty years ago, in the early 1980s. The emotions expressed in these conversations were intense—doubt, frustration, and even anger. Villagers showed a good knowledge of their own land and that of their neighbors, even though all the land was nominally owned by the state. For they had cultivated and maintained their land for at least several decades, some dated much earlier. Even though quite large portions of the land were barren after the rural exodus, it still existed and remained as property, a support for families, and a backbone for people who were away from home. Villagers expressed anxiety about the Land Right Authorization, an attempt in which the state employs governmental and technical personnel to thoroughly inventory the land. After all, the reckoning of land came with the reckoning of people, as it happened in the recent past. There was also a

clear sense of the role that rural residents would play in the Authorization: they would be the primary reporters. Unless landholders themselves provide the land particulars to the government, the state would not know which land belongs to whom, and thus unable to identify the conditions and tenure of land resources across the country.

Mathematics across Chronotopes

STS (Science, Technology, and Society) studies for what is called “science” are still largely focusing on professionalized experts and established institutions. That is, contrary to the classic anthropological studying-down trend along the power hierarchy, STS research tends to follow a studying-up instead. This studying-up is manifested in the fact that the socio-economic status of STS scholars, especially junior ones, hardly gain them leverage in terms of the communicative competence (Bauman and Briggs 1990) of specialized discourses, knowledge systems, access to and support in investigation, and authority of interpretation. These variables, whether positive or negative, would shape the knowledge production. If STS, as an emerging field of critical thinking about the hegemony and scarcity of humanism in “hard sciences,” in turn absorbs the hierarchical categories inherent in the science and technology circles, this would restrain its unique perspective on the analysis of technoscience. Anthropology, in fact, has long reflected on disciplinary divisions arising from the professionalized academia. The emergence of Ethnomathematics in the 1980s is such a typical thread, which extends the concept of mathematics to numerical notions and connections different from the knowledge system of the Modern, Western mathematics (Closs 1996; Crump 1992; Zaslavsky 1999). Although its systematic, specialized approach to describing the concept of mathematics in a certain society fell out of favor four decades later, these studies remind people of alternative ways of

deciphering the world, including the sense of quantity, logic, and space-time (Ascher 1994). Such alternative ways should go beyond the “others to the West” and embrace multiple chronotopic ideologies that come within the so-called “modern” disciplinary mathematical knowledge that people are using.

The imperial China is one of the key research objects of Ethnomathematics and the history of STS. But for the contemporary China, the integration and collision of different technoscientific systems has become mainstream, especially in daily life, and that calls for a understanding from a way other than a systematic interpretation to knowledge. My doctoral dissertation covers an analysis of the most comprehensive farmland cadastral survey and land database construction in Chinese history and re-examines China’s three-decade national experiment in quantifying and bureaucratizing the rural society. This dissertation analyzes these large-scale technoscience projects from the angle of those rural residents who are considered to be data, and delves into their interactions with other villagers, grassroot cadres, and technicians. Furthermore, my research is not just about how people are taken as data, but also how people, as subjects of the survey, follow or transform these projects so as to digitalize themselves, their relatives and neighbors, plants, animals, and land. Their labor involved in these national projects and routine administration has been bureaucratized and moralized.

What the requisition of numbers portrays is the direction of the flow of numbers, that is, the direction of aggregation from the primary producers of numbers to the national/regional databases, but this is not a smooth, consistent, perfectly compiled system. State requisitioning of data is often fraught with controversy, error, compromise, or irreconcilability. The conflicts and discomforts in this data transfer require people— original data users, government personnel, scientists and technicians—to compromise, empathize, sidestep, and find alternative ways. This

means that while the requisition of data seems to be vertical and directional, there are often diverse space-time configurations, or chronotopes in Bakhtin's word (1981), unfolding at each interface, at the intersection of multiple parties. While people engaged in these data-driven projects jointly, they understood the quantified objects in a disparate way. That is, people's measurements and calculations of land were steered by colliding chronotopic ideologies, with reflections on their positioning in the country, their choice of technologies, and social relations. People datafied the seemingly same objects collectively, but the spatio-temporal knowledge they applied, the histories and emotions they cared about, and the means they used may differed.

In the Land Right Authorization, surveyors would ask each landowner in the field, "Where is your land and how big is it?"—This was the surveyors' standard way of asking questions, expecting to find an exact, visible location and a measurable area. Yet most landholders pulled out their Red Books, the land certificate issued in 1998, to show that they owned these land plots, with the placenames and acreage on the paper. On some occasions, the old production team cadres would take out their land notebooks recorded when they surveyed the land in the 1970s or 1980s to verify to the surveyors that the land was there. The surveyors emphasized the "here" and "now" of the land, that is, the size and shape of the field in front of them, but the landholders kept pulling the narrative back to the land "back then" in the period of de-collectivization reforms. In other words, the surveyors focused on the current state of the land, supported by GPS and aerial photography technologies, while rural residents were concerned with the historical processes of land that was bearing social relations and personal sentiments. This cross-space-time (dis)alignment indicates that people employ distinct references that may be indexed to different chronotopic ideologies (Wirtz 2016; Davidson 2007). The past

experiences and data of surveying land became "historical objects" that provided affordance (Keane 2015) for the chronotopic recreation of the social relationships around the land.

Chronotope is a concept that Bakhtin employs for analyzing literature genre featured by its space-time settings. Anthropologists' use of this concept goes beyond the framework of literary narratives and looks instead at what chronotopic ideologies people are oriented by in terms of intertextuality and indexicality in social interactions (Blommaert 2015). Chronotopic ideologies are not a complete, homogeneous, bounded thing. Instead, chronotopic ideologies tend to take the form of fractions that associate a token with a certain space-time at a particular moment (Agha 2007). Rural landholders associated a particular piece of land with the experiences of tax evasion, or with disputes over the Allocation of Paddies to Household, or with the future legacy to children who went to work in the city. These space-time-oriented associations are somewhat similar to Strathern's description of the ongoing understanding of realities as making partial connections, always in the process of being generated (2004 [1991]). Each partial connection, intertextually and cross-space-time, is an enactment (Mol 2022) that bridges the land with distinct chronotopic ideologies. Perhaps chronotope could be understood as a hybrid, a mix of ideologies and practices, a constellation of space-time, and interrelationships among human and non-human.

The collision of chronotopic ideologies does not mean that people are unable to mutually understand each other. In many cases, even though surveyors, rural cadres, and landholders indexed dissimilar space-time concepts, they maintained as if they were talking about the same thing, which, I would call cross-chronotopic empathy, was a kind of translatability between space-time. I was amazed at how rapidly rural residents picked up on how to navigate the aerial photography on the computer and locate their land on it and instruct the surveyors to map it.

Some quickly learned to use the GPS sensor and asked to use it themselves to survey their land. Often, the surveyors were simply following the landholder's instructions to draw the maps. The surveyors, instead, frequently resorted to the help of town or county cadres—linguistically or socio-culturally interpreted—to attempt to grasp the particular demands of the landholders. This kind of distinction or direction in cross-chronotopic empathy reflects a hierarchy of power. That is, the occupants of more niche, in-situ ideologies are more readily, or compelled, to embrace broader, standardized ideologies. As much as the native histories that people create may encapsulate the grand narratives of the state, while the discourse of the state does not reference indigenous memories (Mueggler 2001). In my analysis of across-chronotopic empathy, I have used the terms "agrarian chronotope" and "bureaucratic chronotope," although this does not mean that there are two complete and bounded space-time configurations. Naming chronotopes is intended to mark the perceived discrepancy that is manifested in exchange, although such an act inevitably reinforced a stabilization of chronotopic entities. Whereas the comparison and distinctions are fluid and emergent in the particularities of social interactions.

Calculating Beings

In the summer of 2016, the fourth year after I had visited to Meixian (a district at county level), I heard that the Land Right Authorization Office of Meixian was established to lay out the most comprehensive national land survey. I, then, lived in a rural town called Sanxiang. This town was established in 1906 and emerged into the adjacent Goose-Lake Town in 2006, but the residents still called themselves “Sanxiang people” in daily life. Just like me, the residents there--whom I already knew in the fieldwork, and I would know later—were curious and confused about the imminent major event. But I could not feel what they also felt: anxious and bothered.

When one of the family I lived with, nicknamed Uncle Rich, asked aloud by the door, “Is there any compensation for production team leaders?” I did not realize that it was a historical question. He was the leader of his production team and lineage. That was a job without any salary. Uncle Rich discussed with the village cadres, other team leaders, and neighbors about whether there would be any and how much it should be. He foresaw the land survey to be onerous beyond compare, even impossible. Eventually, he declared his resignation as a team leader just a few days after the staff for the Authorization entered his homeland, Xiaodu Village. The Authorization project was like a time machine, recalling the habitus and social affects back to the rural landholders.

We did not expect that the project in Meixian would only come to an end almost three years later. When I was first informed that there was such a project, I was introduced by Uncle Li Guotai, the second brother of Uncle Rich and the person who introduced me into the field, to the vice director at Meizhou Agricultural Bureau. With her help, I managed to get in touch with the Land Right Authorization Office of Meixian. Since then, I opened a multi-sited survey path beside the settled fieldwork that I originally designed. Transferred from the basic-level town government, the officials at the Authorization Office were mostly the cadres who were familiar with rural areas and knew how things could work out there. South Digital Technology, a company for land surveying and mapping, was hired to assist the Office. The team included a project manager, a dozen surveyors, all under 25, for the fieldwork and eight or nine keyboarders for the office work.

In the following more than two years, I followed the staff at the Office and the surveyors to several towns in Meixian for on-site demarcation, land archives checking and data entering. These young surveyors were with different education degrees. Some were college graduates, and

some graduated from vocational schools. But they were all confident and unhurried with this extremely complex and significant national project. It was a tough job. Following the surveyors, cadres, and landholders, I had been into the grassy valleys and on the narrow mountain paths, all day long, for on-site demarcation. I was impressed that their youngest surveyor, an eighteen-year-old, though acknowledged by others as an “experienced surveyor,” on one occasion, was guiding a 20-year-old newbie in an on-site demarcation, along with some town cadres and villagers. They were looking for the boundaries of a wasted paddy field among the weeds. Squatting on the side of the road, with a cigarette in his mouth, the surveyor was trying to locate the lands on the ariel map, making sketches, and talking with the villagers for solutions. In sharp contrast to the calm surveyors, the landholders were loquacious and emotionally charged. Every on-site demarcation was bustling as such. People made jokes, babbled, questioned, and sometimes argued or swore. In the end, the land data of China was generated in such tense, excited, humorous, and frustrating communication.

The fieldworkers used software called National Database of Rural Land Contracts, designed based on ArcGIS to collect the land data that would be transmitted to the workers at the Office for modification and additional recording. While there were all males for the on-site survey, the office workers were all females hired with basic specialized knowledge, sitting in front of the computers. They learned from the work, repeating the same work—inputting the figures and information into the computer. But the job was getting more complicated, and they, at last, learned how to depict the shape of the lands on an aerial image. At the climax part of the project, some town cadres would reach out to them on the phone or via WeChat directly, hoping they would prioritize their land materials. That was the end of the first round of on-site demarcation, and only some most controversial lands remained unsurveyed. The landholders

pointed out many errors in the first batch of reports. Some villagers even asked for on-site face-to-face settlement or remeasurement. Town cadres went almost crazy, calling the director at the County Office to assign a surveyor to their towns first. And the Office had to pressure the Southern Digital Technology to send more surveyors. But the fact was that the company was handling the Authorization project for multiple provinces and at a terrible shortage of staff. Thereupon, some town governments started to ask the young workers with some computer knowledge at the agricultural stations to learn how to use the software, National Database of Rural Land Contracts, from the surveyors. For a time, the software went wrong, and the second round of revised data did not cover the original mistaken data. Not surprisingly, the new round of reports was a disaster. Then the surveyors, office workers, and those who were new to the software needed to learn how to modify the data when there was a loophole. The database was not one complete, monotonous object but numerous endpoints connected to each other on the Internet. These endpoints involved multiple groups, were constantly shaped and needed to be explored.

Director Liao at the Office, who asked the core members from the survey company to call him Brother Liao, was transferred from Waterwheel Town. His transfer was sort of a promotion, only the rank remained the same. He and other town-level cadres transferred there made plenty of guesses at whether they would stay in Meixian after finishing the Land Right Authorization, whether the Office would turn to a government sector and reserved after the survey, and whether the sector would become an office under the County Agricultural Bureau. The Authorization Office would be meaningless if not for the project. The survey company's staff would leave when they completed their tasks. The keyboarders of the Office knew that they were temporary contract workers and not officially part of the bureaucracy. Only these transferred cadres were

the most anxious about the future of this office. At the end of 2019, six months after Meizhou's inspection of the project, the sector was still not abolished. Most cadres were back to their original town governments, but Director Liao and a few staff were able to stay. Southern Digital Technology Company was replaced by a professionalized archiving company hired for building a database for paper materials on the top floor.

Just two years before the staff for the land approval project came to Xiaodu Village where Uncle Rich lived, Li Guojun, the third brother of his, was so prescient to show me some notebooks on which his production team's land specifics was recorded by himself as a production leader and then a village head between the 1980s and 1990s. His lineage, the Li, and his production team were overlapping, which was common in Meixian. In other words, a lineage was also a production team. The notebooks that were covered with a mass of figures recorded the details of land allotment in the de-collectivization reform. Uncle Li Guojun did not expect these writings to be that useful, until these provided an important reference in reporting his lineage's land area and examining the survey reports during the Authorization. The production team cadres generated huge land data in and after the collectivization era. Rural residents who did not manage to save the land specifics of the production team also had the records for their families. Although most of the young generation was out in cities and unfamiliar with their farmlands, middle-aged and senior landholders were familiar with their land even if the boundaries were least visible because of years of abandon. These landholders were primary data providers in the authorization. They were authoritative to define the size, shape, locations, and quality of their own land, although such authority was often challenged by the cadres or surveyors in the name of modern technology.



Figure 1 Map of Meizhou City, where Meixian belongs to. Photo from Zhong et al. 2018.

This Li lineage in Xiaodu, Sanxiang Town, became my closest connection to Meixian. The reason I came here was that I once happened to know a collection of photocopied land contracts, dated from the Qing Dynasty to the Republican era, kept by Myron Cohen and Fang Xuejia, scholars of Hakka studies. Among these documents, more than 300 contracts were from the Li lineage. Uncle Li Guotai was a retired county government cadre and a scholar of Hakka Culture. He investigated his familial contracts that covered from 1749 to the 1940s and wrote an article to analyze his lineage's history. During the late- and post-collectivization era when Uncle Li Guotai was a commune cadre, he was responsible for the land and agricultural statistics. After retirement, he devoted himself to studying Xianghua Buddhism, Hakka folklore, and military history, and founded a Hakka culture and history association. His trajectory of cultural research and political position was undoubtedly a typical, successful example as an organic intellectual.

Uncle Li Guotai introduced me to live with Uncle Rich and his wife, Ant Si. They had a two-story building in Xiaodu Village. The ground floor included Uncle Rich's shop, a mahjong room, and their bedroom. There were bedrooms for their children on the second floor, but they all lived and worked in cities, so I moved in one of the rooms. This building was a gathering space, at night especially. Neighbors came to drink tea, chew the rag, make a purchase, and play

mahjong. I had been hanging out in such space in the village—Mahjong rooms, shops, parks, and courtyards, and living rooms of villagers’ houses—to get to know the neighbors, learn the market of pomelo, talk about the pork price, and hear some gossip and *fengshui* stories. I was used to joining the chats once getting back from the orchards or after a meal. At first, those who did not know me would ask around, “whose daughter-in-law is this,” and the question, after a time, became “whose daughter is this?” By such a change, their impression of me, though remained the same as a stranger, but had changed from a stranger who was an out-of-town non-Hakka, to someone who should be closely tied to them and may have long not been back home. The Authorization project had dominated many of these chatting nights for two or three years and wore off since villagers received the new land certificates in 2019. Although the Authorization was a national project with a deadline, what was reflected and condensed in this exchange was the entanglement of multiple groups with the lands in the space of history. It was a moment when multiple chronotopic ideologies clashed into each other.

My dwelling in Sanxiang, especially in Xiaodu village, has gradually made me imbibe the chronotopic knowledge distinctly belonging to the local inhabitants, about mountains, waters, fields, trees, houses, and lineages. These chronotopic frames emerged in people's daily agricultural calculations and land measurements in the reforms. As intellectual beings, people measured, compared, and calculated almost all the time. I followed people to their familiar locales: living rooms, mahjong parlors, convenience stores, rice paddies, vegetable gardens, chicken coops, pomelo orchards, restaurants, karaoke bars, and more. Throughout it all, people were shown to be active, thoughtful, exploring subjects of the world. After I stayed in Xiaodu for a prolonged time, people began to treat me as a “half village person,” or “half Pond-Head Li lineage member.” There were sixteen production teams in this small village, and basically each

team was a lineage, i.e., a patriarchal group of people with a common surname who worshiped the same ancestors. The boundaries of villages were not fixed and noticeable. People may have closer relationships with lineages in the adjacent village than with people from more distant lineages in the same village. Since the 2000s, with the completion of a major highway running through Xiaodu, people could easily reach the town or county seat by motorcycle, car, or bus. It was also during this period that people in this rural area widely began to grow pomelo. The increasingly popular pomelo industry also generated new labor networks. From the Land Right Authorization to daily agricultural production, people were bustling around making calculations for the state and the market. This dissertation examines how people's intellectual labor of measurement and calculation has been encouraged, mobilized, discouraged, and redefined.

The Layout

In the dissertation, I explore the creation and circulation of China's land data in three parts. The first part, Chapter 1 and Chapter 2, is focused on the Land Right Authorization and the historical linkages that people had made during the survey. The second part, Chapter 3 and Chapter 4, probes into the patterns of data self-report from the collectivization period to de-collectivization reform in this Hakka area, particularly in Sanxiang Town, Meixian. The third part, Chapter 5 to Chapter 7, expands my analysis to numerical practices in daily agricultural and spiritual engagement.

Chapter 1 *The Alienation of Numbers* sets the stage for the whole dissertation by asking a question “whose property?”—It is a question about both land and land numbers. There was a paradox of giving-while-keeping (Weiner 1998) for rural populations who were landholders but had to alienate the land numbers to the government. I argue that the alienation of land data

created an ethical conundrum for rural residents when they produced and circulated numbers. Landholders were responsible for the authenticity of their land information; they had to, however, take the consequences of their self-reported numbers after they circulate them to the taxation system, open markets, and national land databases. The chapter is focused on how villagers dealt with the dilemma during the Land Right Authorization when they reported, measured, and revised the survey. **Chapter 2 *Mapping Chronotopes*** draws on ethnographic cases of how rural residents mapped land out of their memories and historical documents. In this chapter, I show how rural landholders and GIS surveyors perceived the landscape differently, guided by different chronotopic ideologies. I attempt to show this clashing of chronotopic ideologies by naming them as “agrarian chronotope” and “bureaucratic chronotope.” The chapter unveils a widespread complicity among villagers, cadres, and GIS surveyors in the state-led census. After the de-collectivization reform and the Opening Up, China has experienced the largest rural exodus as people migrated to urban areas and abandoned a vast area of farmland. Thus, people decided to draw land parcels on satellite maps, instead of on-site survey. Mapping land is complicated by epistemic authority and power of people who get to decide the location and size of paddies. This chapter analyzes the ethical predicament of peasants who face the increasingly empty hometown and struggle to reproduce them with memories.

Chapter 3 *Numerical Violence* analyzes how the quantification of land is entangled with personhood, kinship, and state. The chapter shows how calculating land is a social practice that may have serious consequences. I focus on the ethical quandary people face when they define social relations through the quantification of land. In particular, this chapter deciphers the governmental endeavors to quantify Socialist subjects. In the Socialist reforms, land area served as a standard to determine the landlords, rich, middle, or poor peasants (Meng 2016). During the

Collectivization, the “labor points” categorized agricultural salaries based on gender and age; harvest amount was used for evaluating the Socialist "advanced" or "backward." This chapter unpacks the ways numbers step in the unsettling definitions of both land and social categories.

Chapter 4 *Statistical Domestication* recounts how the state used statistics to conduct numerical governance during the collectivization period, when the split the rural population into masses and cadres and mobilized the cadres to make calculations for the collective and the state with moral ideologies and vague political promises. In this way, the state had created a whole new group of local cadres who conducted a great deal of intellectual labor but were not paid by the government. As I further analyze, the production team cadres were not fixed positions and were mostly taken up by young male members. The statistical domestication as such had formed statistical individuals who created, transmitted, and reported data for the state. After the de-collectivization movement and the state's shift from a planned economy to a market economy, people's calculations gradually turned from calculating for the state to calculating for the market.

Chapter 5 *Embodied Numbers* shows that calculation and measuring are mediated by social relations and bodily movements. I analyze the ways numbers become part of human experience to the extent that numbers become physically embodied. I pay most attention to people's numerical practices in different stages of planting pomelo: the seeding, pollination, trimming, harvest, and aftermath. I uncover how price standards were settled by seeing, touching, and tasting the fruits. Reflecting on the phenomenological approach, I explore how people perceived geography and connected sensations with precise conceptions—numbers. Extending from seeing numbers as body image and movements, this chapter examines how moral ideologies of social personae influence people’s bargaining of price. **Chapter 6 *Calculated Relationships*** reveals a new monetized labor market emerged in this rural area,

drawing linkages between numbers and gender. I argue that rural women started to redefine their social roles as they calculated labor and income. They reflected on gender disparity and compared their free work for the family with paid labor outside (Frazer 2013; Rubin 2011). Due to the large rural exodus, there is a severe scarcity of labor in human intensive agricultural activities. People gradually formed a new form of collaboration to exchange short-term labor (*zuo xiaogong*). By analyzing how women compared various types of labor and discussed their expenditure in the family, this chapter rethinks the relation between gender and work in China. This chapter suggests that measured labor is laden with moral concerns, gender ideologies, and kin relations. **Chapter 7 *Real Sciences*** probes into how numeracy creates a sphere of spirits and auspiciousness in everyday life. Rural Hakka people spent considerable time and money on *fengshui* practices. In this chapter, I focus on the predicament caused by a geomancer who used a compass to select a grave location. People fell into an ethical quandary to choose between “real science,” kin relations, and friendship. I seek to understand how various theories of numbers become "social knowledge" (Stafford 2013) and how numerical practices associate persons with non-persons (Latour 2017). The chapter shows that numbers create ethical and spiritual spaces where “traditional” knowledge is clashing with the pragmatic present.

Chapter 1 The Alienation of Numbers

Chapter Tour

The Alienation of Numbers

Numbers Across Time

The Inalienable

Circulation of Numbers

When Uncle Jun showed me his land account books for the first time, it was two years before the land census, a state project that neither of us had foreseen at that moment. We were at his apartment in Mei County, late in the afternoon, taking a break from his mahjong business and chatting about land history in Xiaodu Village, his hometown, where he had been a production team leader and village cadre for some years before he moved to the county seat. “Wait,” he suddenly recalled something, “I know something that you will be interested in.” He went into the bedroom. Later, I heard the cabinet opened and rummaged, as if he hid something deep. He came out with a folded, purple plastic bag. He carefully opened the bag with such an attention that it aroused my curiosity. It turned out to be three notebooks, thin, and yellow covered, titling as “Three-Town Commune, Pond-head (Production) Team, Land Measurement Registration Book,”

dated respectively in 1980, 1982, and 1989. These notebooks were full of tables, numbers, and names. The blue ink on the fragile paper was fading, and staples rusting. “All the measurement and tables were made by my hands,” Uncle Jun was proud about it, “Look how neat my handwriting was! People said that I wrote like a typewriter.”

I glanced over the endless tables in the first account book, which recorded the land measurement to the date of November 30, 1980, an anxious time of recovering from the Cultural Revolution and embracing the decollectivizing reform. The measurement was taken not long before the production team divided land and allocated to members per capita. In the notebook, every single land parcel that belonged to the Li lineage, also called the Pond-head Production Team, was listed with its location, area, owner, and category. Below it shows the first entry of the second page (Pic 1.1).

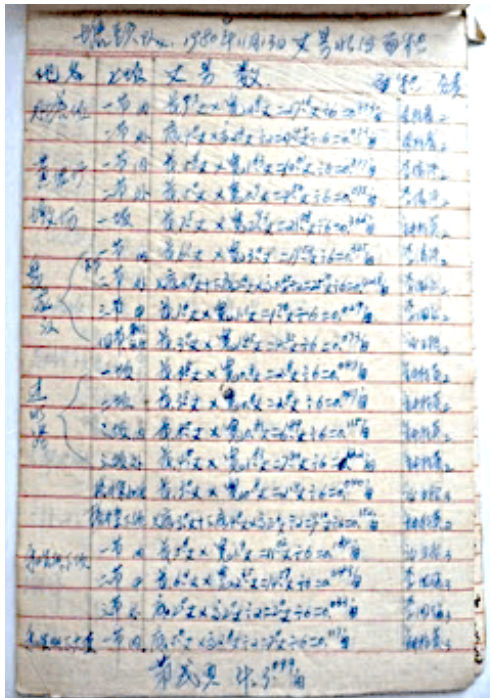


Figure 2 One page of Uncle Li Jun’s Land Account books

Place Name	Parcel	Measurement	Area	Category
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Pork Belly Plot	First Plot, Inside	Length $9.7\ zhang \times$ Width $2.8\ zhang = 27.16\ zhang \div 6 = 0.453\ mu$	Liang Guixiang	2
	Second Plot, Outside	Bottom $4.0\ zhang \times$ Height $2.2\ zhang \div 2 = 4.40\ zhang \div 6 = 0.073\ mu$	Liang Guixiang	2

Table 1 Formulas on Uncle Jun’s notebook. Unit conversion: 1 *zhang*=10 *chi*=3.33 meter

How did people measure the land area back in the 1980s? “We mostly used bamboo rulers. You know, about this long,” Uncle Jun made a gesture indicating the length, “One ruler is 1 *chi*. Just rolled the ruler along the paddy lips (paddy bank).” *Chi* (尺) is the old unit for length and width, equal to 0.333 meter, which is no longer used now. As shown in this entry, they divided the square *zhang* by 6 to get the land area in the unit of *mu*, about 667 square meters. I was intrigued by how simple the formula seemed to be, but the paddy land plots in this hilly part of South China almost never look like a square or rectangle. How did people come to an agreement of rounding up the irregular shapes of land plots to the geometric simplified versions? What were other ways of knowing the land area?

Uncle Jun lent me the notebooks for photocopying and said: “Just remember to get them back to me. They are important.” These account books are important, as I could imagine for a study on the historical processes of land reforms. But why, after more than three decades, at the time when everyone had a land license without a dispute among kin members and when his family had moved out of the village, did these notebooks still matter to him? It was two years later, in 2017, when the nationwide land census reached his hometown, that I came to realize that these land numbers were able to circulate across time.

The Alienation of Numbers

This is an ethnography about rural inhabitants whose intellectual labor of measuring and calculating has always been contributing to the socio-economic transformations and yet has long been overlooked in national narratives and public memories. It is an account of how people use numbers to understand the environments and themselves. Numbers, perhaps too pervasive in everyday life so as to escape from most social analyses, are actors that mediate people's social relations and their relationship with the surroundings. Numbers are often taken for granted as objective and scientific, which alludes to an assumption that people share a unified method of quantification. But mathematics is never confined to a singular modern Western discipline. Mathematics is a word that ends with an "s."¹ People have multiple theories to use numbers and various reasons to accept or refuse them. My fieldwork research shows that numbers can be cultural, ethical, and spiritual. Which does not mean that there are different rationalities, the scientific and non-scientific ones. The whole dissertation is a reflection upon what counts as rationality and how to think beyond it.

What is particular with rural residents² who primarily engage in agrarian production is that they use numbers in a variety of ways to interact with the geographies—and they use numbers at a more frequent basis than what most scholarly and media discourses have portrayed. People are adapting to a clash of different systems of units and tools in this time of the increasingly mechanized agriculture. Numbers excite and agitate people. Confusion, anxiety, and anger about numbers are hovering around the occasional daily payment and seasonal joy of

¹ Ian Hacking also talks about how mathematics is more of a general term than a unified discipline (Hacking 2014)

² I use the term "rural residents" to particularly include people who are legally registered as rural residents (*nongcun jumin*) in the Hukou ID system, even though some of this population may not spend all the time living in the villages. In the past a couple of decades, China has experienced the largest migration in history, moving from the rural to urban areas. As I will elaborate in Chapter Two, those who have migrated to the cities keep the strong economic and social connections back in their hometown and many of them still hold farmland.

harvest. These feelings are common to the countryside dwellers who choose to, or have no choice but, stay in a left world within an industrializing country which sheerly divides the rural and urban. This is especially the case in China where rural populations have experienced the collectivization and de-collectivization reforms and are now facing the seemingly no-return privatization in the market economy.

Chapter 1 focuses on the social life of numbers across socio-economic reforms. It tells stories of how numbers are produced in the previous land reforms and become collective or personal memories that persist to the next one. In both national movements and everyday life, numbers are circulating from one person to another, one notebook to another, and one database to another. They epitomize a curious paradox as both abstract and concrete, at once created and creating, with textures and lives all their own. Though social studies to date have provided a host of lenses, from the symbolic meanings to political powers to cognitive behaviors, through which to understand how numbers work, I am proposing to analyze numerical practices in Marx's term "alienation." The concept of alienation allows for a more nuanced exploration of the production and circulation of numbers in this statistical age, and for a fuller understanding of the role of numbers in rural China reforms.

At the birth of a land number, a creator generates it by *objectifying* a series of natural numbers, mathematical symbols, and area units; and then, its own social life starts in multiple possible trajectories: The number may stay forever in an account book; people may recall it for the purpose of reporting or selling land; it may be printed on a land license or displayed in a database. The last type of objectification is what I call the *alienation of numbers*, likened to Marx's theorization of the commodification in the capitalist economy. That is, a number becomes *alienated* from its original producers and circulates together with other producer-

deprived numbers, serving as the scientific, objective, or official numbers—numbers that are titled to institutions and, more vaguely, to the state.

In this chapter, I argue that the alienation of numbers is the process in which rural landholders—the original producers of land information—have had their ownership as the creators of these numbers taken away, which, after the numbers’ alienation, have gone on to become the official numbers that have a great impact on rural inhabitants themselves. The alienation of numbers reveals another facet of histories on the landholdings and reforms. People cultivate *in* the fields, while they create a great deal of knowledge *about* their land. Public and academic discourses on land issue in China tend to focus on the connection between peasants and land, but there are also property relations between peasants and their own produced information, which, I call the *intellectual objects*.

As I elaborate in this chapter, since the de-collectivization reform in the 1980s, it is precisely by remodeling the land information—what it is and what it entails—that the government has legally changed the rural land ownership, even though people have continued farming on the same land throughout these years. State projects—allocation, legitimization, and the census of land—have transformed not only people’s legal relationship to paddies, but also their own intellectual products, the land numbers, which finally become alienated as numbers *de jure* that redefine their original signified, the land.

INALIEANABLE/ALIENABLE

This dissertation attempts to look beyond the semantics of numerical labels, by focusing on the pragmatics of how people objectify numbers in everyday interactions and how numbers become alienated in circulation. I am intrigued by the processes of how land numbers become socially and officially recognized and how they go on circulating back to their original producers

and the land market. These processes, I call the alienation of numbers, have a peculiar role in China's recent history of rural reforms. Combing through fieldwork data on rural residents' social interactions, I show how people actively participate in the state legislation and management of farmland by producing and reporting their own intellectual objects—information about their land. It is realized with an underlying logic for both the landholders and the government: people know their own properties. My theorization of numbers' alienation speaks to studies on property relations, making connections between the ownership of things and ownership of knowledge about things. Similar transformations of numbers—from personal to anonymous, from subjective to objective, from individual to institutional—are not circumscribed to this China's case, but omnipresent in the increasingly statistical societies.

What is the typical social life of a land number across rural reforms in China? Here is a brief account of Uncle Jun's land numbers: in 1989 winter, people in Xiaodu Village experienced the fourth adjustment to the de-collectivization reform. The four brothers of the Li family split the households. They divided and re-calculated the paddies, inherited from parents. Uncle Jun, the third brother, recorded all the land numbers on his land account books. Almost ten years later, in 1998, he received a land license to secure his every single paddy with exactly the same numbers as those in his account books. Nearly two decades thereafter, in 2016 winter, the nation-wide land census team reached Xiaodu Village. During an on-site survey, Uncle Jun orally reported his land numbers to the GIS mapper and town cadres as references for mapping. In 2017, Uncle Jun used his old numbers as the benchmark to examine the census results. In mid-2018, he received a new land license. The copies of those numbers are dispersed in multiple locations: in Uncle Jun's land license, the county and town archives, and the national farmland database.

Hundreds of thousands of land numbers have gone through a similar journey in the past a few decades, from one rural reform to another. Many persisted from one location to another; whereas some have stopped in the local archives or memories, for they are replaced with new numbers. People encounter numbers at the end of the story, after they are processed. Land numbers, those printed on paper or displayed on the screen, have departed from traces of people who have labored to bring them to birth: landowners, GIS surveyors, cadres, database workers, and archivists. Once numbers officially show up in a land license or a database, they convey legal force, capable to work at or against landowners' will to claim the property or the benefits thereafter. These processes bear remarkably resemblance to the alienation of products in capitalist commodification.

Inalienable objects have long been an interest in anthropological research, as a contrast to the commodified circulations in industrial societies. Kula ring, as a classic topic, has drawn anthropologists in analyzing the give-and-take reciprocal circles (Campbell 1983; Damon 1983). Kula objects associate objecthood with personhood across space-time (Munn 1992). What makes gifts inalienable lies in the values, cultural meanings, and the social relationships that enable the circulation (Sahlins 2017 [1974]; Strathern 1992). These exchange models differ from a typical commodification of objects described by Marx. I am making this metaphor to link the state's requisition of data to the alienation of commodities, although numbers, or raw data, are not real commodities. And the "consumers" of these numbers, the state or government, does not give direct rewards to the primary producers of these raw data, other than sometimes a promise of legal protection in the form of land licenses.

Although Marx does not concern rural societies and non-commodified objects in his analysis of the alienation of products, this process is perhaps more universal in any hierarchy of

extracting objects that have human labor put into creating them. Due to standardization and commercialization in industrial societies, workers no longer own the very things that they produce. Once a product becomes a commodity, it carries social value in the form of money for exchange and circulation. The original producer, the worker, does not possess the products and needs to purchase them from the market. Both workers' labor and products are alienated, not as the individual and private anymore, but as objective and social:

...this fact appears from the standpoint of capital ...that the objective conditions of labor assume an ever more colossal independence, represented by its very extent, opposite living labor, and that social wealth confront labor in more powerful portions as an alien and dominant power. The emphasis comes to be placed not on the state of being *objectified*, but on the state of being *alienated, dispossessed, sold*... (Grundrisse, The Reader: 292. Emphases added.)

The notion of alienation captures the ruptures between production and possession:

property rights are not determined by direct labor input but are pre-assigned to capitalists who own the factories, machines, and labors. A commodity is measurable in market value because it is deprived of individual marks and histories; it is standardized as the same as other products of the kind, even though they are produced by different individuals:

...the social character that his particular labor has of being the equal of all other particular kinds of labor, takes the form that all the physically different articles that are the products of labor, have one common quality, viz., that of having value. (Capital, Vol 1, Fetishism of Commodities, The Reader: 322)

Commodification is thus a process that eliminates differences among different articles and that among different individuals. It is a process in which both producers and products become social beings. Marx sees a comparable linkage between social relations and object relations in his famous passage on commodity:

A commodity is therefore a mysterious thing, simply because in it the social character of men's labor appears to them as an objective character stamped upon the product of that labor; because the relation of the producers to the sum total of their own labor is

presented to them as a social relation, existing not between themselves, but between the products of their labor. (Capital, Vol 1, Fetishism of Commodities, The Reader: 320)

This is part of Marx's reflection on commodity fetishism, a public belief in anonymous and standardized commodities. Hidden in the disguise of things *quâ* commodities are social relations that are pre-determined in the cycle of production. The social belief in commodities goes hand in hand with the course in which products and labor become non-differential products and labor, measurable in the form of value. Maybe a "number fetishism" likewise explains the alienation of numbers in the social processes of extracting people's intellectual objects. Yet the word "fetishism" is itself encumbered with critiques to the provincial Western or colonial point of view, easily evoking a tone of condescending. It is probably better to call it the "number fever," using the term from Jacques Derrida's *archive fever* (1998). The number fever refers to the kind of social affects that persuade people to trust and rely more and more on the quantitative, objective, and institutional truths.

The number fever is manifested in the countless individual and governmental documents during the land reforms. My ethnographic research shows how land numbers, produced by individuals, are transformed into social numbers. These numbers are social, for they enter the fields of social interactions, co-produced and circulated by multiple groups of people. Social numbers are a contrast to private numbers, numbers meaningful to particular personal feelings and memories, such as personal timing and weighing. A land number could be both a private and social number. Private, because it is attached to personal belongings and experiences, linking the owners with their properties; Social, because all the land is ultimately the state assets, and therefore land numbers cannot escape being absorbed into governmental systems of management and entitlement. That recounts how numbers become alienated: private numbers are transformed

into officially or legally recognized numbers, anonymous numbers that are dispossessed by their original producers.

More recently, Marxist theorists have extended their analyses to the cognitive industry such as education, training, and consulting. They criticize that the capitalized production in these professions has taken away the employees' cognitive labor, paying them wage as a return. Whether these employees still have an inalienable space of creativity is debatable among scholars (Buzgalin and Kolganov 2013; Xie and Liang 2016). My discussion of alienation moves beyond the corporate and institutional domain. Rural residents, or citizens writ large, are not employees of the government, but they participate in the information production that the routine bureaucratic systems are assigned to. Furthermore, unlike the cognitive input in industries, the land information, and indeed any agricultural information, that rural inhabitants contribute, does not directly yield the profit and thus lead to capital accumulation. While the alienation of commodities in capitalist production is an exchange of one's labor for wage, the alienation of land information is more of an exchange of one's intellectual objects for legal and political protection of properties. This exchange, of course, is never fair. It is by absorbing the rural inhabitants' knowledge into official truths that the government takes over the authorship and authority over individual properties.

INTELLECTUAL OBJECT

A question underlying numbers' alienation is, in the first place, what is a number—is it an abstract concept? To ask more specifically, does it presume an abstract entity being the counterpart to its objectified form? Whether mathematics is a pure entity or whether it holds objective truth has been widely discussed in philosophy of science. This question is particularly complicated after recent decades of reflection on *representation* in humanities and social

sciences. In response to these long-standing puzzles, I theorize the term “intellectual object” to analyze the social life of numbers, a term that highlights the materiality of a created number and the intellectual labor that the creators put into it. I am formulating this concept along the line with late Alfred Gell’s theorization of “art object.” In his book *Art and Agency*, Gell criticizes that art studies treat artefacts as a vehicle of pre-designed meanings in a particular, “Western” or “indigenous,” cultural understanding of aesthetics. For Gell, an art object is not intrinsically meaningful, nor is it restricted to any institutional definition of arts. An art object is resembling to personhood that has capacity to initialize indexical references with the interlocutors. As he puts:

...the definition (of art object) is *theoretical*. The art object is whatever is inserted into the ‘slot’ provided for art objects in the system of terms and relations envisaged in the theory...Nothing is decidable in advance about the nature of this object, because the theory is premised on the idea that the nature of the art object is a function of the social-relational matrix in which it is embedded. (1998:7) (omission added.)

Alfred Gell reinterprets art objects to emphasize the contingent and generative power of artefacts. He broadens and vibrates artistic things that are generally taken as specialized and motionless. His method of approaching art is not hermeneutic to cultural norms or patterns; instead, he foregrounds social interactions into which an art object abducts the encounters. Gell’s new conception of art object is inspiring to an understanding of numbers as “intellectual objects” in two ways: first, the creation of an intellectual object is loaded with multiple theories, so is the interpretation of it. Intellectual objects may induce communications beyond the original purpose of their existence. What is more, an intellectual object is object-like, so it is capable of presenting, transmitting, and circulating. Intellectual objects make perceptible what is often taken as transient and intangible—the intellectual or cognitive labor.

Numbers are ubiquitous in most societies to the extent that people often ignore them as intellectual objects. A land number is more of an intellectual product than a reflection on its

physical referent. Creating or interpreting a land number inevitably involves multiple theories: mathematical, geographic, and technical knowledge. In Uncle Jun's account book, one parcel of his wet rice field is recorded as 0.188 *mu*. All the elements—0, 1, 8, a point, the unit of *mu*—have no intrinsic or necessary interrelations. They are abstract representations ready to take on values that then themselves become mediators between the signifier and signified. It was not until they were put together in such a particular sequence that they became the indicator of the land parcel's area. The number was birthed when Uncle Jun labored to write it down with a blue ink pen, on a thin notebook, and it rushed with a scratch into the world. He was *objectifying* a series of signs into a land number, a number attached to a specific paddy. From that day on, the number and the parcel became equivalent in an account book or an agricultural report. Without the prior understanding of what are 0, 1, 8, point, and *mu*, this land number would not be conceivable to Uncle Jun. But there is no need to presume 0.188 *mu* as the pre-existed abstract counterpart. From the pragmatics point of view, objectification itself is an actual moment when numbers come to be perceivable. The concept of the intellectual object draws attention away from what is abstract or imperceptible and instead to what is observable in everyday life.

Numbers across Time

Until the national land census, a signal to the privatization reform that will profoundly shape the rural economy, I had not realized how indispensable were Uncle Jun's account books to his claims of lands. The numbers in his fragile little notebooks are proved, objectified, and legalized as his land area during three major efforts that the central government has carried out to

reconstruct and legitimate the agrarian land ownership, three social changes undergone by all rural residents in the past four decades.

The first event, the most dramatic change, that he experienced was the Allocation of Land (*fen tian dao hu*) in 1981, also called the Household Cultivation (*jiating lianchan chengbao*), followed with several adjustments thereafter. In the 1980s, the Opening-up period in Deng's reign, the central government distributed land to rural residents in the unit of "household." The reform ended collective cultivation and ownership, which was established after the founding of the PRC in 1949. This tremendous transformation in landholdings coincided with the de-collectivization movements in other Socialist countries, as some scholars call the transition to the post-Socialist era.³ The reform went swift in Uncle Jun's hometown.⁴ He was the leader of the Pond-head Production Team at that moment. Just as many other teams in the village—each team is a lineage—the Pond-head Team quickly and peacefully divided paddies among lineage members. In his notebooks, Uncle Jun recorded whom, all being lineage members, took part in measuring and apportioning the paddies. I will elaborate the relationship between landholdings and kinship in Chapter 3.

The second event was in 1998, two decades after the initial allocation, when the government put an end to the frequent adjustments and secured the landholdings by issuing land licenses, called the "red books" by villagers. Knowing that the licenses denoted the finalization of the ownership, rural residents reported the land information with some last revisions. As I will elaborate in the following part, many of them manipulated the land numbers to evade excessive

³ The term "post-socialist" is used mostly to refer to the societies in Eastern Europe (Allina-Pisano 2007; Humphrey 2002; Verdery 2003). Some scholars also use the term to refer to China in the post-1980s (Rofel 2007; Farquhar 2002).

⁴ See studies on the de-collectivization reform in rural China, such as Davis and Harrell 1993, Oi 1989, Ruf 2000.

taxes, a way of resistance to the heavy burden. Village cadres collected land information from production teams and presented to the above. Uncle Jun was just elected as the village head. He reported the land numbers according to his records. “All the licenses were made in my hands.” He often proudly mentioned that. The 1998 policy clearly affirms that the licenses guarantee land holders 30 years of right.

Approaching to two decades thereafter, the central government launched the land census as the first step toward a new land reform aiming to facilitate free transfer of rural land for the first time after the founding of PRC. A new land law in 2018, called the Separation of Three Rights, namely, the ownership (*suoyou quan*), contractual right (*chengbao quan*), and management right (*jingying quan*). The ownership of rural land is state-owned and collective. Peasant households are contractors who signed contracts with the government to take charge of land parcels. The contractors can transfer the management right to others for cultivating the land. This is interpreted by villagers as land purchases, a term that cannot be spelled out in legal documents. Will the reform give rise to the corporatization in the rural area and, henceforth, the transformation of the long-term petty peasant economy? Will the reform lead to, as some critiques worried about, legitimizing large-scale land grab, depriving the rural inhabitants of livelihood support? Before and during the land census, villagers were less concerned about future than the question at hand: how many years will the new land licenses assure of their right over land? The answer arrived in 2018, the government announced that the contractual right would be expanded to another 30 years. This reform, although foreseen by the media and scholars as a profound transformation on rural land ownership, is not perceived the same by the rural residents, most of whom take it as a continuity of the previous reform. It is continuous, but more

radical and far-reaching, disguised by its precursory project, the land census, which seems to be just an on-site survey and replacement of people's old "red books."

During the census, Uncle Jun's land account books served as the guideline for measuring his paddies. His family is among 110,000 households in Mei County that have registered in the census. The project surveyed in total of 300,000 *mu*, i.e., 50,000 acres of farmland in the county. In as early as 2014, the county selected two test sites for the census. Two years subsequently, a specially designed department, the Mei County Land Right Confirmation Office, was established with staff from the Agricultural Bureau and town governments.

In Uncle Jun's hometown, Xiaodu, villagers had been extensively discussing the census. They were anxious and excited—anxious about the reckoning of previous mistakes, and excited about registering unreported paddies. "They will never figure it out," people felt that the census cannot sort out all the historical complexity in this hilly place. At first, the village cadres were asked to gather the copies of people's ID cards, household licenses, red books, handing them over to the town. A couple of months later, two young GIS surveyors, accompanied with a town cadre, showed up in the village. Within two days, the surveyors walked over almost all the paddies and noted the self-reported land area on a map. They left the village right after that. Villagers even felt it was sloppy, not serious enough. They did not expect that the two-day on-site survey was just a beginning, the first-round, of a lengthy cycle of waiting and revising, completed in two years afterward.

My narration moves on analyzing how Uncle Jun and his families handle the second-round revision and the final contract signing. The whole process—the various phases of the land census—shows how land numbers are generated and, step by step, alienated from their producers.

PRODUCING

On a warm autumn afternoon in 2017, I came to Uncle Jun's small mahjong room in Mei County. He and his wife, Aunt Ling, were cleaning up the empty room which would be filled of neighbors within a few hours. Brother Gan arrived there, too. He was the one who told me that they planned to read through the second-round report of the land census. Brother Gan became the Pond-head Production Team leader not too long ago. It was Uncle Rich before, but he quit the job because the land census was so laborious with no subsidy. "Why am I doing it? Let those young people do it," as Uncle Rich complained about the census many times. It is common across this rural area where the land census became such a burden that many elder team leaders resigned and handed the task over to younger ones. Over three decades ago, in the decollectivization reform, those elder leaders calculated and allocated the land when the younger generations were kids or even not born. Younger leaders showed less interest in the accuracy of land data (or they were less capable of pursuing it). This is the typical vibes during the census: At first, people were anxious and enthusiastic; later on, the disappointment and even anger prevailed; In the end, people were tired and somewhat uninterested. It seems paradoxical that on the one hand, people were so concerned with their properties as to fight for a small rounding mistake, but on the other, they sometimes were too exhausted by the onerous state project to the extent that they accepted whatever they received at last.



Figure 2 Uncle Li Jun and Brother Li Gan check the survey reports.

Uncle Jun cleared a mahjong table for laying out all the census stuff. I noticed that among those documents, maps, and licenses, there was the purple plastic bag for his old land account books. It had been two years since I first saw them. Brother Gan's duty was to have each household checked the errors and signed on the consent forms. He received the second-round results from the village cadres, and he would return to them once he finished. Without many words, they started collating the entries: Uncle Jun told a plot with the place-name and size, Brother Gan looked for it on the map and the report, and then Uncle Jun wrote the information on a piece of paper. They talked about the mistakes in the first-round report. The land census seems never to be perfect, never true to the truth in people's mind. It is often a compromise in the end. For Uncle Jun, what served as the ground truth was the purple bag on the mahjong table, conveying the perfect land numbers even though they were measured by bamboo rulers.

Uncle Jun recalled the first land parcel: “The upside (of the plot) is Brother Bo; the downside is Lixia...” Aunt Ling immediately added: “The further upper side is Uncle Hao.” During the whole process, she showed great enthusiasm in checking the flaws, but she was doing cleaning here and there, never settling down on the table. The upside and downside referred to the plots along the irrigation direction on a slope. Brother Gan pinpointed on the map, using his thumb nail: “Here it is. See? Just a tiny bit.” Uncle Jun remembered how “tiny” it was, but the number differed from his memory:

	Hakka Transcript	Free English Translation
Jun	<i>ki siid ciu fun sam liug bad, ge zag, ngai dau gim han boi ie cud ge.</i>	Actually (the plot) is (one) <i>fen</i> three-six-eight. That plot. Now I can still recite it.
Gan	<i>fun sam liug bag, ge ie du fun liug, lang diam id liug, fun liug.</i>	(One) <i>fen</i> three-six-eight. That plot is (one) <i>fen</i> six. 0.16 (<i>mu</i>). (One) <i>fen</i> six.
Jun	<i>fun sam liug bag, ngai ho ge ie cong liong, ngai di ded ge.</i>	(One) <i>fen</i> three-six-eight. I was there measuring it. I know it.
Gan	<i>m moi hi guon gi, fun liug cog ge, ciu am ni gong.</i>	Don’t worry about that. (One) <i>fen</i> six is correct. Take what it is said.
Jun	<i>cog, mog li gi.</i>	Correct. Don’t care about that.
Gan	<i>in vi am ni kog a hi, tien sun mag ge du ngia ge ma.</i>	Because (the GIS surveyor) determined in this way. The paddy lips and whatever are all yours.

Table 2 From the video recordings. (Unit conversion: 1 mu=10 fen=100 li)

Uncle Jun said that he could still recite the land number, glancing at Gan and then me—he seemed to recall having shown me the land account books long time ago. He was showing off his good memory by giving the exact number: “(one) *fen* three-six-eight,” ie., 1.368 *fen* or 0.1368 *mu*. People omit spelling the number “1” before a unit, such as *fen*, *mu*, clock, and meter,

except that it is a round number. (The unit of *fen* equals to 1/10 of 1 *mu*.) The report only uses the unit of *mu*. That is why interlocutors kept converting between *fen* and *mu*. Uncle Jun was the original producer of this number, because, as he said, he was there measuring it. Why would he think that a bamboo ruler was more precise than the GIS mapping? Perhaps that question did not even come to his mind when he compared his notebooks with the government-released reports. Other reasons are more compelling than the tools—his being an owner of the land, his labor of cultivating and calculating, and his role as the village cadre. A bamboo ruler is not ideal for measuring the rice paddies. He knew that. Two years earlier when I asked him about the formulas of calculation, he admitted that they just chose a geometric shape closest to the paddy. If the parcel looked more like a rectangle, then they used the length to multiply the width; if it looked like a triangle or trapezoid, then they applied corresponding formulas. The wet rice field in this hilly village mostly cuts into the slope step by step, forming a terrace. Paddies are irregularly enclosed, matching the topography. It is hard to find a paddy in a standard geometric shape, not even in a loose sense. When Uncle Jun said that the paddy was “actually” (one) *fen* three-six-eight, he was just recalling the number. The bamboo ruler, the shape, or the formulas seemed not to occur to him as a problem. Once people measured the plot, recorded it, made a license of it, they generated a land number which launched its own new life.

The social life of a number is full of baggage. Uncle Jun was not the only one who believed that the old land numbers are more correct than the survey results. When villagers saw that the numbers differed from their knowledge, most of them showed uneasiness—not curiosity, not self-doubt, but anxiety and often annoyance. Something must be wrong. And the wrong number must be the survey result. “The first-round report, a lot of mistakes! we told them the correct ones. Now the second round is still full of mistakes!” A village cadre grumbled when she

was scrutinizing the reports. That the surveyors “made mistakes” (*gau ca ei*) was one of the most heard complaints. The term “mistakes” presumes the existence of right answers, the correct numbers they have already known, those in their written records or memories. The land numbers generated in the previous reform become the authentic ones after years of validating and speaking of them. Given a second thought, they could have made mistakes, too. They chose an approximate geometric shape, or they played some maneuvers in calculating it.

But with little lingering, Uncle Jun accepted this new number in the report, a larger number. Brother Gan urged him to just take it. He explained that the new number was bigger because the surveyors incorporated the “paddy lips” (*tien sun*). Paddy lips are low, muddy dikes for enclosing water within the wet rice fields. They are normally wide enough for one person to walk on, with grass and stones. Does a paddy include its lips? This question is trickier than it sounds. As wet rice field was likened to fish scales in land registration in China’s history, people build paddies in a successive pattern, one beside another. Owners of the adjacent parcels share the paddy lips. These lips, a space that cannot directly yield products, become the grey zone in calculation. Before the 1980s, people did not count the paddy lips, told by the previous team leaders and cadres, because the land area entailed taxes in the form of agricultural products. A bigger number meant a larger amount of the “collective grain” (*gung liong*). It was prevalent that villagers reported smaller land numbers to evade the tax.⁵ There are exceptional cases, though. I heard Uncle Xian, Jun’s cousin, griped about one of their kin members who integrated the paddy lips in calculation, so that their Pond-Head Brigade would be evaluated as “advanced” (*sien zin*). That was in the 1970s. “We could barely feed ourselves!” Uncle Xian turned into fury when he

⁵ See Bernstein and Lü (2003) on the rural residents’ response to taxation.

recounted that history. To obtain a glorious title at the cost of life necessities in the time of poverty—sadly, that was not odd news in the revolutionary zealously.

Paddy lips are still the grey zone in the census. According to the policy, surveyors should cut the paddy lips into halves, each side belonging to one parcel. The vague policy allows paddy lips to serve as a flexible space for people to modify land numbers. I have observed so often in the census: when a villager requested a larger number, the surveyor incorporated more paddy lips or empty land around the plot; when someone requested a smaller one, the surveyor drew lines within the lips. Brother Gan’s words “the paddy lips and whatever” implied various spaces for people to maneuver in both the on-site and GIS mapping. He effortlessly convinced Uncle Jun to take the new number. Tax is no longer a problem. More than a decade ago, in 2006, the central government annulled all agricultural tax; instead, they issued monthly subsidies based on the land area.⁶

Uncle Jun wrote down the information of the first plot on a piece of paper, so scrupulously that I could see him slightly moving his head along with the hand wriggling. Then it came to the second land parcel, located in the placename called the Seven Character Plot. Aunt Ling spelled out the owners of the neighboring paddies one after another, as if she saw the map in her mind. This time, again, the new number differed from Uncle Jun’s knowledge:

Jun *liong fun id li ban ge, dau gim han* Two *fen*, one *li* and half. Till now (I) can still
 boi ie cud og, gi do siib ngian du boi recite it! After several decades, (I) can still
 ie cud. recite it.

Gan *ge ie ciu liong fun, n, lang lang lang* That one is two *fen*. Hmm. 00040.
 si lang.

Jun *lang lang lang si lang.* 00040.

⁶ See Hiroki Takeuchi’s (2004) research on the taxation reforms in China.

Gan	<i>lang diam ngi si.</i>	0.24 (<i>mu</i>).
Jun	<i>lang diam ngi si? ai? liong fun id li ban ge, bien a?</i>	0.24 (<i>mu</i>). Eh? (It's) two <i>fen</i> , one <i>li</i> and half. Changed?
Gan	<i>va ng he, tien sun id iong cien pu du...gim a.</i>	Told you. Paddy lips the same...are all (included) now.

Table 3 Conversation between Jun and Gan (Unit conversion: 1 mu=10 fen=100 li)

Uncle Jun kept emphasizing that he still remembered the exact numbers. His voice raised, looking at Brother Gan and me. His pride about being knowledgeable reminded me of other conversations with his brother, Tai, and his cousin, Jiang, whom both had been team leaders and cadres. They spoke in a resembling way when they recollected things that took place several decades ago—“I can still recite it!” The size of the paddies, the houses’ floor plan, the significant dates, the budget for a public project: they can still recite them. Why could not today’s younger cadres tell as many details about their village? Old village cadres and team leaders, who were on duty in the 1980s and 90s, have such thorough knowledge that they are familiar with not only their own paddies, but almost everyone else’s in their production team or even neighboring teams. Many could still envision the whole landscape of the wet rice fields that they had supervised. During the collective and early decollectivization periods, the way cadres took charge of the agricultural production and social relations differed from today’s village management. They were required to take records and report on the rice production, tree plantations, land measurements, and labor calculation. They were trained to produce and memorize the information. The shape, the placename, the owner, and the size of each parcel—all became embodied through years of arduous cultivation and management.⁷

⁷ For an expanded discussion on embodied memories, see the following section of Chapter 1 and some parts in Chapter 3.)

Spotting the land parcel on the map, Brother Gan read out “00040,” the last five digits of the land parcel code, which people are unlikely to remember. A complete code is a 19-digit, combined with alphabetic and numerical letters. The land census will generate a unique code for every single parcel of the arable land in this country. The number in Uncle Jun’s memory—two *fen*, one *li* and half (i.e., 2.15 *fen* or 0.215 *mu*)—was smaller than 0.24 *mu*. The unit *li* equals to 1/10 of one *fen*. This time Uncle Jun was less upset about the “changed” number. He made a decision for the first parcel, rendering the second one fairly easy. Brother Gan showed impatience about Uncle Jun’s hesitation— “Told you,” he was offering the same reason that the surveyors had drawn a larger area on the map.

Not every new number is bigger. When they reviewed the land parcel in the placename of Leaf-New Plot, Uncle Jun seemed surprised to find that the new number was smaller than it should be:

Jun	<i>iab sin qui, bien hau?</i>	Leaf-New Plot, code?
Gan	<i>lang lang lang si sam.</i>	00043.
Jun	<i>lang lang lang si sam.</i>	00043.
Gan	<i>lang diam id m.</i>	0.15 (<i>mu</i>).
Jun	<i>lang diam id m? ngiong guo sau ie? ge du fun bag bag ge, lang diam bag bag ge.</i>	0.15 (<i>mu</i>)? Why is it smaller? It should be (one) <i>fen</i> eight-eight. It’s 0.188 (<i>mu</i>).
Gan	<i>dau sii m geu ge, ng he gi do ge, dau sii ng ga zon hi. ng ko i gen zang ma.</i>	When (they are revising), (the plot is) not enough, how large is yours, you add it at that time. You can revise it.

Table 4 Conversation between Jun and Gan

The processes of the land census had been a back-and-forth negotiation between surveyors and villagers, accumulating and updating information. The long-term, strenuous

communication drained up everyone—the owners, cadres, surveyors, and the government staff. Once Uncle Jun submitted a revision request for this land parcel, the township agriculture station would assist the GIS surveyors to amend the errors. It took Uncle Jun more than a year, since the first on-site survey, to see the second-round result; and it took him five other months to receive the final, revised land contract. Brother Gan's strategy, just like other younger team leaders, was choosing the easiest way to obtain the signatures from owners. If the new number is acceptable, then take it; if it were not, then leave the task to the surveyors for further correction. At that moment, he was not just the son of Uncle Jun's cousin; he was taking the role as a team leader, who sounded like other leaders or village cadres. They are the medium between landowners and the government. Their job is to help exchange information between.

Interestingly, Brother Gan and Uncle Jun reached a tacit agreement that they needed to correct the smaller number. Brother Gan did not give the same suggestion to accept it, neither did he speculate why it was smaller, as if the reason did not matter. He right away assured Uncle Jun that the problem was solvable, a real problem compared to the previous two parcels. Why is the smaller number a mistake, not the bigger ones? Why double standards? They did not ponder on or discuss the standards; they both took it for granted. Rural land holders use the old land numbers produced in the de-collectivization reform as a baseline for assessing new numbers in the census, although they may diverge in criteria how to deal with the gap. It is a matter of choice. When the survey results were bigger than the old numbers, sometimes, as I have witnessed, villagers insisted on the original figures; but in a greater chance, villagers were easily convinced to accept a bigger, new number. When the survey results were smaller than the old ones, however, people unanimously requested to revise the results and returned to the old numbers. This dominant logic was opposite from that of thirty and forty years ago when the

majority of the villagers chose smaller land numbers to evade taxes. After the calculation of land, calculations continued. People are reckoning possibilities now and in the future.

After the collation of all his information in the second-round report, Uncle Jun used a calculator to add up the land parcels. Brother Gan helped him by spelling out the numbers one by one. Aunt Ling, who kept walking around the room and occasionally joined their conversation, found the total number questionable:

Jun	<i>n. ngai kon a ge iu gi do ie.</i>	Hmm. Let me see how much (we) have.
Gan	<i>lang diam id liug, lang diam ngi sii.</i>	0.16, 0.24
Jun	<i>lang diam id liug, he, ga lang ngi sii.</i>	0.16. Yes, add “024.”
Gan	<i>lang ngi liug.</i>	026
Jun	<i>ga lang ngi liug. ga...</i>	Add 26, add...
Gan	<i>ga id m.</i>	Add 15.
Jun	<i>ga id m.</i>	Add 15.
Gan	<i>id giu.</i>	19.
Jun	<i>ga id giu. cang hau id meu.</i>	Add 19. Exactly one mu.
Ling	<i>cang hau id meu? bun sen meu ban tien o. cii ga o!</i>	Exactly one mu? The paddies should be (one) mu and half, oh. Our own family’s, oh!
Jun	<i>mo. ngai m di he?</i>	No. Don’t I know it?
Gan	<i>id ge ngin cang gi do tien? zui gau fung dau sam fun tien.</i>	How much land can one person have? The summit was only 3 fen.
Jun	<i>giu fun giu li m bag, cang zun ge.</i>	Nine fen, nine li five-eight. (This number) should be accurate.

Table 5 Conversation among Li Jun, Aunt Ling, and Li Gan

Aunt Ling was tidying up the mahjong room, prepping for the evening business, but she kept an ear on what was going on between the men. She frequently jumped into the discussion,

giving her input on the issue. She helped Uncle Jun recall the details of their paddies: the locations, size, and neighboring owners. Just as their postures show—two sitting on the table, one standing aside, Aunt Ling was positioned as a less authoritative role in decision-making during the land census. Her husband and nephew often dismissed or sometimes refuted her questions. This time, once more, when she questioned the total sum of 1 *mu*, two other people instantly rebutted it. Somehow, they responded to her challenge in different ways. Uncle Jun directly denied her number, followed with a rhetorical question, “Don’t I know it?” He referred to his epistemic authority as the man-of-house, the owner of land, and the cadre who measured and recorded it. His knowledge of family properties and village affairs underlies his confidence dealing with land and other issues, as if his experience explains the authority: “I was there measuring it. I know it,” “Don’t I know it?”

Brother Gan did not simply deny Aunt Ling. He cast back a question and then gave the answer himself. He was talking about the de-collectivization reform, the Allocation of Land, in early 1980s when cadres divided and assigned the commune’s land to each household per capita. In Xiaodu, cadres organized four times of adjustment during 1983 and 1989. Each adjustment is a minor reallocation according to the changing populations: if people die or move out, their quota becomes collective and would be re-allotted; if there is a newborn or a newly married-in, they would receive a portion. Villages occupy different amounts of farmland—those in flat regions possess more wet rice fields than those in hilly areas. Due to a scarcity of arable land, Xiaodu villagers are dispensed with much less area than many other villages. By “summit,” Brother Gan referred to the highest record at some point of the adjustments. He did not instantly explain to Aunt Ling why 1.5 *mu* sounded wrong. Instead, he implied a quiz for her, a calculation quiz:

every person holds at most 3 *fen* of paddies, and their family has four members—just do the math.

At the end, Uncle Jun took out his old land account books and the red books for a final examination. He was overall satisfied with the final result, pretty close to the “accurate” number in his mind—nine *fen*, nine *li* five-eight. The census outcome is a reproduction of his memories. He places his epistemic authority over his wife, nephew, the GIS surveyors, and computer. The reason is obvious without saying: a person knows his or her own land. Rural inhabitants share this logic of linking knowledge with ownership. This is not merely a philosophical understanding about the relationship between humans and non-humans, but likewise a sociological understanding of their roles as an owner, a cultivator, and an heir to the land. They have always been the original producers of knowledge about their own properties.

ALIENATING

The long-overlooked body of agricultural knowledge that rural residents have created is beyond individual practices. Knowing about one’s surroundings is a social activity. People generate all kinds of information for everyday usage and for fulfilling bureaucratic requests: land censuses, agricultural statistics, forest quantities, irrigation reports, and population control. Once people hand over these figures to the above, they alienate their intellectual objects to the government that ultimately claims the ownership of the data. For most of the time, feeding information upwards is so smoothly that producers may not feel the estrangement. While sometimes, especially during the land census and reforms, the alienation of numbers has a ritual.

Five months after Uncle Jun and Brother Gan checked the second-round reports, it finally came to the contract-signing date. This morning, in the late spring of 2018, I went to the government building of Goose Lake Town. Staffers of the agricultural station were organizing

documents in a large meeting room for the temporary storage of records. They piled the census stuff everywhere, on the table, the chairs, and the floor. The nation-wide land census has produced an enormous number of papers—for every round of survey, they repeatedly printed out maps, results, consent forms, and error reports. Two staffers were sorting out the contract paperwork in the correct sequence before delivering them to villagers. These documents will not stay in the village. The village committee stations have been emptied out since the 1980s and 90s. Their cabinets used to be filled with agricultural reports, land measurement books, labor records, as recalled by old cadres; now those documents are all gone. Village committees act as a facility for document transition. Village cadres receive the census forms from the township agricultural station and pass them down to the production team leaders. Then they collect finished paperwork and return to the town government. The latter would submit the signed documents to the Mei County Land Right Confirmation Office, the terminal repository for all the census archives.

Three staffers were about going to the Xiaodu to “propaganda” (*xuan chuan*) how to sign the contracts, the final step towards a new land license. Before setting out, one cadre warned them: “Make sure that they understand everything. Those people in Xiaodu have very low quality (*su zhi*).” No one seemed surprised by his words. I followed them back to Xiaodu, my major field site. People had already been waiting in the village committee station: the village head Uncle Tiny—that is his nickname, two other cadres, and all the production team leaders, including Brother Gan.



Figure 3 Village cadres and production team leaders learn how to sign contracts in the village committee hall.

Soon after the meeting in the village committee, Brother Gan took all the documents to the county seat, seeking signatures from several team members. The first stop was Uncle Jun's mahjong room. It was early on a Tuesday afternoon, so there was nobody except Uncle Jun and Aunt Ling, waiting for the contract. Brother Gan placed a stack of files on the table, taking out a pen, a stamp, a red inkp pad, and lighting up a cigarette. It would take a while to finish the contract-signing. The couple were carefully reading each page, back and forth, checking errors. Again, Aunt Ling was standing by side. When she recalled a land parcel in the place-name called the Second Narrow Plot, she could not find it on the contract. Her husband reminded her that they switched the parcel with another person in their lineage. During the decollectivization reform, many households in the same lineage or production team swap their land, mostly for the convenience of cultivation. They re-arrange adjacent plots together, making it much easier to plant, irrigate, clear weeds, and harvest.

Aunt Ling knew about the exchange, but she wanted the original parcel on the contract, or at least a note on it. Uncle Jun, again, with an irritable look, pointed to the contract and said: “Because this is the settled statement (*ting lun*). The one (we) just talked about is already the settled statement, regarding the area (*mien gi*).” It was all set, printed on the clipped contract. He thought the specific location was not an issue as long as the land area was correct. For him, the two plots were switchable inasmuch as the area was equitable—the two paddies were reducible to two numbers that summarize them. While for Aunt Ling, those were two distinct parcels: different locations, shapes, and perhaps, with different memories. Their contrasting attitudes toward the exchange may be due to their understanding of social creditability. Uncle Jun showed more confidence in the agreement between him and his kin member, whereas Aunt Ling trusted more on the government-issued contracts.

Hearing that Aunt Ling was still worried about the parcel, Brother Gan persuaded her to focus more on the numbers:

Gan *zii iu do mog sau.* (The land area) could only be bigger, not smaller.

Jun *ngai cang hau ge, ngai cang hau ge, gong gong hau.* Mine is exactly right. Mine is exactly right. Just right.

Brother Gan explicitly spelled out their standard—a bigger number is a better number. He transferred Aunt Ling’s worry into a concern with numbers, as if she cared most about the quantity—but she did not mention the land area the whole time. Uncle Jun did not lift his head from the contract, mumbling after Brother Gan’s suggestion. It seems that he was responding to both his wife’s anxiety and nephew’s suggestion. “Just right”—the total land area was just right, slightly bigger than the total sum in his memory. In the end, he signed on every page and pressed the thumb fingerprint on each signature.

Five days after his brother, Jun, signed the contract, Uncle Rich stayed at home where a small crowd were bustling around a table, playing pokers or watching people gambling. It was seven in the evening, when Brother Gan came in. He brought the contract for Uncle Rich to sign. They sat on another mahjong table, with Aunt Four standing beside—what familiar postures. Uncle Rich put on his glasses, reading one page by another, much faster than his elder brother did. He told Aunt Four to go to the bedroom and take out the “old book” (*lau zab*), i.e. the 1998’s land license. Brother Gan stopped her and said that the contract had copies of their old book. In every contract, there were copies of family members’ ID cards, the household registration book, old land licenses.

While Uncle Rich was flipping pages forward and backward, looking confused, Aunt Four pointed on the contract, suggesting it to be the place for the signature. Her conjecture, however, irritated her husband:

Si *ie ciam zag miang ciu zam* Here sign the name and put the fingerprint, probably.
 su zii mu ie, guo du.

Rich *ng guo di ge id iong o. ng* Seems like you know more, oh. You know more, then
 guo di, ng cii ga hi mu, cii you do it yourself. You write it down yourself, OK? You
 ga hi sia, hau mo? ng zo, zo take, take the household head. [Brother Gan laughs;
 fu zu. Uncle Rich smiles.]

Si *ngai sii m di. mog am ni a.* [Murmuring] Right, I don’t know. Don’t be like this.

The household head (*hu zhu*) is a title in the *Hukou* ID registration system. Without doubt, people register the husband as the head.⁸ The national projects such as land censuses place this category forward to a prominent position. This is the common procedure during the on-site survey: a GIS surveyor, when approaching to a paddy, shouts: “Who is the team leader?” “Who

⁸ For a review of the Hukou system in China, see Cheng and Seldon (1994).

is the household head?” They walk to the front and report the land area. People are not called by their names, but their social categories, whose tasks and responsibilities are pre-assigned by the census policy. It is in these interactions where the categories—surveyors, cadres, team leaders, household heads—are reproduced and reinforced. On every piece of the documents, the spots for signatures and fingerprints are assigned to the household head, not other family members. That who has legally registered as their household head is not a secret, but the title entails no extra duty until moments like this. In the land census, women actively express their feelings and opinions about the rice paddies that they have put labor in. The ones who finally sign the names, however, are always their husbands. These bureaucratic designs zoom in what is tacit in daily life, making the gender disparity explicit in terms of the invented social category, the household head.

After checking the total sum—1.52 *mu*, Uncle Rich said: “Okay, sign.” “(You) need to read all over it before you sign,” said Brother Gan. “Didn’t I?” Uncle Rich wrote his name and pressed the fingerprint on every page of the contract. Signing is a ritual, albeit simple as it shows, that establishes the renewed relationship between the state and the household, a contractual relationship over the land parcels that Uncle Rich and his parents had cultivated for decades. He is signing to obtain the contractual and management rights; he is, at the same time, alienating the information that he provided to the government and confirmed them as official and legitimate numbers. These figures will continue their journey to the Land Right Office, to the county archive, and to the national database.

Alienated

This Tuesday in late July 2018 was a big date for Mei County Land Right Confirmation Office. Everyone—the officials, staff, temporary workers—had prepared for this day for over two years. It was the final assessment of the land census by officials from the above. The County Office hired two private companies to conduct the census: one is a GIS mapping company, Southern Digital Technology, for the on-site survey and database feeding; The other is a professional archiving company, Central Wisdom, for sorting out and storing the documents. At the final evaluation, the mapping task had almost concluded, while the archiving work was halfway through. Two years ago, people thought that they could finish the survey within one year, but only to find that the closing date was postponed again and again. Survey, revise, re-survey, revise—people kept repeating the circles, from the office to each town, to each village, to each household, and then backwards. “We will never get it done,” once said an employee, desperate and fatigued, who worked there since the day one. The last a couple of months was the hardest time, the darkest moment before the dawn. It had been a marathon that drained up lots of people who were assigned to this national project, a mission that the country has reasons to urge.

When I arrived at the office, everyone was rushing off feet, here and there, with nervous looks on their face. The director of County Office and the company managers were delivering a report to several officials from Guangdong Province Agricultural Bureau on the second floor. On the fourth floor, an official from the Municipal Agricultural Bureau and one from the County Archive were randomly picking up the census documents for scrutiny. They walked to the cabinet, chose one window, and took out a stack of documents. One of them selected a pile of contracts and started turning pages. “Why didn’t the peasant leave the fingerprint here?” She pointed to a form. The county official said that it was due to the GIS company’s negligence (later

the company manager complained that it was the negligence of the township agricultural station). They went on checking and found a few more mistakes. The major problem was not a missing signature or fingerprint; it was the Archival Group Number, the number on the top of every archive box, showing the institution that the box belongs to. “Why do you use your own Group Number? You should follow the policy, using the unified codification.” The county official seemed astonished upon hearing this, turning to the representative from the archiving company, who looked the same, startled. The municipal official continued: “Your Group Numbers assigned the archives to specific towns and villages. How could people find them? All the census documents should be directly filed under the Guangdong Province Archive.” Later on that day, the project manager of Central Wisdom, Guo, told me that when they began coding the files, what they heard from both the province and county was that they followed the “local” (*di fang*) codification. Things just changed when they were already in the midway. It would be a huge project to substitute all the Group Numbers of the thousands of papers they had archived.

The evaluation went on. The municipal officials walked the other side of the building, where the staff of Central Wisdom were busy sorting out the documents. A complete assembly line was there: in the hallway, about a dozen of workers sat in a row, in front of desks, reordering and re-stacking documents with clips and passing down one by one. In an office room, another group of employees were examining the documents and finalizing them into archival files. Storage rooms, in the middle of the floor, with rows of filing cabinets, were crammed with both unfinished and finished papers, including the reports from the “below” and the files to be boxed up.

Paper clips are everywhere—and each clip is a household. These land contracts carry the crucial information—ID cards, registration books, old licenses, land conditions, maps of paddies,

repeatedly signatures of the household heads, the production team leaders, and stamps of the village committees, township stations, and the county office. Now all the person- and place-specific information are reduced to a thing called the “archive,” visualized as white papers and colorful clips. The individual experiences have vanished, leaving the traces of signatures and fingerprints, and the products that they jointly create: numbers. These numbers will finally become a digital display in the on-line platform for facilitating future land transfers.



Figure 4 Staff of the archival company are working on sorting out documents.

The next morning, I went to the office to find that everyone looked relaxed. The vice-director walked in, announcing that they scored 87.5 points in the evaluation. “Higher than PY County,” he was especially delighted that they outperformed the neighboring county. These staffers were temporarily borrowed from other departments to this particularly established Land Right Office, working together on the urgent “political task.” They did not know where they would go after the land census. Many of them would probably return to their original positions. The rumor is that the Office gets to sustain to keep the census data and deal with farmland

disputes. The paper archives will continue to stay in their termination, the Office, a department that claims the authorship of all the land data throughout the county.

The Inalienable Numbers

In her book, *Inalienable Possessions*, Annette Weiner reflects on the classic concept in early ethnographies, that of “reciprocity,” particular in Bronislaw Malinowski’s Trobriander Island research. She argues that, instead of being a universal idea, the norm of reciprocity originated in the Western economic understanding of markets; While in many societies, exchange is not a complete alienation of commodities. There is a paradoxical action of keeping-while-giving. She therefore brings up the concept of inalienable possessions to denote things with intrinsic and ineffable identities, meaningful to individuals or groups. These precious objects are controlled with vigilance because they account for the past and construct memories for the future. What separates the inalienable objects from the alienable is the unique values, the source of difference and hierarchy.

Weiner’s theory of inalienability might well explain how alienation works. Personal things become alienable when they are deprived of individual experiences or uniqueness. As she points out, how to solve the constant pressure of exchange and guardianship: “Yet to overcome these contradictions is to erase the difference between one inalienable possession and another, thereby nullifying the difference between oneself and another.” (1998:150) It resembles to the commodification in Marx’s description, when human labor and products turn into non-different, only displayed in the unified form of exchange value.

For rural residents in China, farmland resembles Weiner’s inalienable possessions: valuable, identity-related, and guarded from sales. In imperial times, people traded rice paddies

in redemption sales—that is, whenever the seller requires redeeming the land, the buyer should return them. After the Liberation in 1949, transactions of farmland has been announced as illegal unless the government appropriates it. Both the legal and familial ideologies prevent the large-scale of transferring rural land ownership. A land number seems to be an attachment to a land parcel, as if the number exists whenever its referent exists. But numbers are detachable, ready to alienate from their owners. After they become the written or printed record in the official system, they represent a new truth, a truth that may differ from the owners' understanding of their properties. Conflicts arise when the alienated numbers do not match the inalienable land: a smaller land number for evading the heavy tax may bring in less agricultural subsidy than it should be; Or a missing number in the official record leads to the failure of recognizing a long-standing land parcel.

Why, being the same number representing the same land parcel, does a number act differently with a different authorship? The figures in the official records may work against their original producers. These intellectual objects have changed their social effects by changing the titling—from peasants' knowledge to the official truth. Consider what Michel Foucault calls the “author function” (1979). That what/who is the author matters in terms of social recognition and application. The author function accounts for the paradox of the land knowledge, too—on the one hand, rural cultivators still hold the land information as it is attached to the inalienable paddies; On the other, they have to alienate the numbers to a different author, the government, to ensure the legitimacy of both the information and properties.

On a Wednesday morning, I went to Goose Lake Town seat by bus. I headed to the agricultural station, only to find that the GIS surveyor, Xiao, was not there. It was the last couple of months, the most anxious time towards the final assessment. Cadres received text messages

saying that the land census had escalated to a “political task,” so they are urged to finish it as soon as possible. The county government was taking the progress of the census as an indicator in evaluating each town. Every month, the towns that lagged behind were “called their names” and criticized in the county meetings. Under the pressure, Goose Lake Town asked the county office and the GIS company to send technical persons “down” to help with the second-round revision. Documents submitted from the village thus can be modified in the town agricultural station, saving a great deal of time transferring between the county and the town. Staffers told me that Xiao already set out to Goose Downstream Village, ten minutes’ walk from the town building. When I arrived at the village committee station, Brother Fang, the cadre who took charge of the census in their village, was surrounded by five or six people. Xiao, as usual, sat in front of his laptop, listening to them arguing in Hakka dialect that he could not understand.

I noticed that on a ping-pong table, on top of the census stuff, there was a copy of a document, listing with names and numbers. It is a form titled “The Basic Situation and Tasks of Grain and Oil in Unit of Peasant Household,” with no date. It details with, filled by handwriting, twenty-two households, the number of persons, the land area, and various categories of the collective grain that they submitted to the government. The document was brought here by a senior woman, dressed in a red flowery shirt, with a silver bracelet on her hand, standing beside the table, quietly. I did not expect that this form later became the focus of conversations.

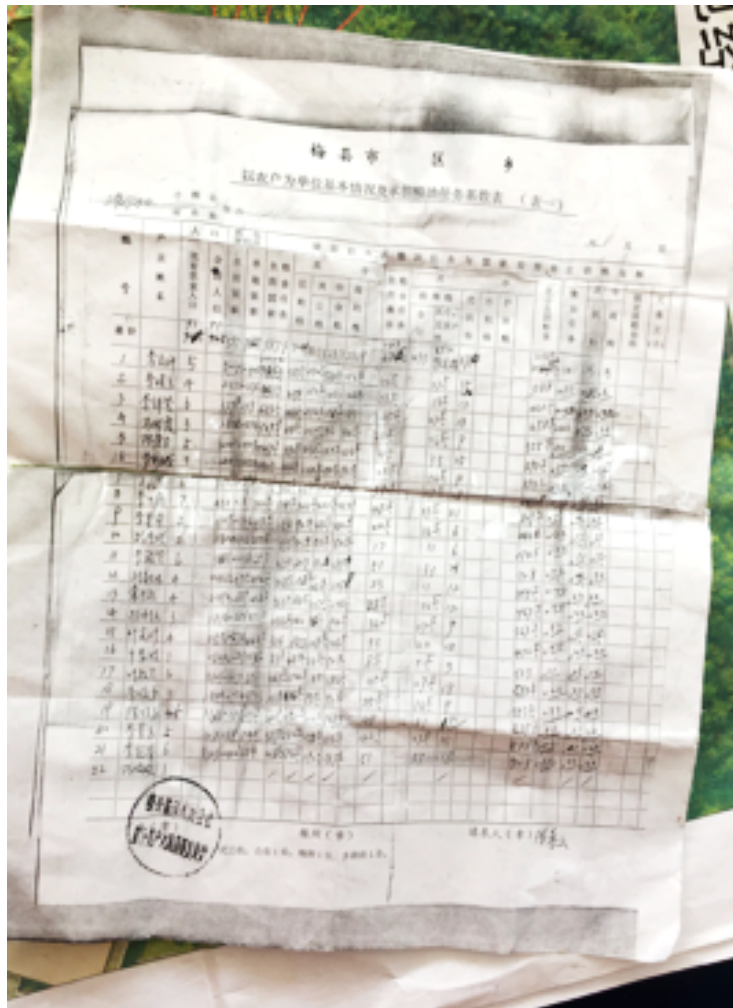


Figure 5 “The Basic Situation and Tasks of Grain and Oil in Unit of Peasant Household”

I lowered my voice, asking Brother Fang: “Why did she bring in this?” But Brother Fang answered in a loud voice: “(She) took it to prove that they still have a paddy to register.” He went on explaining the categories of taxes. His voice was getting louder, drawing other people’s attention to the document. A senior man (as Villager 1), who came to revise his land numbers, entered the chat. The form keeper began to account for her reasons; while another middle-aged woman with glasses (as Villager 2) showed strong interest. They bent down to read it. The paper arouses their curiosity and recollections of the tricks that everyone had played in the decollectivization reform some thirty years ago:

- Fang Their team is more special. At that time, they had many paddies. To avoid handing in the collective grain, (they) didn't report (all the paddies) to the above, leading to (the situation that) the red book did not have (some paddies). Now those people came to replace licenses and wanted to make (the missing paddies) onto (the new license). But we just have one working policy—no. **We just replace the licenses. We are not adjusting.**
- Villager 1 No. And one more (reason). (We) had to hand in the collective grain. She was the production team leader. “Don't put so many (paddies in the report), oh!” All the people reduced (the area). A paddy of 4 *fen*, (men) reported as 3 *fen*. A paddy of 3 *fen*, reported as 2.5 *fen*.
- Fang [Changes to Mandarin. Points to the stamp on the paper] See? Goose Lake Town People's Commune. It was still the commune. It was in the 1980s.
- keeper No. The brigade didn't have it. This piece, I preserve it. Some said that those people wanted it. I said: take it, let the brigade take it. Brigade made a copy. I kept mine. The brigade didn't have this form.
- Villager 2 What time was this? Which year, which month, which day?
- keeper At that time, (we) needed to hand in **what grain, what grain, what grain, too much**. [Consecutive tapping on the form]
- Villager 1 She was the production team leader for a long time.
- keeper (When) making the (land) license, I did not (register one paddy). I was allocated with a paddy of more than 6 *fen*—not there.
- Fang Whatever grain (you) don't need to hand in.
- Villager 1 She herself was the production team leader. She was even before you were (a leader) [to Villager 2].
- Villager 2 Of course, I know that.

Table 6 From video recordings. Hakka Transcript omitted. Emphasis added by author.

They spelled out a well-known secret: manipulating land numbers to avoid the agricultural tax. Downsizing the paddies meant the downgrade of tax. A simple trick. The “collective grain” never evoked feelings of support, except a collective cooperation of chicanery. The onerous taxes of grain and oil left hundreds of households no way to even sustain themselves. Peasants were required to deliver a considerable part of the harvest, food out of their own labor, to the “above.” Cheating on numbers was not a cunning deception; it was an endeavor to survive. There is no need to bury the secret, for it is a history that no one could exempt. This history does not show up in everyday talks, if not because of the census which impels people to disclose the backdrop stories. The census is a reckoning of both land and what people had done to their land.

Not only did they disclose the secrets, but they also revealed how the past stories never faded away, lingering in their social interactions. In just a few words, both villagers and the cadre uncovered two popular ways to dodge the collective grain. One way is to reduce the area, reporting a smaller number than the measured one. This is a widely used ploy. It explains why, during the census, the total area of paddies kept soaring, way larger than the archival data. Cadres and surveyors repeatedly cited this reason, when they were clarifying to villagers why they received a bigger number by the GIS mapping. The other way is to keep parcels from reporting, a much less common strategy at high risk. In this hilly area, paddies are categorized into the plain paddies and valley paddies. Valley paddies are deep into the mountains, easily escaped from the precise measurement and management. Some omitted valley paddies to avoid tax. (I will elaborate the comparison of the plain and valley paddies in Chapter 3.)

Had they known that one day, the land numbers they reported would act against their will to claim property, would they still manipulate the numbers? They probably had hoped that,

sometime in the future, all the wrong numbers would be corrected, truth unveiled, as long as land is there. But in this very village, where cadres stuck to the red books, the existing land licenses, the maneuvers were not retractable. Brother Fang's response to the keeper's request was firm: "We just replace the licenses. We are not adjusting." The government's guideline defines the red books as a reference. Staffers should consider both the actual survey results and the agreement among villagers. In this village, cadres agreed not to add on any unregistered paddy to the new licenses. They were not exactly following the policy; but they did not breach it, either. In 1998, before the government issued the land licenses, rural residents had a chance to finalize their land information into legitimate facts. The form keeper is but among many who decided to keep part of their properties unknown to the official. Three decades later, the decision in 1998 had been a no-returning point. Her paddy of 6 *fen* nevertheless exists, which, cadres and neighbors did not deny; but the parcel lost the first chance to register, and the same the second chance.

Although the secret is not a secret anymore, the maneuver kindled an ethical uneasiness among villagers who all had, at certain point, took part in this ploy. Villagers cooperated on false land reports, from peasants, to team leaders, to cadres—but they did not come up with a unified standard for manipulation. It had been a game, a calculation of what looked like a reasonable false number to oneself and others. Now those who cheated less are standing on a moral high ground, looking down upon those who cheated more, as if honesty is measurable according to people's distance towards the truthfulness of the real numbers. To entirely wipe out a land parcel from registration is, at this moment of reckoning, judged as more wrong a deed than reducing the land area. The latter move is redeemable, while the former is unforgivable. As more villagers joined the discussion, they showed contempt, not empathy, to the old team leader. Brother Fang, the policymaker in the village, in his early 40s, who had only vague memories and limited

knowledge about the 1980s, showed no mercy to her regretting on the trick. He sounded sarcastic and indifferent. Other villagers there, at a more senior age, did not support her, either. The man (Villager 1) repeated three times, pointing out that she was once the production team leader. The title itself suggests the relation between the power in the village and the maneuvers that they can possibly play.

The conversation became an evaluation of the document. They were skeptical about the accuracy of the information on it—the confusion of numbers made them upset and annoyed, a sentiment later transferred towards the previous team leader, someone who might have overplayed the game. She stood by side, listening to her trial, with only occasionally a few words of explanation. What first puzzled everyone was the date of the document, to which the form keeper never gave an answer—either she did not know it, or she decided not to tell. People took it as the foremost question, as if the date determined whether it was eligible to serve as the evidence. It turned out to be a difficult puzzle, because the document was just one of numerous reports that they had created. The 1980s is a time of constant changes—first, the allocation of land in 1981; and then, frequent adjustments of the allocation.

People tried to figure out the date by analyzing the form. They began an archaeological investigation. The senior man (V 1) gave a conjecture: “In this way, (I) compared each household. (The form) was before the adjustments, small adjustments, small adjustments, small adjustments, and so on.” Too many adjustments to recall. He took one household as an example. The woman with glasses (V2) disagreed: “This was after the adjustments.” She cited another household from the document, suggesting it to be the final arrangement of paddies. Another woman in a pink shirt (V 3) supported her judgment.

Villager 3 This is not the original (allocation). (It’s) after that.

Villager 2 Adjusted. Adjusted. Ah-Third Sister—three people divided one paddy of (1) *mu* 99. Why was it so big a parcel? The whole production team, people’s eyes were turning red, almost falling out. (Others) wanted it so much. Do (you) know? Hmm. Whenever the whole world also knows it...

They were translating the numbers on the document into the memories of how paddies were allocated and adjusted. Households, the headcount, land area, grain and oil—these are just numbers and names to the unfamiliar audience; but in villagers’ reading, every information has a story. Over thirty years later, the numbers are reminiscent of the emotions of uncertainty, unfairness, and jealousy in the past.⁹

Brother Fang had a different opinion, drawing from the stamp, again: “I told you that. This (form) was still the Goose Lake People’s Commune. It was before the 1980s.” “Ay-ya!” the woman with glasses refuted him, “don’t mention what 1980s.”

“We divided the paddies in 1980,” said Brother Fang.

“In 1981, (we) divided the paddies.”

“No. What time was this product?”

“This, by a look, is not accurate (*zun Kuo*).” She did not answer Brother Fang’s question, but went on pointing out the mistakes. A household was listed with five people. She asserted that there were six people who had obtained paddies. “Don’t believe (me)? Let (the document) out. Let’s see, (you) will be beaten up!” Their doubt over the date slid to an uneasiness about the accuracy of numbers, which, once more, evoked an agitated recall of the stories behind. The accuracy is not just a calculation; it concerns with how people make numbers and take the

⁹ Revolutionaries and reforms have caused not merely economic and social loss to people, but also long-term post-traumatic emotions that persist in everyday life; see Siu 1989, Mueggler 2001.

responsibilities thenceforth. The wrong numbers irritated them, although everyone had created some.

After they debated for a while, people did not reach any conclusion. The numbers of land area and population seemed not to fit in anyone's memory of a specific time, a particular distribution of paddies. No wonder that, for it is a false report, a product that distorts what people believe to be true. It fits only part of people's knowledge. Readers can find clues to bring up their own hypotheses. I am amazed by how detailed people remember the landholdings in the village: who was born after the adjustments, who divided which paddy, how large was the paddy, etc. Reforms are not perceived up-to-down, but as collective actions and memories among lineage members and neighbors.

Their archaeological investigation of the document is not in vain. Everyone, the cadre and other villagers, unanimously denied it as the evidence. The form keeper took it to show that she had one unregistered paddy. No one doubted that. But it was the inaccuracy of other information—numbers of the paddies and persons—that upset people, to the extent that they distrusted the whole document. Towards the end of the investigation, the woman with glasses stood by Brother Fang's policy: just follow the red books.

Villager 2 It wasn't that? The allocation of paddies—it should be more than this headcount.

[Tapping on the form] **Do (you) know, master?** [Look at the form keeper]

Villager 3 Say in this way. This shows the land area at the time (after the adjustments).

Villager 2 After the adjustments of paddies, there were (changes in) the headcount. This headcount [point on the form] were after the adjustments. The number of people is not **accurate**. I don't know about the land area.

Villager 3 The Stalk Divide Ground [placename] is not **accurate**. Should be after the adjustments of paddy. Today's (arrangement) is accurate.

Villager 2 No. Thereafter, just follow the red books as the **accurate**.

At this moment of eschewing numbers, accuracy was not simply an intellectual question; it induced an ethical judgment on the person who jointly produced the document and brought it up after three decades. The once team leader (V 2) challenged the form keeper, who was also once the leader of the same team, by calling her “master” (*sien sung*), a term that people use for geomancy masters or those who are knowledgeable. “Do (you) know, master?” What a sarcastic question. The form keeper did not respond. She came to the village committee to revise a mistake, to retrieve a maneuver she did a long time ago. She came to correct errors, but her earlier ploys and the inaccurate document, together, discredited her.

Of course, she has reasons to feel the grievance, for it is among this group of people who evaluated the manipulation of numbers in a degree: reducing land area is an amendable strategy, while erasing a land parcel is not. In some other villages, people could add unregistered paddies, as long as the majority of the team members have agreed. In fact, two weeks later, I ran into a previous village head of Goose Downstream Village, who demanded to register an extra land parcel. Brother Fang was there, too, grumpy at his request, but he soon gave up arguing and consented to add it, just as other village cadres did. They walked to his paddy, next to the committee station, using a GIS sensor to measure its area. It was 0.66 *mu*. “Count it as 7 *fen* (0.7 *mu*).” The old village head persuaded cadres to change it a bigger number. After the old cadre left the station, the current cadres were angry about him, criticizing him as acquisitive.

Both the previous team leader and village head were attempting to claim a property that they were allocated, cultivating, and taking charge for decades. Villagers recognize it. What worked against their claim of property they owned was precisely that they once concealed them from the official records. After several decades of living with the hidden land, they both took the

census as a good timing for a second thought, for a reckoning. It is a moment where both the alienated and inalienable encounter and clash: the alienated, the registered land information on the red books, and the inalienable, the paddies they own and cultivate. At the end of the day, the woman put the undated document back in her bag and walked away. She would go home continuing to farm on her paddy of 6 *fen*—no one will take it from her. She will receive a new land license without that paddy of 6 *fen*, just as before. Nothing has changed. But the conversation in the village committee station, the archaeological investigation, let her know that her own intellectual objects, the land information, had already alienated.

Circulation of Numbers

Annette Weiner sees that inalienable possessions are kept out of circulation because of their special meanings to their keepers; Once they are annulled with their uniqueness and therefore alienated, they are able to circulate. The Kula Ring has been a classic topic in the anthropological exploration of social relationships across space-time (Malinowski 1984 [1922]). In China, the flow of goods also goes beyond the economic domain and plays a significant role in everyday social life. Gift-giving has become a delicate social protocol that helps establish networking among familiar and unfamiliar people in different socio-economic statuses (Yan 1996). Not only goods, but people also circulate all sorts of “objects,” which, in its broader sense, may refer to concepts, texts, or other sensory sources. Matthew Hull in his study on governmental routines in Pakistan comes up with the term “graphic artifacts” to analyze how the circulation of textual/graphical objects mediates the bureaucratic practices that are shaping and shaped by the public infrastructures and constructions (2012).

So far in this chapter, I have focused on the land census, an intense moment of producing and circulating numbers. The census may not always produce the “new” data. It is recycling the existing data and reproducing them as new. Numbers travel across space-times, connecting land reforms. Moving from the census to the everyday production of numbers, I show how numbers become alienated and circulated in the state landholding system in a wider historical span. I analyze one prevailing form of circulation—reporting, a movement of numbers from one organization to another, until they are official and archived.

Reporting (*bao*) has a special role in China’s history, especially the most recent one. The reporting technique is, after all, an administrative behavior, but it is realized by the reporters, the subjects themselves. Owners of the farmland have created the first-hand information about their properties. These intellectual objects move upwards, reproduced and circulated. They converge to the final products in the institutions—reports, statistical forms, or the platforms. It reminds me of that linguists parcel out the reported speech as a syntactic unit. Quoting someone else’s speech has a different effect than saying it without the citation. Sometimes people use reported speech for avoiding responsibility and distance themselves from the opinions; whereas sometimes, people report to gain credibility or authority.¹⁰ Both work in the governmental reports of agricultural conditions. These documents absorb rural residents’ self-reported information, make it anonymous, and stamp with an institutional title. Rural residents, the sources of these bureaucratic reports, account for the credibility of the content, while the departments above take the authority to legitimize them.

REPORTING

¹⁰ *For linguistic studies on the function of reported speech, see Janssen and Wurff 1996, Lucy 1993, Widmer and Zemp 2017.*

The land census is among numerous tools that the government employs to manage the populace and resources. Many other devices of gathering information take place on a more recurrent, everyday basis. Back into history, rural inhabitants have been producing and circulating their knowledge all the time. Their self-reported numbers become an essential part of the governance of agricultural life.

Rural cadres and team leaders—positions outside of the system of civil servants—are assigned to create the first-hand data, whose commitment has long been taken for granted. I have talked to the brigade (village) and commune (town) cadres on duty during the 1970s to 1990s. They still remember how they compiled and reorganized the agricultural information. Numbers were reported from one person to another, from lower levels of administration system to higher ones. Uncle Tai was a “data staffer” of the Three-Village Commune from 1976 to 1979. The commune staffers obtained messages from brigade cadres, and cadres from team leaders. It cost a great deal of labor of speaking and circulating the figures. There were a few months every year, the busiest period of production, when the data staffers worked intensely assembling materials. One period is called the Spring Cultivation (*chun geng*), about twenty days when people plant the seeds into the wet rice paddies. Another is called the Double Summer (*shuang xia*), i.e., the summer harvest and planting. Throughout Mei County, people plant two-season wet rice annually. The last is the Autumn Harvest (*qiu shou*) of about three weeks. When it came to the peak season, staffers had to report daily.

“When I was in the commune, I made phone calls day by day. In the 1970s, it was still the hand-operated telephone. You know, you call and at the same time you row the handle like this. Every day at 10:30 P.M., I started to call each brigade. The brigade accountant was responsible for reporting. They had to wait for my phone calls in the office. If you are not telling

me today, I will call you tomorrow morning and ask you again. Sometimes people missed it. ‘Oh, I forgot to ask that production team.’ They would ask the team leader tomorrow. Or they just made up a number, say, similar to the day before. The next morning, at 8 A.M., I would report to the county. Every day, I was reporting like this.”

I found the textual version of Uncle Tai’s story in the Mei County Archive and Meizhou Municipal Archive. They kept old administration documents pertaining to Three-Village Town and Xiaodu Village.¹¹ From 1950s to 1980s, people had created tons of reports, all sorts of reports—agricultural, forestry, population, rural industry, infrastructure, and so on—most of them handwritten. The archive opens a different past, a more organized history. These comprehensive documents show how detailed was the state governance of agriculture and forestry in the collective and early de-collectivization periods. Plans, reports, plans, reports—season after season, year after year, the government had been repeatedly implementing what was called the “Plan Economy.” Since 1990s, a decade after introducing the “Socialist Market Economy,” the number of archived plans and reports largely dropped. During my field trips in the 2010s, village staffs are no longer required to accumulate the information about the wet rice, pomelo, pigs, and so on. Individual families still care about their own yields, but they need not to report the numbers to the administration.

¹¹ Sanxiang Town was incorporated into the adjacent Goose-Lake Town in 2006. But the residents of Sanxiang kept calling this place Sanxiang, and calling themselves Sanxiang people.

Figure 6 A report on the agricultural harvest of Three-Village Commune.

Above are pictures of a document, titled as “Three-Village Commune 1976 Statistical Form of the Total Production of Wet Grain of Each Production Team.” It lists every team in the commune, including the Pond-head Team, i.e., Uncle Tai’s lineage. The heading reads as:

Production Team	Actual Production of Wet Grain			
	Area	Yield per <i>mu</i>	Total Yield	Total Yield Compared with Last Year

Chart The head rows of the harvest report.

This summarizes the wet rice yield in the Summer Harvest, dated on September 20, 1976. The wet grain refers to the freshly reaped from the fields, a term in contrast with the dry grain which is thoroughly dried after the exposition to the sun. The statistics table shows the results from a series of communication and calculation. Every number comes from the recurring conversations, beginning from the households to the village, to the town, and finally to the

county. After the harvest, the commune staffers summed up all the quantities and accomplished this statistical form.

Sometime later, I mentioned those documents to Uncle Tai. He laughed: “The statistics materials that you saw in the archive—I made part of it.” He had been an accountant (会计), or bookkeeper more accurate, at multiple levels of the organization system. In 1974, he was the accountant of the Pond-head Production Team. One year thereafter, he was the assistant to the brigade accountant as a part-time job. The next year, he became the brigade accountant, when he also took charge of three teams: the Pond-head, Yellow Mud Hallow, and Pathway Upside. In 1976, when he was promoted to work in the commune, he passed his position in the team to his cousin. “When I was leaving, nobody could take up the work. Nobody knew how to do it. I randomly gave it to somebody. Accounting is very complicated. Only the most ‘cultured’ persons can do it.”

Numeracy is more than a skill for evaluation at school. The ability of calculation differentiates people, granting a person opportunity of social mobility. For the past decades, particularly in the second half of the twentieth century, rural cadres have been transmitting numbers between rural residents and the government. Before 2000s, they used to gain much more power than today’s cadres. Their active roles in planning and accounting rendered them higher prestige and capability in village business.

Uncle Jun was a team leader and the village head. Just like his brother, Tai, he had created a considerable amount of agricultural data. At the end of that afternoon when Uncle Jun and Brother Gan were checking the second-round report of the census, he took out his old account books and the red book, placing them side by side (Pic 0-0). He compared both sources: “See? It is accurate, the same.” It is not surprising that they are the same: in 1998, he made the

land licenses based on his own records. He transferred the numbers to official figures, having them printed on the red books.

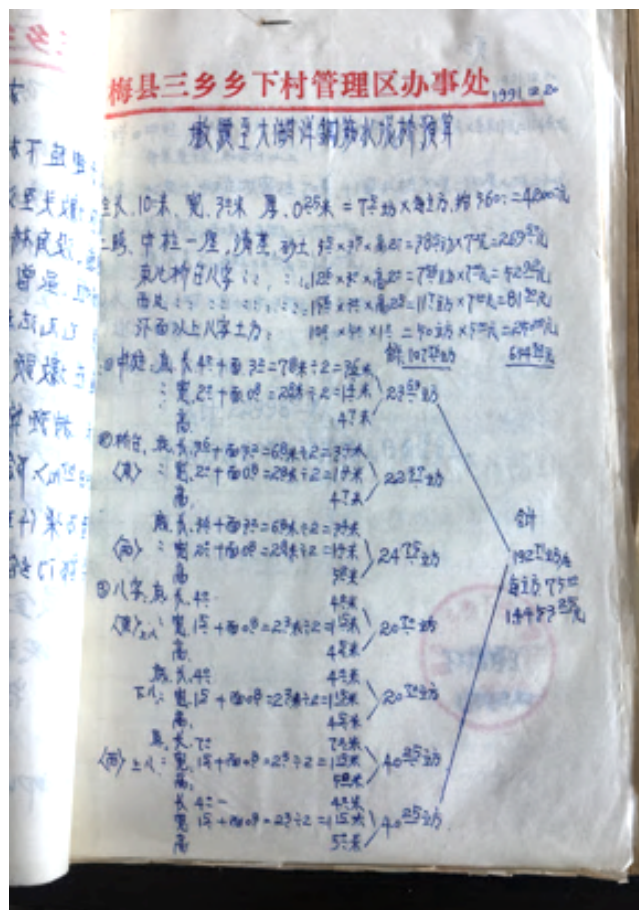


Figure 7 Uncle Jun’s budget application for building a bridge (1991).

When I was browsing through documents in the county archive, I found a budget for the Temple-Front Bridge, written in 1991, stamped as the “Downstream Village Management District,” i.e., Xiaodu (Downstream) Village. I immediately recalled that Uncle Jun told me, proudly, that the project was realized “in his hands.” The handwriting is his, I can recognize that. Even the style of presenting the dimensions—length, width, height—is similar to how he displayed land numbers in the account books. But unlike the account books, possessed by the original producer, this budget was authored only with the village title. His estimation of the cost

had a great impact in the community—the bridge now serves as the busiest connection between both banks of Xiaodu Stream, a transportation joint that residents use every day. The project is among his best memories. He still recalls the details how he solicited donation from the “hometown fellows” who lived in the city. But villagers started to forget about how stories began. Once the bridge is built, finance audited, the budget has lost its initial function. The author of the budget is not meaningful anymore.

As a cadre, he has produced plentiful intellectual objects that eventually do not belong to him. He does not hold the authorship of his written texts. Budgets, reports, and even his own land numbers—all transformed to official records, leaving him with memories of creating them. Once these intellectual objects are alienated from their original authors and become anonymous, they are readily for circulation in a broader social sphere.

TAXATION

Tax, the apparatus that the government uses to penetrate the society from top to bottom, is never just a regulatory action downwards. Taxation is entangled with some kind of message channeling upwards, a communication between the governments and taxpayers. Tax units, rates, and procedures are constantly shifting, so are the populations and taxable properties. Tax systems are built upon mechanisms that, efficiently or not, absorb the changes and adapt to the new conditions.¹² If a taxing system draws upon the database whose sources mainly come from taxpayers’ reports, then what assures the credibility—honesty, social supervision, or penalty? What sentiments—hope or fear—compel people to report the properties of which they know that the state is going to charge tax?

¹² See Brean 1998, Huang 2009.

Strategizing around taxable items to resist the state exploitation is not a contemporary invention. Reporting the amounts of land has a long history in China. Historian Ping-ti Ho in his book, *The Study on Land Numbers in China's History*, points out that economic historians had mistaken the numbers in the imperial taxing systems. He argues that the unit in the official land account books refers to taxable units, not persons. He gives caveat to researchers that the land numbers from the early imperial time to the 1950s were much inaccurate and therefore cannot be used directly as evidence. How did the imperial government build up the taxing systems of land? In the *longue durée* of governance, dated back to the Western Han Dynasty (206 BC – 9 AD), landlords and cultivators had been the main sources of land information in the official records. The administration systems relied on people's reports of their own land, rather than the on-site survey. Concealing land area from the government has been a common practice throughout dynasties. The early Western Han Dynasty government kept relatively accurate numbers; but in the late imperial periods, especially Ming and Qing Dynasty, when the central court levied tax based on land area, the numbers became increasingly inaccurate (Ho 1995).

My dissertation is not an investigation on what “real” numbers are—how much farmland the Mei County residents actually hold; or what is the gap between the reported and actual figures (see Liang 1980). I am more intrigued by the fact that in both far and near history, and the present, rural inhabitants have been the primary producers of the knowledge about their properties. They have contributed to a major part of the statistical governance of agriculture, including paddies, forest, animal farming, and even the reproduction of populations.

Taxation system transforms the self-reported quantities into legal facts and charge back on the cultivators, even though sometimes the taxable item has altered without renewing the information. The Li lineage of the Pond-head Team possesses a collection of over 350 written

contracts, mostly land deeds dated during the 1800s to 1950s. When I was reading these familial documents, a question arose to me: How people paid tax if they were frequently exchanging the ownership? Uncle Tai carefully keeps these contracts, inherited from his father, in a locked briefcase, with each piece concealed in a clear plastic bag. He proudly told stories of his great grandfather, Li Rongfa, a locally well-known landlord, who, using his father's earned money from Malaysia, purchased many paddies and forest parcels from neighbors during the late nineteenth and the early twentieth century. His transactions add up to almost half of the contracts. In some deeds, the seller explicitly marked the property as a "rent paddy" (*zi tien*), which means that the buyer should take over the tax duty to an upper landlord living in the town or county seat. The upper landlords were obligated to hand in grain to the administration.¹³ I saw a letter from an upper landlord, with the surname of Xie, to Li Rongfa's son, courteously asking for the tax of grain. According to the format of the paper and Uncle Tai's telling, this undated letter should be written around 1920s, after the breakdown of the Qing court. The newly established Republic government (1911-1949) only held the records of Xie's ancestral properties, passed down by generations, whereas the paddy had been transferred multiple times, and finally to Uncle Tai's grandfather. At that time, the authority had not yet updated the tax information, taking over the items from its imperial predecessor. The government certainly would not have records of other paddies that the Li lineage owned, which were reclaimed by villagers and never registered.

¹³ The taxing system is called "double landholdings." Similarly, see Myron Cohen's research on the "big rent" and "small rent" in the late imperial period in Taiwan.)



Figure 8 The Pond-head Li lineage’s familial document. A letter asking for the tax.

Grain as the major form of tax was common in the rural area of China before the founding of PRC in 1949. The county archive preserved documents on the grain tax during that period. Here cited are two forms, both produced in 1944, about the grain barns in Mei County (Pic 0-0). The documents list the volume and market price of grain collected from each town. Although the two documents are created in the same year, by the same institution, the Mei County Bureau of Paddy Tax, they display in different ways: one is following a traditional up-to-down, right-to-left writing order, using the classical Chinese characters for numbers; while the other is more or less the same as a Western format of tables, also prevailing after 1949, adopting Arabic numerals.

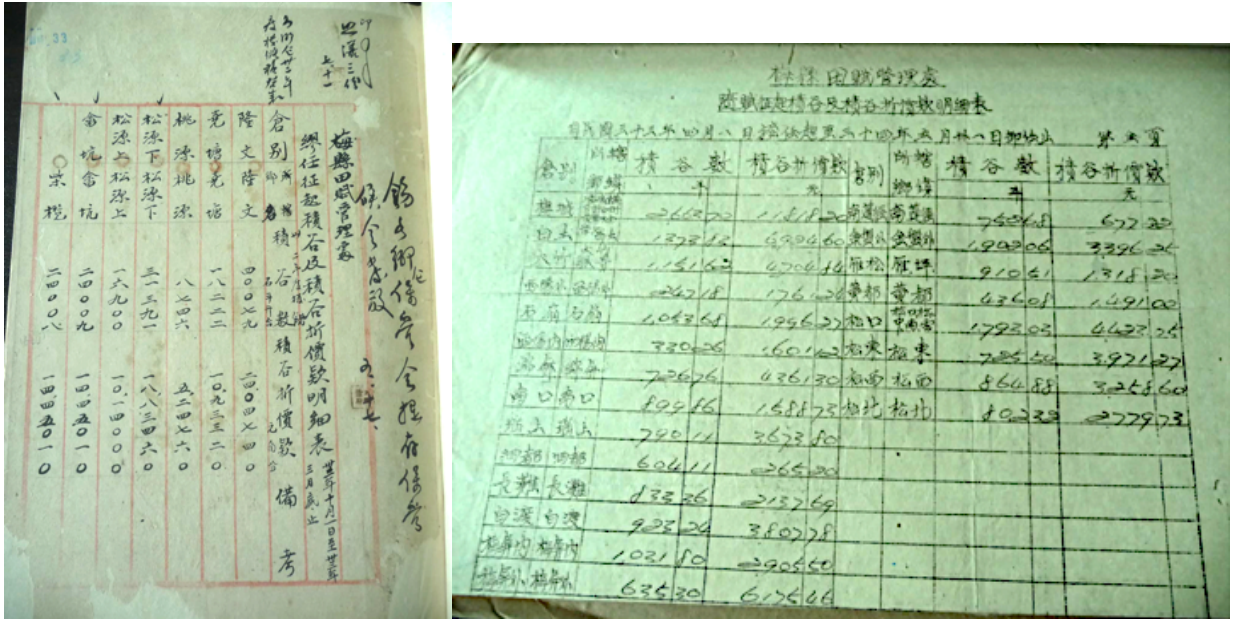


Figure 9 Forms on the grains as taxes in Mei County in the Republican Era

After 1949, the PRC government carried on the agricultural tax of grain for several decades. Rural landholdings had been dramatically reshuffled in the collectivization reform in the 1950s and the de-collectivization reform in the 1980s. Because of its vast geographical scope and the limits of technology, the taxation system still heavily relied on the self-reported information, channeled from production teams, to brigades, to communes, and all the way up. Excessive tax it was, in the time of poverty and scarcity. Manipulating land area and headcount became a prevailing weapon of the weak. Consider that undated document in Goose Downstream Village. It rekindled people’s memories about their strategic reporting as a resistance to the overwhelming taxes.

documents, both written in 1983, on the tasks of grain and oil in Three-Village Commune, now preserved in the county archive. Every year the staffers reckoned the collection and allocation of the tax grain, compared it with last year's plan, and made a new plan for the following year. These forms only tabulate the data of each village, which means that the numbers are the total sums drawn from the reports on each team and household. After the more detailed reports were recapitulated in an umbrella summary, they were no longer useful. Thousands of the raw materials were discarded. Villagers' labor of communication and calculation was reduced to undifferentiated numbers, converging towards a statistical result. Even though the first-hand, self-reported paper could survive, as the Goose Downstream one, they are unlikely to work as evidence anymore. Once alienated, it is hard to return.

Taxation is thus resembling to an incessant filtering system that digests the taxpayers' information and convert them to the numbers de jure, which will be imposed upon taxpayers. The alienated numbers may have unexpected impacts on their producers when policies are modified. After the central government abolished the agricultural tax in 2006, Guangdong Province began to issue subsidies to rural landholders. In Mei County, every household head opened an account in the Hakka Village-Town Bank for receiving monthly subsidies. Things just reversed. The land numbers now bring in corresponding compensations. People who were used to submit part of the harvest now earn an extra income by holding paddies under their names, even if they are not cultivating. What is unchanged, however, is the land area that they registered in 1998. No one had foreseen this change. Those who reported smaller numbers to avoid tax are taking fewer subsidies than what they should get based on the actual land area.

DATABASE

In the state taxation and statistic governance of the rural economy, most of the circulated documents are handwritten or printed—reports, policies, records, licenses, and letters. Numbers are copied by different hands and on various pieces of paper. Entering the millennium, digital products began to take up expanding space of the administration system. Once the information is typed into the computer, added to the database, the reproduction of data is more concealed and fluent. A land database is a perfect repository for the alienated numbers—anonymous, replicable, and ready to circulate.

Every time I walked into the Land Right Confirmation Office, I always first went up to the third floor, where the GIS company, Southern Digital Technology, was working. I could find about a dozen of staffers who sat at the cubic desks, in front of computers, surrounded by piles of maps and paper, clicking and typing. These contractual employees—most of them in their twenties, a few younger than twenty—are the final carriers of numbers into the comprehensive database. They are low paid, heavy loaded, and worried about the future plan. During the busiest period, from morning to night, seven days a week, these young people were doing on the repeated jobs as the day before, just inputting different figures, names, and locations. They have been relentlessly fixing errors, back-and-forth between the county office and the towns. As the conclusion of the census postponed from one year to two years, they are taking pressure from the above—both the company leaders and the officials. I could see on their face and in their words, how exhausted and desperate they are. Staff changes all the time; people come and go.

These recently graduated, some not yet, college or professional school students are at the bottom of a fast-growing labor market in an increasingly statistical society. They thought that the land census was a great opportunity for their career, but it turned out to be a long haul, far away from their hometown, hanging on the ceaseless journey to an unknown future. Once they finish a

project in one city, they move to another. They are temporary workers who engage in the production of the most crucial information in this country.

In the digital time, software acts as the most convenient device that helps alienate information from producers. The GIS surveyors use two pieces of software: one is the ArcGIS for mapping, owned by an American enterprise; the other is called the “Rural Land Operation Right Data System,” especially used for the nationwide census, which is developed based on the ArcGIS. Several companies designed the system and won a national technology prize in 2018. County- or municipal-level governments are on their own to hire private businesses for conducting the census. Southern Digital Technology has also generated their own auxiliary tools, selling them to smaller surveying companies. They send technical support to every client that has purchased a renewable license. “Our company makes money mainly on the software, not surveyors,” said Old Wang, a young surveyor who had been a technical support in the Mei County project. That is why the software branch is always the company’s focus, not the survey department. “But without us surveyors, who provide the data for the database?”

It takes substantial effort to learn how to use the software. Surveyors normally acquire the basic skills about the ArcGIS, one of the most popular mapping tools. But the “Rural Land Management Right Data System” is a new design, so the employees have to study it while they are working on the census. Those who are leaving the project have made video and textual tutorials for new comers who are replacing their positions. One day I went to the agricultural station of Waterwheel Town. I noticed that the surveyor Ah-Wu was reading a handwriting manual when he was inputting data into the system. “Old Wang taught me how to revise the database. I just took the notes.” It was especially complicated because they are using two sets of

maps with different coordinate systems. The surveyors need to collate both maps when they make any tiny changes, either replacing a number or adding a person-name.

The land data of the whole Mei County has been digitalized into the database, a repository for a nation-wide online platform, available to the public in near future. “The platform will be just like the ID system of the police,” said one staffer, “where you can check detailed information of every land parcel and peasant household.” This state project is generating a huge number of files. One surveyor showed me that for a single village, the textual and pictorial files amounted to the size of 200 megabits, while the map data took up to 15 gigabits. GIS mappers all carry a personal laptop with them to conduct the survey in the fields. They have to return frequently to the county office for exporting files and downloading new ones, for the census files are bulky, easily cramming their PCs. The exchange and transport of data is meticulously planned and executed on the third floor of the county office. Not just surveyors’ laptops, their major desktop computers are still limited to deposit all the data, which must be divided and stored in multiple locations.

Where is the database? A database is imagined as a centralized, virtual storehouse; whereas it is a total sum of various kinds of data, scattered in multiple locales. Software helps assemble and distribute the elements of the database. The online land transfer platform will be a device for retrieving specific pieces of data, as if the platform is the database itself. From the central to the local governments, the offices keep distinct or overlapping parts of the database. Numbers are made into countless copies, disseminated into separate servers and archives. This state project has generated an enormous volume of data, way beyond the capacity of individuals who produce the information—neither their account books nor laptops are able to deposit the

data. Individual producers' intellect objects are circulating to the unseen database, manifested as the websites of platform and governmental archives.

Chapter End

What is it like to own properties that may not wholly belong to the owner? This is the dilemma for rural landholders in China, who cultivate on paddies they inherit from parents, which, however, cannot escape the state entitlement and administration. They are keeping the land while giving the land information. They continue farming and planting on the rooted, immovable rice fields, whereas their intellectual objects, knowledge about their properties, have gone on circulating in the governmental routines, land markets, and the expanding national database of everything.

People feel they own these numbers. When they tell stories of how they measure and record the paddies, and when they use their memories to correct the GIS survey results, they are talking like the owners of these intellectual objects, just as they are the owners of the farmland. Alienation takes place in a hidden way. It is until the moments when people regret to have reported smaller land area for evading taxes because they receive less subsidy some years later, and when people attempt to register a land parcel that they once concealed from the official records, could they realize that they do not fully own these numbers.

Rural inhabitants handed over their intellectual objects to the authority by a great deal of communication labor. Self-reporting has long been utilized in the state management of populations and resources. This governmental technique evolved to an extreme in the second half of the twentieth century, among the zealous social revolutionaries and reforms. One of the saddest, the self-criticism (*ziwo piping*) that turns individual narrations into evidence of guilty, reveals how people become vulnerable, not protected, when they alienate their personal

experiences and memories to the political discourses.¹⁴ Similar is the alienation of land numbers. Granted with a red book—the land license, rural landholders may not know if, one day, these numbers de jure would be redefined to change or even dissolve their property relations to the land.

¹⁴ For studies on self-criticism in social revolutionary in China, see Chen 1986, Dittmer 1973, Selden 1971, Perry 2002.

Chapter 2 Mapping Chronotopes

Chapter Tour

Placenames as Nodes across Chronotopes

Cross-Chronotope Empathy

Agarian Chronotopes

Bureaucratic Chronotopes

Aerial Photo vs. GPS vs. Tape

Mapping Disappeared Land

This chapter examines the ways the land's particulars have weaved spatial-temporal networks and bridge multiple ideologies of geography, by analyzing the state's requisition of source data from the rural landholders through registration and cadastral surveys. The interconnected land particulars—the size, soil, ownerships, placenames—constitute what Bakhtin calls the “chronotope” (Bakhtin 1981; Silverstein 2005), a constellation of space-time indicators, which provides its inhabitants with cultural schemata and guidelines of behaviors in a historically formed setting. I focus on how land particulars are transformed and translated into other chronotopic systems beyond the one in which they were originally created. That is, these particulars have been adopted by a variety of groups or organizations for chronotopic configurations. People's acquired knowledge haunts back as memories when they (re)produce new knowledge. The previously generated land particulars continue to sculpt the ways of identifying, measuring, and calculating land years later, even when the land exists no more. That

histories anchor in the present is especially vital in the “Anthropocene,” a fast changing and damaged world where memories survive after damages. Land particulars in memories shape people’s understanding of the chronotopes that they occupy and the chronotopes that they are creating.

In the first part of the chapter, I analyze that the Hakka speaking population of the Southeast mountainous areas were frustrated and irritated by the fact that their historically transmitted placenames, as nodes in what I call an “agrarian chronotope,” were misspelled and substituted by government staff and GIS surveyors in China's most comprehensive land cadastral survey, the Land Right Authorization. This frustration suggests that placenames connect people to the spatial-temporal systems to which they refer, just as personal names can invoke a sense of self (Humphery 2006; Pina-Cabral 2010). I argue that rural residents’ complaint about the misquotation of placenames emerged from the failure of cross-chronotopic empathy. Rural placenames have long been requisitioned by the government and recorded in governmental documents and databases, where these placename clusters, along with other land particulars, formed what I call a “bureaucratic chronotope,” a system that uses geographic coordinates and linear time as references. Different from the references in the bureaucratic chronotope, rural residents rely on the established chronotopic ideologies with regional histories and personal experiences in their daily interactions to define geographical features and normalize their conduct in specific locations. Placenames became a source for delineating lineages, navigating neighborhoods, identifying property rights and imagining social relations. Rural inhabitants, nonetheless, were also capable to comprehend the state's standardized geographical coordinates and linear timetables, those space-time concepts and references belonging to the bureaucratic chronotope. Instead, it was the officials and technicians who failed to empathize with people who

occupied different chronotopes. As outsiders who came to carry out governmental tasks, they lacked regional knowledge and life experiences, and therefore were unable to comprehend the significance of placenames to landholders when they collected land particulars during the cadastral survey. This chapter brings in the concept of chronotope to analyze people's creative usage of placenames as spatio-temporal indexes during day-to-day social interactions, rather than merely taking placename clusters as fixed systems of cultural notions. The concept of chronotope helps see that these land particulars not only constitute a cultural network, but also travel across different ideologies of space-time. Drawing on anthropological and historical approaches, I explore the anxiety of identification brought about by this cross-chronotopic communication and rethink the dichotomy between language and materiality and that between bureaucracy and the folk.

Placenames as Nodes across Chronotopes

A place name stands not in isolation but is associated with other place names in a systematic pattern. I consider interlinked clusters of place names as nodes of cultural spacetime configurations, mapping out a social space, which may be understood as a chronotope, shared by multi-groups of inhabitants. Chronotope is a framework that the literary critic Bakhtin employs to analyze literature that is characteristic of its time and place. The chronotope that the author presupposes in a work guides the fate of its characters, the progression of its plots, and its historical lineage. A typical example is the medieval chivalric novel, which Bakhtin considers belonging to the "mysterious world of the age of legend" (Bakhtin 1981). People who acquire the same chronotope share the space-time concepts and reach a consensus on their words, actions and causality. But this concept should not be reduced to "culture" that may suggest a static

collection of principles. Chronotope instead portrays how landscape has historically established connections with people who show up in both disciplined and innovative ways, connections that are place-specific and materiality-oriented. In this sense, the notion of chronotope is perhaps analogous to what Bourdieu calls schemata, which refers to a set of rules that people comply with by practicing them in particular scenarios (Bourdieu 1977). But unlike the poststructuralist and narrow sense of schemata, chronotope is more scalable in terms of scope (Blomaert 2015), highlighting the association of space-time with personhood, a term relevant for examining how people's sense of time (historical concepts) and space (territorial knowledge) mold and are molded by people's actions.

Bakhtin analyzes typical places in literature where chronotopes unfold, including castles, roads (Bakhtin 1981). Literary scholars extend Bakhtin's attention to place, distinguishing between generic chronotope and place-based chronotope. Place as a figurative material object reveals the life trajectory and destiny of a character. A placename is somehow equivalent to the place it refers to, but also a discursive/textual object that is detachable from the place.

Linguistic anthropologists, in a slightly divergent way from literary critics, apply chronotope to everyday discourses to investigate the ideological distinctions presented by spatio-temporal indexes (Wirtz 2016). Bakhtin suggests that the chronotope is inseparable from "emotion" and "value" (1981). The entanglement of emotions becomes salient when multiple chronotopic ideologies—whether held by different groups or a person—have encountered and contrasted. Chronotopic ideologies are established judgments about the definitions of and practices within spacetime. Chronotopic ideologies bring forward the relation between spacetime and personhood in a dynamic form that salves are recombinant through the reflection and clashing of such ideologies (Agha). Placenames can evoke a sense of identification, especially

when the social meanings of these placenames are contrasted or contested. In Deanna Davidson's research on people who held what she called the "East German chronotope," she found that these speakers cited historical spaces in East Berlin to criticize the social practices in the so-called "West time" that represented a pan-German Chronotope (Davidson 2007). Those who intersect in the space-time, as they occupy different chronotopic ideologies, come up with conflicting interpretations of the meanings and values that their landscape carries. This identification with place names needs no second thought in one's everyday life, especially when there seems to be no dispute. But the identification may be challenged when the comparison of chronotopic ideologies becomes triggered. China's Land Right Authorization, the nationwide land cadastral survey, was such an encounter among rural residents, government cadres, and scientists. These groups held dissimilar emotions and values towards the place names, and thus their attitudes and handlings conflicted, which, the clash of chronotopic ideologies, manifests the politics between them and their hierarchical relationships.

Michael Silverstein focuses on discursive choronotope, i.e., taking the intertextually indexing words or chunks in discourses as objects with spatio-temporal properties (Silverstein 2005). The innovation of his "miniature chronotope" lies in separating this concept from the broad historical-cultural systems and instead examining speech acts as materialized objects. To some extent, a place name is also what Silverstein calls a miniature chronotope, with the ability to travel cross space-time and texts. When people refer to a place name in everyday discourse, they entextualize discursive events that occurred in the past.

Naming places is a typical technique that governments or dominant groups employ to assign legible identities for the purpose of management and exclusion, from street names (Augustins 2004; Shlegle and Pfoser 2021), city names (Pirie 2016), to straits and bays (Bigon

2016; Carter 2010 [1987]; Douglas 2019). A prominent subject in history, geography, and linguistics, place names have attracted scholars across time and space. Chinese historians have long connected geography with the humanities.¹⁵ In China the study of place names eventually became a branch of the field of history, focusing on the textual research of historical toponymy (Rao 2007 [1946]; Sun and Li 1997; Hua 2010). Among European and American scholars, toponomastics, a term that combines toponymy (the study of place names) and onomastics (the study of names), has become a blooming discipline devoted to understanding the nomenclature of locality (Hough and Izdebska 2016; Levkovych 2020). The related new field of linguistic landscape research has emerged that examines how linguistic signs work in navigating geographies (Burenhult and Levinson 2008; Puzey 2011; Shohamy and Gorter 2006).¹⁶ An influential example of these trends is found in Keith Basso's *Wisdom Sits in Places* (1996). Based on three decades of walking over large areas important to Western Apache people, Basso shows the conventional and contingent usage of place names as they emerge through conversations. Favouring the cultural meanings of place names and their implication in ethical judgments, his analysis leaves gap for understanding place names as social entities that actively play a role in navigation, dwelling, and livelihood, as well as their ability to channel to the administration systems.

Historians and linguists are interested as of late in tracing the origins and the classification of place names in rural China, especially in Guangdong Province (Situ 1992). In

¹⁵ *The Classics of Mountains and Seas* (山海经, written in the Warring States period (5th-3rd century BC), was one of the first books that recorded more than a thousand place names. Another book, *Commentary on the Water Classics* (水经注), written by Li Daoyuan in the Northern Wei Dynasty (4th-6th century), explores places in detail, especially waterways and their historical and literary significance.

¹⁶ Scholars across many disciplines have now turned to look beyond the textual interpretation of toponymy, turning away from the semantics and origin of place names to a more dynamic analysis of place names that takes practice into account (Rose-Redwood et al. 2017; Thornton 2011)

Hakka speaking areas in Guangdong, scholars have sought to describe the peculiarity of place names linking to Hakka histories and customs (Liao 2015; Lin 2004). However, reading these studies, it becomes clear that they center more on the linguistic patterns of naming and leaves explained how ethnographic analysis can inform the role of place names in social interactions.

Cross-Chronotope Empathy

Chronotopic ideologies are not stable but are in a state of formation, ready to be confronted, recreated, or supplemented. In everyday interactions, each chronotopic practice is an innovation, a new contextualization of established notions and relations, which may surprise or fail. Place names as miniature chronotopes provide schemata or scripts for inhabitants' daily behaviors, but they may not be intelligible to outsiders. Other groups of people who fail to follow the original designs of the chronotope would introduce modifications that potentially cause uncomfortable or resisting feelings for the original users and adopters of these chronotopic concepts.

This section takes the Land Right Authorization as an approach to discussing how place names possess such characteristics and abilities across space-time, and what kind of conflicts arise when the placenames are perceived differently, so as to reveal the divergent chronotopic ideologies of rural landholders, government staff, and technicians, and the corresponding political and cultural impacts. My materials cover Land Right Authorization and people's daily interactions. To understand the confusion, frustration and rage that the Authorization and land policies have brought to people, it is not enough to solely focus on the Authorization as a state action and a massive national project, but it requires extended fieldwork in rural areas.

During the Authorization, place names and other source data were requisitioned to enter into the national land database. In the following I show the frustration of people who reported

their land-related data up to the government but received incorrect translations and substitutions. Place names are representative mistakes partly because they became less useful now that new technologies, GIS in particular, had been employed in land surveys. For the architects of the land database, a plot's place name was simply a customary reference, while they attributed more weight to the geographical coordinates, especially in terms of whether the land was clearly demarcated in an aerial map, which was why there was a very high ratio of errors in the registered place names. Most complaints from rural landholders after they reviewed the first and second rounds of survey reports were about the area figures and place names. The conflicts of place names illustrated that rural and bureaucratic chronotopic ideologies were disparate with distinct reference systems. That rural landholders were so attached to their place names emerged from their agricultural life and production, something that practitioners of the bureaucratic chronotope, including government officials and technicians, rarely grasped. Rural landholders expected bureaucrats and technicians to properly handle all the raw data they reported. During the collectivization era and the de-collectivization movement, rural landholders served as the primary implementers of land measurement and land data reports, which became an essential source and instrument of state statistical governance. In the Authorization, rural landholders continued to be the primary creators and reporters of this data, and as such they were frustrated, even infuriated, that these data were not being correctly documented. As landholders they viewed themselves as entitled to land licenses printed with the correct information.

What I analyze in the following is such a moment of frustration that people expressed about the lack of cross-chronotope empathy of bureaucrats and technicians. This frustration, then, was more than a grievance against technological opacity from a marginalized, subordinate

position; but also, their indignation as landholders, and as owners, at the failure of the state to respond to their demands and to respect their indigenous knowledge.

Following a preliminary verification of the archives generated from the de-collectivization reform, Meixian's Land Right Authorization Office and the Southern Digital Technology Company sent GIS surveyors to each village to "demarcate on site" (M. *xianchang zhijie*). This was the most spectacular and performative actions in the Authorization. On-site demarcation meant that the surveyors, with the assistance of town and village cadres, along with the landholder to walk to their fields, confirming the details of each land plot: the contractors (landholders), the area, and the place names. On-site demarcation was an act of collective verification of land holdings. In the presence of witnesses—village cadres, team leaders and neighbors—the landholders publicly declared where their land was, how large it was, and where it was located. According to the policy of the Authorization, land particulars for registration must be determined by the collective (M. *jiti*), in most cases, the production teams. As long as the majority of the team members agreed on the land possession, the Authorization office would allow registration.

On-site demarcation may be understood as what Michael Silverstein calls a “recruitment,” when users who already have knowledge about a chronotope introduce proper names or past events to new users. (Silverstein *ibid*). GIS surveyors were outsiders and lacked familiarity with the local chronotopic contexts, thus they relied on villagers to impart this knowledge to them. But recruitments may not necessarily always work but are potentially fraught with resistance. Over the subsequent communications, rural landholders realized that they failed to recruit surveyors to recognize the place names during the initial on-site demarcation. People found that a significant number of place names in the preliminary survey

report were mistaken, and these errors irritated them. In this cross-chronotopic communication, surveyors were unable to empathize with the landholders and grasp their emotions about the histories carried by the place names. For the surveyors, landholders' names and land area mattered more than place names in the land database that they were supposed to fill in.

One October morning in 2017, I followed the cadres and surveyor A-Yang from Meixian Nankou Township to the village committee, where two production teams of farmers had already gathered, with a representative from each household, to confirm the farmland. After hearing a brief explanation of the process, people set off for the fields, with some thirty to forty people forming a long line and following the village cadres. When they arrived at the first production team's fields, the team leader led the group up to a trail between the fields. A-Yang took out a printed aerial map at 1:1200 scale, where the boundaries of the fields and the houses were visible. He located where they were, and pointed to a land plot to his right and asked in Mandarin, "Whose is this?" A middle-aged man came forward and said, "Mine." "What's your name?" The man gave his name. The cadre of the township agricultural station found his name on the production team's list, which also included the household head's ID number and household code. The cadre quoted the code "A1", and A-Yang wrote down the code in the land plot on the map. "How big is this field?" A-Yang continued to ask. "3 *fen* and 2 (about 0.05 acre)," answered the landholder. A-Yang jotted down the number on the map. He walked forward along the path, pointing to the next paddy and repeating the previous questions. Having recorded a dozen or so paddies, A-Yang gestured to these nearby fields and asked, "What is the place name of this area?" The production team leader told him that the area had several place names. A-Yang instructed him to tell him a "big place name" that would represent the area and

there was no need to report a “small place name.” “Then just write Maple Tree Pond,” replied the production team leader. A-Yang wrote down the name on the map.

This was a moment of on-site demarcation, hectic and spectacular, surrounded by the villagers’ bustling discussions among themselves. On-site demarcation is the toughest task in the Authorization, but it was often much quicker than the village cadres and villagers thought. It was this rapid tempo that foreshadowed many problems that would arise afterwards. After the on-site demarcation, people were required to contribute revisions to at least two rounds of survey reports in the following one to two years. During on-site demarcation, people’s communicative labor centered on the ownership and land size, while their inquiries about place names were usually hasty. For people who have resided in the villages for a prolonged time, the place names were not disputable, and that explained why people appeared unacceptable on finding out that the place names were mistaken in the reports.

“Then just write Maple Tree Pond.” The production team leader told A-Yang the name of the large area, recruiting him to recognize the proper noun. Perhaps because the place name was easy to understand, the surveyor wrote three characters on the map without further questions. This may seem like an unchallenged recruitment, as the place name raised no doubts for the surveyor, but it left a potential pitfall. After learning that the fields contained more than one place name, A-Yang suggested that the team leader offer a “big place name.” Although “big place name” and “small place name” were not terms that villagers would use on a daily basis, people did not show confusion about these classifications. Rural place name systems have a cascading structure, for example, a residential place name could encompass multiple field names, which I will expand on in the next section.

It was the production team leader who answered Xiao Yang's query about the place name, and he provided a name that he thought would sum up the field, but the name may not be approved by the other landholders. The on-site demarcation was noisy and chaotic most of the time, as villagers talked loudly and switched between Mandarin and Hakka. More often, surveyors would prefer to consult village cadres or team leaders, as these people typically spoke better Mandarin and were eager to accomplish their tasks quickly.

Surveyors and landowners navigated and datatized the landscape with reference to different chronotopes, even though they were facing the same fields. A-Yang employed the bird's eyes view from the aerial map and identified the location based on the surrounding landmarks, such as buildings and roads. When he returned to the office, he imported an electronic version of the map on his ArcGIS software and traced the boundaries of the plots with yellow lines. The software automatically calculated the land size and generated their geographic coordinates. With geographical coordinates, the “land parcel name” was not important anymore. He entered the same “big name,” Maple Tree Pond, for all the dozen paddies in the area. For landholders who reported land particulars, they located a land parcel mostly through personal experiences, memories, and knowledge of the placenames. People living in the neighborhood simply used what Yang called the “small place name” to identify a paddy. The name Maple Tree Pondw, as which eventually registered in the national land database, was the name of a residential cluster, and villagers were unable to locate a specific paddy by this name alone.

Sometime later, the topic of place names was brought up in Xiaodu Village where I lived. Similar to other production teams, the Li lineage of Pond-head dealt with the Land Right Authorization over the span of two years, from the fall of 2016 to the summer of 2018. They experienced all the various procedures: the on-site survey, first round revision, second round

revision, and final contract signing. They found mistakes in land numbers and successfully requested revisions. Members of the Li were fretted especially about incorrect place names, which were more difficult to correct than land numbers. In the GIS mapping software, there is a category that must be filled in called "land parcel name" (*dikuai mingcheng*), which is designated for local place names, but cadres and surveyors paid more attention to other categories, such as landholder and land area.

One afternoon in late autumn, I walked into Grandma Yang's house to find her son, Uncle Li Jiang, and a neighbour reading the second-round Land Right Authorization reports. Li Jiang was Uncle Rich's cousin, and he was the Pond-head Team Leader during the 1970s. Among the lineage members who lived in the village, he was the one who took charge of the land survey. The current Pond-head Production Team leader, Brother Li Gan, usually restricted his involvement to delivering the documents to Li Jiang and asking him to help with the revision. During my visit, Li Jiang opened the folded map, which so large that he had to lay it on the floor, discovering it with his neighbour, Uncle Zhong. The map was an aerial photo, with a dimension of 1: 1200, depicting all of the farmland held by the Pond-head Team members, stretching from the house cluster along Road S224, where I stayed, to the far inner mountains area, called Xuanhua Valley, where the Pond-head Team used to cultivate a couple of decades ago. Li Jiang started to explain the map to his neighbour, Zhong, who was a member of another production team. On the map, each land parcel belonging to Pond-head Team was demarcated by yellow lines, within which could be found the landholder's name, land area, and parcel code. Li Jiang took out the survey report and glimpsed at the pages. He became grumpy seeing some errors: "Most of the place names are wrong. Paddy names (*tian ming*) are wrong." Paddy names are a particular type of place name, used for locating and identifying farmland parcels. He continued:

“The survey company made mistakes. At that time, I was there reporting.” As the previous team leader, Li Jiang knew every inch of farmland in the Pond-head Production Team—paddy names, land area, owners, and even recent histories of exchange.

Uncle Jiang started to explain the map to his neighbor, who was a member of another production team. On the map, each land parcel that belongs to Pond-head Team was demarcated by yellow lines, within each of which, it printed the landholder's name, land area, and parcel code. Soon, their scrutiny turned into a critique of the survey:

Jiang: Here, the [land] area in Xiaodu Village. Here it is farmland, so many paddies. Just like here, [the surveyor] didn't write [information for] this strip of paddy. There are so many people [who have paddies there], [and the surveyor] didn't write it.

Zhong: So many characters, not enough [space on the map].

Jiang: [Space is] enough to write them. If [they] write different [information], then it is useless. Right? [If they] write the Wanli [Team's paddies] under the name of Pond-head, then what is its use? It's inconvenient to find [paddies]. Right? [Translation from #MXYYF1023_2138]

At first, Uncle Jiang was confused why some land parcels did not show names and codes—those were paddies of other production teams, but he quickly diverted from the puzzle to a concern about misinformation. Along Xiaodu Stream is the main aggregation of wet-rice land in the village, where parcels belong to different production teams. Villagers worried that surveyors might mess up different teams' properties, a mistake that inhabitants would not make.

Reading the map itself is an examination not only of surveyors' work, but also of their own memories about the village. They drifted away their focus from the wet-rice paddies to other things on the map. Uncle Jiang squatted down, pointed on the map, and moved his finger as he

spoke out the place names and houses: "Here, Upstream Lip. Here, Coiled-Dragon Slope. Here, Upper-Lake. Here, Zhang Miao's house. Here, Pond-head. Li Qiang's house, Zhang Lu's house, Li Gan's house..." His hand slid over the map along a village pathway that people often take.

At someone's house, Uncle Jiang was stuck, repeating "Zhang, Zhang, Zhang..."

"Zhang Xin's house," said Uncle Zhong.

"Zhang Xin's house. No, Zhang Quan's house."

"Here, Zhang Xin's house. Here, Zhang Quan's house." [Zhong points to the map]

(#MXYYF1023_2138)

In this way, they cooperated in deciphering the map of the village, a place they already had in mind, although seeing from top is different from how they perceive this landscape in everyday life. When Uncle Jiang tried to recall the house owner's name, he probably was visioning the house and person as if he walked down that village path as usual. The neighbor's quick adding on shows that he was reading together, moving his eyes with Uncle Jiang's finger on the map. By reiterating each other's words, they exchanged their conjectures and confirmed their knowledge about this community.



Figure Uncle Jiang and Uncle Zhong are reading census documents

As he further unpacked the mistakes, he indicated that surveyors failed to keep get the names right not only because of a lack of local knowledge, but possibly also because of a language barrier:

Jiang: Instead of “Upstream Lip (*shang xi chun*),” they wrote “Up-Down Lip (*shang xia chun*).” Right? The character “stream” should be written like this. (Writes the character on paper using a finger.)

Zhong: It has “three-water-dots.” They forgot it.

Jiang: No. They just, just, just...

Me: Oh, they don’t speak Hakka.

Jiang: “Downstream Lip,” they wrote “Down-down Lip.” Do you know? Or they wrote “Up-Down Lip.”

Zhong: I said that it was three-water-dots. They forgot how it should be written.

Jiang: Really, really annoying! This one.... It should be Big Seedling Plot. He wrote Down-Down Lip. Ay! (English translation from fieldwork recording.)

Upstream Lip and Downstream Lip both refer to the riverbank along Xiaodu Stream. They are fairly intuitive place names to villagers—perhaps that partially explains why they were irritated by the error. They focused on one character, "stream (*xi* 溪),“ that surveyors mistook with another, "down (*xia* 下)” The two words seemed to have no connection, either morphologically or semantically. Li Jiang and Zhong tend to attribute the mistake to the surveyors’ lack of expertise or carelessness. The character "stream" has "three water dots" on its left side and figuratively stands for anything related to water. Li Jiang's metaphorically writing with his finger and Zhong's repetition of “three-water-dots” imply their suspicion regarding the surveyor's competence at writing the character, one that is normally mastered at the beginner level.

During the land census, I observed how villagers formed kind of love-hate bonding with GIS surveyors. They praised and appreciated these young men who came all the way down to villages and trudged in lush valleys to check land parcels, under blazing sun or cold rain. Villagers teased them, asking them if they were looking for a girlfriend; they invited them to house for a light lunch, serving hot tea or honey water; they protected them in the field, reminding them to avoid thorns, snakes, and muddy puddles. But this care from the elder to the junior was inevitably intertwined with the "local" residents' doubt and distrust of outsiders, who were at the age of their sons or grandsons, hired by government to investigate their properties. These student-like employees looked immature and incompetent, particularly due to their urban

background and language barrier, to experienced landholders who had cultivated on this landscape for a whole life. These GIS surveyors were in many ways resembling ethnographers.

If misspelling one word is a minor fault, then mistaking the whole place name for another was a major one. Li Jiang sighed when he found that surveyors typed “Down-Down Lip,” instead of Big Seedling Plot. In villagers' everyday conversations and land exchanges, paddy names are used to identify specific. For surveyors, however, local place names are subsidiary information, because each land parcel marked on the satellite map has geographic coordinates, an absolutely correct and more reliable frame of reference. What the surveyors and town cadres often called the “big place name” were non-specific placenames covering many parcels. Some other times, they ended up simplifying the survey by using one paddy name to refer not only to that one paddy but all the parcels around it. The rise of the new GIS technologies has led to the decline of paddy names as a recognized reference in the official land system.

Agrarian Chronotopes

Rural residents had unique ways of marking and mapping their space-time frames. These markers of people's trajectories of life were shared memories, mostly without systematic written or pictorial records. The clusters of rural placenames constituted such markers, linking a spatio-temporal network which I would call the “agrarian chronotope.” In conventional chronotopic frameworks, people complied with and fashioned their behavioral norms and social expectations. Given the established chronotopic ideologies, people formulated their own ways of mapping the dwelling places, arable land, forests, roads, water resources, and so on, according to their experiences of agricultural production and life trajectories. Rural place names, as nodes of agrarian chronotopic networks, enabled people to locate themselves and others even without

standardized address codes. While I refer to it as an agrarian chronotope, this is not to say that there is a homogeneous, fixed, space-time ideology that is shared by all rural residents. Such an agrarian chronotope becomes salient only when people who occupy it encounter other chronotopes that are imposed onto it or clash with it. That is, the boundaries of agrarian chronotopes emerge in contrast with ideologies that distinguish the urban/rural, governmental/folk, Hakka/non-Hakka.

During my stay in Xiaodu Village, I became familiar with this residential cluster and its surroundings. I learned about the neighbours, houses, pathways, orchards, and of vital importance, place names. Over the years, the inhabitants have explored everywhere in this landscape, naming geographic features of significance to their dwelling and labouring: a wet-rice paddy, a flat mound, an ancestor hall, a mountain ridge, a vegetable garden, or two strangely shaped stones. Some of these named places had visible boundaries: paddy bunds, footpaths, or water ditches; some other places, such as a group of houses or a memorial site, had invisible borders.

Each time I stepped out of the door of Uncle Rich's house, very often I could see Grandma Yang, an amiable and curious neighbour in her 90s, sitting on the cement dwarf wall of her yard, bathing in the sun. Our conversation always started with her asking me:

"Where are you going?"

"Lake-head Mound (*fu tou dun*)."

"Oh, Lake-head Mound, you even know that!"

She would laugh and repeat the compliment to anyone who happens to be around. "You are going to Sister Qun's house, right?" "Yes!" Lake-head Mound is a small, flat area on a slope next to the road leading to valleys, where my best friend Sister Qun lives.

“Where are you going?”—this is one of the most common greeting expressions in the village, along with “Have you eaten?” Place names are a versatile answer to questions about whereabouts, for they serve multiple purposes, such as implying knowledge of people who reside in a particular location or what people could do there. Answering a question with simply a place name presumes interlocutors' shared knowledge of historical and up-to-date village affairs. One time when Grandma Yang and neighbours asked me where to go, I answered “Big Swamp (*da hu yang*).” “Oh, you are going to take a look at the funeral.” We all knew that a few days ago a senior man had died; he was a member of the Zhang lineage, whose ancestral hall is located in Big Swamp. Then, another man, Uncle Song, passed by us, and he also answered with “Big Swamp.” People all laughed watching him drive his motorcycle away: “Of course, he is going there gambling!” People knew that he was fond of gambling and at funerals, gambling, which is normally illegal, is temporarily allowed by police.

Rural place names do not hold fixed referents but work as deixis that need to be interpreted contextually. They imply multiple possibilities that vary depending on situations and interlocutors' shared knowledge. They can function as deixis only among people who reside close by one another. Yang House, for instance, is the place name for a cluster of members of the Yang Lineage in the adjacent Middle Village, about a twenty-minute walk from Uncle Rich's home. Often when villagers say “[I'm] up to Yang House,” it means that they are going there to buy something, because one Yang member runs a small shop. A few years after my first visit to the village, Yang House suddenly acquired new meanings. The owner of the little shop, Sister Feng, set up a public space for people to dance. Every night, she would turn on her tablet, place it on a chair, light up the door front, and follow dance steps in on-line videos. It was called “plaza dance,” a popular exercise throughout China, especially in cities. Some women joined her,

Figure 11 A map of place names in their neighbourhood, drawn by Uncle Li Jiang and Uncle Rich.

Xiaodu Stream runs across the middle of the map, dividing the village into halves. Along the stream, wet-rice fields line the riverbanks, stretching to the mountain foot. At the top and bottom of the map, there are two rows of hills in the shape of parabola. The map is not a picture of a vast area. From the left side to the right is about a ten-minute walk along the Provincial Road, which runs parallel to the stream. The map's scope covers the residential clusters of three lineages, usually called by their place names: the Li in Pond-head, the Zhang in Big Swamp, and the Chen in Mound-head.

To understand how place names work in this rural area, I categorize the place names into three types: residential clusters, production locations, and memorial sites. A place name for a residential cluster refers to a group of houses usually belonging to one lineage. In Xiaodu Village, Pond-Head Downside refers to where the Li lineage dwells, Big Lake to where the Zhang lineage dwells, and Yellow-Mud Hollow to where the Liao lineage dwells. Lineages in Xiaodu Village all built ancestral halls, normally located in its residential cluster. The Li lineage's ancestral hall sits in Pond-Head (Downside) and was built in the early eighteenth century by a twelfth-generation ancestor. A residential place name is thus typically interchangeable with a lineage name in daily discourse: “We Pond-Head Downside bear a closer relationship with the Li lineage in Plum Peak than with Big-Horizon Hollow,” or “Once two Chen lineages, Mound-Head and Bamboo-Mound, had a serious dispute over water usage.” When villagers ask me where I am going, I usually need to answer only with a residential cluster name to indicate whom I am going to visit. A residential cluster name also covers an area around the houses, including the adjacent paddy-field, hills, and roads, which is why in residents' eyes, their geographic arrangement is more a lineage-distinguished map than a village-differentiated

one. During the People's Commune Movement in the late 1950s, the village was divided into seven production brigades along the seven lineages rather than equally split by the number of households. Although production brigades were coded in numerical order, villagers usually used place names instead. The Li lineage was once officially called the Sixth Production Team, but people preferred to call it "Pond-Head (Downside) Team." After 1984, these production teams were made "villager teams," and each team was named after its original place name. Place names serve as a symbol of their lineage identification. Within the community, they are simply called by their residential cluster names.

Another type of place name pertains to production locations, including portions of forest, wet-rice paddies, and vegetable gardens. A place name of this kind refers to a much more specific location. Deep in the mountains, local people demarcate valleys and hills in portions, each of which has a place name, such as Cow-Lost Top and Water Well Recess. From the eighteenth to the early twentieth century, villagers planted pine and fir trees all over the hills as a supplementary source of income. Reading the Li lineage contracts, I found that people referred to the boundaries of their forests using features of the landscape such as a water ditch, footpath, or hill ridge. The borders of hill portions often were a source of disputes among villagers in part because these natural or manmade boundaries were more difficult to maintain than those of paddy fields. People bestowed names on wet-rice paddies or vegetable gardens. Rice fields are segmented in slices, each with a name, and within one slice there may be several more pieces on the same stage of a terrace. A land parcel is enclosed by interlacing earth ridges called "paddy lips." These connected footpaths lead people traversing the fields to their own plot of land. Place names bring order to this seemingly complicated and irregular workplace; their vivid signifiers help to clarify properties.

I call the third type of place name memorial sites, although they are in many aspects different from the Western Apache ones that Keith Basso describes. These places might not have fable-like stories attached to them that signal ideas or moral codes. A memorial site name may indicate a former architecture. Old Temple Front refers to a place where there was once a temple; Earth-God Hollow, a place where there was once a shrine. Sometimes, a non-sacred place can have its lost religious meanings restored. On the bank of a small creek stands a big tree and an Earth God shrine hides among the tree's branches. The shrine was newly built, with sticks of incense and the remains of fireworks in front of it, indicating that villagers had recently come to worship. The organizer Zhang Xin, whom the others mocked as an enthusiastic about “gods and ghosts,” proudly explained his achievement to me: “This place was called Earth God Front (*bogong qian* 伯公前) but had no Earth God shrine—maybe there was one long ago, so I collected money from villagers and built one. Now it is indeed the Earth God Front.” This is a case of villagers, inspired by a place name, remaking a place after the original meanings have been lost.

Earth God Front was remade, not merely because its appearance had changed—the creek bank was flattened, a shrine built, and a memorial stele erected—but also because its place name was redefined, a sacred location restored, and a connection between villagers and this place re-established. This is a moment of place-making, as when a lineage selected a new residential location which later flourished to become a cluster of houses; when a piece of wasteland was cultivated as farmland and named Big Plot; when a new bridge replaced an old one, generating a place called Old Bridge Front. In these moments the participants, an individual or a group of people, make places in both physical and symbolic ways, leaving their trails of place-making through nomenclature. Hence, there are place names for group identification, for land properties,

and for any other location in need of clarification or remembrance. In his *The Practice of Everyday Life* (2002 [1980]), Michel de Certeau contemplates beyond the pre-determined cultural schemata in place, and focuses on people's practices of inventing contexts, transcending limits, and transforming spatial symbols into something else. Although designed places designate "authorized" spatial appropriations, he suggests that, given a designed already-ness, people may be neither foreign to spatial organization nor conform to them. Naming a place, or speaking of a place name, contributes to the making of place (Tuan 2008). A place is made and constantly remade in a historical process, and each moment of place-making involves the creative actions of participating individuals.

Mapping is a chronotopic practice of categorizing and anchoring inhabitants and objects in a particular space-time. The map drawn by the two Li members was not simply a description of territory, but also a reference to the daily trajectories, geographical knowledge, and shared memories. The two mappers who grew up in this Hakka region marked in more detail the place names in the vicinity of their lineage congregation and the sites they frequented, while omitting numerous field names of other lineages. Their choice of details—density and sparsity—in this map also showed that people's chronotopic understanding may be fragmented and not completely overlapping, despite their joint presence in a broader space. This map stands out from other types of maps I have seen in the government archives, including administrative maps, topographic maps, and farmland and irrigation maps.

Bureaucratic Chronotopes

These historically generated clusters of rural place names constitute a chronotopic framework of agricultural life, and they also channelled up into official archives and legal

documents, forming a governmental grid on agrarian space that I call the “bureaucratic chronotope.” The official chronotopic construction is not necessarily coherent and exhaustive, but rather exists in a variety of versions and formats, some in the form of fragmented archives and some in the form of cadastral surveys. The administrative terminology indicates an official/civil dichotomy, for it referred to rural placenames by “native/earth/folk names” (*M. tuming*). The division between agrarian and bureaucratic chronotopes becomes manifest in the language ideological distinctions and technical discrepancies, as evidenced by the ensuing doubts, conflicts, and faults. This is not to say that the two conceptualizations of space-time are radically separate and incommensurable. Just as the fact that place names serve as nodes of multiple chronotopes demonstrates that, although the chronotopic ideologies and schemata may differ, they nevertheless share established cultural concepts, including spatial and temporal markers. This sharing could meanwhile be citations, translations, substitutions or creations. For the practitioners of bureaucratic chronotopes, this sharing of data is directional, a requisition of civil knowledge, which, after being transformed into the official data, is given legal validity and political legitimacy.

I observed the circulation of rural placenames out of my curiosity about historical land deeds in this Hakka speaking area. I noticed a parallel between the official registration of land transactions during the imperial period and the state’s collection of land data in the modern era, that is, both involved the governmental requisitioning of local social and geographical source data, including placenames referred to as “native names.” In Meixian, a number of lineages have preserved their ancestors’ land deeds dating from the Qing Dynasty. Li Guotai, brother of my host Uncle Rich and a scholar of Hakka Culture, was in charge of keeping some 350 land deeds that pertained to their Pond-head Li lineage, spanning from 1749 to the 1940s , from the late

imperial period to the modern era. These familial documents recorded the sale and lease of farmland and forests for more than ten generations. Residents of the area had long made their living from wet rice, spruce and pine trees, supplemented with foreign cash from oversea lineage members. In the academic field of China's history, contract studies (地契研究) comprise a specialized field (Zelin et al. 2004, Hansen 1995, Hayes 2013, Cohen 2005, Yang 1988). Very few researchers, however, have paid attention to place names in the written contracts.

Li Guotai examined these land deeds and combined genealogy and oral memories to recount his lineage's migration and settlement Xiaodu Village. He expressed interest when I asked him about the place names in the deeds, saying that most of them were still used in the present day. Just like his brother and cousin, who drew the map of place names in Xiaodu, he also remembered the locations of these places, thirty years after he left the village to work in the city. He later went on to study the place names and told me that he thought that the place name in his hometown indicated that, before their Han ancestors moved into the area, the "indigenous people" who lived there were the She people (M. *she zu*). His exploration precisely shows that people could see the history of identification and social relations in the continuity of place names; in other words, there are temporal indices beyond their spatial indices. Residents in the village had also associated the place names that spread across the hills and fields with their migration and reclamation history. According to the genealogies and family stories, Xiaodu villagers told that their ancestors migrated to this Hakka region about twenty to thirty generations ago, in the late Ming and early Qing dynasties (15th to 17th century). (See Luo Xianglin for a study of Hakka migration). They considered themselves to be proper Han Chinese and were called Hakka (literally, "guest people") during their migration. The land deeds preserved by these lineages revealed that villagers frequently traded land and leased forests among

themselves. In the Late Imperial times, this Hakka-speaking region featured several migration routes to Southeast and South Asia by sea. Genealogies, oversea messages, and family memories suggest that almost every lineage had members who went to Hakka diasporas. Most of the overseas members attempted to maintain ties with their families back home by writing letters, bringing goods, and sending remittances. These remittances from overseas supported the property purchase back home.

In the official documents, these place names were called “earth-names” (*tu ming*). The word *tu* has multiple meanings—soil, earth, folk, and native. “Earth name” suggests an awareness of two types of naming systems, for the word *tu* stands in opposition to the official or formal. Official place names serve as an umbrella term that includes specific rural earth names. When people drafted a land contract in the imperial period, they needed to spell out the earth names where the parcel was located. Sometimes buyers went to the government to register a sale contract: they filled in an official printed form and obtained a stamp on it, which made the contract a “red contract” (*hong qi*). On such an official form, there are places for both the administrative place names (prefecture, county, village) and earth-names for locating land parcels. Earth names are local conventions, compatible with the official administrative framework that recognizes, utilizes, and incorporates them. This was the common practice in the imperial time and the Republic era, but interestingly, today’s government also uses earth names in their routine management and land cadastral survey.

In the Pond-head Li lineage’s family archive of contracts, most of the documents were “white contracts” (*bai qi*), that is, contracts that were not registered with the government, because the transactions were among people in the same village or in nearby villages, a small enough scope to ensure the credibility of these sales. Only a few are “red contracts,” such as the

following one. There are two parts of this contract: a sale agreement, written in 1749, and an official registration form, registered in 1750. Here is an excerpt from the sale agreement:

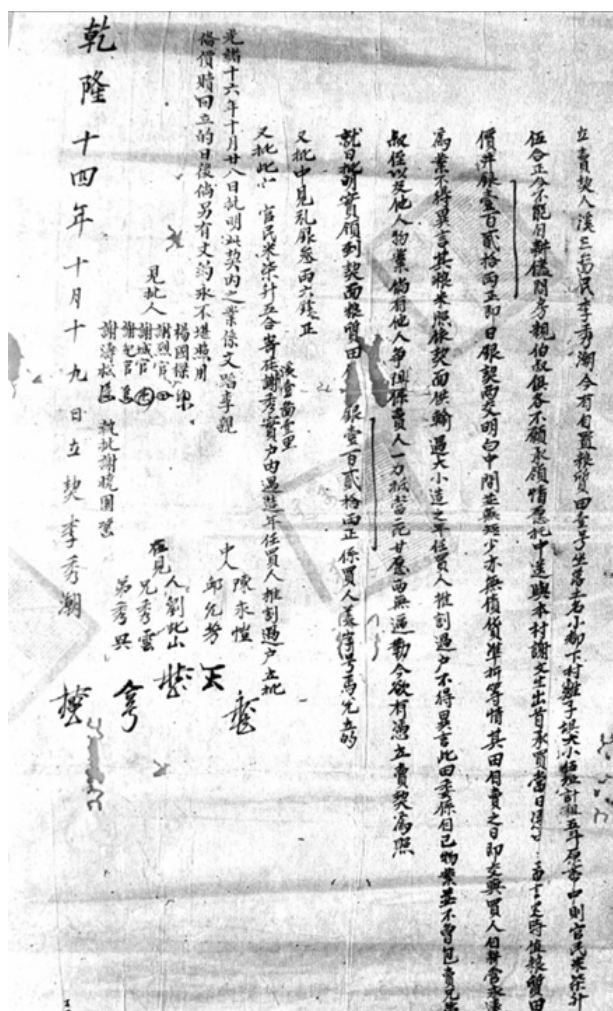


Figure 12 A selling land contract made by a Li lineage member in 1749.

[1], Li Xiuchao in the Stream the Third Tu (*xi san tu*), have the “upper right” of one group of paddies that I bought before. It is located in the **earth name Chicken Dam** (*ji zi ba* 鸡子坝) in Downstream Xiaodu Village, a total of five small parcels. Its rent is five *dou* [of rice], and it contains official grain tax (*guan min mi*) of seven *sheng* and five *he* [of rice]. The contract was written on the tenth day of the tenth month of Emperor Qianlong in the fourteenth year (1749). Three red stamps cover important words and lines, indicating that it was registered with the local government. In the main body of the contract, the seller describes the

position, size, tax information, and price of the property. For location, the seller used the earth name Chicken Dam, which still existed in the village when I conducted fieldwork, about five-minute walk from Uncle Rich's house. People still cultivated wet rice in the paddies there. As immovable properties, the location of land parcels seems to be self-explanatory yet confounding—self-explanatory, for a parcel will not change its place as it always sits there; confounding, for land parcels do not always bear permanent and clear borders: most boundaries are of human construction, which are subject to time's erosion. Any land property identification requires some level of local knowledge that is exclusively acquired by inhabitants in and around its locale.

In the official registration form attached to this contract, a section called the “contract tail” (*qi wei*), the buyer detailed the location of his purchased land. In the middle of the form, it reads:

Property owner Xie Wensheng [an ar part, should be household register] bought paddies from Li Xiuchao in South Stream the third Tu. [Paddies] locate in the earth name Chicken Dam. (Words in the italic and underlined form were handwritten.)

This is a printed formulaic document, a typical contract tail in the imperial time. The buyer filled in the blanks with names, household register, property types, and earth names. Note that earth names were required particulars in the governmental property register. At a time when there was no coordinate locating or aerial mapping, earth names sufficed to identify land parcels in both the folk and official documents. This contract, consisted of an original deed and a “contract tail,” served as the interface between the legal system and the folk credit system. A written land deed was often a record created by buyers and sellers at the time of the banquet with the middleman, witnesses and a scribe. Before it turned into a “red contract,” its effectiveness rested on the trust and recognition among these acquaintances. Once this contract was registered with the government, the details of the land parcel were channelled up from a narrow circle of

users to a more authoritative, abstract government system. The printed templates in this contract tail represented a typical bureaucratic document. The blanks on the contract tail were designed to requisition land particulars that the government rarely knew. By filling in their household registration and the placename, the seed capacity, etc., the new land owners uploaded these details of the property, which the government lacked active access to or did not yet know, into the bureaucratic chronotopic database, in order to obtain legal recognition. Although the term “earth names” implied that these names were not official and authorized, this very act of registration was a recruitment, bringing the government into the user group of the earth names. A registration of a land contract was the buyers’ initiative to communicate with the government. This proactive behaviour was certainly also motivated by the government’s incentive to provide legal security and the potential risk for breach of trust. Land surveys and the issuance of land certificates were more obvious state actions of collecting and absorbing source data on properties and population.

The year of 1912 characterized with the fall of the imperial Qing Dynasty and the beginning of the Republican Era (1912-1949), the regime led by the Nationalist Party. Most paddy and forest contracts of the Li Lineage after 1912 inherited the same style and format of those in the imperial period. Although the Republican government launched several rounds of land cadastral surveys, bathed in both the World Wars and civil wars, these surveys never fully completed, leaving partial land records (Jiang 2013). Shortly after the Liberation in 1949 (the founding of the People’s Republic of China), the newly established Communist government-initiated land surveys across the country. In Mei County Archive, I found the land cadastral records of Xiaodu Village, composed in 1955. That was just after the Socialist Land Reform, a

nation-wide movement to redistribute land to peasants. The land documents list every household in the village, showing the details of parcels as followed:

戶主姓名	成份	農業人口	照顧人口	合計	種類	水田	旱田	旱地	魚塘	菜園	閒地	其他	共
李 忠						面積 377 畝	577 畝	276 畝					
						產量 1105 市斤	市斤	7 市斤	市斤	市斤	市斤	市斤	市斤
地號	1、	2、	3、	4、	5、	6、	7、	8、	9、	10	11	12	1
土地種類	水田	水田	水田	水田	旱田	水田	旱田	旱田	水田	旱地	旱地	旱地	旱地
座落土名	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村	沙灘村
面積	0.349	0.923	0.677	0.233	0.470	0.552	0.078	0.256	0.439	0.030	0.016	0.016	0.1
縣評等級	7	13	13	13	14	14	14	14	15	8	8	8	7
每畝產量	520	280	280	280	240	240	240	240	170	50	50	50	2
總產量	189	258	190	66	113	132	18	61	75				
開墾年月													
備考													

Figure 13 A table of land parcels of one Li household in the government land account book (*tu di ce*) in 1955.

This governmental land record in 1955 continued to use the “earth name” for identifying land parcels. The first line of the table lists the key land particulars: household head name, paddy type (wet/dry), native name (*tu ming*), area, level in county-standard, average yield per *mu*, total yield, and exploited date. For land area units, they adopted *mu*, *fen*, and *li*, following government standards in the Republican Era. Rural cadres and inhabitants filled in the names and numbers in these tables and assembled them into government archives, where a written account of the farmland distribution was displayed. These bureaucratic files were hierarchical and non-unified entities that existed in the local governments’ archives. The newly founded state, after having reshuffled rural land ownership, obtained data on population and farmland through a layered reporting system, and formed a database of a new bureaucratic chronotope. More than twenty

years after the socialist reform and collectivization movement, in the early 1980s, the central government implemented the Allocation to Household reform. This reform distributed per capita the farmland that was previously jointly administered and cultivated by the production teams, the so-called “primary accounting units.” This was a de facto abandonment of the established collectivism. This sweeping de-collectivization reform released the rural population from strict settlement and allocated arable land directly to families. Land holdings had since undergone several adjustments in response to population changes up until 1998, when the government organized land measurements, registered up-to-date land records, and issued certificates to households. People in Meixian used to call these land certificates the Red Books because of the red covers. Here is one page from the little red book of a Li lineage member:

承包责任田登记表

地块(段) 名称	块 数	面积 (亩)	坐落(四至)			
			东	西	南	北
叶姓组外第	1	0.1880	村道	田	田	路
叶姓组外第	1	0.2150	田	田	田	田
叶姓组外第	1	0.1368	田	田	田	路
<续上表>						
叶姓组外第	1	0.660	屋	田	田	田
叶姓组外第	1	0.2190	田	荒坡	田	田
叶姓组外第	1	0.570	荒坡	荒坡	田	田
叶姓组外第	1	0.120	荒坡	荒坡	田	田
合计	8	99.18				

Figure 14 A Tables in a Li lineage member’s land license, issued in 1998.

Land Parcel Name	Number of Parcels	Area (mu)	Location (four border)			
			East	West	South	North

Table 7 English translation of the first line of the table in the 1998 land license.

In addition to native names, here called the “land parcel name,” the Red Book displayed the four borders of each parcel, indicating the surroundings as “village road,” “paddy,” “canal,” “house,” or “waste slope.” A government-issued land certificate is a standard bureaucratic document to legitimize property particulars. This land certificate was filled in by village cadres with a blue pen and stamped with the government’s red seal. Similar to the land survey thirty years ago, each land plot was labelled with the placename, here called the “parcel name.” This detail was replicated and archived in the township government. Rural placenames were collected as signs on paper files, and were not circulated nationwide. This legally recognized information on the land certificates awaited re-measurement and re-confirmation, twenty years after 1998 and before the thirty-year guarantee of unchanged ownership promised by the government. This is when the Land Right Authorization was carried out. The surveyor, A-Yang, who wrote down “Maple Tree Pond” on the map, returned to the village committee to enter the notes into the computer after a day of on-site demarcation. A-Yang and his colleagues used the software that was developed by their company based on ArcGIS, called “Rural Land Contractual Rights Database System.” The data that these surveyors, as well as other government staff, had input into the software will be aggregated in a giant database where people will be able to search for land and household particulars. A-Yang showed me a land parcel with its boundaries marked on the aerial map. He clicked on the details to see an overview of the parcel’s shape, the geographic coordinates, the code, the name of the household head, the area, the place name, and so on. This

parcel, just a tiny bit in this database that outlined countless fields in rural China with aerial photographs and geographic coordinates. This is the most massive digital system of farmland of this country, which constructed a comprehensive bureaucratic chronotope.

Replaced Chronotopic Nodes

Ten days after Uncle Jiang and his neighbor discussed placenames, this topic was brought up again among the Li lineage members of Pond-head Team. That was a Saturday night, after supper, When Uncle Rich and Uncle Jiang were going to visit their cousin, Uncle Li Wang, who lived across the stream and usually came down to village from the county seat at weekends. I went with them to find Brother Li Gan and his father and brother there, too. It was a small gathering of the Pond-head Lineage. Soon, the gathering turned to a men's meeting, as Uncle Wang's wife and daughter-in-law quietly retreated to inner rooms, leaving men talking over the lineage business. People drank tea, ate snacks, and planned the lineage feast on Spring Festival Eve, which was three months away. The high volume of speech and laughter attracted the curious village head, nicknamed Uncle Tiny, who came all the way from his house on the other side of the village-face. Uncle Tiny, a short and stout man in his fifties, who had been the village head and party secretary for about a decade, operated a thriving pig butchering business.

“What is so interesting that you are talking about? So loud! I can hear your voice from the other side [of the village]!” Uncle Tiny walked in and the air stopped moving for a few seconds. That is his typical way of jumping into villagers' conversations: a joke with a serious tone and unsmiling face—whether it is a joke, sometimes it is hard to tell.

Uncle Jiang and Uncle Wang, good friends of his, immediately welcomed him. After exchanging a few words, people shifted the topic to Land Right Authorization, a topic that has something to do with both the Li Lineage and the village head. Uncle Wang first brought up the

question about mistakes in the land census: “About Land Right Authorization, what [we] should speak out, [we] should speak out.” They started discussing whom to blame for mistaking place names in the census, whether the township government or the mapping company. People quickly switched their roles from neighbors and friends to their administrative roles: Uncle Tiny represented government and Brother Gan, the current Pond-head Team Leader, was the go-between.

Brother Gan: Uncle (Li) Jun had already finished [checking the reports] ... Following the aerial photos, it is all correct. Following what Goose-Lake Town printed, it is all wrong. It is them [the town government] who made it wrong...

Uncle Rich: All, all the place names are wrong!

Uncle Tiny: This problem, [we] should not blame them. Let me tell you. [We] should not blame Goose-Lake Town. [We] Should blame whom they hired. They hired a third party that takes charge of the aerial photographing. It is them who made mistakes. Not us.

Brother Gan: Aerial photos can't be wrong.

Uncle Tiny: It has nothing to do with Goose-Lake Town. If we didn't appear [in the on-site survey], how could they know [our land]?

Uncle Rich: Whichever place names were all wrong!

Uncle Tiny: Aerial photographing, after that...

Brother Gan: No, no problem. The aerial photos are all correct.

Uncle Wang: Actually, in logic, it is the problem of typists. This is a huge problem. [Land licenses] are like ID licenses or household registration books. It is typists who made them.

Brother Gan: Aerial photos are all correct. It is what [they] wrote, the land usage and so on, that is wrong.

Uncle Tiny: Place names are incorrect.

Brother Gan: Aerial photos are correct.

Uncle tiny: Place names are written incorrectly. [Land] area and numbers of parcels are correct.

Uncle Rich: Whichever place names are written incorrectly.

Brother Gan: They printed incorrectly.

Uncle Tiny: Just like us, Horizon-cross, all the way to Mill Back, all [places] are called Horizon-cross [on the report]. (People laugh out loud.) Do you know? That is how [they] wrote it incorrectly.

Uncle Jiang: Mill Back is also Horizon-Cross, haha.

Brother Gan: They dared to type every place as Horizon-cross. Earlier, people received the photos, the aerial photographed, and checked. [The photos] had no [place names on it]. It is those who typed it incorrectly. (Translation from the transcript of #MXYYF1104_210559)

So far, they had jointly worked out an answer to their doubt. The discussion resembles a multi-part chorus, with singers designated with their own voices: Brother Gan repeatedly confirmed the objectivity of aerial photos; Uncle Rich emphasized the mistakes on place names over and over; and Uncle Tiny kept clearing the charges on the township government. In this way, they formed a temporary investigation committee, trying to find out the guilty ones. At first, Brother Gan's idea was straightforward: Government (wrong) ≠ Aerial photos (correct). Uncle Tiny, the representative of government at this moment, refuted Brother Gan by bringing up another concept: Government (correct) ≠ Third party (wrong). This connection, however, puzzled Brother Gan, for he thought that Third party = Aerial photos (correct), then why blame the surveying company? When they insisted on their own opinions back-and-forth several times,

Uncle Wang's new formula saved them: Government (correct) ≠ Aerial photos (correct) ≠ Typists (wrong). Till then, they finally found out the real cause of their problem. Who are those typists, the ones who input the information onto computer? As I have observed, the "typists" consist of both governmental staffers and GIS company employees. There is no separate category called typists in the land census—or every implementor could be a typist. Typists are a popular occupation during the 1980s and 1990s when typewriters were introduced to rural bureaucratic documentation, a job that many villagers, especially women, dreamed to have (Mullaney 2017).

Almost two years after the first on-site survey, people were still confused about how the census worked. They could only guess whose responsibility it was, drawing from fragmented information that they detected in chit-chats among themselves or discussions with cadres. They were especially frustrated by the fact that even though they had already reported all the information—correct information, of course—to government, the returned reports were full of flaws. They positioned themselves as the owners of land and producers of original data, but they had no control over those unknown or even unseen people, whom they imagined existing and operate the census.

I cannot help but notice Uncle Tiny's apparently successful joke about place names towards the end of the conversation—successful, because it ignited hysterical laughter of everyone, except me, who never heard of these two place names before. Later, I learned that Horizon Cross refers to a few parcels near an old factory which no longer existed, a place close to Brother Gan's house. While the other, Mill Back, denotes several parcels at the back of an old mill, near the Zhang's ancestral hall in Big Swamp. These two locations are about one-minute-walk away, but in space between them, there are some other place names. It is a small mistake

for outsiders, but a huge one for people who dwell in this place, having been familiar with every detail of their land. Messing up paddy names, in particular, is unacceptable, for each name stands for a specific location, as if someone navigates in a city with wrong street and house numbers.

But unlike officially recognized street and house numbers, most of rural place names are giving way to other references, such as geographic coordinates. With the large rural exodus and transformation of wet-rice cultivation to diversified economy, fewer and fewer people keep using and remembering this indigenous knowledge that once was essential to their production and taxation. Younger generations who never cultivated on the wet-rice fields have no idea what paddy names are. Many of them, during the cadastral survey, even do not know which parcels they have inherited or where their familial land is. Landholders who whined about mistaken place names are those who have collaborated working on farmland in the collectivization time. The indigenous knowledge that they adhere to is doomed to dwindle, leaving only incorrect place names in the official census documents and land database, until one day people could no longer tell whether these names are correct or not.

Wet-rice parcels in rural China have their own names. These names are derived from people's meticulous farming of the land. Over time, they have become symbols of identification, indexing the designated production and entertainment activities in each named place. Although only those who live nearby are familiar with these place names, since the imperial times, these rural place names, officially known as “earth names,” have been integrated into the government’s taxation system for levying “grain tax” (*guan liang*) and deed tax (*qi shui*). It was the recognition of these names by the landowners and their neighbours that made it possible for these names to carry legal weight. The policy of Land Right Authorization, the project designed to digitize every land parcel in this country, followed the same rule: as long as the majority of a

collective (*ji ti*), specifically the production team, agreed to the ownership or use-right of a land parcel, they could register it and obtain a land license. Yet the role of rural place names in locating land parcels is not as effective as it once was. The government has adopted the more accurate GIS system to locate land parcels on maps. Of course, the accuracy of GIS is contingent, as the surveyors delineated parcels on maps based on villagers' self-reports. These non-native GIS surveyors, along with township cadres, who were completely ignorant of local place names and paid less attention to them, had generated numerous incorrect place names in the national land database. And the mistaken place names will be passed on with the new land licenses.

Anthropologists consider naming and names to be “entangled in histories” (Bodenhorn and Bruck 2006). It is the shared memories anchored in place names that evoke a mutual understanding of social relations between interlocutors. Conflicts arise when people's knowledge and sentiments about place names are not reciprocal. Those who are attached to their place names experience frustration, even anger, at the apathy of others. The language ideology (Irvine and Gal 2000) that emerges in the conflicting readings of place names, especially the attempts of dominant groups to translate or even rename indigenous place names, may bring anxiety or inconvenience to underprivileged groups. This is what has happened to the Navajo people, whose traditional place names have either been substituted by English names or have been refashioned. No longer do the new names convey their original histories, nor do the Navajo have a sense of belonging to them (Webster 2017). Place names in rural China have also undergone a transformation: some have been standardized, some replaced, and some incorrectly recorded. After the Land Right Authorization, new land licences kept a handful of place names, but they no longer served to locate the parcels, as fewer and fewer people remembered them, let alone

recognizing the incorrect ones. Henceforth, for any transfer of rural land, buyers and sellers could look up in the new national land database, where it contains geographical coordinates of each land parcel, a more reliable reference, an impersonal one.

Aerial photo vs. GPS vs. Ruler

Acknowledging that these different techniques and spatio-temporal knowledge may interpret the land differently, I do not go that far as to say that the land understood by surveyors and landholders are two distinct ontologies. The Ontological Turn enables people to rethink the authority of knowledge and to reflect on the traditional cultural studies that take the world conceived by the so-called Modern Western sciences as the only true world (Latour 1993). Of course, the word ontology itself has a lot of baggage, suggesting a homogeneous, bounded entity, so much so that some scholars have criticized it as hardly encompassing the colonial setting (Todd 2016). Perhaps chronotopic configuration can be understood as a dynamic association between humans and non-humans, rather than a fixed set of rules.

The default technique in this nationwide land survey is GIS mapping on aerial photos, a productive and accurate way to calculate irregularly shaped wet-rice paddies in Southern mountainous areas—Accurate, only when surveyors are well informed about where the parcel is and how it is shaped. Just as the White Sands Village case, surveyors and cadres sometimes apply this method in a flexible way when there is a lack of information or a drastic change in physical environments. In some other cases, GIS mapping may fail to produce accurate land numbers due to unintentional or deliberate mistakes, for the software cannot automatically create data without people giving it orders. The technique thus heavily depends on people who

participate in the whole process of operating, informing, and revision. This kind of mistakes, of course, are subject to scrutinization as landholders know well about their own properties. Even in case landholders join in complicity with surveyors, as I will show in the following section, other people—cadres, lineage members, and neighbors—could easily spot on any problems. That is when alternate techniques, such as rulers or measuring tapes or GPS sensors, come to the stage as substitutes to GIS mapping. Contrast to GIS mapping, by which surveyors measure land area on their computers after they gained enough information, those substitutes require people to use tools and measure the parcels on site.

How do people measure land, arithmetically and geometrically, with different tools and units that yield conflicting kinds of knowledge? Mapping is not just an intellectual activity, but always involved in power relations--who conduct survey, who draws the maps, and who bear the consequences (Harley 1988; Wood 2010). The power of mapping also lies in different means of deciphering geographies. Modern and new technologies are taken as "scientific" and "objective," compared to traditional, human labor-dependent methods. People with specialized skills are often positioned in a more authoritative place in production of maps. It is in moments of revealing mistakes that people come to reflect the limitation of technologies and the "cartographic ethics" (Harley 2001).

After releasing the first-round cadastral reports, the County Land Census Office sent GIS surveyors to town governments helping them with any revision. Dispatched to Goose-Lake Town was the surveyor A-Yang, a confident and experienced technician, a 23-year-old, who dressed and behaved maturely for his age. Later, someone told me that A-Yang's cousin was the vice director of Southern Technology, which probably explained why he always sounded assured, unlike other surveyors. He was one of the core surveyors in Mei County's project. I

have known him for quite a while, for he happened to be the surveyor in charge when I followed the county census work team to different towns. And this time, A-Yang came to my long-term settled field site, Goose-Lake Town, where Xiaodu Village belonged to.

In a winter morning, A-Yang told me that he had to conduct an on-site survey in First-Valley Village, which is neighboring to Xiaodu Village, also located along Xiaodu Stream and the Provincial S224 Road. I often go there by taking a ten-minute bus or motorcycle from Uncle Rich's house. First-Valley Village used to be the town seat of Three-Village Town. After the town was incorporated into Goose-Lake Town, people keep their old habits going there for shopping daily goods and meeting friends.

A few days ago, Goose-Lake Town assigned A-Yang a task to go to First-Valley Village and solve problems revealed from the first round of cadastral reports. Following the cadastral survey in this neighboring village, I went to the Village Committee Hall to observe their revision work. Village cadres spent several days reading over these reports, summoning each production team leader to verify their information. Soon they discovered a serious problem with the land area of a villager named Zhang Tianxi. The village head and Tianxi's production team leader collated information and found a huge gap between his surveyed result and Red Book records. The GIS mapping showed that his land was three times of his old land amount registered in 1998. Just as what they did every time when they found a problem, the village head, Zhong Mei, took out the Old Account, i.e., the archived land records written in 1998, of this production team. It was a yellow-covered printed account book with handwritten records. The team leader said, "There are numbers of parcels, but no land area." On Tianxi's page, it displayed seven placenames, each with a number to show how many parcels he held. There was no specific land area for every parcel, but a total sum of all land: 3.47 mu. Then they pulled out the printed aerial

map of this production team, looking for Tianxi's land. On the map, the surveyor marked every parcel with red lines and listed landholders' names and land area. They bent down and used a pencil pointing to a few parcels that belonged to Tianxi. Village Head was not familiar with his parcels, so he asked the leader if the shape and area were correct. The leader just answered: Hard to tell, now he all changed to pomelo trees. I took a look at the map, too. They were focusing on a vast district of hills, full of large pomelo trees, cut off by a wandering concrete road. For most of the places, I could not discern the borders of land parcels. The red lines were drawn on greens without resorting to borders or landmarks. "[I'm] afraid that his land can't be so big," pointing on Tianxi's land, said Village Head. The leader seemed reluctant to directly answer it and just repeated "now it is all planted with pomelo trees."

They called Tianxi to come over and tried to figure out why. A gray hair villager in his sixties, slim and short, dressed in a neat shirt (in the following days, I found that every time when he went to the village hall, he would change clean clothes), Tianxi always had a smile on his face, spoke in a high voice. Just like the team leader, his explanation was vague and ambiguous: it was the surveyor who measured it; now his land was filled with trees. Finally, they settled by all agreeing to conduct a new round of on-site survey, which would be two days later. They did not make any conjectures on why the survey result was wrong, as if they knew the reason tacitly. Afterwards, I learned from cadres and A-Yang that it should be the fault of the previous GIS mapping company, which the township government later fired for faking land numbers. The company paid its employees based on how much land they have surveyed, so some surveyors exaggerated the paddy area to gain more payment. It became a headache of Goose-Lake Town. They had to request surveyors from Southern Technology to re-survey the mistaken paddies.

So, in this morning of on-site demarcation, when I arrived at the hill foot of First-Valley Village, a group of people had already started measuring. Besides the surveyor A-Yang and landholder Tianxi, I saw some other familiar faces: the cadre of township agricultural station, Uncle Wen, the production team leader, the village head, and the village secretary. A standard configuration of a survey group. Town cadres are responsible for supervising and leading the whole process of cadastral survey. They need to drive surveyors to each village and production team, make connections for them, and guide them to the paddies. It always surprises me that township cadres are so familiar with every village—its people, landscape, lineage relationship, agricultural and other industries, and even many anecdotes. Later I realized that, as civil servants at the bottom of administration systems, their daily work involves frequently “going down to villages” and talking to people. Their indigenous knowledge expands particularly because each of them is assigned with a village to settle in (*zhu cun*), which requires them to go the village committee hall at least once a week and oversee village cadres’ routine tasks. Every a few years, they rotate to a different village and start their new exploration there. Besides cadres, landholders must present at the on-site demarcation, for they need to “point to the boundaries” (*zhi jie*) the locations and shape of their land. Team leaders and village cadres are the necessary witnesses and representatives of the masses. Only when all parts agree with each other could surveyors confirm the ownership and information of a specific parcel.

More than a decade ago, Tianxi gave up planting wet-rice and turned his valley paddies into pomelo gardens. Due to his big family size, his household was allocated with sixteen land parcels, although most of them were small and distributed all across hills. His method of transforming paddies was typical—drained the water out, blocked the holes of irrigation ditches, filled in more soil, and planted several pomelo trees in each parcel. He is one of many villagers

who changed their wet-rice paddies into pomelo orchards (I will elaborate on this transition in Chapter 3). Now in First-Valley Village and its adjacent areas, the valley paddies are either restored to grass or planted with pomelo trees—nowhere people can find a wet-rice parcel deep into the mountains.

The group rode motorcycles on the cement road to a location and walked along a mountain path to a half-moon shape paddy. The village head, Mei, asked the town cadre: "Uncle Wen, how to measure it?" "First, pull the [tape] over its length," said Mr. Wen.

(20180119#3569#) They decided to use a leather measuring tape to measure the longest length and width, and then multiply them. It is not the best formula for calculating a half-moon shape area, but a convenient one. After they pulled over the tape across the parcel and read out the result for the width, the landholder Tianxi bargained about the number, trying to secure a bigger number:

Village Head: Count it as fifteen [meters], Okay?

Tianxi: Fifteen is too short. Your bone [=bullshit]! Make it eighteen. There, it is so long!

Village Head: Dead old! Fifteen not enough?

Tianxi: There, that part, [you] should also measure it.

Village head: There, on the mouth [of the paddy], did you see it, it's just a corner. Really, really [annoying]! There, it is only ten [meters]. Stupid devil.

Tianxi: Then make it sixteen, ay.

Village Head: Okay, sixteen, write sixteen. [People all laugh.] (MXYYG0119#3570#)

The landholder Tianxi is much older than the village head. When Tianxi and the village head bargained, they were smiling. Their cursing words are not necessarily offensive, as those are very common ones in villagers' everyday life—in both peaceful and disquieted

conversations. Having stayed in this rural area for a long time, I have learned that cursing words are so versatile, frequently used by men and women, young and old. Calling them “cursing words” is even not fair, for they have multiple registers that depend on speakers and situations. These words can suggest anger, worry, intimacy, and joy. People may use cursing words in a more neutral way as a habit and would not entail surprise or criticism among others. What is defined as vulgar or rude varies from group to group. In this mountainous area, people are more tolerant and open to cursing words. That explains why no one seemed to be shocked to hear the village head, Mei, talking in this style. Besides being a cadre, Mei is a part-time funeral host and a grandson of a famous “culture person” who jointly founded the poetry club in Three-Village Town.

During the on-site demarcation, people kept talking, joking, and laughing. Cursing words in their shifting tones became less offensive among them. Of course, there still displayed a hierarchical relationship. Tianxi clearly positioned himself in a less authoritative place as he kept begging for bigger numbers. Others, his familiar village fellows, were acting as cadres to assess his properties and negotiate with him. Their way of measuring land suggests a fluid understanding of what is accurate, which depends on tools, paddy shape, and participants. The mark on the measuring tape, the number 15 (meters), does not signal the exact length of a paddy, for it is negotiable and contestable. Using a tape seems to be a straightforward assessment, yet it involves people’s multiple decision-making processes and back-and-forth communication. They put labor in choosing the route for pulling tape, the mathematics formula for calculating, and the acceptance or rejection of numbers they see on the tape or calculated on the phone. For Tianxi, it is especially urgent to argue the numbers next to his paddies, all in irregular shapes. Such a

particular feature of paddies in Southern China has offered possibility for maneuvering land numbers throughout history.

After settling the length, they adopted the formula of rectangle to calculate the area of this half-moon-shaped paddy. Village Head Mei made a mistake at the beginning, which was immediately refuted by Tianxi:

Wen: Let's calculate [the area of] this parcel. Fifty-four multiplies sixteen.

Village Head: Eight fen and six [li]. (Looks at his phone.)

Tianxi: Eight fen and six [li] is not enough. It is not enough, oh!

Village Head: No.

Tianxi: Eight fen and six [li] is not correct!

Village Head: Eight hundred and sixty-four.

Team Leader: The paddy is more than [one] mu.

Village Head: Eight hundred and sixty-four. More than [one] mu.

Tianxi: It is a bit more than [one] mu.

Village Head: One mu [equals to] six hundred and six [=sixty] [square meters]. It is about [one] mu and two [fen].

Tianxi: Yes, yes. (MXYYG0119#3570#)

The village head calculated it on his phone, quickly giving the answer “864.” At first, he forgot to convert the unit from square meters to mu, so he directly spelled out “eight *fen* and six [li]” (0.86 mu). Tianxi’s rebuttal and team leader’s reminder made him realize the unit conversion and change it to 1.2 *mu*. Errors occur when people count and calculate, an inevitable fact. But people show different reactions towards errors. When Village Head obtained a much smaller number, Tianxi showed rage with a higher voice and eyes wide open. “Not enough” is a

terrible blunder to him. After realizing his fault, Village Head downplayed the mistake by quickly giving another answer. Tianxi instantly shifted to a smiling face and accepted it. This error was after all forgivable, because it was promptly corrected without leading to further consequences. Calculation extends far beyond mere intellectual activities, and it often induces ethical judgments and emotions.



Figure 15 On-site measurement in a pomelo orchard.

Having measured ten or so parcels, Village Head then suggested to call off the on-site demarcation and instead use the numbers on the Red Book for the rest of paddies:

Village Head: Aiya! You should just follow the Old Account, so that we need not to walk all the way [to measure them]. Really, really [annoying]!

Tianxi: No. If I reported [numbers], then [the results] would be bigger, not the same [as the Old Account]. You would say that [I reported] bigger [numbers].

(Village head laughs out loud.) (MXYYG0119#3570#)

Because Tianxi's valley paddies were scatteringly located on hills, we had to frequently take motorcycle trips and climbed up and down hills to find one or two of his parcels. Village Head persuaded him to take a simpler method, a shortcut that was widely adopted for measuring valley paddies across the county. But Tianxi admitted that his actual paddy size was larger than his Red Book records—nothing surprising, the same as many others who sought to avoid excessive tax. There is certainly a hierarchy of credibility among varied types of land numbers produced by different people and in different times. The Red Books, although being “inaccurate” due to its historical and social reasons, are still better evidence than landholders' oral reports, even that landholders are the ones who know their own properties best. Cadres and surveyors trust the official numbers written in archives more than a fleeting series of sound articulated by owners. Maybe it is not trust, but an optimal choice of more accountable sources that can be traced back afterwards. In fact, the Red Book records are also self-report numbers, usually a co-product by a production team. Just as I have analyzed in Chapter 1, once these self-report numbers become alienated and certified, they bear official and legal forces that in turn impact on landholders.

That is perhaps why villagers prefer on-site demarcation when disputes over numbers arise. If cadres and surveyors tend to rely on Red Book records, at least villagers could bargain with them by exhibiting the tangible object—land parcels. During the cadastral survey, I observed that, in most of the cases, it was landholders who invited to conduct an additional on-site demarcation as a strategy to verify their knowledge to the officials. A land parcel is the best source to demonstrate its own value.

Seeing Tianxi's insistence, Village Head brought up a compromised way to generate land numbers:

Village Head: At that time, it was aerial photograph, Old Uncle, [do you] know?

Tianxi: Yes, aerial photograph. I can do [measuring] today, it's Okay.

Village Head: Hmm. That paddy is one mu. [The previous surveyor measured it as] two mu on aerial photos. [What about] adding a little bit onto the original [numbers in the Red Book]? So that we don't need to walk all the way. [We] almost died!

Secretary: [We were] walking and tossing and flipping over! (MXYYG0119#3570#)

On-site demarcation was always a tough task. Young surveyors might handle it better than cadres who are mostly mid-aged. Valley paddies are much more difficult to reach than village-face paddies. As I analyzed in Chapter 1 and earlier part of Chapter 2, a large portion of valley paddies is no longer existing or recognizable. In that case, people usually just sit down and negotiate numbers based on the Red Books. But Tianxi would rather choose to bargain over numbers based on on-site demarcation, with his properties right by his side, an actual object that seems to stand for its true area number. Even though their calculating method might not be scientifically "accurate," both landholders and cadres deemed it more reliable than drawing a shape on the aerial map or copying a number from a Red Book—a surveyor might cheat and a Red Book might have fake numbers.

Having measured most of the parcels, people talked more, joked around, picked up some oranges from Tianxi's trees and shared with each other. The village secretary, Uncle Hong, teased Tianxi about his paddies:

Secretary: This year [we] should have a meeting saying that you are no longer in poverty. Wherever you all have land. And so many pomelo trees!

Tianxi: (Laughs) Big landlord, oh!

Secretary: [You] should be out of poverty! [We] should tell the town government not to dispense the subsidy. (MXYYG0119#3582#)

Tianxi laughed at himself, calling himself “Big Landlord,” a common word that villagers jokingly refer to someone rich or someone who looks/acts rich. Landlord (di zhu) is a social category that was claimed to be eliminated in the Socialist Land Reform in the 1950s. People who were categorized as landlords in Three-Village were publicly criticized and deprived of properties. Although occasionally villagers recall that history with sympathy, today they mostly use this term as a teasing label to make people flattered or embarrassed.

Village Secretary himself operates a huge green plum orchard with 2,000 thousand trees. He inherited the managerial right of this village-owned enterprise from his father, an old village secretary who initiated and exploited the orchard thirty years ago. So ironically, he is probably more qualified to be called a “landlord.” Village Secretary was playing with another category “poverty household” (pinkun hu) whose annual income is under the standard and receives monthly subsidy from the government. It is of course not a glorious title, but villagers sometimes show jealousy towards those who receive extra aid.

So far, the surveyor A-Yang did not directly take the measuring, not a rare case during the cadastral census. A-Yang just walked behind the group and showed the previous cadastral report to people when they compared new numbers with the old ones. He brought a GPS sensor which they hoped to use, but when they arrived at the first a few parcels deep into mountain, the device detected no signal. Finally, reaching to a flatter and more open valley, they found it available:

Village Head: The device can work! There is signal. The device can work.

Team Leader: The device can work.

Secretary: Here, [shall we] use the device or not?

A-Yang: You do the measuring. I am afraid this [device] is not accurate. Because when [you] walk in [the paddy], after the trees' blocking...

Village Head: The device is more accurate. (MXYYG0119#3582#)

People were excited about using the GPS sensor, a fancy device that should be a more accurate and convenient method. About its accuracy, A-Yang and cadres see it differently. A-Yang perceived it in a professional way, considering the obstruction of trees and the paddy size; While cadres deemed that the device was certainly more accurate than a leather measuring tape. Tianxi led A-yang, who held the device with one hand, to walk into a paddy that was filled with large pomelo trees. They bent and stepped on the paddy lips to go around the parcel. After coming back to the beginning point, A-Yang looked at the GPS sensor and read out in Mandarin: "Eight *fen* and five (li)."

Tianxi: Why so small?

Village Head: Eight *fen* and half, (he) said.

Secretary: This is very accurate. There is no mistake.

Village Head: This is absolutely accurate. (MXYYG0119#3686#)

A-Yang showed Tianxi the displayed number on the device: 0.85. The sensor also revealed the shape, a diamond, of the parcel. This time, Tianxi did not say anything, and others kept persuading him that the device must be accurate. Tianxi's silence contrasted with his previous bargaining tone—he lost confidence facing the device, even though he was the owner of this parcel for many years. Is GPS sensor always accurate? A-Yang had shown his concern before the measurement, even though he would also emphasize the superiority of the device over other measuring methods. When Tianxi led A-Yang to walk around this paddy and A-Yang

stopped in front of a big pomelo tree growing next to the paddy lip, Tianxi said, “It’s OK, just go around it from the inside.” He was aware that the route of surveyor would affect the result, but he showed tolerance to a minor gap. During the cadastral survey, I witnessed some rare cases in which landholders requested to test again when they did not accept the result using a GPS sensor. Ironically, the surveyor walked into the same paddy the second time and ended up with a different number. In these occasions, villagers and cadres always landed their arguments on the “route” that the surveyor took—inside or outside of paddy lips, a bush that blocked the way, an unclear corner, and so on. Their contestation was not really about the device, but still people who operated it. The accuracy of GPS sensors is always without doubt for these non-professional users.

People continued using the GPS device to assess a few more parcels until they finished the survey and went back to the village committee hall. After lunch, A-Yang and cadres worked together to calculate land area and revise the maps. The town cadre Mr. Wen took out the piece of paper where he had taken notes during the on-site demarcation. A-Yang told Mr. Wen to reckon the area in square meters and then multiply 0.0015 to convert the unit to mu. Then Mr. Wen and the village head used a calculator to work out land numbers one by one.

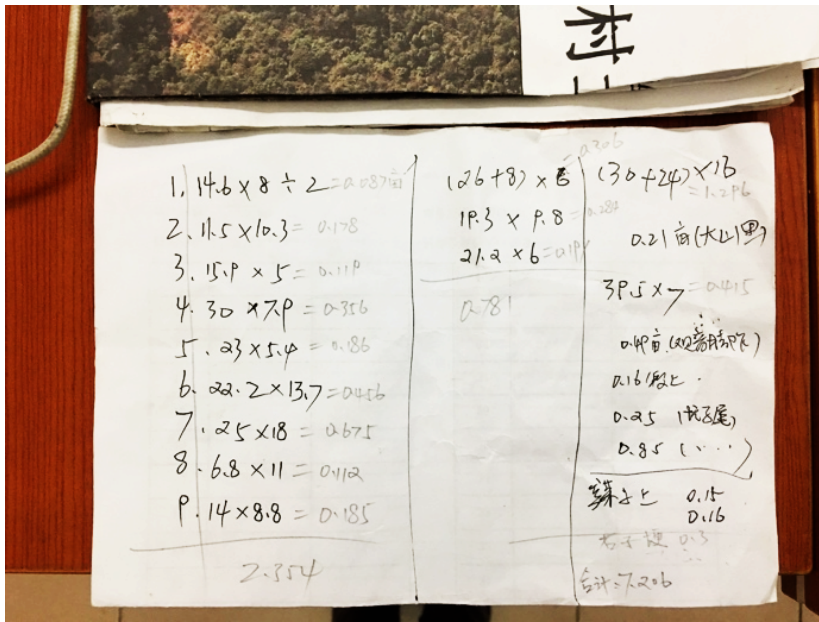


Figure 16 The finished note taken by the town cadre.

This is the finished note of Tianxi’s paddies (Photo 2-?). Words in black ink were written during the on-site demarcation, and those by pencil in the village hall. By a cursory look, they seem to be very simple calculations, but these are actually “wrong” equations in a strict sense.

Take the first line for example:

$$14.6 \times 8 \div 2 = 0.087 \text{ mu}$$

In this “equation,” the writer omitted writing down the step of multiplying 0.0015. Numbers on the left side of the equation are in the unit of meter, and the right side in *mu*. Of course, these expressions looked unproblematic to people who frequently deal with unit conversion. Sometimes people may not remember to do it. The village head, during the survey, once forgot to convert units, but people immediately detected the mistake because the answer looked far away from their memory. That is the way people live with different unit systems: length, capacity, weight, or temperature. They must constantly calculate on backstage. No matter how proficient they are at converting, it always takes some extra time and labor. Yet they are

also used to hide it in the dark—either they convert it in mind, or they omit the process and only display the results.

A-Yang turned on his laptop, sat at the next desk, and pulled out the map of First-Valley Village from the database. He looked for Tianxi' land on the aerial photo, preparing for a revision of the drawing of parcels once new numbers were available. When Mr. Wen and the village head were almost done with the reckoning, Tianxi came to the village hall again. He said that he forgot to bring people to one parcel in the morning and asked to add it on. Then they came to sum up all the land numbers together to get a result: a bit more than 7 mu. In Tianxi's Red Book, his total land area was about 3 mu, while in the first-round cadastral report, his land amounted to more than 11 mu. At three different times, three different numbers. "I always know that my land is about 7 or 8 mu," said Tianxi, overall satisfied with the result. He knew it, but he kept silence when the 1998 survey gave him a much smaller number and when the 2017 first-round survey showed him a much bigger number. His understanding of what is the optimum official number of his land has changed. A smaller number means less tax forty years ago, but less subsidy or price today. His little ploy, a too common ploy at that time, also prevented him from getting more land in complicity with some surveyor who happened to take advantage of a loophole in his company's policy. It was the seemingly absurd gap between the Red Book record and the survey report that arose the cadres' alarm and entailed a new round of on-site measuring. But at the end of the day, everyone--himself, cadres, and the new surveyor--was pleased with the final number, a result that they all deemed to be accurate. They agreed to each other about the authenticity of the result in such a light mood as if they had finally restored justice to Tianxi's land.

They never suggest that a measuring tape is a more objective and accurate approach. In fact, they seemed to be elastic when they pulled the tape casually around paddies and when they

used easy formulas of rectangle or triangle for irregularly shaped paddies, let alone they always bargained over numbers afterwards. Yet it was the very acts of being there, seeing the parcels, walking around it, and talking over it that made people deem their measurement to be reliable. It was teamwork, a standard set of witnesses—cadres, surveyors, landholders, neighbors or lineage members—that ensured the authenticity of the on-site demarcation.

The default method in the land survey, GIS mapping on aerial photos, is perceived as operatively convenient and scientifically objective. Just as that discussion among Li Lineage members shows, villagers thought aerial photos "can't be wrong." Sometimes, this survey method is simply taken as a modern technology in contrast with traditional ones relying on human labor. People—more often cadres and surveyors—would say that "computers can't be wrong" to persuade landholders to accept the cadastral results. But in this First-Valley Village case, people seriously doubted GIS mapping and aerial photos. They realized that computers are also handled by people. They thus resorted to a traditional measuring method--the tape.

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That a measuring tape is not accurate enough is immediately proven when people found the GPS sensor available to use. The device silenced the landholder who had been confident

about his own properties. A GPS sensor combines advantages of both the traditional and aerial mapping: a machine that performs on-site. By holding the sensor and walking around a paddy, the surveyor establishes a legitimate and accurate result. This method, however, cannot be widely adopted during the national land cadastral survey, for it requires a huge amount of time to go over every single parcel across mountains and plains. It already took Mei County more than two years to survey using aerial mapping.

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The Restoring of Greens

I analyze the ethical predicament of staying with the shifting environments by examining how rural residents (re)produced land numbers in the nationwide cadastral survey in China. When people live in a changed environment and they have to recreate their once familiar geography out of memories, what ethical concerns do they have to deal with and how do they act as moral beings? These questions echo scholarly and public reflections on the increasingly “damaged geography” in Anthropocene (Tsing et al 2017). I explore these questions by focusing on rural areas of China, a world left out in this industrialized country, a place that has

experienced damages not because of excessive human activities, but, on the contrary, the massive exodus from the rural to urban areas. The evacuation of population leaves those who stay in villages a dilemma to live with: on the one hand, they feel responsible and even imperative to guard their family land and make good use of it; On the other, they are entrenched in grappling with an empty, forgotten, and marginalized environment— “damaged,” not ecologically, but socially.

The ethical quandary of fighting with the rural social decay in an ecological recovered home place is manifested in everyday rural life: people maintain their empty, decayed ancestral halls while moving to new houses in more crowded riverbank; they reconcile between family, friendship, and a new monetized labor network in the village to tide over the scarcity of human labor, scarce workable population; they are eager to learn various new ways to exploit the wasteland but strongly protest against outsiders who offer cooperative investment in their own “lineage forests.”

What struck me during my fieldwork was the land cadastral survey which provides a chance for peasants to recall their memories about a changed or even disappeared geography and remake it through self-reporting. In the 1970s and 80s, the government encouraged rural residents to exploit mountains and build paddies (*kaishan zaotian*). Trees were burned to ashes and hills cut into terraces. Later on, as the large population migrated to cities, paddies were left abandoned. Three decades after the de-collectivization reforms and the Opening Up, a vast area of farmland is covered with weeds. The once bare earth now grows with forest again. I am intrigued by the paradox of "damaged geography": why does the restoration of greens, not the deprivation of them, bring up unsettling feelings and ethical challenges for villagers? This ethnographic observation thus further complicates the understanding of environmental ruins by

rethinking ecological well-being not just as measurable, but as socially intertwined conditions that are indivisible to people who live in and around. Extending from seeing environment as vulnerable things to human activities, I focus on the pressure, emotionally and physically, that people face when they have troubles to find comfortable ways of interacting with surroundings. Protecting environment is more than returning to wilderness or nature as a thing in itself, but also a protection of humans by bringing up a repaired relationship among landscapes and social beings. Protecting environment not only for the common goods of human beings –also care about those who live closely and historically intertwined with these beings.

Facing the indecipherable wasteland, peasants, cadres, and surveyors formed a tacit complicity to reproduce their land directly on the aerial maps. Mapping has a long history in human efforts to know about the world. It is a way for people to grasp what is beyond their immediate vision, collaging scattered information into a synthesis of their surroundings. Mapping is not just a cognitive skill to transfer 2D into 3D, but it is often mediated by ethical and political ideologies. Cartography has been a significant technique skill in governance, particularly in colonial rule (Craib 2004; Mitchell 1991). And, bureaucratic mapping is able to shape geography intertwined with social relations (Hull 2012). The relationship between maps and their references is way beyond resemblance. To some extent, maps create property relations, for mapping validates power and knowledge in claiming belongings (Harley 1988; Hostetler 2005). Scholars have been interested in the ethics of environment, particularly after the recent attention to climate change and Anthropocene (Broome 2012). They reflect not merely on the ruined and fragile environment caused by human activities, but also the ways people bestow moral qualities and responsibilities to their relationships with geographic beings, including

mountains, rivers, and plants (Descola 2013). The ethics of environment thus is inseparable from the ethics of knowledge about environment.

The ethical predicament of rural residents is specially provoked during the new land reform in China. Though de-collectivization started three decades ago, for the first time after the founding of the People's Republic of China, rural collective farmland is scheduled to be put on the open market. As a forerunner to this reform, the government conducted a nation-wide census to produce the most up-to-date land data, using GIS cadastral mapping, field surveys, registration audits, and villagers' self-reports. The census, or Land Right Authorization, is a reckoning of land information established since the previous reform. (I have explained the policy history in Chapter 1.)

In the mountainous area of Southeast Guangdong Province, the relationship between the greens and population seems to display a kind of zero-sum game in the past half century. Either the population took the lead, causing trees and grass to retreat or disappear, or the other way around. As rural population rapidly grew in the 1960s and 70s and dramatically dropped after the late 1990s and 2000s, human activities concomitantly stretched to more remote areas or withdrew to flat, open areas. This historical trajectory of human interaction with their neighboring species has brought up an unbalanced relationship in-between and thus difficulties for both sides. Situated in such a particular time of reckoning land data in the nationwide cadastral survey, rural residents become more aware of their unsettling connections with the surroundings and openly express perplexing emotions and opinions towards the past and the present. By capturing these affective moments and everyday practices, my analysis in this chapter rethinks what is "damaged" geography and what "troubles" people continue to stay with (Haraway 2017).

During the Cultural Revolution and People's Commune times, population grew rapidly. In Xiaodu Village, people were pressed to probe deeper and deeper into valleys, exploiting every inch of arable land and swiping down greens that grew out of their way. The government encouraged villagers to "exploit mountains and create paddies" (kai shan zao tian) to claim their own paddies and sustain themselves. Lineages sought for any possible "waste land" in valleys that belonged to their own production teams (I will explain the production team/lineage properties in Chapter 3). Not all mountainside land was available for transforming into wet-rice paddies, for it required flatness, accessibility, and water resources, so most of paddies congregated in lower valley areas. Once have built up paddies, people should take a trudge, sometimes more than an hour's walk, to their land, let alone they had to carry tools and fertilizers (human or pig feces). The temperature in valleys is lower than the village-face, so people only planted one-season wet-rice, which meant that the growth cycle was different from that of two-season rice in the village-face. This difference caused extra labor and time input for villagers. Soil was another problem. People called the soil in valleys "raw soil," compared to "cooked soil" in the village-face. People needed to attend more to the raw soil to make sure it had enough fertilizing. Mountains became more approachable after human-intensive care and attention

Water is as vital as soil to wet-rice planting. In Xiaodu, the mainstream, called Xiaodu Stream, provides water to paddies in the village-face, but it does not reach to valley areas. Down to the bottom of the four valleys, there are small creeks people can utilize. In the 1960s and 70s, villagers cooperated to build water canals for irrigation—mostly organized by the village (brigade) and some large projects by the town government (commune). Their work for the collective good was rewarded with salary in the form of "labor points," but no one desired this job because it was extremely hard labor. Senior villagers recalled the arduous work in which they

carried two baskets of earth on their shoulders and walked on the wandering, narrow paths deep into mountains. It was by such great effort that people transformed valleys into paddies.

While wet rice thrived in the valleys, other plants had to give way. Grass and bushes were enemies to wet rice and needed to be eliminated frequently. In more steep mountainsides, it was covered with trees. Xiaodu villagers have a long history of planting pines and fir trees in their lineage forest base back in the imperial time, as shown in the Li Lineage collection of land contracts in Qing Dynasty. After the founding of PRC in 1949 and Socialist reform, forest was claimed to be collective properties managed by the village or production teams. Therefore, per policy, individuals had no right to chop and sell trees from the forest. As population grew and human activities extended to deep mountains, more and more people participated in "tree stealing" business. Almost everyone did it, so the forest became much empty. Tree-chopping came to a summit when people heard the rumor of upcoming de-collectivization reform in the late 1970s and early 1980s. Xiaodu villagers literally just chopped all the trees and burned everything done. Four decades ago, people exploited almost every inch of land to sustain a life. One time, Uncle Tai showed me some pictures taken in the 1980s. I noticed that the mountains were all empty, bare without trees and bushes. "People burned it down. Completely."

Not only soil, water, and plants, animals fell prey to human exploitation, too. During the collectivization, villages organized their own "hunting teams" for capturing wild animals, mostly wild boars, and sharing the trophies with the whole village. It was a glorious job that young men would dream to join--of course, carrying a gun and fighting with beasts sounded masculine enough. But they favored this task also because the effort they put into hunting counted as "labor points" equal to agricultural works in collective paddies (I will elaborate on labor points in Chapter 3 and 5). A Xiaodu villager, Liao Zhen, who later became a renown Red Revolutionary

writer, was one of the hunters and wrote essays about his experiences (cite). After the mountains became bare and empty, wild animals started to disappear and the hunter teams disbanded.

During the collective time, people engaged intensively with once less familiar deep mountains to the extent that they exploited all the possible space above ground. That leads to one kind of "damaged geography," damaged because of the scarcity of natural resources to sustain people's life and the exhaustively grabbing of everything in mountains.

Deforestation, soil loss, animal population plummets, together with heavy taxes, forced collective labor, lack of food and essential supplies--this hardship was what people were dealing with, which resulted in a vicious cycle between the needs of human and non-human species. After the de-collectivization reform in the 1980s, their lives dramatically changed, but rural residents perhaps did not foresee that they would face another kind of "damaged geography" one or two dozen of years later: damaged in a sheerly opposite way from ecological degradation; damaged in that people feel even more loss and helpless about their relationship with environments than the collective time.

The dramatic change started since the Opening Up and Allocation of Paddies in the 1980s. After the industrialization, China has experienced the largest migration in human history (citation), moving from the rural to urban areas. Young people went to cities and suburban counties to look for jobs. Rural exodus reached a peak in the 2000s, leaving their hometown to an empty and neglected place. Now the majority of the rural long-term population is elderly people and children. Even though many of those who migrated to the cities still keep strong economic and social connections back in their hometown, a vast area of farmland has been deserted due to lack of labor. In Mei County, most of the abandoned paddies are located deep in the valleys where it is difficult to reach.

Now the tide ebbed. The shrinking population moved out down the hills and congregated to narrow plains and riverbanks. Villagers observed the change and often sighed that “people are all down the mountains!” What they have lost is their old homes and workplace in the mountains, the previously wild space that they once painstakingly exploited until it was overexploited. They seem to miss the past—not the forests filled with trees, grass, and animals, but a mountain infused with human experiences. Those who used to play in the mountains in their childhood now do not allow their grandchildren to go there alone: “Too dense (*niung*). Beware of snakes and wild boars!” These more recent feelings and struggles with a damaged geography in rural area partially account for what I analyze in this chapter: why people show strong emotions and ethical judgments when recall or recreate their memories of land during the cadastral survey. The reckoning of land data calls for not only villagers' intellectual and communicative labor, but also their reflection on who they are and what their hometown is.

Mapping Disappeared Land

The Land Right Authorization provided a chance for peasants to recall their memories about a disappeared geography and remake it through self-reporting. It was a winter morning in the meeting room of White Sands Village, Mei County, Southeast China. Some thirty people—village cadres and peasants from the Number Six Production Team—gathered there, waiting for the township agrarian station staffers and the GIS surveyor. One year previously, the land census work team had come to the village and conducted the on-site survey. They finished other production teams, but failed in this team, because their farmland had changed too dramatically, and that villagers did not reach an agreement about how to fix the problem. In the past decade, this village has undergone major transformations. A portion of farmland was converted to roads;

some became ponds for fisheries; and a considerable part was abandoned due to exodus. Recently, the town government launched a project, planning to build a “farm happy tour” site in White Sand Village. Construction was everywhere: more land was turning into lotus ponds, linked by wooden bridges and paths, with a huge waterwheel. When asked about paddies, the village cadre replied: “Paddies? Can’t see them anymore.” Villagers were opposed to the on-site survey, for there was hardly any trace.

Soon the director of the agrarian station, Cu, arrived, with several other cadres and staffers. They brought a solution with them. It was “just to draw the land parcels on a satellite map.” Though this is a widespread method in this rural, hilly area, what is peculiar in this case is that the physical landscape carries no track of the majority of paddies—surveyors cannot even go to the original locations of paddies, the relics, to take a look. Fortunately, the land census team was using satellite maps taken a few years ago, which happened to have captured the overall shape of the previous landscape, though boundaries of paddies were blurred. Cu’s suggestion was “simply” to recreate the paddies on this outdated map.

People sat around a large, wooden oval table in this meeting room, with more villagers sitting or standing in the corners, near the door. Men and women, mostly middle-aged and elderly, looked upset and angry. Cu and other cadres sat at one end of the table, far away from the door. They were supposed to speak to the audience. A-Wu sat at the longer side of the table with his laptop, looking for the maps of this village and preparing for drawing paddies. Cu, as the person who was directly in charge of the land census in the town, stood up first to explain that drawing the map was the only best solution. People were discussing in a low voice, until a senior man broke out: “It was all because of Old Brother Ngi!” Another affirmed, “Yes, the 1998 red books are fake licenses!” While another said, “What he wrote, does not count!” People spelled

out historical complicities that have been hovering in the past two decades in this village. Brother Ngi was not there. He was the old production team leader, who contracted some unused paddies out, changing them into ponds. The paddies were the production team's shared holdings. It had finally come out that was why villagers disagreed to replicate the previous official records in the land census: Twenty year ago, in 1998, Brother Ngi had registered the land under the contractors' names on the land licenses, the "red books." People now requested to register the collective farmland as the production team property:

Villager 1 So many contracted paddies and ponds and so on. Never allocated money!

Villager 2 So, today, do you mean authorizing his previously contracted (paddies)?
(We) never have settled (the problem). It still belongs to those people
(contractors). I think the contracted (paddies) should be returned to the
production team. That's reasonable.

Cu Not that. My idea is this: that (contracted land) is a problem. We should first
draw all the paddies (on the map), and then we can talk. Good?

Villager 2 (Paddies) should be returned to the production team!

Cu continued to persuade the crowd that now the "biggest mistake" was that they did not fill in any land information in the system. "I know that you all have paddies," he said, "but there is no (information of) land area nor household owners." Like other cadres and staffers, Cu's job was to finish the survey, a pressing task that had hung up for two years. His speech continued: "So what I mean is that (the survey) should be the first step. The second step, if it involves any disputes, if, as you said, that the production team has (shared) paddies, and if (we) don't know what to do with it, then put it in the next step." (#1874) A senior man repeated his previous words loudly: "No. The contracted (land) should be returned to the production team!" Another added, "In a word, Old Brother Ngi tried to have a meeting (with us), but (he) didn't make it. (He) didn't make it, and then (he) wrote it down (on the land licenses). I told you so!" (#1874)

The two parts insisted on their own priority, so their negotiation reached an impasse. People kept blaming Brother Ngi and casting doubt on Cu's suggestions.

A cadre, in a blue shirt, who had sat silently next to Cu, suddenly jumped into the conversation. "In the end, let me say something." His rank, the vice-director of the township People's Congress, is higher than Cu. He began a lengthy speech:

"Since last September, I came to this village as the responsible cadre, today (I) can say (I) understand the basic situation of No.6 Team. In order to make sure the Land Right Authorization (is implemented), the (Communist) Party and government, including the land census office, have thought of many methods. So far, our No.6 Team is the only team which didn't finish the on-site survey in the village. Ah. (You/We) didn't finish the on-site survey, which means that we, in the land census, any person, *Jia* [random person X], *Yi* [person Y], *Bing* [person Z], who has paddies—in the future, any agricultural subsidies [you] will not get. (Do you) know? Everybody here is an uncle or nephew [meaning lineage members]. Why do (we) have this meeting today? It is for making sure the vital benefits of every household, the masses (*qunzhong*), and for making sure to accomplish every task. So, I sincerely ask everyone here, father, uncle, and aunt, please support this task." (#1874)

A typical cadre talk with some most common phrases in the mainstream political discourses. But by attaching himself to the village and bringing up kinship terms, his words seemed to appease people's anger and upset. The meeting room became quiet for a while, until a few senior villagers returned to whispering with lower voice among themselves.

Then Director Cu distributed a dozen of pieces of blank paper and asked villagers to write down their names, paddies, and size. Soon after that, Cu lost patience with the endless discussion: "All the peasant representatives, that's all for today's meeting." Villagers looked grumpy, mumbling, some kept cursing. Nonetheless, they gave up debating and walked out. As they probably had foreseen it, the meeting was not really designed for negotiation, but for notification.

Only a few stayed. The current team leader, Ng, whose husband is Brother Ngi, brought a senior man to the meeting room. This person, Liu, turned out to be an old accountant of the team.

He also brought his little granddaughter, who was curious about what was going on, but soon lost her interest as no one paid attention to her. The accountant took out some documents—a dozen of separated leaves from a notebook—flipping back-and-forth and reading them. These papers were full of names and numbers. On the right side of the bottom of one page, it was dated “1978.10.21,” signed with his name. The table headline reads as: Place Name, Landholder, Area, Front Height, and Back Height. This is a typical way of recording wet-rice paddies at that time, similar to Uncle Jun's account books.



Figure 17 From left to right: The old team accountant, Director Cu of Town agricultural station, surveyor A-wu, the current team leader

Finally, it was settled that the mapping project was to be undertaken by these four people: Director Cu, Team Leader Ng, Accountant Liu, and the GIS surveyor A-Wu. The team leader asked the accountant to come over, for he knew best about the paddies in their production team:

Cu (We) can draw (the paddies). At the time (of revision), individual peasants could delete them.

T L Yes, so many, many people, I can provide (land information) to you. But if you mean that which person has how much land, then how can we give you...

Cu (You) could, (you) could. Whose (paddy) is next to whose (paddy), (do you) know?

Acc More or less.

T L More or less (we) know. We have two people.

Conversation between the director Chu and the team leader Wu. (TL: team leader; Acc: accountant.) (#1886)

The new team leader Ng seemed unconfident in her knowledge about the vanished paddies. That is why she emphasized “we have two people”—she and the old accountant. During the whole process, the accountant was the main source of land information. The account book was just a reference of numbers. The shapes, locations, and sequence of paddies were all in his mind. Their solution of mapping is complicated by authority and power of those who get to decide the location and size of paddies. In the decollectivization reform in the 1980s, it was village cadres and production team leaders who organized and handled the allocation of paddies. Now, in the new round of privatization, it is still these people, the old cadres and the new leaders who are family members of old leaders, who dominate the land census.

Surveyor A-Wu sat in front of his laptop, connected to a screen monitor that he brought from the agrarian station office. He opened the designated software “Rural Land Operation Right Data System” and found out the map of White Sands Village. Team Leader Ng seemed intimidated by the maps:

TL: How wretched! Need to do this (on the computer). We have never (done this). Take the (land) register. We can help you mark (on the register).

Cu: No. We just draw on the maps. Draw directly. (We) could draw, just draw directly on the map. (#1886)

“How wretched (yuan wang)” is an interjection that people of M County often use for expressing pity about themselves or others. In Mandarin, the word *yuanwang* means injustice or misunderstanding imposed on people (Cao 2017); while in Hakka, it is widely cited to express regret, sadness, and feeling of loss.

GIS mapping is a specialized skill that requires training, which, at the first glance, is not accessible to non-professional people, let alone those who have limited exposure to computers. As I followed the work team during the land census, it is surprising that mapping on computer quickly became approachable to cadres, staffers, and villagers after an initial resistance. A few staffers even learned how to use the software after they worked with surveyors for some time. Villagers mostly hesitated on using electronic maps at the beginning, but in the end, they often found a way to navigate when given some landmarks--roads, houses, ponds, and graves. They have had a map in their mind, just as Uncle Jiang and Uncle Rich. They just never draw it or see it from a map.

Old Accountant Liu was clearly proud of his notebook and memories about paddies, mentioning it several times. He often started the thread himself: "In the past, I was the one who recorded the labor points (gong fen). After I recorded the labor points, I kept this (account book) till today." Cu responded: "Hmm." (#1896) And the thread ended. After a while, the accountant took out the notebook and flipped from the first page to the end, murmuring, "(Land numbers) of that time. Only (preserved) in my old 70s' copy!" (#1896) Others showed no reaction to his words, busy preparing for mapping the paddies. When people threw away, intentionally or not, bureaucratic and folk records of paddies that were produced in the 1970s and 80s, they probably saw no use in those routine documents. Only a few cadres kept the documents, most of whom are the authors. This nationwide land census is no doubt the prime time to validate their prediction, bringing their hidden treasure to light and proving their foresight. Those old documents were immediately recognized by cadres and lineage members as evidence or original data. But there are always moments like this, when Uncle Jun or Old Accountant Liu brags about his important role of creating and keeping records, no one seems to care. No compliment or response.

They searched for the place names and started to locate farmland. Some still showed blurred boundaries on the map; some were masked by grass. Their division of labor was clear: Accountant Liu spelled out the name, location, and size of one paddy; Cu and Team Leader Ng found out the location on the map; once Liu confirmed, Cu gave instructions to A-Wu in Mandarin how to draw lines. They would be about this business, turn-taking in this manner for each parcel.

Cu Here, draw 1.2 (mu of paddy).

Acc (They) share a parcel.

Cu Each person (has) one half. (Let's) see, how large?

Acc Yes, each person (has) one half.

GIS Here?

Cu Hmm.

Acc How wretched! In the past when we calculated the (labor) points, whichever the corner (of a parcel), even a tiny bit, (people) all knew. [Looks at Team Leader Ng]

Cu Count it as 1.2 (mu). (Each half) 0.6 and 0.6. Here, draw towards the inner side.

Table 8 Drawing two parcels on the map. (TL: Team Leader Ng; Acc: Accountant Liu; GIS: surveyor A-Wu. Unit conversion: 1 mu=667 square meters=0.164 acre) (#1921)



Figure 18 . The map on the screen of A-Wu’s laptop

Cu used a pen pointing on the monitor, showing A-Wu where to draw lines and how large the parcel should be. By saying “draw 1.2 (mu),” he was translating Liu's land number into a shape. At first, A-Wu drew a plot that was bigger than 1.2 mu, so Cu suggested shrinking the area by drawing lines “towards the inner side.” A-Wu tried several times, until he got the desired result of 1.2 mu. The boundary of that paddy could be vaguely seen from the map, but the shape does not matter as much as land numbers. They wanted accurate numbers, the same as the old accountant’s memorized ones.

A-Wu clicked the button of drawing lines, and then clicked twice—one above the land parcel, one below—to add a vertical line in the middle of the parcel, dividing it into halves. Though the whole parcel was 1.2 mu, when he first split it, the software automatically displayed 0.6 mu and 0.7 mu, in total of 1.3 mu. The result is geometrically impossible, for the total sum of all the parts should be equal to the area of the shape itself. The error is caused by the unit equation: the government uses a customary unit system--mu, fen, li--to calculate farmland and forest land, either in routine documentation or land censuses. The software that surveyors use,

however, is based on the product of an American company, ArcGIS, which only adopts U.S. customary units and metric system. Per policy, surveyors input formulas in the software to convert between mu and square kilometers:

1 square kilometer/0.0015= 1 mu; and 1 square kilometer=666.67 mu

These are fixed formulas to attach to the software, but during the on-site survey, surveyors and cadres may use simpler equations: 1 square kilometer=666.7 mu or 667 mu. Because that conversion creates a gap between the two units and also that the software rounds up numbers to the second place after the point, people sometimes see an impossible result on the computer: the parts are larger than the whole. Even though I only came to understand it given such an explanation afterwards, when people saw the results at that time, they just showed a slight doubt--"Eh?" Soon they were pleased to see how A-Wu re-drew a line and got the desired numbers. "Beautiful!" Said A-Wu, and every one nodded with a grin.

“How wretched!”—Accountant Liu’s grumbling to Team Leader Ng did not receive much attention among them. Ng turned around and looked at him with a smile, saying nothing. Her knowledge about village farmland was limited. Liu was recalling the old days of the commune (*gongshe*) during the 1960s to 1970s when villagers, including him, used to collectively cultivate paddies and gained income in terms of “labor points,” a salary standard based on age and gender. That was the time when Liu wrote down those numbers and names on his account book, a time on the eve before the de-collectivization reform. As farmland was abandoned, people gradually forgot the details of paddies which they once plowed, sowed, and harvested together. The deserted paddies take away people’s recollection of their social relations and shared experiences.

After they moved on to drawing more farmland, they became more proficient using this method and redefined the necessary level of accuracy. In the place name called Earth-God Downside, a hollow in the mountain, they found it difficult to precisely mark out every tiny piece of “valley paddies.” Cu suggested making it flexible in mapping out the shape:

Acc: [M.] Here. [H.] Here (the paddy border) bends around. [Points to the screen]

Cu: [M.] Here at the corner, it bends. Here (draw a paddy of) 0.75 (mu), just draw a curve. Cut (a slice) at the top. Just cut it. [Points to the screen]

Acc: [H.] Bend it.

Cu: [M.] It’s Okay. Can’t bend it. Then just cut it. Cut it at the top.

[Accountant and Team Leader Ng cracked a smile.] (M: Mandarin, H: Hakka. #1955)

The small piece had been a round corner of a larger rectangle parcel. People can no longer tell its shape from either the old site or the map, which only exhibited a strap of weeds. Accountant Liu pointed to the screen, moving back and forth his finger to indicate how the paddy lip should bend around the corner. Cu followed his instruction when suddenly he changed his mind, asking A-Wu to cut a straight line, instead of a curve. Cu's smart way of making things easier was at once corrected by Liu, who seemed uncomfortable to recreate a paddy far from a reality that did not exist anymore. During this national land census, it was a frequently applied method to use a shape with straight sides--a square, a rectangle, or a trapezoid--to substitute an irregularly shaped paddy. Villagers tend to keep cultivating on their “village-face paddies” that locate near their houses in a flat area; while they are more likely to abandon “valley paddies” deep in the mountains. Director Cu’s substitution method applies well to valley paddies, a vast majority of which only survives in people’s memory. Immediately after Cu’s persuasion, everyone accepted this way inasmuch they obtained the requested land area. Sometime later,

villagers would receive their new land licenses with sketch diagrams of each of their parcels. They would see that the locations and shapes are different from their knowledge, but they would not dispute with it as long as they agree to land numbers. Accountant Liu's fleeting inclination to rectify the wrong shape is resembling to how he felt about people's disappearing memories of every tiny bit of every little corner. For at the end of the day, the "how wretched" memories and the original shapes are readily replaced with a tacit smile.

They spent the whole afternoon in this large meeting room, staring at screens, going through every piece of farmland that belonged to the production team. Accountant Liu's little granddaughter was running around the table, singing and talking to herself. Occasionally, she was scolded for being too noisy. Someone turned on the light, as it was getting dark. The little girl repeatedly begged her grandfather to go home. Though they tried to stifle yawning from time to time, they were determined to finish the mapping, especially Director Cu, the most resolute one, who probably did not want to launch the same project again the next day. He was switching between Mandarin and Hakka, translating between villagers and the GIS surveyor who could not understand the regional dialect. By speaking to both sides and rephrasing villagers' requests, cadres like Cu act as a bridge to transmit information in-between. The language barrier has caused misunderstanding and hardship in communication during the census. Landholders often attribute mistakes to surveyors' inability to speak Hakka, as if surveyors would never fully grasp what their lan is like without speaking their language.

The translation is more than language. During the census, town and village cadres became the real implementors of policies, not the GIS surveyors. They dominated the survey by making decisions, mediating disputes, and facilitating communication between technical persons and landholders. Surveyors, who are trained and equipped to map out and calculate land area, the

only ones who could operate the GIS software, are subject to negotiations between cadres and rural residents. In this afternoon in White Sands Village, the surveyor A-Wu had no choice but listened to what people requested to draw, add, and revise, to the extent that he was objectified as a tool, an extension of the software, that only took orders from people. Without landholders' memory and cadres' translation, surveyors could hardly map out those hundreds of thousands of paddies that are distorted or even disappeared. Rural residents have always been the first producers of land information, no matter when they exploited a new parcel or when they recreated a digital one through memories.

Chapter End

A large part of White Sands Village's farmland disappeared and reappeared as figures. It disappeared because people abandoned it or converted it into other things. In this part of Southern China, very few rural residents are still cultivating wet rice in this fast urbanization time. Those who stay are turning to small business, fruit orchards, pigs and poultry, and tourism. Deep into mountains and valleys, the paddies which people once strenuously built and maintained are now deserted. "People can't see them anymore," as villagers said. These paddies may not have really "disappeared." The shape of the thing, its materiality, has changed. As enclosed patches with earth ridge borders and irrigation ditches, those paddies disappeared. But as a series of land numbers and shape imprints, they persist in people's memories, account books, census maps, newly issued land licenses, and the national land database. They are now everywhere, fluid. Without physical existence in their original locale, however, these paddies left a void space in the village, in people's everyday life. It was the lack of their landowners and cultivation experiences that produced a damaged geography—damaged not in the sense of deforestation or soil loss, but in the sense of losing human care and bonding. It was a damage to

those who chose to, or have no choice but stay in rural areas, and who lived with an ethical predicament to face the increasingly empty surroundings and struggled to reproduce them with memories. These rural landholders reconstructed a map of the village's land with chronotopic particulars they had created and passed down in the past-some of which were also historically produced for bureaucratic chronotopic configuration-on the surveyor's computer. The shape, size, and locations of the land stored in this software portrays an ideal recovery of a now-defunct landscape of the past. This was a bureaucratic chronotopic map, one that was far distanced from the agrarian choronotope it mirrored.

Chapter 3 Numerical Violence

Chapter Tour

Quantifying Social Categories

The Reckoning of People and Land

Stealing Trees from the State

Uncle Chen Rongquan of Bamboo-head Mound, who was in his eighties, could barely hold back his tears when he mentioned the house his father had built with his lifetime savings. When his father was young, he went to a Hakka settlement of Taba, a small place on the outskirts of Calcutta, India, and made a living from leather production there. He bought some paddy fields with the money he sent back and built a large house to provide residence for his offspring. The white house was huge and magnificent, with European-style corbels and arches, as well as Chinese eaves and courtyards. The house was not completed until shortly before his father's death. During the socialist land reform in the early 1950s, some jealous villagers said that this large house should also be “converted” into farmland, reckoned as part of their family's land properties. His family were thus raised to a higher class status and were categorized as “overseas Chinese Landlord.” As for the “jealous” villagers, Uncle Chen said that they were some people from the Yang lineage next door. After that, the big house was taken away and given to the

households who were categorized as Poor Peasants. The house was occupied by many families for twenty years, and in the 1970s, the house was severely damaged and collapsed.

Numerical standards seem to have increasingly become the norm in life, with new quantifiable standards constantly being created. People evaluate whether these standards are reasonable and experiment with adjustments but are also dependent on them and struggle to discard them. Looking back at history, people may find that most numerical standards are not only biased, but also inherently absurd. That was people's retrospect, after the de-collectivization, about the policies of quantifying people and properties during the Land Reform and Cultural Revolution (Song 2020). Although people may have entirely reshaped their thinking, the violence caused by these numerical criteria is irreversible.

In this chapter, I analyze the violence of state-designed numerical standards in a massive, thirty-year socialist experiment, that is, what I call numerical violence, the physical, social relational, and psychological violence brought about by authoritative quantification. It is not the numbers themselves that are violent, but the definitions, applications, standardization, and implementation of numbers. In her book *The Seduction of Quantification*, Sally Engle Merry notes that measurement systems can create social impact beyond what the designers envisioned, especially when the purpose of these systems differs from the understanding of those directly involved (Merry 2016). Numbers serve as symbols of authority and objectivity, i.e., they come from power and produce power (Porter 1996). The boundaries between what is counted and what is excluded from counting are interchangeable, meaningful, and negotiable (Nelson 2009). Numbers are a typical form of knowledge use, and the very hierarchization of knowledge can produce neglect, discrimination, and an inability to communicate reciprocally, which may be understood as epistemic violence (Spivak 1988; Scheper-Hughes and Bourgois 2004). The

potential for violence arises when the architects of numerical standards have discursive authority over the subjects being measured and calculated. Scholars have pointed out that algorithms help produce violence especially in military weapons and surveillance (Owen 2015). Yet numerical violence as both a technique and a social effect could appear much earlier than what is now the so-called algorithm that has been invented, and much more permeable in everyday life. Salient numerical violence often originates from authoritarianism. The state, as the engineer and promoter of countless numerical standards, is the most obvious perpetrator of numerical violence. The violence of the state is often invisible and inescapable to those who are in it (Lagasnerie 2018). The violence of the state exists in the discipline of the population, especially the physical and mental control (Foucault 1995, 2010). Numerical violence is a widespread pattern of state violence, but always in a taken-for-granted and subtle way that permeates everyday bureaucratic running. In this chapter, I focus on the reshuffled social relations, property deprivation, and even life deprivation, brought about by the numerical standards in more radical social movements. I also examine people's internalization of numerical violence and their forced involvement in it by such violence and even passing it on to others.

People's quantification of material environments has been framed by moral ideologies and has generated ethical evaluations related to measurement. Helen Verran notes that "numbers are all political" (Verran 2010). The concept of politics is not limited to state politics but encompasses the politics of kinship and neighborhood as well. I am drawn to the manner in which people relate human attributes to material environments by means of mathematical operations. The calculation of property relations builds on the definitions from multiple authorities—the state, collective, kinship, and so on. Statistics reduce people and objects to de-

humanized, de-concrete numbers and, in the meantime, create a reclassification and emergent definitions of people and things.

What kind of moral calculations, i.e., ideology-laden quantification of people and things, are created through juxtaposing discourses? The term, moral calculation, is parallel to but different from the concept of moral economy. James Scott's concept of "moral economy" assumes that morality and economic values are perceived as antagonistic (Scott 1976). In his writings and other such applications, moral economy refers to the fact that morality may "restrain" the impulse to pursue economic interests. This tendency to assume that "economy" is simply the pursuit of profit is biased, because economic conducts are inherently ideologically mediated human behaviors. Moreover, the assumption of "selfishness" as human instinct, something that needs the restraint from morality, is problematic (Dawkins 2016[1976]; Startup 2021). Some other scholars explain "moral economy" as a systematic, stable socioeconomic structure. While such a definition recognizes the inseparability of economic behaviors and moral ideologies, it leaves open how moral discourses legitimize and frames economic behaviors in historical social interactions, which is a dynamic rather than a static process. It is the emergence of new moral ideologies that has given rise to innovative approaches to quantification and marketability. In contrast to the relatively flexible term "economy" in "moral economy", the term "morality" is often taken in a narrower sense, i.e., sharp distinctions in dichotomies of good and bad. However, the uncertainty of moral ideologies and the multiplicity of ethical discourses often lead to contradictions in economic behavior, especially when diverse discourses overlap. Under intertwined moral ideologies, land grabbing may be both righteous and unkind, and stealing may be both good and illegal, as has been particularly evident in China's contemporary history of collectivization and de-collectivization reforms. The rationality assumption of

economy is problematic, for the economic behaviors are understood and gauged in association with social relations in everyday ethics (Keane 2019). Thus, I replace the term economy with calculation, for economy is inevitably moral, whereas calculation is not. The term calculation itself does not assume at which end of the magnitude scale—large or small, long or short, more or less—is preferable. It is the ideological assessments of these things that render the differences socially significant.

The inhabitants of this rural Hakka region had fashioned time- and space-specific methods of quantifying land and forests in the historical shifts of moral discourses. What makes things (land, house, trees) calculable and marketable are the moral frames that define these objects. There are also geographical—highlands, plains, forests, coast—features that steer people to different lifestyles and ways of communicating with the regime, as has been discovered in studies of other societies (Scott 2010; Szonyi 2017). People have created different ways of quantifying territories with distinctive characteristics, leading to various access to national governance and market operations. I am interested in the interpretation of miscalculations that occurred in the practices of surveying, reporting, registering, grading, and leasing land. Of course, calling them “errors” does not mean that there was a correct reference, but these calculations and results are controversial and have ongoing social consequences. The histories of collectivization and de-collectivization lingered in people's lives in the form of ethical talks about what they had lost or still held, especially the land that had been wrongly divided and calculated.

Quantifying Social Categories

In Sanxiang Town, rumors of such notorious ancestors with gambling addiction had been passed down in many lineages. There was such an individual called Li Meiyang in the Pond-Head Li lineage. Li Meiyang was addicted to opium and gambling in the early 20th century in the Republic Era. He sold all the fields and forests that his grandfather had bought with the money earned from his venture in Malaysia. As a result, the Li lineage declined overnight. However, when Li Meiyang's descendants spoke about it, they did not show even the slightest bit of regret, for their ancestor's misdeeds and misfortune had saved his descendants instead. During the land reform in the 1950s after the founding of the People's Republic of China, Li Meiyang's descendants were rated as "Poor and Lower-Middle Peasants" (*M. pin xia zhongnong*) because of the small amount of land they owned. While the next-door neighbor, the Zhang lineage of Big Lake, was originally wealthy and influential during the Republic Era, being involved in both politics and commerce. A couple of them bought large portions of land from Li Meiyang back then. When the land reform was underway, some members of the Zhang lineage were labeled as "Landlords" (*M. di zhu*) or "Rich Peasants" (*M. fu nong*). Several of them were executed. The surplus land of the landlords and rich peasants was handed over to the commune and then allotted to the villagers.

Since the late imperial period, many Hakkas in this region migrated to the "Southern Ocean", i.e., South and Southeast Asia, to seek a living. This was not contradictory to the long-standing description of Chinese peasants as being bound to the land (Fei 1992; Hinton 1966). The money earned by these Hakkas away from their hometowns was regularly sent back to their families in China to cover the living expenses. The rest of the money was then spent on the purchase of fields and forests. The founding of the People's Republic of China and the Socialist

Land Reform broke the chain of funds that had been forged over the centuries (Shue 1984). The new state moral discourse created new social categories, relating people to the fields they owned and measuring their political categories in terms of quantity.

The idea of using the amount of property to define social rank was not unprecedented. Nevertheless, the first land reform in the People’s Republic of China reshuffled the entire social structure and relations by assigning social categories based on the size of the land that people owned (DeMare 2019; Tang 2006). Such transformations could be life-changing for individuals. These criteria for quantifying personal property were built on a set of theories about the state and class proportions, as well as on moral ideologies that endorsed the revolution. With this social theory, the previously accepted social status by the standard of wealth accumulation was reversed after the New China.

	Pre-Reform	Post-Reform
Extensive Land Holdings	The Rich, The Achievers	The Exploiters, The Wicked
Lesser Land Holdings	The Poor, The Losers	The Exploited, The Kind-Hearted

The former was a more common evaluation of wealth, while the latter had a strong sense of moral judgment. Much of the violence exhibited in the land reform tended to be associated with quantitative criteria. Bureaucratic document-making is biased and arbitrary that easily leads to violence against the vulnerable groups (Gupta 2012). There was a combination of government guidance and spontaneous behaviors by people involved in such a pattern of violence. The new government mobilized the masses to collect evidence of the “crimes of landlords and bullies” and to report their accounts to the government. The government demanded that the masses,

especially the Poor and Lower-middle Peasants, express their hatred for the landowning class. Such verbal accusations included making lists of the size of the landlords' fields and properties, recounting their exploitative stories, and exposing their blatant tyranny in the villages (Wu 2014). As a result of ideological education and public accusations, people had come to a logic that the relationship between the exploiters and exploited was determined by the size of the land owned.

The government devoted most of its energy to moral propaganda in directing land reform as well as pursuing collectivization (Madsen 1986). The purpose of propaganda, as emphasized in many policies, was to “mobilize the masses”. In other words, the reform was supposed to be led by the people. They were the ones to “look into each other’s property,” to “reckon old scores,” and to “ferret” the Landlords. At first, the villagers did not resort to violence against their fellow villagers. Many would ask for mercy for the landlords they deemed to be kind-hearted. Later, the government prompted “no peaceful division of land” to discourage sympathy for the landowning class. Not long after this, the violence began to spread, even spiraling somewhat out of control (Dikötter 2013). Some of the landlords were shot, while others committed suicide. In 1951, Meixian counted the number of people who committed suicide during the first phase of the land reform within its jurisdiction. While most of these people were landlords, rich peasants, and “bullies”, there were also members of other classes. A slightly larger number of these suicides were committed by men than by women. (MZ Vol.015-001-006)

梅縣土改第一階段鬥爭戰役運動情況比較表(表一)

項目 戰役	曾依自然村 未展開鬥爭 的空白村	受鬥對象 人數	受鬥對象 戶數	查出果 實數	交出果 實數	分 出 果 實 數	分 得 果 實 數	參 加 鬥 爭 人 數	法 庭 處 決 人 數	自 殺 已 死 人 數	貧僱農組織情況			新農會情況			
											小 組 數	組 人 員 數	佔 農 業 人 口 %	村 農 會 數	會 員 數	佔 農 業 人 口 %	
第一戰役	557	82	50	742	7942953	2207772	1655823	119954	154469	8	38	1524	20084	5.2	—	—	—
第二戰役	631	8	289	3831	3975689	1696855	1442326	172431	193086	10	38	2049	27179	7.04	—	—	—
第三戰役	636	3	1210	5092	9188140	3953951	2918726	224227	259436	148	53	3303	48970	12.68	30	5920	153
合計	636	3	1549	9665	20205882	7857678	6916881	224227	259436	166	129	3503	48970	12.68	30	5920	153
說明	(一) 戰役時間：第一戰役(5.19—6.7)，第二戰役(6.8—7.30)，第三戰役(7.1—7.19)。 (二) 分出果實數與分得果實數、參加鬥爭人數在第一、二戰役均屬不完全統計。 (三) 重新組織的貧、中、有城、城、白渡三個區部分村已成立其他各區仍正組織成立中。																

一九五一年五月十九日起至七月十九日止。梅縣土委會調研科製。

Figure 19 Statistical Table of the First Phase (May 19—July 19, 1951) of Land Reform in Meixian

This statistical table of land reform of Meixian shows that in the first phase of the reform, in just two months, the court executed 166 people and 129 people committed suicide. This was still a prelude to the widespread class determination and land distribution. Only three of the 639 “natural villages” in the county had not yet begun the class struggle. The main purpose of this stage was to distribute food from the landlords to the people in the villages through struggle rallies. While stereotypes like “wealth equals greed” were not uncommon, new state policies allowed people to take actions that turned inequitable land ownership into an equitable land allotment. The slogan promoted by the government was: “People who till the land shall own it.” If the goal of “building a communist society and achieving great harmony” seemed overly abstract, the concept of equal sharing of land was grounded in easy-to-understand moral principles: the minority is subordinate to the majority and all people are equal. The land reform correlated land property with political categories, upholding a seemingly contradictory logic:

property and people were brought together in a way so close that the amount of property determined the quality and even the personality of people. And yet the connection between property and people was so fragile that it could be revoked and shuffled at a moment's notice.

It was a brief revolution. In 1950, Meixian conducted a land survey and produced a report from typical data and cases reported by each district (MZY77Y81). In preparation for the land reform, in the second half of 1951, Sanxiang Town launched a campaign against the bandits and bullies, returning the rents and deposits to the peasants. In the summer of 1952, the Meixian Land Reform Work Team arrived in Sanxiang to mobilize the masses to confront the landlords and assign the class statuses. In October, the land allotment was initiated in Sanxiang. In November, the land reform movement was brought to an end. In just a few months, this dramatic reform was over. The *Gazetteer of Sanxiang*, written in the 1990s by a team of cultural workers, listed the tasks accomplished during this phase.

During the land reform movement, the landlords' land was confiscated, and more than 3,400 mu of lineage paddies, association paddies, education paddies, and surplus land leased by rich peasants were expropriated and allotted to peasants with no land or little land. Also, the forests were confiscated from the landlords and associations. They were then converted into arable land by the amount of timber they had produced and distributed to peasants according to their willingness and needs for arable land or forests. In the spring of 1953, after the end of the land reform, a re-inspection was conducted to implement the policy on overseas Chinese, correcting the misclassification of "landlord overseas Chinese" or "overseas Chinese landlord" in the land reform into "overseas Chinese industry and commerce" or "overseas Chinese handicraft", and returning the confiscated houses. In March of that year, after the completion of the land reform re-inspection, another month was spent on "surveying land and fixing production quota" (M. chatian dingchan). On this basis, the old deeds (land deeds before the founding of the People's Republic of China) were collected, and the "Land and Property Certificate" issued by the County People's Government was filled out to determine the ownership and right to use land and houses. (*The Gazetteer of Sanxiang*, p54)

The compilers concluded that after months of reform, "the feudal land ownership system that had existed for thousands of years was abolished." This reckoning of land and social

categories was not an easy task, which entailed a great deal of intellectual and physical labor. They were not sure what the criteria for classifying the categories were and had to reckon the size of the fields of landlords as well as other categories. A few months after the start of the land reform in 1952, the Xingmei (i.e., Xingning and Meixian) government issued the *Provisions on Certain Issues in the Implementation of the Policy*, emphasizing that “the criteria for assigning class status are the quantity and use of the means of production” (MZ No.003-A12.1, Vol.008). The *Provisions* identified the problems that arose in the class assignment in the preliminary stage of the reform, particularly “the focus on ownership (quantity) but not on labor (relation), or the focus on labor (relation) but not on ownership (quantity).” (Ibid)

There was no established yardstick to assign class statuses, so that people were constantly testing and adjusting, bringing personal grudges and social affects into their judgments. They tended to raise the class status of those they were holding grudges against, exaggerating the latter’s economic status through lifestyles, political positions, and family ties. In response to this, the above-mentioned *Provisions* proposed that the holdings of landowners could be used as a criterion to define Large, Medium, and Small Landlords, which should be adjusted by each district/county:

[Each district should] set standards for land ownership by Large, Medium, and Small Landowners per household. For example, those who are holding less than 30 dan of land are Small Landlords; those who are holding more than 30 dan but less than 50 dan of land are Medium Landlords; those who are holding more than 50 dan of land are Large Landlords. Normally, if someone had less than twenty dan of land, he or she would not be rated as a landlord, but as a Small Leaseholder or another class member such as a Businessman or Industrialist according to their main occupation. (Ibid)

The unit of measure used in this passage is *dan*. The area measured by *dan* varied slightly from region to region at that time, with one *dan* being about four to five *mu*. This was a continuation of the unit commonly used by people in this region during the imperial period,

which was a measure of the size of a paddy field in terms of the amount of rice harvested. (In the land register of Meixian in 1955, “*mu*”, or 666.67 square meters, was used as the unit of land area.) The figures used in the *Provisions* were only references. Xingning, Meixian, and other districts were required to adjust numerical standards according to the proportion of local class status. The *Provisions* specified that the proportion of each class in society was the overriding factor for determining class status:

The Landlord households should account for 4%-4.5% of the district and 5%-5.5% of the total population. The number of households of Rich Peasants does not exceed 3%. The number of Medium Peasant households is 20%, while their population does not exceed 25% of the total. The number of Poor Peasants and Farm Laborers should be above 60%.

These precise figures on class status depicted an Old Society constructed by the new state regime, in which more than sixty percentage of population were the poor, who hardly had any land and were exploited by less than 5% of the populations, i.e., the Landlords. The idea of land reform was to seize the land of the Landlords (5%) and the Rich Peasants (3%) and transfer it to the poor peasants and laborers. Toward the later phases of land reform, however, people grew even more radical and there was a tendency to rate more people as Landlords and Rich Peasants rather than less than this ratio.

Most of the documents on land reform in the first three years of the 1950s dealt with the “classification criteria.” These criteria were derived from the *Provisions of the Central Committee on the Division of Social Classes and Their Treatment in the Land Reform (Draft)* issued by the Communist Party Central Committee in 1947. This draft was drawn up based on a peasant survey conducted by Mao Zedong in the 1920s and several reports he wrote between 1927 and 1933 (more analysis of Mao’s theory and influence of Stalin, see Gao 2004). Some historians have re-estimated these figures to verify whether this was indeed the ratio before the founding of the PRC. I am more concerned with the violence brought up by these numerical

standards. Given that the number of land holdings per capita varied from village to village, the rigid application of classification criteria to all villages was arbitrary, bearing grave consequences in the end.

While all the criteria issued by the government for assigning class status were based on the means of production, people still took other forms of property into account in practice, such as houses. At that time, Meixian had many overseas Chinese style houses which were built during the Qing Dynasty and the Republic Era. These buildings integrated Chinese, European, and Southeast Asian architectural features. Many of them had exquisite murals, window treatments, and balustrades. Most of these houses were built by overseas Chinese who went abroad and sent money back to their hometowns. During the land reform, this kind of luxury architecture justified the division of social statuses. It was not uncommon to see such examples as the house of Uncle Chen Rongquan's grandfather in Bamboo-Head Mound being converted into land area. Although the Central Government's 1951 *Land Reform Law* mentioned the possibility of confiscating landlords' surplus houses, no provision was given as to whether houses could be converted into fields and used to assign classes. What people in Sanxiang did was a reversal of the order of reform's policies. The *Land Reform Law* also stated that property in the form of other than surplus fields and houses could not be confiscated from Landlords. The Meixian Work Team, who directed the land reform, also discovered that people often took some other factors into account when assigning class statuses. Houses, despite not being a "means of production," were direct manifestations of ways of life, but their physical nature served as a constant reminder of the bond between the object and its owner. The propaganda of the land reform led to the consolidation of the link between property and class status, and people learned to interpret the language of differences in the amount of land and property. It was precisely due

to the state's moral discourses that connected the amount of property with good and evil, making the big houses, which the villagers had once worked so hard for, the embodiment of wickedness. Many generations in this Hakka region had gone out to South and Southeast Asia, where the money earned was often sent back home to purchase fields and build houses. Yet the precious legacy these people left to their descendants made them vulnerable instead.

Overseas Chinese families like Uncle Chen Rongquan of Bamboo-Head Mound were so great in number in Meixian that the Land Reform Work Team had to create a new political category: "Overseas Chinese landlords". These "Overseas Chinese families" would regularly receive money and other items from their relatives overseas to cover their household expenses and purchase properties. The way they became rich was unlike the portrayal of traditional Landlords in the state moral discourses. Their wealth was not built upon the exploitation of the peasants. This added to the complexity of the task of assigning classes. In the *Measures for the Treatment of Overseas Chinese Land in the Land Reform of Guangdong Province* issued in 1951, the government stipulated that "the principle of safeguarding the interests of overseas Chinese" should be followed. The *Measures* stated that if these overseas Chinese were also "laboring people", including workers, clerks, small vendors, and freelancers, they could keep the land they leased in their hometown, as long as the amount of land did not exceed 200% of the local land per capita. Families under the category of "Overseas Chinese Landlords" might keep their houses, furniture, farm animals, plows, food, etc., if they could prove that the money for the land purchase was obtained through labor overseas. But as was the case with Uncle Chen Rongquan's family, their class status was defined as higher than it should be. And therefore, they were deprived of more than the policy dictated. To prove that their relatives abroad were "working people" depended mostly on the testimonies of other villagers. At that time, the

Hakkas of Meixian often went to the same destinations in South and Southeast Asia. They tended to travel with lineage members or fellow villagers, all going to the same places and engaging in associated occupations. Like Uncle Chen Rongquan's father, many of his fellow villagers went to Taba, India, a village where Hakka people congregated. They opened leather factories and started their business.

This preferential policy for overseas Chinese families blurred the criteria for delineating class status, as almost every family in this Hakka region, including Sanxiang, had males who headed overseas to make a living. They had raised money for the trip or sold some of their paddies before leaving. The money they earned overseas was often sent back to their relatives at home, either by their fellow villagers or by a special agency. Quite some people did not make it back, turning into "decedents abroad" on the lineage genealogies. Many families have received money from overseas at one time or another. Issued by the Xingning and Meixian governments, the *Provisions*, which was discussed previously, also noted that in the early stages of the land reform, there were families whose class statuses were raised as a result of income from overseas earnings. Other families were misclassified as Landlords when their relatives back home rented out just a small area of land because the labor force had moved abroad. The determination of class status by quantitative criteria changed the lineage pattern in Sanxiang. I will discuss the changes brought about by the collectivization movement to the lineages in the next section. These newly created social categories were then abolished in 1979, three years after the Cultural Revolution ended. It was called the "removal of hats" from Landlords and Rich Peasants. Till then, people retrospectively reflected on the absurdity of all the numerical standards that determined people's life and death.

The Reckoning of Lineages

The “old society,” which had been defined in terms of uniform class ratios throughout the country, was sought to be completely replaced by the newly established government with an ideal social composition. The new regime aimed to eliminate not only the “exploiting classes” in the countryside, but also those local forces that were seen as remnants of feudalism, such as lineages. Lineages, linked by surnames and joint worship of common ancestors, were particularly prevalent in Southeast China (Also in some Northeast part of China, see Cohen 2005). In Meixian, lineage was a label that almost everyone had. These lineages often had their own ancestral halls, kept their genealogies, and possessed shared properties, such as land and forests. These lineages, as the members carefully maintained, participated in ancestor worship, lineage properties, genealogy compilation. In Xiaodu, people differentiated seven lineages, each with the same surname and residing in a close neighborhood. Lineages usually kept genealogies—the format, from a glance, resembled a typical patrilineal model: only male members were traced, and eldest sons took the most important positions. Only in recent years, after the 2000s, people started to include daughters in their genealogies. The word “lineage” is both a scholarly term and a translation of indigenous words (*jia zu*, literally “family group,” or *zong zu*, “ancestral group”). The translation is commonly traced back to Maurice Freedman’s book *Lineage Organization in Southeastern China* published in 1958. His research led to the later “lineage-model” of cooperate patriliney in China studies, which was subject to some criticism and revision since the 1990s (Faure 1986; Santos 2006; Zheng 2009).

The socialist transformation in the early 1950s attempted to disintegrate or undermine lineages, a social group built upon patriarchal systems. In the late 1950s, however, during the People’s Commune movement, the emerging political organization called production teams (M.

shengchan dui) were maneuvered to overlap with lineages in Meixian. Contrary to the state's policy to dismantle local forces, the linkage inside the lineages was thus reinforced, as a considerable number of lineages directly became production teams. From then on, lineage/production teams jointly managed properties, dealt with finance through negotiation, and cooperated to complete national tasks during the collective cultivation of paddy fields. In addition, lineage/production teams acted like a closely coordinated economy, as the production team members worked in groups and engaged in planning harvests and distribution jointly, with "labor points" counted.

During the land reform, the state quantified people's properties as a criterion for classifying social categories. In the People's Commune movement thereafter, the government abstracted human labor as an equal amount of work. These were all state behaviors of quantifying/datafying human and material resources. Ultimately, the reckoning of land was a reckoning of people, as social relations were altered by the redistribution of land. In the early days of PRC, the government attempted to break down the lineage organizations as pre-existing relationships. Meixian government started to investigate how to reform the lineages before the comprehensive implementation of land reform. In 1951, Ye Qixiang, a cadre and educator in Xingning County wrote an investigation report for the Meixian and Xingning Committee, called *A Typical Report on the Breaking of the House Boundary and the Surname Boundary in Huangpi District, Xingning County*. According to him, to eliminate lineage, which was deemed a "remnant of feudalism", it was necessary to disintegrate its economic base and confiscate the land of the Landlords. The government should extensively publicize the ideology that lineages were backward. Furthermore, in each village, production teams should be built according to the place of residence rather than lineage, so as to cut off the ties of lineages. The leaders for each

production team, he suggested that, should be selected from the Poor or Lower-Middle Peasants, preferably ones who suffered from lineage struggles.

Following the land reform and “surveying land and fixing production quota” in the mid-1950s, Meixian assigned a code number to each household. Families with different surnames were grouped together by residency with each group consisting of the same amount of people. In the comprehensive collection of land data carried out in Meixian in 1955, the government recorded the class status of each household, as well as their ID number, the location, and the size of land parcels, with surnames mixed in the ordering.

The lineages obtained a chance to come back to a salient role when the government established the new political organization, the production teams (*shengchan dui*), during the Great Leap Forward and the People’s Commune Movement (Lu 2015). The same as much of China, 1958 witnessed the beginning of a new type of cooperation in Sanxiang Town, as well as the eve of a three-year great famine. In 1961, as required by the county, Sanxiang Town changed to Sanxiang Commune, established with 12 production brigades and 110 production teams (*The Gazetteer of Sanxiang*). Those production teams inherited the coding given in 1955, each team with the same number of members. However, families from different lineages found it difficult to adapt to the highly cooperative pattern. People suggested that the production teams should be based on lineages, as people of the same lineage lived together with their fields adjoined. In this way, the Pond-Head Li lineage turned into the No.6 Production Team. Due to the large population, the neighboring Zhang lineage was divided into three production teams, which were three branches with respective ancestral halls (descendants of three brothers). Similarly, other lineages, Chen, Liao, Zhong, etc. in the production brigade all formed into production teams. This arrangement continued up to now.

This linkage between lineage and production team was common in Sanxiang and the whole Meixian. Different from the rural areas in the Pearl River Delta, where people of the whole village belong to the same lineage (Chan et al. 1984), the lineages in Meixian were usually of a small scale as a branch of shared ancestors. In the beginning, the production teams in Sanxiang were encoded in numerical order. The Li lineage was grouped as the No.6 production team subordinating to the Xiaodu Brigade. Later, numbers were replaced with the placenames for each lineage's ancestral hall, gradually. People started to call the No.6 Production Team as the "Pond-Head Team", for Pond-Head was the placename of the Li lineage's ancestral hall. The Zhang lineage, similarly, was called the "Big Lake Team", and the Chen lineage the "Mound-Head Team". The change in naming production teams highlighted the lineage identification further. As I mentioned in Chapter 2, in Sanxiang, placenames of ancestral halls represented the lineages since at least the late Qing Dynasty. Grouping lineages into production teams created teams with different numbers of members, which was apparently not the original design of the state policy. People from the Pond-Head Li lineage sometimes mentioned the power disparity among the teams caused by the unequal number of members. In the 1970s, the Pond-Head Team had 38 members, the Big Lake Team had more than 70 members, the Mound-Head Team had over 100 members, and the Yellow-Mud Valley Team had about 60 members. According to Uncle Li Guojiang, the Big Lake Team, i.e., the Zhang lineage, would always "bully" the Pond-Head Team by the advantage in population. He referred to micro conflicts, such as the distribution of agricultural tools, the use of cattle, and the sequence of water supply. The concept of lineage was reinforced in these petty frictions, which were both a competition for resources between administrative units and were also described as conflicts between lineages.

The coincidence between the lineages and administrative units (production teams), however, did not mean a return to the pre-Liberation way of life. In the 1960s and 1970s, with the highly collectivized pattern, lineages were more like economies of united control. Before the founding of the new China, the nuclear and extended families were more independent by cultivating their self-owned fields and raising their self-owned livestock. The properties shared by a lineage were used for significant occasions such as sacrifices, education, and fulfilling the lineage's duties. There may be significant differences between lineage members in terms of wealth and poverty. This was why, at the time of land reform, there were both Landowners and Rich or Poor Peasants within the same lineage. Subsequent to the land reform and the People's Commune, all the activities in a production team were collectivized. The team owned the land, managed the agricultural tools, collected harvests, handed over the food tax, and distributed the income to the members. The members gained new bureaucratic relationships in addition to original kin relations. In the production teams, families with wealth differences eliminated appeared more equal.

The System of Labor Points prevailed in the period of People's Commune: people over a specified age were defined as labor with equivalent wages and food distributed corresponding to his/her age and gender (Xin 2005). An adult male's workday equaled 10 points and an adult female's workday equaled 8 points. As summarized by an old cadre, "Time, workday, was money". Labor points were measured by time and subject to adjustment according to the type of work. Besides farming and animal breeding, labor points may apply to many other collective activities, including the construction of irrigation systems and roads, tree planting and logging, as well as cultural and recreational activities. The hardship varied among work types for the same labor point. Easier jobs were attractive, but the chance to get to choose was rare. Almost all

young and middle-aged men would be arranged to build dams, which was one of the hardest jobs, and sometimes women had to do so. People recalled that a large dam near Sanxiang was built by local villagers with rocks and earth, and it consumed enormous labor. Hunting was one of the most desirable jobs for young men because it was easy, interesting, and admirable. To protect crops from wild boars in the nearby forests, Sanxiang Commune organized a “hunting team” composed of young men to hunt wild boars with shotguns at night. They obtained equal labor points for the time they spent and priority for receiving better parts of the prey. By comparing the difficulty of jobs, people formed this kind of logic that “time was money,” but also reflected on the irrationality of this indiscriminate labor point system (Zhang 1998). The labor of all people was abstracted into gender and age-based time. The labor points system, a model of collectivized management, developed a systematic measurement of labor and value. People became more explicit of calculating the effort they put in, physically and intellectually. Other than those livelihood with direct outcomes, people came to identify the value in more diverse labor, including purchasing seeds, tending forests, and performing educational stage plays. In such a system, people realized that their efforts made for the commune/state were valuable and countable. In the next chapter, I will expatiate how this system influenced the idea of private/collective labor after de-collectivization with the question “is there compensation for work loss.”

Using the system of labor points, production teams quantified the labor of their members and conducted centralized management, which changed the power relations and coordination pattern of lineages. In Meixian, a Hakka-speaking region, Granduncle Heads (*su gungteou*), most of them are senior men, played a central role in managing shared land, presiding over sacrifices, distributing grain, and mediating disputes in lineages. They usually came from families with

dominating economic or political strength. Conflicts between two lineages were usually settled by the respective Granduncle Heads. After the production teams overlapped with lineages, the managerial power was transferred to a younger generation. Each production team set up cadres, including the leader, vice-leader, accountant, cashier, women's director, and scorekeeper, etc. Their daily administration, including bookkeeping that cost an extra half hour every morning and afternoon for recording the labor of the members, was not paid with direct allowance. Nevertheless, the posts were regarded as honorable for being "advanced" politically. Due to the patriotism mobilization, those positions were more attractive to the younger generations. In this case, Granduncle Heads, who still earned respect, quit daily management of their lineages gradually. Instead, their authorities only came into force in dealing with internal or external conflicts. Most candidates for team cadres were young and politically proactive.

To some extent, the originally linear kin relations were extended horizontally by the system of labor points, with people simply considered as an equal labor force. Nevertheless, kin relations continued to play a role in the system. In the late period of collectivization, people held negative attitudes to farm work. The cadres had to supervise the farm work under political pressure. The day-to-day management became complicated especially concerning the lineage relationship. According to Uncle Li Guojiang, who was the leader of the Pond-Head Team in his twenties, his job was so arduous in the late 1970s:

The most annoying thing was to urge people to work. Every morning, I got up at six or seven. I had to wake them up from door to door by blowing a little whistle. What can I do? I could neither beat nor scold them. They were all my uncles and aunts. It usually took one or two hours every day for them to arrive at the fields.

Peasants' dawdling along may be considered the weapon of the weak (Scott 1987). This kind of anti-social or anti-power behaviors were prevailing throughout the Collectivization (Gao 2014). In this nationwide socialist experiment, with their initial enthusiasm and confidence

fading away, the experiment subjects suffered from a sense of frustration and pressure. The common scene in the rural Meixian as described by Uncle Li Guojiang above indicates that the imposed political structure turned the lineage into a military-style factory. The conceptual confusion of lineage with production teams brought up both the reinforcement and a weakening of the lineage identification. As reflected in people's words "They the Big Lake Team always bullied us Pond-Head Team," people belonged to a kind of lineage-team complex, where the shared surnames and ancestry justified the organizational boundaries, while the moral ideology provided a pretext for the existence of production teams: lineage members were supposed to cooperate with and help each other. The government tried to eliminate lineages as "feudal remnants," while the establishment of production teams gave lineages a chance for coexisting and merging with the new political units. The organization called production teams even confined the originally mobile lineages to their native land. With their birth, death, food, work, illness, and aging managed by the lineage-team complex collectively, the members were closely tied to it until the collectivized life became unsustainable.

Collective labor and the system of labor points came to an end in the early 1980s, drawing a full stop to the commune experiment. "Allocation of Land to Households", a new experiment of de-collectivization reform, was carried out across China in an unimaginably radical way. It was carried out in Sanxiang in 1982, which deprived production teams of the function of highly unified management. The ties among lineage members inherited from the bundling mode of collective labor also became looser. In terms of forest management, there was a long-term "micro-struggle" among lineages, which will be analyzed in the next section. In the de-collectivization movement, production teams were issued with certificates of the forests under

their management, endowing them with the rights of managing and renting out forests, as well as gaining corresponding profits.

Stealing Trees from the State

I was drinking tea at Uncle Li Guojiang's house one afternoon. Some relatives at Pond-head got together chatting on the tea plantation managed by the village head, nicknamed Uncle Tiny. Uncle Li Guojiang told me that the forest where the tea plantation was located belonged to the Pond-head Li lineage, but the village head took away the forest certificate, but did not ever pay a single cent for the Li members. I had never heard about that until the third year of my studies in Sanxiang, when the Li lineage members began to invite me for almost every activity of their lineage, including joining their WeChat group. "We don't have a forest certificate," explained Uncle Li Guojiang. At the end of 2019, I returned to Meixian again after a brief absence. Uncle Li Guojun, the former production team leader, gladly took out the contract newly signed between Uncle Tiny and the Li lineage, which specified an annual rental of 5,000 *yuan* for using this forest for tea plantation. Disputes arising from forests were common here, mostly between relatives or between renters and the lineages. "Our mountains", as the villagers called, was not the same thing as "lineage shared mountains" before the founding of the People's Republic of China. The former was the property of a lineage-production team complex formed after the collectivization movement.

Fields, regarded by all regimes, was the focus of governance. Forests, however, often lurked outside the state's fine management framework and became an obscure zone (Marks 2006). They were not only too wild and raw to be clearly defined but were also ever-changing while coexisting with a wide variety of wild animals and plants (Elvin 2006; Forsyth and Walker

2008). Since the late Qing Empire period, Sanxiang people had been planting pine and fir here, making it part of the huge timber business crossing regions and even national borders. When the state's control attempted to penetrate the forest, it collided with previous ownership— those intertwined with kin and territorial ties—or adapted to each other (Li 2014).

The new government invested immense energy into managing the mountain forests after the collectivization movement, and even did accurate statistics down to the number of trees with an attempt to refine forest management. In contrast to that, the locals fought back with their “wits and courage”, by stealing trees, selling trees, and burning mountains. They exploited the complexity of mountain forests to thwart the government’s precise calculations and control. Most Sanxiang residents have “stolen trees” in the collectivization and even after the de-collectivization movement. “Stealing” here is quite complicated—the villagers used this word because governmental regulations did not allow any unauthorized logging, from a regulatory standpoint. But they also insisted that they were stealing trees of their own, or rather, trees planted by themselves in the forest or left by their ancestors. “People will definitely not steal others’ trees. They would be beaten,” said Uncle Li Guotai. Although stealing trees of the state was dishonorable, it became a justified practice unanimously admitted by people. They did not flaunt the trees they stole and remained quiet about others’ stealing. The brigade cadres drafted as forest rangers inevitably fell into moral dilemmas that they suffered pressure from the superiors, but they did understand economic necessities of their neighbors and even their own families. The government was counting the number of trees, while people were stealing them. Such dynamic interaction reflected the game between the villagers and the government in this shade of gray. The collectivization movement ultimately left behind the mountain forests of lineages, as well as the social conflicts that survived to this day.

This conflict arose from the newly established state's defining mountain forests as the state property and "forest resource". The former specified the ownership of forests, while the latter restricted its use as a morality for ecological science. The government sought to expand forest resources by encouraging forest planting and assigning the task of developing forest farms and planting trees to the communes. People had no right to cut down the trees they had planted, which were owned by the state. Such policies were baffling to Sanxiang residents, who had been running forest businesses for generations—why could they not cut down trees they planted themselves? Although people must hand in their wetland rice harvest to both the production brigade and the commune, they could still receive part of "surplus crops" returned. The collectivization of forests, compared with that of paddy rice fields, encountered more prolonged resistance in Sanxiang, and even the entire Meixian, unexpectedly resulting in three large-scale tree-felling actions.

The first tree-felling action in Meixian took place in 1958, which was actually a conspiracy between villagers and the government. Fields had everyone's attention in previous land reforms, leaving forestland in an obscure area of rough edges. Although forestland was allocated to each household, people were kind of in a wait-and-see situation about how to deal with these woods. Before the liberation, many Sanxiang households had some portions of forest, which were leased and traded among villagers. By 1957 and 1958, rural residents heard further collectivization was on the way, worrying that all the forests would be state owned. So they started to fell trees without permission. It was also during this time that the government called for steelmaking by all, marking the start of radical movement under the Great Leap Forward's slogan. Tree felling became more blatant. The government led people to chop down big trees and leave small ones. A fever pitch for production soon loomed large with the advent of a massive

famine that swept across the country in the three years that followed. People rushed to the mountains to siphon off everything to eat, such as wild fruits, bracken, and kudzu root. Even tree barks were not available at last. The great famine was a direct result from radical movements but was often interpreted in terms of climate disasters (Guo 2013). When people had no way to feed themselves, the forests provided them with additional nutrients from plants and animals, which escaped the government's calculation and taxation, time and time again. The broadscale tree felling was deemed legitimate of its day, just like a historical reckoning in which the majority of trees planted by the locals before 1949 were drained and hence left land for socialist afforestation.

The deforestation movement in the Great Leap Forward period drove Meixian government at all levels to muster enormous manpower and material resources into tree planting in the early 1960s. Apart from rice planting and livestock breeding, people were organized to plant trees and offered labor credits as compensation. The government put "forestry production" on the agenda, and set annual tasks to be completed, like that for every other food crop. After the communization movement, the government allotted forests to communes and managed them by production teams. The Meixian government assigned production tasks to communes every year, which would then be transmitted to production brigades and production teams. A work report of Sanxiang Commune in 1963's winter says:

For more than a month, the whole commune had called out over 1,500 people (daily average) to seal off a total of 28,000 *mu* of mountains, planted and tended over 10,000 *mu* of young forests, collected 52,000 *jin* of oil-tea fruits and 25,000 *jin* of pine cones, cultivated 414 *mu* of oil-tea trees and 2,030 *mu* of forests, including 700 *mu* of pine, 130 *mu* of fir and 1,200 *mu* of newly planted oil tea trees, and built up 8 nurseries. ... Currently, the commune has over-fulfilled the forestry production task of the year 1963.

It was a massive pop-out tree planting movement that had scores of villagers mobilized. People must first “refine the mountain”, that is, to burn mountains with fire to remove the weeds and clear the roads. They would then plant a mix of fir and pine trees, which can feed on each other to grow taller and straighter. Besides pine and fir that had been planted locally for centuries, villagers, led by the government, planted many oil-tea trees to provide cooking oil. Notwithstanding the labor credits offered for tree planting, people were reluctant to “do mountain work”, which was toilsome but unrewarding. In “refining” the mountains, there was smoke everywhere, which would blacken their bodies from head to foot. A day’s work paid them 10 labor points, but the income of tree planting was far lower than that of rice planting. Rice can be planted for two harvests a year, with a short planting cycle. After planting trees, only a very small proportion of trees could be cut down in batches each year, and the income from wood selling must be divided equally between villagers involved in tree planting. As a result, the income from tree planting was usually only half the value of labor points from rice planting.

Many tree planters decided to chop down their own trees secretly. They did the math, and found they profited very little from the government—a sapling was worth 1 or 2 cents, less than one-tenth of wages for one day’s labor. People “stole trees” because the government forced them to plant trees in mass quantities with very low wages and restricted them from felling their own trees in their production teams’ mountains. Of course, apart from dissatisfaction with the labor value and ownership of trees, which were planted by themselves but belonged to the state, the primary reason of “tree stealing” was economic woes. There was a dense population but a very limited amount of arable land in Sanxiang. People were tied to the scarce land for intensive cultivation, so they could hardly eke out a living. Most families were confronted with a “balance due” after a whole year’s work, which meant that they could not receive a share of food from the

harvest, but they even owed the production team some crops. People had no alternative ways but to steal trees and sell wood in the neighboring Bingcun Town. Stealing food was extremely difficult and would be more severely punished both morally and legally, whereas stealing trees was a justified practice unanimously admitted by the villagers, and a way of making a living that would not harm the interests of the neighborhood.

The People's Communes shouldered the heavy responsibilities for guarding forests and preventing unauthorized logging. Since 1962, after the Great Leap Forward movement and the great famine, Sanxiang Commune began to record forest guarding and tree planting in its work report. A forestry work summary of 1964 by Sanxiang Commune suggested that the reason for abusive logging was the locals' tradition of mountain business. It recorded a jingle said to have been passed down through generations: "The ancestors planted trees in mountains every year and left rich resources. Countless pine, fir, seedlings and bamboos are provided for us to rely on the mountains for a living." It also said that the "masses" were concerned about the loss of forest resources, so they adapted this jingle to teach people not to do so (MXS2Y122). The jingle was not likely to be adapted by the "masses", but by the commune cadres. This detail, however, did indicate that the state's policy of strict control over the rights to forest use contradicted the "traditional" livelihood in Sanxiang. The vast forests here had been outside of the jurisdiction of the state/central government since the late Qing Empire period. The commune cadres tried to transform people's minds with jingles, a classic way of propaganda in the revolution period. After collectivization in the early 1960s, production teams took over forests, and transferred part of the administrative tasks to production teams. I will elaborate on how production teams failed to effectively prevent illegal wood theft in what follows.

During the People's Commune, Meixian's statistical reports on forestry swelled considerably. This numerical approach to precise management lasted two decades. Paddy fields were under unified management of production teams since 1958, but the ownership of forests was long vaguely attributed to the "collective," that is, the village or production brigade. In 1965, the production teams officially took over forestland in Sanxiang, and started building forest farms and calculating work at forest farms by labor points. The division of ownership had a profound effect—Since the 1960s till the recent Land Right Authorization, production teams have been managing their forests in a unified manner. Most lineages had control over "their own mountains".

The second large-scale tree felling in Meixian took place in 1967 and 1968, the ensuing year after the Cultural Revolution had begun. With the frequent reshuffles of local cadres and a shift of work priority, the government made a breach in forest management, driving people to scramble for felling trees to build houses, make furniture, and do business. Uncle Li Guotai recalled:

Our lineage had a mountain portion, the place was called Mid-Mount Pit, about 3 kilometers away from my home. We Pond-head people used to own that area, just opposite the Left Peak. At that time, a small portion of mountain there was allocated to our production team, but other members didn't know it. In fact, that place used to be my family's before the Liberation. My father, the production team leader, did not tell others about that. He took me up the mountain to cut down trees every day during the trend of 'abusive logging'. Those fir trees were huge. The mountain covered an area of around 11 or 12 mu. I was too young to handle an axe. My father chopped down trees with it and asked me to leave a V-shaped vein on the bark with a shovel. The vein would remain after the trees' wound was dried. About 300 trees were felled.

That was in 1967, after Uncle Li Guotai graduated from elementary school, he followed his father to chop trees to build a house. He said there was a trend of 'abusive logging,' a term used by the government to describe the uncontrolled behaviors at that time. Mid-Mount Pit was a

small valley in the forest of Li lineage, the current Pond-head production team. This name also appeared in the land sale contract of the Qing Dynasty kept by Pond-head Li lineage. Sanxiang residents, who had stolen trees back then, recalled that they only stole trees managed by their production team, especially those in the mountains that belonged to their lineage before liberation. Even though the ownership of forestland changed legally, people would give priority to the properties before the new regime's establishment in tree stealing. The villagers, to a certain extent, still recognized the historical property relations, which made tree stealing more morally acceptable, and less prone to conflicts with others.

Uncle Li Guotai's father, the then production team leader, was clear about the land allocated to the team. He concealed the fact that Mid-Mount Pit belonged to Pond-head production team, thereby preventing others in the team from felling trees there. Of course, the rest of the team might be well aware already, since he had cut down 300 trees and used them in plain sight in the village to build a big house with four rooms near the Li lineage's ancestral hall. Its bricks were made of field mud from his family's three fields, while tiles were bought on credit from the neighboring production team. Moreover, the V-shaped vein on the 300 felled logs marked by his father kept them from theft, which means that tree stealing was a practice admitted and mostly not disrupted by the villagers. Engraving a specific symbol on trees, or *guo tie* (branding trees with ironware), was a popular tactic among Sanxiang people since the Qing Dynasty. His father continued using this way of marking trees' ownership, believing that the neighbors would recognize his symbol, which speaks to the fact that, the previous forestry rules formed among neighbors joined hands with the newly established collective system in maintaining the order of forests.

The massive tree felling in 1967 and 1968 unfolded a battle between the government and the residents over forest resources in over a dozen years that followed. Over the next decade till the end of the Cultural Revolution, the government intensified moral denunciations and administrative penalties on “abusive logging” and educated the locals via ideology learning class. In the meantime, the commune arranged cadres to take turns in managing mountain forests and put huge amounts of money and effort into controlling the logging right of the collective forests. Tree-stealers took on extra losses and even risks of being caught and jailed. They had to be wary of those rules-follower cadres as well as neighbors not on good terms. During the Cultural Revolution, the government widely employed methods such as self-confession of guilt, accusation and disclosure to escalate penalties on unauthorized tree stealing, which put people into a dilemma where they were entangled in multiple moral discourses.

In 1970, after the forests were badly looted, the Meixian government carried out a vast forest census, which was the first and most comprehensive forest census kept in government archives since the founding of the new China. Sanxiang Commune set up a “forestry census” group made up of seven cadres. Statistics included the categories and area of existing forests. The first statistical table (shown below) contains details such as the area of forest of each production brigade.

classes for reinforcing political penalties on unauthorized logging from the standpoint of moral discourses. Only “abusive logging”, rather than “illegal logging”, can be seen in government archives in this period. Administrative penalties were accompanied by stricter, harsher economic penalties. Just like the ideological remoulding movement in other places across the country, Sanxiang Commune tied forestry to the quotations from Mao Zedong (Leese 2013). The final report of Sanxiang’s 1970 forest census quoted Mao’s words “be prepared against war, be prepared against natural disasters, and do everything for the people” and “afforesting our country, turning the land green with parks and woods” (MXS2Y138). Forestry production was interpreted as “afforesting for the revolution and supporting socialist construction” (MXS2Y154). After the central government issued the No.12 document in June 1972, Sanxiang Commune held a meeting to discuss “promoting the implementation of timber policy,” where people came to the conclusion that the timber issue over the years was a matter of “struggle between revolutionary lines”, and it was theoretically necessary to “distinguish Marxism from revisionism.” Central government’s political discourses provided a template for specific local issues. This Sanxiang discussion was summed up with a narrative similar to the prevailing moral discourse of the time:

Closely follow Chairman Mao’s instructions ‘only cutting branches instead of trunks, and any tree felling must be authorized by the government’ and the No.305 document Regulations of the State Council on Forest Protection. ... [The meeting] severely criticized liars like Liu Shaoqi and their evil deception of “three ‘more’ and one ‘fixing’ (‘sanziyibao’ in Chinese; more plots for private use, more free markets, more enterprises with sole responsibility for their own profit or loss, and fixing output quotas on a household basis),” “four kinds of freedom (freedom to buy or to sell land, to hire labor, to issue usurious loans, and to engage in business)” and anarchism, made a snap criticism against a few class enemies’ fallacies like “trees are always available and felling always feasible in mountains,” “leave the house with an axe and get liquor and meat back” and “receive food from the collective, receive money by yourselves,” and disclosed the crime of a pseudo baojia head named Liao Shiqiao of Gaoqiao brigade, who, in an attempt to

restore capitalism, incited the mass, saying “trees are treasures if rare in the mountains but you will get nothing to use if not felling it now” during the Cultural Revolution period, which further fueled abusive logging in his village. (MXS4Y129)

This is a textbook-style ideological report during the Cultural Revolution. Unauthorized logging was defined as an act of “anarchist” capitalism by the enemy of the people. The faulty statements by the enemies cited in this report were all in the form of a four-word or five-word couplet. The words of Liao, a village head labeled as leading in abusive logging, were in a four-line jingle. These were prevailing means of political propaganda, namely, to tell stories with catchy jingles. The commune also had a dedicated propaganda team, which carried out ideological education with Meixian’s popular musical *wujuban* (five-line songs with bamboo clappers or plucked lute) and singing Hakka mountain ballads. The *baojia* head Liao was publicly denounced and humiliated over and over and appeared quite often in the reports of Sanxiang Commune as a typical character of unauthorized logging. In 1971, the year before this report, the commune “confiscated more than 2,100 pieces of timber cut by him and another fellow, and 1,100 *yuan* they obtained from selling the timber” (MXS2Y157). Two years later, their story was written by Sanxiang Commune into the document submitted to “Fujian-Guangdong Provincial Border Forest Protection Conference”, and even the fines were the same (MXS2Y163). The dossier transmission during the Cultural Revolution shaped these paper profiles of people with delinquency and disciplined the public’s behaviors (Chang 2019). Those who were caught as typical examples would be convicted of unauthorized logging based on their past positions and identities rated in the land reform. “Pseudo *baojia* head”, a local bureaucrat title used in the Republic Era, was a label of widespread antipathy, so did other controversial occupations like “barefoot doctor”, a term that made its debut in the 1960s referring to those “half-farming, half-healing” village medical persons under simple medical training. After Mao

commented in 1968 that “barefoot doctors are good”, communes across the state set up cooperative medical teams and trained a great many medical persons on a crash course. A “barefoot doctor” in Sanxiang Commune was denounced publicly in a thought learning class in 1975. His crimes included “cutting down 44 cubic meters of timber, which were used to build 2 storied houses with 2 halls, 4 corridors, 18 rooms, 3 wooden beds, 1 desk, 3 coffins and 3 round tables and to sell for money” (MXS2Y82). The report accused him of “bribing cadres with his legal identity and engaging in speculation in the name of building houses” (ibid). The “legal identity” as a barefoot doctor amplified his crimes. Although this occupation was backed by Mao and promoted, the public held different views on it. People kept skeptical about barefoot doctors’ medical skills and this term was still used to describe quack folk doctors even after the occupation was revoked in the 1980s. While other occupations, such as student, were more likely to be treated with tolerance. In a learning class of Sanxiang Commune in 1969, a young student whose family was classified as overseas Chinese Businessmen was accused of felling trees after his return from school every Sunday. He was fined 290 *yuan* in total for 5 *yuan* per tree. He was considered to fell trees as “influenced by anarchism.” However, other students in the class pleaded for him and claimed that he was “a student rather than a leading guy,” so he should be given a lesser punishment and returned with the excess fines (ibid).

In the Cultural Revolution, people with an inferior family background, who cut down many trees, were more likely to be publicly denounced as typical cases of class enemy. Others also risked being criticized and forced into the special learning class. These ideological education conventions encouraged people to prosecute each other and even themselves, using the class-based moral framework to override family relationship and friendship. Surrendering themselves and prosecuting others were deemed brave and rightful, and even a must-do task (Yang 2019). In

1969, the guarding team of Meixian Revolution Committee came to Sanxiang to investigate the basic situation here with the commune and co-wrote a *Summary Report on Handling the Mass Surrendering Issue*, which pointed out that party members dared not to surrender for fear of being classified as traitors, and farmers did not consider themselves party members who deserved this responsibility.

In 1971, the Revolution Committee of Sanxiang Commune announced the punishments for unauthorized logging, underlining “complete leniency for confessors and severity to resisters”: If the crime was prosecuted by the masses instead of the result of *dousi* (struggling with selfish motives), the fine would be increased by 50%; for class enemies, all the money they earned from timber selling would be confiscated (MXS1Y70). In the same year, Sanxiang Commune organized an eight-day Mao Zedong Thought learning class for party members, in which all participants were required to “struggle with selfish motives” and self-report whether they had any capitalist tendencies. The summary of this class says:

According to statistics, among the 243 party members who attended the meeting, 4,015 pieces of timber from abusive logging were self-reported, of which 2,358 pieces have been declared and approved while 1,049 not yet been handled; 26 *mu* of private wasteland (5 *mu* returned, 21.6 *mu* unreturned) reclaiming and 6 *mu* of collective land encroached were self-reported. (MXS1Y95).

Among the 243 participants, 205 of them struggled with selfish motives. Self-reporting was described as an act of showing fealty to the government and embodied a high political consciousness. But the act did have consequences. People who self-reported to fell trees would still be subject to economic penalties, and administratively be treated as people with capitalist tendencies and subject to criticism and education.

Some others considered not ideologically advanced would be sent to special learning classes. Once they had a record of special learning class, their social relationship would be affected. There was a member of Pond-head Li lineage, a carpenter before liberation, were

forced into the special learning class many times for tree stealing. He was not well-liked in his lineage. Many others thought he was eccentric and aggressive. Most people in special learning class in the 1970s were at fault for logging. *A Table on Handling and Implementation of Sanxiang Commune Line Education and Learning Class*, written in 1973, recorded 15 people sent into the class, in which 12 were for “abusive logging”. Other major mistakes included “furtive sideline”, that is, some people engaged in non-agricultural production, or the so-called sideline, without turning in all the income to the government. This form lists the amount of money that each member paid for and returned to the commune (MXS3Y161). If a person was defined as “incorrigible”, he might be recorded in a “case approval form” and reported to the commune. These people would not only be publicly denounced at the collective convention, but also be imposed stiffer fines.

The commonly used method of interrogation was to distinguish between the consequences of surrendering themselves and being prosecuted, for the sake of encouraging suspects to surrender. Unauthorized logging was a wrongdoing in a legal sense, a manifestation of selfish motives, and in more severe cases, a mistake in revolutionary line. However, whether in these governmental archives or locals’ memories, “abusive logging” was just a violation of regulations instead of a breach of laws. Albeit the word “steal,” stealing trees was not the same as stealing other properties. Law was never the most important criterion in ideology learning classes. The moral framework of class struggle turned out to be a criterion by which everything was judged. Large-scale conventions made surrendering and prosecuting others spectacular social performances. Overwhelmed with the surging revolution enthusiasm, people were living under even greater pressure. An ideology education summary of Sanxiang Commune in 1975

stated that, in the past eleven months, the commune had organized 19 tutorial classes, with 52,100 counts participating (MXS2Y82), and achieved remarkable results:

952.5 *mu* of privately reclaimed land was returned; 654 cubic meters of felled logs were settled; 20,393.3 *yuan* were repaid for timber (by loggers); 39 persons outing for sideline without doing collective production labor came back and repaid 2,855 *yuan* of sideline income; 1,231 private manure pits were returned to the production team in the form of money. (MXS2Y88)

In parallel with the incessant ideological education, the government intensified management of forests, from planting to daily caretaking. Compared with the 1960s, the government's penalties for unauthorized logging became harsher, both administratively and economically, during the Cultural Revolution. Nonetheless, tree stealing never ceased. The commune cadres, as links between the superiors and the masses, found themselves in difficult moral dilemmas. Uncle Li Guotai, who had followed his father to chop down trees secretly in the mountains, became a cadre of Sanxiang Commune in the 1970s. He publicized in villages not to "fell trees abusively" in the day and stole trees himself at night. Just two months after starting this job, he made a large wardrobe out of the stolen trees. Villagers' furniture was all made from trees on the mountains. They knew that the "superior authorities" would not allow any logging for furniture making. The mountain was just like a treasury, of which the ownership was unknown, in the villagers' eyes. People who dealt in mountains (planting and taking care of trees) for centuries believed that they were free to cut down trees they planted or from the mountain forests of their lineage. Forests were complex and hidden, with a wavy terrain and countless diversified species. People's tolerance for neighbors' tree stealing stemmed from empathy and complicity. It was safer when logging became a common practice, and everyone stole trees. Some documents of Sanxiang Commune quoted problematic remarks of the masses, such as "cutting down a few trees is not a matter of class struggle" (MXS2Y157) and "chopped down fewer trees than others" (MXS2Y99). No one had ever explained how many trees would

be “counted” as a class struggle, as that was usually decided by cadres on a case-by-case basis. Uncle Li Guotai worked at the culture station and radio station, and once served as a statistician in Sanxiang Commune. He was drafted to watch over “logging” many times.

Trees in the forests were not allowed to be felled without approval of Meixian government, but scarcely any application was approved, recalled by Uncle Li Guotai. No one would take that way. In a 1972 statistical table of Sanxiang Commune, the cadres recorded the number and use of felled logs by all production brigades from 1968 to 1972.

(表一) 1972年 月

姓名	67年至72年砍伐木材情况										砍伐木材去路			
	67-68	69-70	71-72	合计		其中				俱用	出售的		现存	
	年砍数	年砍数	年砍数	总砍数	折几方	有批准	乱砍	新建	修几间		几方	几方		金额
编号	1	2	3	4	5	6	7	8	9	10	11	12	13	14
李村	248	110	33	791	36	34	2	16	2	22	8	0.8	60	4.4
上村	108	25	22	555	53	18	34	16	2	24	4	16	46	7.3
下村	391	18	39	488	312	5	282	30	2	28		185	83	2.5
中村	439	159	65	669	261	15	24	51	6	26	9	13	78	6
林村	476	173		649	67	40	27	42	9	48	13			2.8
王村	224	16	9	249	17	5	12	9		18		1.3	30	1.2
赵村	154	88	70	312	207	8	11	13	2	14	0.4	18	56	4.2
孙村	763	46		809	262	2	24	7	1	28	6	92	106	14
周村	476			476	265	4	22	35	1	19	28	1	24	2.1
吴村	212	54	23	290	143	3	11	1	2	26	0.6	86	440	3.0
郑村				140	78		1	7	9	28				

Figure 21 Statistics of logging of all brigades in Sanxiang Commune. MXS3Y264

The table shows, the two years 1967-1968 saw a greater number of trees that were chopped, which accounted for the vast majority of the five years’ total. Despite that, the total number of trees felled in each village over the five years was only a few hundred pieces, in

which very limited amount of timber was authorized for cutting. These figures might not come near to reflect the actual number of trees felled. For Xiaodu Brigade, the trees felled during 1967-68 were counted as 439 pieces. While Uncle Li Guotai recalled that his father alone chopped down more than 300 pieces during that time. However, both the government's statistics on forestry production and the figures obtained from the learning classes suggested that Sanxiang government, and even the superior authorities, dedicated more manpower to forest resources control in the 1970s. Cadres of Sanxiang Commune were sent to guard mountains and "fence trees" in turn. They were issued with cotton padded coats to keep out the cold when guarding overnight. Uncle Li Guotai described it as a "thankless" job, and his recollections also contained reflections on this policy:

When I was a cadre in Sanxiang Commune, I spent twenty or thirty days in the mountains a year. My brother was working in the cooperative in Bingcun, and I often took the guys guarding trees with me for a drink in his store. Tree sellers would come over at around four or five in the morning. Bingcun was the only way to go. We drank all night with my brother. Tree thieves would not pass by too early, because the log weighed over a hundred *jin*. We lay in ambush at the side of the road at four or five. When we saw people carrying logs, we blocked them in the way. As soon as they saw us, they left the logs and hid in the alley. We just pretended to chase them but did not really do that. They were exhausted too, carrying more than a hundred *jin* of logs across vast distances, and dared not to use a flashlight while walking in the darkness. They would be sent to the learning class if caught. A new cadre must catch someone, but we just pretended. We had no way. The superior authorities were issuing notices constantly. The cadres would be punished and publicly criticized if abusive tree felling in their commune was severe.

Uncle Li Guotai likened the experienced cadres' attitude to "turning a blind eye". In guarding the mountains, they would shout to scare those who tried to steal trees when hearing any noise. They would fulfill some basis tasks but avoid catching someone specific—those were all their neighbors and relatives. "Pretending to chase" was nothing but a performance, since the two sides couldn't recognize each other through the shadow of night, with no superiors watching

unnoticed. “Pretending” was mostly a performance jointly done by cadres and tree thieves. At that moment, the escaped tree thieves, whether they thought their action was justified or not, would immediately admit their mistake, while the cadres also exhibited their identities in the chasing. Of course, such “pretending” was more of a self-directed and acted performance by the cadres. They showed their existence with sudden shouts and strong lights, safeguarded the authority of the commune, and contained self-comfort for their malpractice. The tree thieves’ escape was real, since they could not judge whether the cadres in ambush would catch them seriously or just let them go.

After the Cultural Revolution and the increasingly unsustainable collective farming, there came the third large-scale tree felling in the Meixian, which might as well be called deforestation. It started in 1978 and continued until 1982, the eve of the Allocation of Land to Household. This time, everyone rushed to the mountains and cut down all the trees of their own production brigades, regardless of size. Even the roots of the trees were barely left. In some places, the mountain was directly burned to the ground after the available materials were cut. This retaliatory deforestation came mainly from people's confused anticipation and fear of the coming de-collectivization reform. The Cultural Revolution came to an end in 1977, which unleashed people's extreme sentiments under oppression. In 1978, rumors that the land would be distributed to individuals—a practice that had been tried in other parts of China—reached Mei County, leaving people uncertain about how the policy would be implemented. In the photo taken by Uncle Li Guotai in 1982, the mountains of Xiaodu Village were utterly bare, except for a semi-oval ring of trees behind the lineages’ ancestral halls. After the deforestation, the new policy was announced that the forests would continue to belong to the “collective,” namely, production teams. Production team leaders received forest licenses issued by the government.

After the Allocation Land to Household, the de-collectivization movement, production teams had a certain amount of communal paddy fields and a large area of communal mountain. For many lineages in Sanxiang, this meant that they shared properties. Compared with the limited forests shared by the lineages before the New China, the lineage-teams thus were granted a large mountain area for joint management after the 1980s, which reinforced people's sense of belonging to their lineages. People usually equated the saying "our team's mountains" with "our lineage's mountains."

For quite a time after the new forest policy, production team members had no clue how to deal with the bare hills, as they could neither be distributed to individuals nor used to grow economic forests due to a lack of funds. In the 1990s, in response to the central government's policy (Whiting 2001), Meixian promoted the rural enterprises vigorously, including orchards, tea gardens, and pig farms. Sponsored by the town's agricultural station for popularizing agricultural techniques, village committees contracted production teams' mountains to establish rural enterprises at an extremely low cost for 20-30 years. Some villagers also personally contracted the forest of their own team or other teams. In this context, Li Guojun, the then village secretary, contracted a vast majority of the forest of the Pond-Head Li lineage, located in Rock Peak, to a pork butcher nicknamed Uncle Tiny, who succeeded Li Guojun's post later. He built a tea garden on this hill. To the anger of the Li lineage, Uncle Tiny never shared profits gained from the tea garden with the Pond-Head Team on the pretext of failing to recover the investment, which broke his promise. According to the Li lineage, "This forest has always been ours!" The Li lineage planted fir and pine trees on Rock Peak, a placename that appeared in the land contracts signed in the Qing Dynasty and the Republic Era. They also transferred part of the mountain forest within the lineages frequently during that time. Driven by the conjecture that Li

Guojun accepted bribes from Uncle Tiny secretly, people vented their frustrations to him for betrayal. The dispute was never settled until the contract fee of 5,000 *yuan* was admitted in the contract between Uncle Tiny and the Pond-Head Li lineage renewed twenty years later.

Chapter End

More than a decade after the last deforestation, the wild woods on the hills became a gray area, where people were allowed to cut down trees, but the timber belonged to the collective. Uncle Li zhang a carpenter of the Pond-Head Li, usually cut down trees in the forests of their production team. Despite their reluctance to allow him to use the collective trees for free, people didn't stop him because they would buy furniture instead of using logs. Since 2018, in response to the national advocacy of "clear waters and green mountains are valuable as gold and silver," the words by Xi Jinping, the forestry station of the town government had strengthened the control of the forests. It would investigate the tree felling by means of satellite maps and people's reports. Villagers who were found cut down trees were fined and ordered to "plant them back" by planting saplings. Those who planned to exploit pomelo orchards had to hire tractors to dig the soil and tear down the trees secretly at night and then planted the seedlings as soon as possible. This marked the start of a new round of micro-struggles.

The word "Landlord" continued being used in the daily conversations of the people in Sanxiang, but mostly in a mocking tone or as taunting disguised as compliments. In the second chapter, I mentioned a rural resident who mocked himself as a Landlord when cadres joked that he had excessive land. The hatred, threat, restriction, and discrimination brought about by the "hats" of the Landlords eventually turned into a term of ridicule. Another term "Overseas Chinese" which is also widely used in the Meixian region refers to those Hakkas who are living overseas. People sometimes used the word Overseas Chinese in everyday conversations to make

fun of someone who liked to show off, was dressed in fancy clothes, or acted like a rich person. When both the definitions of class and the measure of property changed, the emotions, values, and consequences of these terms changed with them. The once radical and even absurd numerical standards seemed to be easily abolished, but new forms of numerical violence are still being created.

Chapter 4 Statistical Domestication

Chapter Tour
Statistical Domestication
“Free” Cadres
Statistics on Everything
Calculating for State or Market

One summer afternoon, a few months before the Land Right Authorization arrived in Xiaodu village, several members of the Pond-Head Li lineage and a few neighbors gathered over tea in Uncle Rich’s mahjong room. They heard that the Authorization would re-survey everything, the land, the forest, and the houses. People were skeptical that this survey could actually clarify all the things. The fields deep in the mountains were unrecognizable because they had been abandoned to the wilderness for years. “We can’t even figure it out ourselves,” said Uncle Li Jiang. Members of Pond-Head asked Uncle Rich, the production team leader at the time, to make sure to verify survey results. Uncle Rich said loudly, “(The Authorization staff) does not make clear, I will not sign my name!” They also expressed doubts about the forest and the house. Uncle Rich then repeated resolutely: “(The Authorization staff) does not make clear, I will not sign my name!” They had no idea of the exact procedure of the Authorization. The subsequent investigation was different from what they had supposed. But they correctly guessed

that the last step must be the signatures. They recognized that the signatures stood for landholders' authority, and that the refusal to sign acted as an objection to the lack of accurate representation of their property specifications and as a resistance to the wrongful implementation of the survey. Signing to obtain a land license—the same applies to other forms of properties—is both a right and an obligation of the owner. As I described in Chapters 1 and 2, rural landholders behaved as if they were doing something more than just their own business. The complicated procedures, frequent errors, and time-consuming process brought about incessant complaints from all participants. People often asked, “Is there any lost wage (*wu gung fii*)?” This is a complaint, as well as a probing and reminder. What is reflected in this question is their understanding of the Authorization, a massive national digitization project: it is what the government needed.

Over the second half of the twentieth century, rural inhabitants of China performed a great deal of calculations and measurements for the state, and the raw data they generated were processed into vital statistics for the state. It was considered a moral and administrative obligation for them to carry out this labor of self-reporting. Even in the age of collectivization, when revolutionary fervor was high, people complained about this compulsory and cheap labor, questioning the necessity of their engagement in these daily statistical tasks. Yet at the same time, this intensive collective labor made themselves count and gave them a sense of participation and legibility at the familial, collective, and even national spheres, so much so that after the de-collectivization movement and the Opening Up, people experienced marginalization as the state gradually drew its attention away from the countryside. After the 30-year-long nationwide experiment of collective labor, rural residents who had carried out strenuous data collection back then in the days of the Planned Economy retained more or less the habit of

counting and recording. Now their main purpose at the moment was to cope with the changing market. At major events, like the Authorization, they re-engaged in this familiar yet reshaped mode of self-reporting.

Statistical Domestication

In the years of collectivization that followed socialist reforms, this newly formed government was ubiquitous in its involvement in people's lives and production. The penetration of numerical governance transformed people into datafied individuals. Everything was quantifiable, including people themselves (Adams 2016; Cheney-Lippold 2017). The state's control of rural affairs placed the tasks of measuring, calculating, and reporting to the government on rural residents. The PRC in the early years of the state was modeled after the Soviet Union and India to gradually develop the National Bureau of Statistics and its subordinate statistical offices at all levels (Ghosh 2020). This new statistic state converted people into domesticated subjects who had become carriers, creators, and transmitters of national data through everyday datafication. This is a transformation that I call "statistical domestication," that is, the numerical transformation of unreduceable subjects into quantifiable and calculable individuals. This process was particularly salient in the socialist transformation and collectivization reforms, when the state divided up a nuanced and multi-layered bureaucracy to collect data and grain taxes, thereby tying people firmly to their "accounting units" and placing the onus of data production and reporting on the people themselves.

Cultural anthropologists have analyzed the intertwined relationship between humans and animals in terms of their domestication of plants and animals (Cassidy and Mulin 2007). But the concept of domestication goes beyond non-humans. In his book *Against the Grain*, James Scott

argues that the state in its nascent period was based on the domestication and taxation of grains by humans, which in turn led humans to domesticate themselves and become the subjects of state control (Scott 2017). What biological anthropologists call self-domestication (Wilson 1991) is similar to but different from what Scott says about human domestication from an archaeological perspective. Self-domestication refers to the genetic predisposition of humans to favor docility and pro-sociality (Wrangham 2019) from an evolutionary perspective, whereas Scott analyzes people's obedience to organizations and authority from a national perspective. The domestication Scott refers to is not necessarily essentialized propensity, but rather habit and self-protection under the powerful. Once the system collapsed, people might be able to adapt to new patterns of social organization very quickly. Archaeological and biological understandings of domestication are also associated with a metaphorical usage of the term. In feminist studies of unequal marital relationships, wives are described as domesticated as they are limited in their range of actions and emotions (Brenner 1998; Fermon 1994; Rogers 1981).

The statistical domestication I analyze leans more towards this metaphorical usage, although it is analogous to archaeological analyses. For my research does not go that far as to prove that people's genes or habits have actually changed as a result of such domestication, as the concept of domestication is narrowly defined. I would maintain that numerical production is also a form of production and requires a great deal of intellectual, communicative, and physical labor. As the state expropriates taxes, it inevitably also expropriates numbers, i.e., the data that calculates and records the population and property. Statistical domestication is a product of the state's use of statistics to control materials and information, and a way to control the people who contribute to this data system.

Rural China during the period of collectivization was a demonstration of statistical domestication at its peak. It was not a nascent state, but a neo-state, a state that claimed to break with tradition and establish a new order. Of course, as I have analyzed in previous chapters, these new orders and new practices were not entirely detached from the governmental behavior of the previous late imperial and republican periods. Statistics provided the new country with a scientific approach to stewarding a population and a ravaged economy that had just recovered from endless world and civil wars. The development of statistics and the centralization of state power have gone hand in hand throughout history (Hacking 1990; Mitchell 1990). The institutionalization of statistics influenced the governmental understanding of administration (Poovey 1998). Statistics requires not only top-level design, scientists, and financial support, but also a massive amount of personnel to perform these measurements, calculations, collection, delivery, and archiving to create databases. During China's planned economy, the state's need for statistical data was at its highest, and it was the people themselves who implemented these statistics on the front line. In other words, people themselves took responsibility for regulating themselves with data. In 1961, the state defined the production unit as a "basic accounting unit" and differentiated the people in such a small group—ranging from a few dozen to two or three hundred—into two positions: the mass and cadres. The state gave these production team cadres managerial powers and used moral ideology and empty political promises to motivate people, especially young people, to take up cadre positions. This was a covert but effective form of domestication, a way of exploiting people's calculating labor to domesticate themselves, their families, relatives and neighbors.

The new state made the people self-managed in their semi-military units and differentiated the more authoritative leadership, but these positions, called cadres, were "free"

services to the state and government. They were free in the sense that the meager "allowances" they received were distributed from the earnings of the production teams, and they did not receive subsidies from higher levels—village, town, county and above. In an annual review of anthropology (2021), Lea suggests that scholars who study bureaucracy generally keep a desire about the system and still consider bureaucracy to be necessary, only flawed, and in need of improvement. She suggests that perhaps scholars could try to criticize bureaucracy more radically. These rural China's free or cheap grassroots cadres themselves recognized that they were "redundant bureaucrats," especially in the wake of the decollectivization movement. This sharp contrast between collectivization/de-collectivization has led to a very different reading of history in retrospect (Yurchak 2005). The appointment of production team cadres was casual and frequently replaced, and the ratio of cadres among the adults was high. In a sense, the cadres were the masses, and the masses were the cadres. Statistical domestication reached its extreme with this form of political organization and the calculation of everything.

“Free” Cadres

In the days of the Planned Economy, when everything was statistically regulated, at the forefront of the rural datafication was the smallest political unit with an egalitarian outline, which was both autonomous and completely absorbed into the local economy: the production team (*shengchan dui*). All members of the production team were paid equally for their “labor points.” The total profit, after subtracting food taxes and daily costs, was distributed to laborers based on the total number of hours they worked. It was this highly centralized and collaborative economic mode of the production team that made it imperative to keep meticulous economic statistics. These figures were reported to the production brigade (village level) in the form of

verbal or written reports, and then the brigade reported them to the commune (town level). In the production team, people became involved in the production of numbers: they calculated their own labor points, compared other people's labor, 'borrowed' food or household goods from the production team or brigade, estimated the agricultural earnings, and compared the income of their local production teams. It was the production team cadres who were responsible for recording and reporting these figures. Unlike the cadres of other administrative units, they were elected representatives of the production team and served the team members.

Production team positions changed frequently and were elected by the team members, sometimes by young people who volunteered, sometimes the recommended ones when no one else was willing to take the job. Their work was generally transparent and was monitored, negotiated, and questioned by the team members—also their relatives and neighbors. A production team was a tiny administrative unit of close acquaintances/kins that lived together. In Sanxiang, although the number of team members varied from some thirty to more than a hundred, their cadre composition was almost consistent. The cadre positions in the production team consisted of the team leader, vice team leader, accountant, treasurer, custodian, scorekeeper, and women's director. The production team leader oversaw all team affairs, especially agriculture and husbandry. Team members often expected the most from the leader and assumed that it should be held by someone who was particularly knowledgeable and authoritative in production. The team leader received a slightly higher allowance than other positions. The accountant assisted the leader in making plans, supervised the financial work, cleared the accounts, announced the results publicly on the wall, and submitted them to the brigade. The treasurer, also known as the cashier, was responsible for managing cash, announcing daily cash balances and receipts, and saving the excess cash to the credit union. The

custodian guarded the production team's warehouse filled with farm equipment and food. The custodian kept a record of the items entering and leaving the warehouse and posted the inventory regularly. The scorekeeper participated in the labor planning, recorded people's labor points and the manure that people turned in, and posted the records on the wall for the public. The women's director handled matters involving women and children. After the One-Child policy was implemented, the women's director assisted in the birth control work. These positions, which at that time seemed to have a complex division of labor with numerous tasks, were not expected to suddenly all disappear, except the leader, until the de-collectivization movement years later.

This collectivist experiment pushed people's self-reporting obligations to the supreme regime as far as possible. All rural residents were grouped, assigned work, and required to hand over food taxes. Some of them, mainly young adults, held positions called cadres to report upward on the status of their small collective in a real-time manner. The state moral discourses and policies made these intellectual labors an obligation for legitimate team members and a part of their daily life without fixed compensation or wages. The positions of cadres were not scarce; rather, the number of cadres was high in proportion to the entire team. Most of the cadres were in their 20s to 40s, and many of them served for a couple of years and then switched. Young people, especially men, all had the possibility to take up the position of team cadres. They only received a modest allowance after completing major activities or tasks. Their low payment was evident from this "Summary Table of Income Distribution of the Primary Accounting Unit" of the Xiaodu brigade (village) in 1963. The so-called "basic accounting unit" referred to the production team. This table provided the income and expenses of each production team, as well as their distribution of benefits.

numbers in the table, but these figures came from the liquidation after each labor day throughout the year, from weekly, monthly and quarterly accounting, and from the year-end summary. This data derived from a great deal of communication and intellectual labor by the cadres and team members.

There was no fixed policy on the amount of allowance for cadres, as it varied by region and even by commune. But for all regions, the subsidies were very modest. In 1973, Sanxiang Commune issued a policy on rural economy, which specified the maximum amount of allowance for production brigade and team cadres. Production brigade (village) cadres, relatively speaking, were officially staffed. They joined in collective labor the same as others and received a “flat-rate allowance.” This policy stipulated that brigade cadres could be paid for each labor point a slightly higher payment than that of the average labor point, but no more than 20% higher. Moreover, their allowance could only be granted with the approval of the commune. Compared with the brigade cadres, the production team cadres only obtained the “lost work allowance,” that is, they could only receive a limited allowance for the missed labor points when they instead attended administrative meetings or tasks. And the total lost work allowance in a year should not exceed 1% of the total labor points of the team. The sum of the subsidized labor points of all brigade and team cadres should not exceed 2% of the total labor points of the whole brigade (Series 1, p. 79). It was not only the production team cadres who could request the “lost work allowance,” but also other team members who were temporarily appointed to tasks that disturbed their farm work. The most typical tasks that were eligible for the lost work allowance included attending administrative meetings in the brigade or traveling to make purchases for the collective. This meant that production team leaders received an extremely low allowance for the time they contributed to the production team, in addition to their own duty of collective labor.

The lost work allowance represented a collective compensation to the individuals, implying that the efforts they put in went beyond or even at the expense of their personal interests. The lost work allowance indicated that the missions they performed were external to their principal duties and were not formally paid. The production team cadres still took peasants as their primary identification, and their proper job should be collective labor. While they were also called “cadres,” production team cadres were different from others. They were more of the part-time service personnel endowed with the title of cadre. The way of using labor points for allowance, in fact, internalized the cadres’ compensations within the group, especially the production team cadres. For the state—town governments and above, the production team cadres were actually “free.” This was reflected in the formula of calculating the production teams’ labor points:

$$\text{Income per labor point} = (\text{Total income of production team} - \text{Total expenditure} - \text{Arrears} - \text{Food tax} - \text{Provident fund, etc.}) / \text{Total labor points of the whole team (labor points} + \text{cadre allowance points)}$$

This formula demonstrated that the production team cadres’ allowance did not take up the food tax paid to the state, nor did it draw from the upper levels of government. The cadres only shared a slightly higher percentage of the profits than the other team members. In other words, the whole team split about 1% of the common profits to pay the cadres. (The percentage of 1% was set by the Sanxiang Commune but may be a bit higher in some areas.) The production team, a self-governed unit, in addition to being self-sustaining and contributing a high proportion of the food tax, also bore the burden of subsidizing their own cadres. These cadres, with a low pay, not only managed the economy and livelihood of the team, but also spent considerable labor to hand over the team's tax and statistics upwards.

The production team cadre was such a paradoxical position that it was both an honor and a burden. The word “cadre” was a political term fashioned by the Communist Party from the

early days. In the newly invented political unit, the production team, cadres seemed to be a taken-for-granted yet artificial position. Taken-for-granted, because there were always charismatic leading individuals standing out in a group; artificial, because these positions existed out of the state's needs for comprehensive control, economic and political, over the mass.

In response to the grievance and lack of motivation of rural grassroots cadres, the government used ideological education to mobilize cadres, especially during the Cultural Revolution. In June 1969, Sanxiang Commune organized a nine-day study class on Mao Zedong Thought, gathering a total of 435 village cadres and production team cadres. The class report quoted some of the cadres' complaints:

The cadres of the production brigade and production teams thought that their village work was difficult: "There is no day and night;" "There is no food, but there is scolding;" "The top blames you, the bottom complains about you;" "As a cadre, I dare not engage in personal sideline, family members and relatives were not happy;" "If work well, no one appreciates you; If work poorly, you would be scolded to death by team members. When the movement came, the first to bear the brunt" ... "As an idle member is instead free and easy and stable." Some cadres also believed that being a cadre would be a loss: "Rural cadres work hard and no wages to receive, relying on labor points to eat;" "As a cadre, we will be poor. Team members engaged in sideline income; we dare not." [They] thought that when the political status of cadres does not suffer, economic income would suffer. (MXS1Y87)

These words reflected the moral dilemma and unfair treatment of rural grassroots cadres in the kin-political relationships. As delegation of the government, they faced the resistance and reproach of their families and friends, but as representatives of the people, they bore the burden and criticism of their superiors. The social status brought by their titles was not enough to compensate for the political risks and economic pressure. Their jobs in managing the production teams were highly transparent and constantly monitored by the members. People's supervision of daily administration was focused on finance service. In the 1970s, Sanxiang Commune required each production brigade to set up a "democratic financial management group," with a core of

five to seven Poor, Medium, and Lower Peasants to review the brigade's accounts every month. The cadres should regularly clear their account books and publish the cleared accounts orally or in writing. Their everyday statistic work was inseparable from their constant verbal communication with the production team members. The figures behind the account books and tables recorded by the grass-root cadres were ascertained through a great deal of communication with each household and even each person. As models of “advanced ideology,” cadres were not as free as other members in earning extra income. Once they did something wrong, they were more vulnerable to punishments or being scapegoated in the ideological movements. This turned out to be a predicament for those who had become or might become rural cadres, as well as for the cadres in the government, including the communes and the superiors.

Reckoning for the state was not risk free. Mistakes people made in reckoning, intentional or not, might be defined as political wrongdoings that gave rise to harsh penalties. In this Sanxiang Commune ideology education class, cadres complained that the frequent “movements” were putting them under tremendous pressure and risks. Three years before the Cultural Revolution, Mao Zedong launched the “Four Cleanups Movement” (cleansing labor points, account books, property, and storage) in rural areas, which was later expanded to “cleansing politics, economy, organization, and ideology” (ECNU 2012; Lin and Guo 2013;). It initially focused on cleansing the prevailing accounting frauds for tax evasion and avoidance at the time. Persons who were accused suffered severe interrogation. The commune cadres interrogated the suspects separately, dividing cadres of the same production team and asking them to report each other for more lenient penalties. This method of interrogation, which forced colleagues, neighbors, friends, or even relatives to prosecute each other, was cruel indeed. Social movements confronted these grass-roots cadres, who were barely paid and scarcely promoted, with a

collapse of their political careers and social relations. The “Four Cleanups Movement” was afterwards interpreted as a prelude to the Cultural Revolution, during which a large number of cadres were punished, and more than ten years of political turmoil and reshuffle were inflicted on the state (Dong and Walder 2021). The base level cadres undertook the most onerous work of raw data collection, sorting and reporting, but they were also likely to pay for it. The trend of the “Four Cleanups Movement”, from cleansing accounts to cleansing ideology, precisely reflected people’s political and moral understanding of reckoning. Mistakes in reckoning were not just about errors in intellectual activities but were understood as value-laden intentions.

The state and local governments could not afford the salaries of the production team cadres. People’s motivation to serve as team cadres was largely attributed to the state moral mobilization, empty political promises and a sense of duty to relatives and neighbors. In the endless ideological study classes, commune cadres summoned the cadres of production brigades and teams to “recall and compare,” that is, to recall the Old Society, the miserable life before the founding of the New China, and to compare it with the current life. After this nine-day-long study class on Mao Zedong Thought in Sanxiang Commune, 154 of the 435 cadres who attended the meeting openly struggled against their own selfishness and criticized revisionism. Among them, 109 people who originally did not want to continue to be cadres also “built up their confidence and said that they would follow Chairman Mao to do revolution forever” (MXS1Y87). Such ideological training may not have completely dispelled the cadres' dissatisfaction with these positions. The moral judgments and revolutionary sentiments, together with the brutal struggles during the Cultural Revolution, created enormous social pressure on the rural cadres.

Production team cadres could theoretically be any adults, but they were mostly young people, especially young men. Party committees at all levels attached importance to absorbing and cultivating new cadres, especially young ones, referring to them as “fresh blood.” Adjectives in the national revolutionary discourse used to describe outstanding cadres such as “motivated,” “courageous” and “literate,” were in line with the stereotypes of masculinity and youth. Under the influence of Mao and other leaders’ encouragement that “women can hold up half the sky,” women also made up a significant proportion of workforce, though they often took different positions. The elders in the family smoothly relinquished their management positions. The phrase “let the young people become cadres” often appeared in people’s memories and current discussions about team cadres. For the party committee’s ideological work, the number of young cadres was one of the significant indicators of the performance. In a summary of Sanxiang Commune in 1975, it was written, “Among the 92 prospective party members, 29 have been absorbed into the party, among whom 19 are under 25 years old, and all of these people have been filled into the second-level group of brigades and teams to undertake practical work and accelerate their development.” (MXS2Y91). Both production brigades and teams were called as “second-level group,” i.e., they served as a preparatory pool for commune cadres, providing alternative candidates for the future promotion. This statement may give a sense that these team cadres would be promoted level by level. But it was a rare to be promoted directly from the production team to the brigade. At that time, there were a total of fifteen production teams in the Xiaodu Brigade to which the Pond-head Li lineage belonged, and each production team had six or seven cadres. While the entire brigade held only 11 cadres, five of whom were cadres sent from outside by the county government. Most production team cadres had no opportunity to be promoted to the production brigade, let alone to the commune. The cadres of the production team

may not necessarily be the Communist Party members, whereas those of the production brigade and above were generally members. Some positions, such as the women's director of a brigade, were allowed to be inducted into the party afterwards. The above summary stated that one of their achievements was to have lowered the average age of the brigade cadres in Sanxiang Commune from 39.1 years old to 31.2 years old (MXS2Y91). The party's priority on young cadres had shifted the power relations within the lineage and caused frequent changes in grassroots leadership. These young people, born around the founding of the PRC, were the most receptive to the ideologies disseminated by the new regime and were the most ambitious group politically as well.

This system of grassroot cadres, maintained and developed by the government and the party committee, provided a large number of free or cheap service staffs for the country's planned economy and rural administration. In addition to the ideological education, the local government also offered technical training to grassroots cadres, especially those related to finance. In 1975, Sanxiang Commune established a "financial activity day system." From the 1st to the 3rd of each month, brigade should organize training classes of skills and political ideologies for all financial personnel and liquidate the account books. From the 5th to 7th of every month, the communal inspection team would liquidate the communal credit union and other financial departments. The cashiers were expected to be "meticulous," "reliable," and "disciplined." These obvious feminine traits made women take up a larger percentage of cashiers. On the contrary, accounting was thought as a complex job, therefore the expectation for the position was "educated," "numerate" and "smart" people. These traits made men more likely to be recommended for the accountant. The on-job training was mainly in the form of imparting personal experience, that is, the experienced accountants trained the new ones in an

apprenticeship style. New cadres learned financial skills in the communication with other cadres and team members. Financial staffs in the production teams did not require necessarily specialized degrees and experiences, and many of them were learning while working after they were on board. The position of accountants sometimes kept vacant due to staff mobilization, for example, when the previous accountant quitted or was promoted. A common solution in Sanxiang was that people would ask the brigade accountant to work part-time for the production team for a while until the right person came along.

Uncle Li Guotai was the custodian of the land deeds of the Pond-Head Li lineage. He was the lucky one among his peers, for he jumped directly from the brigade to the commune as a cadre in the 1970s. His father, for quite a time also a gambling addict, owned a small shop before the founding of the PRC. Li Guotai's father had a spell as the leader of the Pond-Head Production Team in the late 1960s, and then in 1970 recommended his eldest son, Li Guotai's older brother, who had just turned 20, to succeed him as the team leader. At that time their family was poor, and the 14-year-old Li Guotai, who had just graduated from junior high, went to work as a barber's apprentice. And when he was 16, he went to a coal mine in Ming Mountain in Sanxiang, where the working conditions were extremely harsh. He worked there to support his family. Later, Meixian was building a reservoir near Sanxiang, requiring each production team to send one person to partake in the building. People were reluctant to do this hard work, but Li Guotai went voluntarily despite the opposition from his elders. In 1974, the final stage of the Cultural Revolution, Xiaodu Brigade, following the national trend, newly established a Mao Zedong Thought Literature and Art Propaganda Team. At that time, he was 20, and the villagers all knew his interest in literature. His mountain ballads were even published in the local magazine Meixian Literature and Arts. Therefore, he was selected to be a comedian in the

propaganda team, responsible for writing and performing sketches. He also worked as a part-time accountant due to his good numeracy. At that time, he was courting a girl from the production team next door but was rejected on the grounds that his family was poor and had four brothers to divide up family property in the future. His failure in courtship did not affect his successful career: his comic performances and drama writing started to earn him fame in the brigade and even in the commune. He was assigned to the commune's literature and art group for three months and received some communal allowance. He also sat the national college examination, which had just resumed in 1977—the first college entrance exam after a decade of Cultural Revolution—and scored 2 in English, 1 in Mathematics, over 70 in Chinese, and over 30 in Politics and Geography. Although he didn't get into college—very few people went to college that year, his turnaround came quickly. In 1979, Sanxiang Commune set up a cultural station with a special grant from Guangdong Province. The secretary of the cultural station appreciated him and therefore transferred him to the commune. He believed that his luck came from his persistent self-education and the promotion by the “educated” seniors in his village including his uncles, elementary school teachers, junior high school principal, and leaders of the brigade and commune. And he calls them the “precious people” of his life. The comments he received from these people made him decide at a very young age that he would not be a plowman for all his life, but a man who could live easier with his abilities. His promotion from the Xiaodu Brigade's propaganda team to Sanxiang Commune's cultural station was not that smooth. He did not continue his studies after graduating from junior high because his family could not afford the tuition fees, which was common in that rural areas. Then his high school principal helped him obtain the high school diploma after making up missed lessons for a short time. But villagers all knew he hadn't really gone to high school. Some years later, when he

visited the commune's archives, he saw the meeting minutes about his promotion. It was stated that two of the seven committee members of Sanxiang Commune had voted against him because his lack of education. He was admitted eventually thanks to the strong recommendation of the secretary of the cultural station. The commune arranged for him to live with a family near the office. There he met the host couple's daughter, and they admired each other. The girl, however, thought that she was "not good enough" for him because he lived by "the public (*gongjia*) food." Here *gongjia* means the public or collective, referring to the state and government in general. The completely different feedback from his two romantic relationships provided a glimpse of the significant difference in income and social recognition between brigade and commune cadres. The production team cadres were even less comparable. After all, Li Guotai was lucky. Of his father, brothers, cousins, and classmates who were also production team cadres, very few were able to work in the brigade or commune, while the vast majority stopped at where they were. And many of his peers went to work in cities or started small businesses in the late 1980s and early 1990s. Li Guotai was a typical "organic intellectual" who actively absorbed mainstream ideology and gained social capital through self-learning and networking. He was also fortunate because of the new ideological propaganda team established during the Cultural Revolution, a new brigade-level department that called for active and eloquent young people with performance talents.

Villagers called those cadres working in communes and above people "eating public food," a term that indicated that people were keenly aware of the difference in the sources of cadres' income. Although the main subsidies of the production brigade cadres came from the income of the brigade, they occasionally received a small number of subsidies from the commune. The cadres of the lowest level, the production teams, were "free" for the state and all

level of governments because their meager subsidies came entirely from the team's revenue. This form of political organization created domesticated subjects with the promise of moral and political ambition.

Statistics on Everything

Since 1961 when production teams were defined by the central government as “basic accounting units,” they had contributed to the state the physical tax, covering various types of grain, meat and poultry, and cash crop products. At the same time, the production team also produced a great deal of statistical reports and account books which used to plan and record the details of agricultural production and even social life. These data collections were done both verbally and in writing. In fact, verbal communication—all kinds of discussions, inquiries, bargaining, monitoring, and criticism—had become a critical way to generate data. Behind these silent numbers were long hours of talks: idle chatter in the fields and all kinds of meetings, extensive or brief ones. Production team cadres reported data directly to the brigade, verbally or textually. It was a collective intellectual activity that these cadres and villagers produced data together.

The busiest and most lively calculation was the recording of labor points, a long-term and difficult task. As long as there was a workday, the scorekeeper needed to record the people involved and the number of points they earned. As I have explained in the previous chapter that the labor point system trapped people tightly in the production team economy and disciplined their labor in a quasi-military way (Huang 2014). What scorekeepers do was not only record but also evaluate, that is, they had to judge the value of the work done by laborers according to their age and sex. There were general criteria, such as 10 points for adult males, 8 points for adult

females, 5 points for children, and anywhere from five to eight points for adolescents. But this division presupposed adult males as a standard workforce, and they were stronger and more powerful than other people of different gender or at different ages. The division in line with stereotypes was inherently unreasonable. The labor points accumulated by members within a production team did not entail an immediate income but went into the year-end earnings of the entire team for distribution. That means, the total sum was limited. The more labor points a household had, the less amount that others could be distributed. There would always be some disputes over the labor points, and people were arguing for higher points. Some senior villagers recalled that in the morning when they had to do farm work, the production leader called everyone to gather in the fields and the scorer should show up every day. The scorer brought a small clock and a notebook to write down the time and the names of working people. After half a day's work, people gathered to record the labor points. It was not the task of the scorer alone, but a collective evaluation. To show fairness, the scorer would publish the records he marked down in time. It was a noisy process of writing, with people joking, commenting, and sometimes arguing. Point marking was the typical and most frequent practice of collective documenting, an assessment of people's own and others' participation in the collective labor. In this way, people saw the distinctions among themselves and reflected on the unfairness of labor point system (Lin 2005). In doing the same amount of work, those who were lazy would be accused of, but under this rigid collective labor system and unreasonable distribution pattern, people's resistance was so limited that a majority slacked off in time to save energy and time. Labor points recording provided a basis for the calculations, inspection, summaries, and public accounts that took up production team cadres countless hours of intellectual efforts. Just as the joint negotiation of

labor points, rural grassroots cadres' daily management and documentation were generated in a lively, bustling exchange full of jokes and curses.

In Meixian Archives, the most basic level of archiving unit was the communes (town level). Only a small fraction of brigade-level statistical documents was still preserved in the archival boxed of Sanxiang Commune. These data, as people recalled, came from the people's verbal reports, submitted to the brigade after the production team cadres' processing. These then became the brigade's data and continued to upload and converge to the commune, to the county, to the municipal, and finally to the state. The communes and production brigades often shared the same forms, copying the styles and patterns that were transmitted down from the county. On July 13, 1968, after a busy summer harvest, the statistical staff of Sanxiang Commune filled out a series of forms, including commune-wide statistics and that for each production brigade.

The image shows two pages of handwritten tables. Both tables are titled "大队六八年夏征公粮计算表" (Production Brigade Sixty-Eight Summer Procurement of Public Food Calculation Table) and dated "68年7月13日" (July 13, 1968). The tables are organized into columns for different categories of data, including brigade names, base numbers, tax amounts, and procurement figures. The handwriting is in Chinese characters, and the tables are filled with numerical data for various brigades.

产队名称	六七年基数	各项附加合计	正、付税额合计	夏征比例	预征税额	上年	合计
竹木	4427	4428	277	1902	90	4470	4470
德宇	4051	3211	521	4057	100	4057	4057
德大	2007	2007	200	2007	70	2007	2007
德不	1557	1201	200	1757	110	2007	2124
德玩	1521	1250	200	1521	100	1521	1521
德明	4461	4222	577	4461	100	4461	4461
德院	2024	2209	200	2124	70	2124	2124
德清	1497	1226	157	1524	100	1524	1524
德坪	2757	2204	200	2157	110	2157	2157
德六	2224	2111	200	2124	100	2124	2124
德万	1207	1011	115	1207	100	1207	1207
德大	2225	2200	200	2225	100	2225	2225
德星	1250	1001	200	1250	100	1250	1250
德上	1210	1115	100	1210	100	1210	1210
德洋	1716	1604	200	1716	100	1716	1716
德文	1040	1157	100	1040	100	1040	1040
德良	2217	2000	200	2217	100	2217	2217
德公	1707	1511	200	1707	100	1707	1707

Figure 23 Sanxiang Each Brigade Summer Procurement of Public Food Calculation Tables in 1968 (MXS2S2 Y35-36)

The above two forms, the right by Sanxiang Commune and the left by Xiaodu Brigade, used identical tables. These forms might be filled in by the same staffer, for the handwriting looked similar. This table, titled “(so-and-so) Brigade Summer Procurement of Public Food Calculation Table,” was designed for the brigades to record their grain tax. After the summer harvest, the first season’s rice harvest, brigades should turn in the grain tax to the commune. The title of the form left some flexibility for broader usage outside of brigades. By filling in the blank with the word “each”, as in the right figure, the statistical staff used it to summarize all the brigades in the whole commune. The table on the left recorded the grain tax of 18 production teams in Xiaodu Brigade, including yields and taxes of the previous year, other taxes, summer tax percentage, advance levied tax, and arrears. All these 18 rows of numbers, each denoting one team, were compiled into one row to denote Xiaodu Brigade, which were filled in the commune-level table on the right. These 10 rows of numbers in the form of Sanxiang Commune would likewise be reduced to one row appeared in the statistical table of higher level. This self-report data system was like a stream with water droplets converging into, and the production team members and cadres had been contributing these droplets. In this replication pattern, the staff of lower-level administration units copied the tables designed by higher-levels and expanded the tables to create and collect data.

Following such a replicate-expand approach, production teams produced a great deal of data, a majority of which were not preserved by government archives anymore. (Some production team cadres still kept their own documents). During the collectivization, production teams produced a myriad of documents, and they were asked to keep them as records. In 1975, Sanxiang Commune issued a regulation on finance, and it stated that “production teams’ account books, statements, and vouchers must be sealed and bound for safekeeping for over ten years,

and must not be burned, lost or damaged for any reason” (MXSY79). These files were kept for the sake of inspection and supervision. In the same regulation, Sanxiang Commune explained the financial system of production teams as followed:

Production teams should establish an accounting system that is concise, applicable, easy to learn and understand, and convenient for the masses to supervise. At present, the adopted form of “four accounts books,” “three bookkeeping,” “two booklets,” and “one table” should be recorded comprehensively and in detail according to the provisions. Each production team should be equipped with all the required account books. Any off-the-book accounts are prohibited. All income and expenditure should be recorded in the accounts one by one and in detail, no matter it is cash or payments in kind.... The accountants and custodial staff are required to liquidate and publish the accounts every month in accordance with the provisions” (MXS1Y79).

“Off-the-books” referred that production team cadres and team members conspired to conceal the actual grain harvest in order to avoid excessive grain taxes. This collusion might extend to multiple production teams, or even production-brigade-wide (Gao 2014). To prevent such deception and corruption, there were regular inspections of production brigades and teams. Meanwhile, this rule repeatedly emphasized the role of the “masses” as the main force of supervision.

Numbers and tables had become powerful and efficient forms of information dissemination, so much so that in many cases, because of their simplicity and intuitiveness, numerical tables even replaced textual records, including records of ideology education classes. Writing required an extensive time of vocabulary and grammar training. Numerical statistics, especially in earlier data collection phase, could be accomplished with a relatively shorter period of training and following a template. People’s numerical abilities, of course, varied. Accounting, often considered a job for the “educated” people, was more complex than cashiers and labor point scorekeepers. The latter two required “only an entry level of culture,” as the villagers recalled. Text and numbers dominated different types of files. Governmental policies,

regulations, and meeting minutes were mostly in text-based forms. Figures and tables, on the other hand, were the main forms of reporting from lower to higher levels as well as disclosing to the public, especially to the production brigade and team members. This distinction showed the power relations in the production of statistical data: the top-down regulations of data collection were prescribed in words, and the results of survey were reported in tables.

A distinctive feature of the collectivization was that the state defined the economic model as a "planned economy," that is, the state set unified production goals, issued tasks, and coordinated distribution. These tasks were passing down from higher level to lower ones, all the way down to production teams. Scholars and the general public have described the planned economy as too rigid and inflexible (Liberthal 1997; Oi 1999). What the planned economy brought about in rural residents' everyday life was not only numerous restrictions, but also redundant labor of measurement and calculation. All the production activities, including rice, vegetables, cash crops, livestock, etc., had to be planned in detail to determine its quantity, timing, inputs, etc.

三乡公社一九六一年粮食种植计划 (表二.1) 编制日期: 1961年8月

生产队	一九六〇年					一九六一年					一九六〇年					一九六一年				
	水	旱	甘	薯	其他	水	旱	甘	薯	其他	总	单	总	单	总	单	总	单		
一队	9774	8791	493	206	100	25	10222	8791	493	206	100	25	10222	8791	493	206	100	25		
二队	844	364	364	388	80	784	707	349	208	77	21629	249	17809	249	231	22922	251	22929		
三队	514	391	245	136	123	528	391	245	136	123	102774	212	82274	209	190	127616	236	100616		
四队	359	277	177	102	80	355	265	155	92	91	88240	246	24400	272	220	92298	270	74368		
五队	380	655	341	294	90	771	4	678	328	200	112	178200	267	172200	268	260	23981	307	22281	
六队	810	680	380	200	120	853	718	404	314	124	24100	277	177000	273	280	280	260421	305	22220	
七队	284	686	270	296	98	806	22	806	223	123	228260	271	228260	301	308	231400	311	231400		
八队	610	550	270	260	60	620	70	620	300	300	172210	281	172210	281	280	182276	301	182276		
九队	480	405	225	200	58	483	420	228	202	53	120000	270	120000	270	270	120228	270	112228		
十队	352	322	176	126	50	324	22	324	172	122	86072	222	27222	236	27	108682	222	72282		
十一队	473	461	219	170	22	600	227	460	280	40	112666	249	112666	249	242	142220	246	142220		
十二队	706	628	323	271	78	727	22	672	369	204	44	222226	312	17822	311	309	222224	310	222222	
十三队	567	437	267	261	30	640	77	610	222	30	108200	262	108200	262	260	128220	274	128220		
十四队	1080	1125	620	461	75	1120	105	542	181	27	244400	227	22722	220	220	28222	228	262222		
十五队	1445	1256	628	577	59	1426	76	1421	262	577	27	222670	228	227220	227	260	227220	227	227220	

Figure 24 Sanxiang's Agricultural plans for the year of 1961 (MXS2S2Y5).

The statistical table above indicated that it was developed by Sanxiang Commune in 1961, which listed the rice and cash crop targets for each production brigade based on the previous year's production. Whether this table was an accurate reflection of agricultural income for those two years, I am not sure yet. Following Mao's Great Leap Forward campaign in 1958, there was a national trend of exaggerated reporting of agricultural income and increased collection of agricultural taxes. The inflated production plans sent people into a frenzy of optimism about the future, accompanied by the waste of human and material resources during the Great Iron and Steel Refining, which brought about three years of great famine and mass death (Lin 2008; Manning and Wemheuer 2012). Although my interlocutors in Sanxiang did not recall the great famine in their villages as harrowingly as some other places in China, people still clearly remembered the feeling of hunger and the struggle to find food.

The communes translated the agricultural tasks issued by the county planning committee into more detailed schedules, and then submitted these plans to the county planning committee.

These agricultural plans were not necessarily strictly enforced once drawn up, and actually entailed constant revisions. In 1967, as in previous years, the Sanxiang Commune designed a production plan in early January and distributed it to production brigades at a commune-wide meeting. The brigade cadres then provided their revision suggestions to the commune. On January 17th, cadres from Sanxiang Commune attended the Meixian Agricultural Work Meeting with the revised plans based on suggestions from brigades. The county and commune cadres studied these materials and discussed how to revise the plans. A week later, Sanxiang Commune published the amended production plan, adjusting some unreasonable tasks, tasks where the expectations of Meixian did not match that of the production brigades. For instance, Meixian originally drafted the new year's plan on rice production based on the previous year's yields. Production brigades gave feedback that the planned target was too high. Sanxiang Commune maintained the original plan and requested all production brigades to "do everything possible to tap the land potential and ensure the completion of the assigned tasks" (MXS2Y30). Production brigades also asked for planting more cash crops, the chufas, to reach a total of 4,000 mu in the following year. But Meixian considered this was the first time they promoted this cash crop and agreed to allocate seeds for only 200 mu. The revised plan of Sanxiang Commune echoed Meixian's suggestions and requested brigades to adhere to.

60.

三乡公社一九六七年农业生产计划修改(草案)数 (表一) 单位: 亩、市斤

大队别	一、水 稻									二、甘 蔗								
	合 计			其中: ① 早 稻			② 晚 稻			合 计			其中: ① 水 旱 田			② 旱 地		
	面积	亩产	总产	面积	亩产	总产	面积	亩产	总产	面积	亩产	总产	面积	亩产	总产	面积	亩产	总产
序号	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
总计	8721	505.4	4403336	4617	511	2359380	4104	498	2043956	1385	308	426950	930	374	348400	455	172	78550
东坑	693	516.4	358070	370	540	199800	323	490	158270	110	276	30400	70	320	22400	40	250	8000
东边	470	445	209200	420	460	193200	250	420	105000	220	421.8	52800	120	260	46800	40	150	6000
二村	598	547	327600	328	570	186960	270	520	140400	90	320	28800	70	360	25200	20	180	3600
都	1318	531	692460	710	530	376300	608	520	316160	205	351	72000	165	400	66000	40	150	6000
乔	438	506	221740	230	530	121900	208	480	99840	95	319	30300	55	420	23100	40	180	7200
沙	870	580	502620	439	560	246020	431	600	258600	130	342.2	44550	75	440	33000	55	210	11550
水	460	480.8	221180	250	500	125000	210	458	96180	155	209	32500	85	300	25500	70	100	7000
坑	1161	524	608610	600	530	318000	561	510	290610	160	365	58400	110	440	48400	50	200	10000
和	1145	445	509600	580	450	261000	565	440	248600	110	307	33800	50	460	23000	60	180	10800
楼	1368	483.5	661496	690	480	331200	678	458	330296	110	394	43400	70	500	35000	40	210	8400

Figure 24 Sanxiang Commune Agricultural Production Revised Plan, Table 1, in 1967 (MXS2Y31)

The above was one page from the mentioned production plan. Based on each brigade's conditions, Sanxiang Commune designed the planting areas and targeted yields of rice and sugarcane. The growth of rice was divided into early season and late season, while sugarcane was divided into dry-land planting and wet-and-dry-land planting. Each production team's goals were set according to the quantities of harvest in previous years, or the so-called "historical habits of each brigade" in the production plan. Which meant that, the statistics reported by the production brigades each year not only determined their taxes for the year, but also, to some extent, the tasks they would have to undertake in the following year or even years. Once these harvest reports had formed the "historical habits" recognized by communes or higher levels, it would be difficult for production brigades and teams to make notable changes in the future plans.

Harvest statistics and plans were interdependent and interlocked in sequences. Such a strict planned economy placed huge pressure on farmers and gave them limited space for adjustments. Although production brigade and team cadres could request for revision, the scope of adjustment was narrow. These historically linked figures defined rural residents' future actions and expectations, and therefore tied them to their inescapable responsibility.

Accompanied with the production plans, people devoted considerable energy to record the harvest yields. Special forms were created to show whether each unit had completed their task of delivering grain tax for the state's "monopoly for purchase and sale" (Lian 2016).

1966-67 年 粮 食 统 购 统 销 表

队 名	1966年计划数		1967年实际数				备注
	收购	统销	收购	统销	收购	统销	
合计	26879	25200	11690	6630	987	25200	28841
下关里		3338			216		3122
排上		177		2870			4597
墩坎		1300		155			1455
墩洋		2603		802			3405
竹坎		1100			72		1028
塔山		1480			72		1384
木炭	218	2132	218		326		1779
高茅		2291			149		2142
牌墩		1556			100		1456
木尖		5070			189		5259
石坑	1166	600	1166	2116			3744
塔南	1007					1007	
塔北	1745		1745	500			500
在下	842					842	
里坑	8286		1472			4814	
殿上	3742		700			3042	
波南	8039					8039	
竹坎	11774		6389			5385	

Figure 25 Summary Table of Sanxiang Commune Xiaodu Brigade 1966-67 Grain Procurement and Unified Sale (MXS2Y27)

The chart above is a table produced by Xiaodu brigade in 1967, listing the grain requisitions and sales adjustments of each production team. The table consists of three parts: the 1965's figures as a reference, the tasks in the commune's adjustment plan (the numbers of increase or decrease over the previous year), and how were the tasks accomplished by each production team. Through this chart, all production teams' data was clear at a glance, that is, whether the plan was completed, or whether there was an increase or decrease. These figures would become new reference figures, providing a basis for comparison in the following year.

In the later stages of the collectivization, agricultural planning had become increasingly elaborate, with a greater categorization and progressively complicated forms. People enriched the varieties of rice and experimented intermittent cultivation with other cash crops. These finely honed experiments on limited lands led to even more elaborate plans. The "Spring Sowing Schedule for Major Varieties of Early Season Rice" drafted by Sanxiang Commune in January 1980, was a typical example of a detailed production plan.

三乡公社一九八〇年早稻主要品种春播田间安排计划表

1980年1月21日

品种	对口农	全生育期(天)	育秧形式	播种期		秧苗期		移栽期			争取收割日期	备 考
				起止日期	适期	适宜天数	秧龄(天)	始期	适期	中止期		
1	2	3	4	5	6	7	8	9	10	11	12	13
迟熟种								3.6	3.10	4.5	7.5	
桂	桂湖	160天	尼龙漫润	1.25-3.5	2.5-3.5	30-40	55					
	冬闲田	一批	" "	1.25-2.5		30-40	55					
	秧田	二批	" "	2.5-2.12			45					
湖	秧田	二批	" "	2.5-2.12			45					
	秧田	三批	" "	2.19-2.25		30	35					
	秧田	三批	泥坪秧	3.1-3.5		15-18	18-25					
十二一〇四	十二一〇四	145天	尼龙漫润	1.25-3.10	2.5-3.10	30-40	50					
	冬闲田	一批	" "	1.25-2.5			50					为晚熟种十二一〇四秧田
	秧田	二批	" "	2.5-2.12			45					青草提供秧田
	秧田	三批	漫润秧	2.19-2.25			40					
中熟种												
青二矮	青二矮	130天	漫润秧	2.12-3.12	2.12-3.10	30-35	45					
	秧田	一批	" "	2.12-2.20								为晚熟种秧田提供秧
	秧田	二批	" "	2.19-2.28			35					
	秧田	三批	" "	2.20-3.12			35					
朝阳十八	朝阳十八	135天	漫润秧	2.10-3.12	2.10-3.10	30-35	40					
	秧田	一批	" "	2.10-2.15		2.10-15	35					为晚熟种秧田提供秧
	秧田	二批	" "	2.19-2.28			30					
	秧田	三批	" "	2.25-3.10			30					
早熟种												
六陆	六陆	120天	漫润秧	2.19-3.15	2.19-3.15	30-35	45					
	秧田	一批	" "	2.19-2.28			35					为晚熟种秧田提供秧
	秧田	二批	" "	3.1-3.15			30					为晚熟种十二一〇四秧田提供秧

Figure 26 Sanxiang's Spring Sowing Schedule for Major Varieties of Early Season Rice in 1980 (MXS4Y147)

This schedule showed four different rice varieties, each with three batches of seeds corresponding to different paddy types. Each batch of seeds was listed with its seedling cultivation method, sowing period, seedling period, planting period, and harvest timing. People drafted these dates based on data from previous years and the weather forecast for that winter. This series of schedules in Sanxiang Commune provided a guideline for each production team. Production teams were still left some space to decide on their own exact time of cultivation. Production team leaders, other cadres and those more experienced in farming would decide on

the best timing of sowing and seedling, according to weather conditions throughout the year. As I have analyzed in Chapter 5, villagers were accustomed to judging the best time for farming by their perception. Planning is an ability that could bring power. Higher levels of governments issued these tasks and schedules and restricted rural residents' life in many aspects. The basic-level cadres, especially those in production teams, spent considerable time and energy in making plans, responding to governmental requests, communicating with the "masses" and directing them to follow the plans. Team members particularly valued the planning skills of the team leaders. When selecting a production leader, the team members considered whether the candidate could make the best production plans to avoid losses and generate more income for the team. These specific production plans were not decided by the production leaders alone. Other cadres and experienced elders played a part in working out the plans. By defining production teams as the "basic accounting unit," the state extended the model in which the family head planned for the family, to that cadres for the entire production team. Just as the family head was often a male member, so were most of the production leaders. Having a clear grasp of history, able to plan for the future, having a sense of time, and self-discipline—these descriptions of an ideal team leader fit the ideal, intellectual masculinity.

Planning, revising plans, recording, and accounting for agricultural production alone had taken up most of the work by production team cadres, but their statistical works went far beyond agricultural production. Statistics reached its peak during the collectivization, to the extent that nothing was left out. What they were required to calculate ranged from crops, to animals, to land, forests, and hydrology, as well as the births, deaths, and minds of people. After the central government began testing birth control policies in the 1970s, marriages and births became a priority statistical object for all levels of authorities (Greenhalph 2008). This statistical table of

birth control, produced in 1978, was designed by the Guangdong provincial government as a uniform form. Sanxiang Commune cadres recorded the numbers of fertile couples, birth control measures, abortions, and contraceptive pill use in each production brigade. One years after this form, the strictest One Child Policy came into effect.

单位: 三乡公社

广东省一九七七年落实计划生育措施统计表 日期: 1978.1.5.

单位	总人口	育龄夫妇	总对数	育龄夫妇占总人口百分比	一九七七年(季)落实计划生育措施							至一九七七年一月止落实计划生育措施总数							
					放育育环	避孕套	男结扎	女结扎	人工流产	绝育手术	合计	放环	男结扎	女结扎	小计	育龄夫妇总数%	避孕套	打避孕针	避孕工具
合计	10294	1288	12	185		1	22	47	255	32	799	77	138	1037	80	18		125	81
莲心	828	115	7.2	21			2	4	27	3	62	7	17	84	81	5		14	84
站边	997	135	7.3	21			6	1	28	2	84	2	28	114	84			82	84
上村	711	97	7.3	18			2	4	24	2	67	2	13	82	84			201	81
小郭	1782	248	7.1	35			4	9	48	1	150	12	6	178	76	3		59	86
林边	543	68	8	9			1	2	12	4	42	12	5	59	86			114	83
甲坑	1129	135	8.5	18			1	8	27	5	71	4	18	113	83	1		101	67
普石	1361	149	7.1	16				6	22	2	71	2	8	101	67			78	85
三桥	762	94	8.1	14				6	20	2	65		13	78	85			97	80
石塘	1127	121	7.3	21			1	6	28	6	57	16	21	94	78	4		101	84
田边	760	116	6.5	11			5	1	17	2	48	41	8	97	83	4		8	73
新水坑	273	11	2.6	1					2		6	1		7	60	1			

Figure 27 Statistical Table of Sanxiang Commune's Birth Control Implementation (MXS3Y198)

What these figures indicated was rural cadres' strict control over the fertility of couples, especially women. More than ten percent of Sanxiang residents were closely monitored for their reproductive conditions. What unfolded in those figures was numerous surgeries: birth controls and abortions. The seemingly stale numbers were filled with tears, cries, fights, and rage.

Tables, most of the time, replaced purely written narrative records. Numbers became the most convincing evidence. Meetings, large and small, were filled with all kinds of voting and calculating. Tables presented an objective truth that was intuitive, especially when such tables

death during the famine of the 1940s, whether they were ever forced to sell their children or their land. Each number was a story that was used for moral education.

“The government didn’t control too little, it controlled too much.” Uncle Li Guotai lamented once while talking about forest management. During the collectivization, everyone, from commune cadres to production brigade and team cadres, was busy with the overwhelming task of statistics. At that time, people already reflected on the unreasonable policies, but their questions were often more specific, such as why they couldn't cut down a tree to make a closet, why they couldn't build an extra toilet in their own house, and why they couldn't raise more chickens. The more macroscopic reflection on the planned economy and collective production did not take hold. It was hard to imagine that one could completely overturn the patterns that had been taken-for-granted before.

Until the end of collectivization did people surprisingly find that most of the tasks that they had regularly practiced—making agricultural plans, recording labor points, showing loyalty in education classes, identifying "bad members," controlling human and animal manure—were redundant administrative tasks. What these superfluous statistics data presented was a strictly regulated, even panopticon like, semi-military community. Of course, while these bureaucratic tasks were later considered "extra nosiness," the redundancy was not without meaning. The redundant measuring, counting, and calculating that took up so much of people's leisure time gave those unnecessary bureaucratic positions something to do, that is, something to pass time for the young people who were trapped in their hometowns, in the so-called “collectives.” But it was this redundant bureaucratic work, imbued with a sense of enterprise, patriotism and responsibility, that made the state’s statistical domestication invisible, comprehensive, and lasting. While people were mired in the logistics of red tape, these bureaucratic work in turn

disciplined them. In some sense, people were disciplining themselves. The younger generation in the production teams, especially the young males, jumped at the chance to become cadres for a few years. They became representatives of the state and managed themselves as representatives of the masses.

Calculating for state or market

In the village committee hall, the Director of Women in Xiaodu opened the door of a metal cabinet that appeared empty with only a dozen of archival boxes. She showed me the booklet that recorded the village's household information. These notes were recorded from the 1990s and were handwritten in pen. The handwriting added later was written with a pencil or ballpoint pen. During the Land Right Authorization, some production team leaders referred to these booklets to check the demographic information. The same was in other village committee offices: spacious places, new tin cabinets, but very few documents. Once, the village committee was the starting point for collecting first-hand materials, reporting households' data to the town government, which, these data, would then go on to the county, to the municipal, one level at a time. In the 1990s, the central government shifted from a planned economy to a socialist market economy. Since the 2000s, village committee halls had gradually no longer serve as the primary repository of rural records. People needed to find the records of Allocation to Household in the town government, rather than their village committees. Village cadres reported the data of grain production, fruit trees, poultry and livestock based on estimates from previous years. Rural residents continued calculating their agricultural production, although they were no longer required to submit these figures to the cadres. People's daily numerical practices shifted from calculating for the state and collective to calculating for the market.

The absurdity of this data collection only came to the fore at the end of collectivization, although the exhaustively detailed statistics of the collectivization era drew complaints from production brigade and team cadres at that time. The de-collectivization reform was not only an overturning of the ideology they had embraced for the past three decades, but also a sudden realization that many of the endeavors they had been devoting for the collective were redundant and ineffective. The collective intellectual practices, such as counting labor points, calculating tax grains, distributing earnings, handling debits and credits, and commuting in-kind, had caused so much excitement, anger, and anxiety and took up extensive communicative and computational labor. But all of these were no longer needed after the Allocation of Paddies to Household. As people began to believe, accept, and then actively embrace this shift, they became skeptical and critical of the social settings and practices they were accustomed to.

Meixian County Archive kept collectivization documents at the commune level but did not deposit the vast majority of those of the production brigades and production teams. These documents were required to be stored by these units themselves. Sanxiang Commune issued a policy to archive all their documents, account books, receipts. After the production brigade became a village for some time, the village committee did not retain documents from the collectivization period. Only very few village committees preserved the historical documents (See Chapter 2). Some former production team cadres managed to keep their own scattered manuscripts. The spacious village committee halls were much empty now. The publicizing wall, where used to be crowded, become a plastic bulletin board that no one bothered to take a look.

The extremely thorough statistical materials in rural area were a product of the planned economy and collective agriculture. After the transition from a planned economy to a market economy in the 1990s, rural areas gradually withdrew from this model of elaborate statistical

management. The production team cadres' positions were abolished, leaving only the team leaders. Since the late 1990s, people had spent more and more energy calculating their possible income in the "market," something they could rarely consider during the collectivization.

After the Allocation of Paddies to Household, rural residents received land certificates in 1998 and were promised by the state that their contract rights would continue for thirty years. The account books recording the distribution of land were only a kind of folk or personal records. Some cadres who kept the account books were not sure if these records were still useful, but the time proving their values came twenty years later when the state launched the Land Right Authorization.

In Chapter 1, I have analyzed Uncle Li Guojun of the Pond-head Li, using his account books as the basis for bargaining figures in the Authorization. He was a controversial person in Xiaodu, and the controversy about him largely resulted from people's dissatisfaction with his practices when he was a village cadre. He worked as a cadre for two decades after the de-collectivization reform. In the early 1980s, when he was in his twenties, he was involved as a team leader in the surveying and distribution of land in production teams. In the 1990s, he became a village cadre and was engaged in the establishment of village enterprises, including several large orchards. In the economic transformation after the Opening-up, village cadres gained more power and more opportunities to control village land and mountains. Villagers and some relatives speculated that Li Guojun pocketed some of the profits. He kept three account books of the Pond-head Production Team, written at different times. One book was written in 1980, one in 1989, and the remaining one in 1998. These books were also not written exactly according to the timeline, but with some modifications or additions of later records.

Li Guojun always emphasized that he took the measurements all by himself, but in fact, he organized the measurements, and each household participated and confirmed the numbers, supervising the accuracy of the measurements. The Pond-head Production Team was small and in “solidarity,” so the land was divided peacefully and quickly. The village fields with fertile soil were rated as first-class fields, while the paddies in the valleys were rated as the second- or third-class. The land was allocated to households according to locations where they had been accustomed to cultivating, to make sure that the land plots the same household were adjacent to each other as much as possible. As for the infertile land, people divided them by drawing lots. By the 2000s, as an increased number of people went out to work in town, a large number of fields were left abandoned. People in the village swapped land plots with their relatives so that they could farm more intensively. Gradually, for those paddies deep in the hills, buried in the lush grass, there was no way to restore the shapes and ownership. As I have shown in Chapter 2, the account books and the Red Books became the basis for drawing the corresponding land parcels on the map during the Authorization.

I ran across another land account book when I was in Huangao Village, next to Xiaodu, in Sanxiang Town. Uncle Liao Xianglong, a village cadre and also the vice-director of Sanxiang Poetry Club, invited me to his friend’s house. His friend, Uncle Liao, and he used to be in the brigade propaganda team. They were partners in performance—one played the plucked flute and the other the erhu. —During the late 1970s and the early 1980s, Uncle Liao, then in his twenties, was a production team leader and participated in the Allocation of Paddies to Household. He kept these land account book that he wrote in 1982. These account books looked like Uncle Li Guojun's thin notebooks with yellow covers.



Figure 29 Left: Liao's notebook cover; Right: one page in the notebook

On the cover of this notebook, Uncle Liao wrote "Canal-up Team" in blue ballpoint pen, using an artistic font. The following line is "Land Registration Book." He drew some rice fields with irregularly shaped plots. The way he recorded the fields was different from Uncle Li Guojun. Uncle Li Guojun lists the land blocks by household, while Uncle Liao lists them in the order of placenames. In the above figure (right), he listed a few land plots located in the Pork Belly Plot, in the sequence from hilltop downwards. On the right side of the page, he drew diagrams with numbers indicating the location and shape of each plot.

Uncle Liao's record differed from the way the government's registration of land. His land account book was more like a simplified map. In 1998, 16 years after the Allocation, the government finalized the land holdings that had undergone four minor adjustments and issued land certificates. Unlike this set of government-produced land records, Uncle Li Guojun's and

Uncle Liao's account books handwritten notebooks would not be archived by the government. Even if these books were written in the production team's name, they were more like a private archive, which were fully owned by the person who wrote them back then. These notebooks may not be the most original land data. After all, these numbers were too neatly written. When measuring the land, people often used some pieces of paper to take notes. As people measured the land with a ruler in Jiakeng Village (Chapter 2), people immediately calculated the area of the plots, and double-checked and recalculated their notes afterwards. Other than these rare personal accounts, most files and daily records were long gone. That village committee halls became empty was not entirely because people discarded the files, rather, it was because people had not continued this way of keeping statistics on everything.

After catching up with his friend, Uncle Liao Xianglong left his house and headed to the Huangao Village Committee. As a committee member, he went to office one day a week, unless he had temporary tasks. He chose to go every Tuesday for on that day he would communicate with the regularly visiting cadre from town's agricultural station. Many village cadres arranged to go to the village office on a fixed day. People rarely go to the village committee anymore. Huangao Village Hall used to be the abandoned elementary school building. Later they built a two-story building as the new, spacious office, furnished with seven or eight desks and some wooden chairs. There was a row of cabinets flush with the wall, on which a dozen archival boxes were neatly arranged, with labels indicating categories of village documents. Uncle Liao Xianglong showed some of his hand-drawn maps. One was a schematic map of the village's canals and dams, as he was requested to provide such a map for Meixian's farmland irrigation survey. Village cadres had to deal with this kind of survey projects from time to time. Another was a schematic map he drew for Meixian's rural village general census a few years ago. In this

map (see the figure below), he illustrated the residential areas of eleven production teams, their houses, household numbers, along the roads and rivers. The map template was a blank rectangle frame with a printed legend with an explanation of the symbols. He positioned himself or the audience in the middle of the map, the center of the village-face, surrounding the text around the center, with the words written upside down in the bottom of the map.



Figure 30 Liao Xianglong's painting of village map for general rural census.

Liao Xianglong also drew several similar maps of wet-rice paddies for the surveyors during the Land Right Authorization. As for agricultural data, he said they still had to report agricultural and forestry production to the town every year. "In the past, it was a planned economy and all the grains had to be weighed," said he. Now village cadres only reported the size of the cultivation areas and harvest yields of rice, pomelos, and other fruit. They did not really measure and calculate these figures, and instead gave estimate numbers based on the

previous years' data. The "estimated numbers" replaced the more accurate numbers that people carefully measured with a scale.

The production team gradually withdrew from the routine quantitative management of the collective in the 1980s. This rural organizational unit was no longer a “basic accounting unit” of agricultural economy. In the collectivization era, people calculated and compared harvests together; but after the de-collectivization, they calculated more for the market. Although rural residents earned a higher income after the Opening-up, they were suffering heavier taxes to meet the needs of urbanization and industrialization. By the mid-to-late 1990s, it became increasingly difficult for them to support households and pay taxes by farming fields. Many people would rather go out to work and pay agricultural taxes with part of their wages. The final earning was still higher than that from farming in their hometown. Sanxiang people were no exception. They went out in large numbers to cities in the Pearl River Delta for jobs or small businesses. Those who worked out of town lent the fields in hometown to their relatives and neighbors, until most people had left, leaving mountain fields completely waste and only tiny plots at doorsteps for cultivation. The current middle-aged and elderly rural residents had experienced vicissitudes in the past half century—being trapped in the collective, working far away from home, and then moving between urban and rural areas. The central government abolished all agricultural taxes in 2004 and promoted the policy in 2008 of granting farmland subsidies onto farmers' passbooks issued by town-level Rural Credit Cooperatives. After the 2010s, increasing people returned to Sanxiang after a couple of decades of living in urban areas. They built houses and established pomelo orchards. With Mexian's incentive policy, pomelo industry developed rapidly.

The statistical materials of the collectivization, the evidence of people's labor for the collective, had been dissipated, leaving only scattered clues. Yet when major quantitative

projects, such as the Land Right Authorization, appeared in the lives of rural residents, people conjured up memories of the familiar ways of communication during collaborations filled with the racket, taunts and complaints. People sometimes habitually asked, "Is there a compensation fee for work loss?" This question was never answered. Nor did people stay and ask again but take their hats and coats and leave quickly.

During the three years of the Authorization in Meixian, village committee halls in Meixian started to install high-speed internet, and every household had been allocated routers for receiving free Wi-Fi. Smartphones of reasonable prices had become popular in rural areas, especially among the male villagers. People chatted, browsed TikTok, shopped in groups, and started to spread some policy documents issued by the town government or forms to fill out on WeChat groups. It was also during this period that new signboards that wrote so-and-so "Village Service Station" had been hung up in the village committee buildings. Village committee halls had been decorated like the offices of government departments in the city, with a uniform style and a new front desk with a computer on it, a blue backdrop behind it, and a computer screen on the wall playing short publicizing videos. Village residents liked to chat about the newly recruited staff at the service station and they often introduced them to me, "This is the college graduate we have at our service station." The fact that "college graduates" were coming to work in the village made them feel fresh and proud. Through a unified examination, Meixian had recruited young staffers who could operate computer and manage the document exchange for each service station. Most of them were not from their working village or town and came to work by bus.

In contrast to the quietness in the new service station, the village head's home had been a lively place. The spacious living room of the village head, Uncle Tiny, of Xiaodu Village was

always full of people who came for tea, from morning to night. Some of them were friends and neighbors, while others came for help. Uncle Tiny set up a big expensive wooden tea table in his living room and sat for long hours at the table making *kungfu* tea for his guests. Since the village building was turned into a service station, the village, a grassroots semi-autonomous unit, had been divided into two different office spaces. People went to the service station for government-related logistics, such as registering social insurance, checking information, and issuing certificates. Uncle Tiny's home was like an informal political space, where people talked about the miscellaneous in their lives, gossiped about village businesses, and dealt with neighborhood disputes.

Professional computer operators typed in the specifics, originally registered by the village cadres by handwriting, into the computer and connected it to the government's unified database. These data did not belong to individuals, those villagers who self-reported, nor to the staff who filled out the forms. These young staff, unfamiliar with the village, would not use notebooks to record the particulars of people and fields, as what the young cadres like Uncle Li Guojun did in the past, keeping a copy for themselves. These "college graduates" may have not accustomed themselves to the chronotopic ideologies that other villagers shared to imagine the historical and experiential indexes of these data. They were professional bureaucrats stationed in the village, as contrast to village cadres who did not receive training. They were mostly like county office staff or GIS surveyors, who followed the specialized procedures and help create a bureaucratic chronotopic database about the rural.

Chapter End

Statistical domestication in the collectivization period brought heavy workloads of redundant measurement, calculation, and aggregation. Uncle Rich's distrust of accurate measurement and his expected huge labor work before the Land Right Authorization drove him to be concerned about the compensation for lost work. After de-collectivization, there was no subsidy for production team leaders anymore. Some town governments dispensed a one-time subsidy of 50 or 100 *yuan* to team leaders during the Authorization. Uncle Rich heard about this subsidy, lower than the income of a one-day temp job, and eventually decided not to be the team leader. He recommended his nephew to take it, and said, "Let the young people do that." Before the pandemic, Mei County installed high-definition cameras in rural areas, a common action across the country. These cameras were used to detect illegal gatherings under strict epidemic prevention policies. Villagers originally thought it was fine to play mahjong and gamble secretly and disperse as long as they saw the police cars, until these villages were visited by the town police and warned by the county government. The new things, like the service stations, high-speed network, computer operators, and cameras, had gradually transferred management tasks of the originally half-autonomous village committees with elected village head and cadres to specialized departments of the county or town government.

Chapter 5 Embodied Numbers

Chapter Tour

Time and Space

Time of Nature

Projecting Time

Situating Self and Other

Trees and Body

Trees as Human/Animal

Kinesics of Tending Trees

Painful Counts

Tactile Numbers

The Middleman Uncle Yun selected one pomelo from the pile, peeled it, and tasted a slice. He chews slowly and nodded: “Hmm. Good. Beautiful. This year's pomelos are good in quality. Sweetness can reach 12 or even 13 degrees.” He negotiated price between buyers and planters in Xiaodu and adjacent villages for many years. Some picky buyers from outside places may use a device to detect the sweetness of pomelos, while among local middlemen and planters, they often just needed to taste it and give a conjecture. But for those villagers who never applied such a device themselves, their comments on sweetness were often qualitative rather than quantitative—only experienced connoisseurs were confident enough to make judgments as Uncle Yun did.

This chapter analyzes people's bodily interactions with the material environments, particularly in the pomelo industry. People transform their bodies into vehicles for exploring the worlds to perceive time, space, size, and qualia—sometimes such perceptions are quantified. What enables people to link their perception with clearly defined concepts, numbers, to the extent that the number sense becomes embodied? The skills of quantitative perception require long engagement with non-human beings—plants, animals, weather, soil—and their interaction with other people. In contrast to measuring with tools that are usually considered more accurate, measuring with the body is a habit and a politically/ethically situated choice.

Embodiment and Quantification

How do people come to acquire and practice the ability to quantify things in daily life? Instead of taking mathematics as mere intellectual activities that apply numbers onto things in the world, I analyze the ways people explore and master the ability of quantification through bodily perception. It is through long time of bodily perception and the communication about their perception that rural residents become knowledgeable and proficient in their conventional and creative fashions of counting and measuring agricultural belongings. People's embodied skills of quantifying and the applications of these embodied skills, as I show in this chapter, are intertwined with cultural, ethical, and economic purposes that are vital to farmers' livelihood and social relationships.

Before I delve into the analysis of fieldwork data, I briefly lay out two scholarly threads that have greatly informed my understanding of the question how people quantify themselves and the surroundings via the body. The first is what I categorize as the linguistic/cultural studies centering on the relationship between number concepts and the body, especially those about numerical practices in non-Western societies (Massam 2012). The human body, such as digits,

can be designated as symbolic tokens to denote numbers, such as twenty-unit in Iqwaye counting system (Mimica 1988) and sign languages across societies (Madalena 2020; Semushina 2019; Taub 2001). These studies analyze the numerical designation as conventional body-image in languages. Extending from the semantics of emblematic gestures of numbers, other linguistic works, particularly in education studies (Martin 2019), instead look at the real-time applications of both customary and creative bodily expressions of numbers, including co-speech gestures (Wolfgram 2014).

Another thread is the cognitive studies with a similar interest in the relationship between the body and arithmetic, but from a more inward perspective. Psychology/cognition studies have provided sources for scholars in humanities and social science to interpret mathematics via the body, especially the brain. Generalizing from psychological cases, Merleau-Ponty suggests that body holds the ability to grasp objects even without immediately taking up rules or concepts for calculation (2002). Psychology-oriented anthropologists investigate the social and material settings that trigger a smooth, sometimes unfelt, calculating mode (Lave 1988). These scholarly works theorize embodiment as a seamless living status in which people unconsciously act in a habitual manner, without intentionally resorting to norms and concepts. In the emerging field of embodied cognition, scholars move their focus to the acquisition and internalization of knowledge. They emphasize the ubiquity and omnipresence of embodiment as fundamental human propensity to learn to inhabit in the world. Mathematical practices, the same as other intellectual activities, are after all metaphorical and embodied (Lakoff and Nunez 2000). Embodied cognitive scholars suggest that any human understanding of the self and others is inevitably intertwined with human body to the extent that there is no disembodied cognition and absolutely objective surroundings (Lakoff and Johnson 1999). Some push further that there is no

“environment” outside of human bodily perception (Shapiro 2010). That is not to say that reality is pure idealist; on the contrary, they suggest that environment and human/non-human beings are co-determined (Varela et al. 1992). These cognitive studies examine human interaction with the surroundings by focusing on the function of brain and bodily perception.

While I align myself with the major arguments in the embodied cognition field, my methods of researching and analyzing are primarily linguistic/cultural. During my fieldwork, I mostly attend to observable moments of bodily involvement with numbers—by “observable,” I refer to moments that have entered the arena of social interactions and are detectable to interlocutors. I especially zoom in what might be called natural conversations among villagers when they explicitly voice out their bodily experiences. By deciphering these moments, I analyze not only the semantics, but also the pragmatics of the embodiment of numerical notions. My conceptualization of embodiment has twofold references. First, I show that the acquisition and familiarization of quantifying is an intellectual activity that is intertwined with bodily experiences. To understand objects, be it tangible or not, in a numerical way involves multiple sensations—sight, hearing, taste, and touch. Here I use the concept of embodiment to refer to the receiving of phenomena and processing the information into knowledge. Second, for a relevant yet different reference, I explore how numerical concepts, once become embodied, play an active role in social interactions. In this sense, I focus more on another understanding of embodiment as a status, an obtained habit or skill that is applicable in both specialized occasions and everyday life. That is not to suggest that once people have acquired such an ability, they would practice it in the same manner in any situation. Instead, I focus on ethnographic moments when people intentionally apply their embodied skills and express their opinions about the skills, which brings up social consequences in daily life.

Time and Space

In my early impression of life in Xiaodu, villagers seemed to always have much leisure time, hanging around, chatting, joking, drinking tea, or playing mahjong. I was convinced with this kind of relaxation especially when I watched how they paced in the village: with hands crossed behind the back, legs moving slowly, each foot pointing outwards, and the body swinging concomitantly to the left and then to the right. If they walked in a group, they often kept the same rhythm and direction, swaying to the left and then to the right. It was until I followed them to their daily agricultural works and year-long production cycle that I realized how complicated timing they were dealing with. Different from the regularized weekday schedules in urban areas (I talk about new changes in time perception during hired labor in Chapter 6 Calculated Relationships), Xiaodu residents perceived time and responded to it in a much more intricately and spontaneous way.

How does numerical knowledge become embodied during agricultural production? Before I analyze villagers' embodied quantification abilities in pomelo planting, in this section, I articulate how people make sense of their surroundings via bodily perception and numeracy, especially how people grasp time and space. As I further analyze in the following part "Trees and Body," I show that people's arithmetical understanding of time and space is inseparable from their intimate interaction with non-human beings, particularly their agricultural belongings.

Alfred Gell in his book *The Anthropology of Time* (2001) examines scholarly understanding of time in multiple disciplines (anthropology, linguistics, philosophy, and psychology). He traces the earlier ethnographic focus on time concepts as cultural and geographic knowledge, to the later turn to the theory of practice, that is, seeing time knowledge as power related. Built upon the debates between cultural relativists and anti-relativists, Gell

proposes to contemplate the issue by combining ethnographic methods and cognitive studies. His final argument, or a point of future departure, is deriving from, although not completely conforming to, a phenomenological approach, for phenomenology endeavors to bridge together cultural concepts with cognitive activities. But he also points out the limitation of applying phenomenology in anthropology, because it heavily relies on philosophical and psychological views of internal sensations that are not readily available to observations.

Extending from seeing time perception as social/collective knowledge and cognitive activities that map conceptions onto external environments, I focus more on the interactive moments when people gain original knowledge of temporalities and make timely decisions in a spontaneous and contingent way--not only by perceiving the surroundings, but also by communicating with other people. In particular, my fieldwork reveals that people's communications and observations give rise to the acquisition, reflection, and modification of established numerical reading of time, such as calendars and clocks. Even though my theoretical routes are traceable to phenomenology, my method--social and linguistic analysis of everyday interactions--explores the embodiment of time perception in a observable way. I show that it is through bodily experiences and the voicing out of these experiences that people come to embody and re-embody their numerical knowledge of timing.

Time of Nature

Time perception is particularly crucial in villagers' daily works in the rice fields and fruit orchards. Even though farmers have accumulated substantive knowledge of agricultural timing, they cannot simply follow the rubrics in a rigid way. In fact, all rubrics are tentative and flexible temporal frames that change from year to year. Thus, it requires trained skills and extra effort for villagers to manage their agrarian activities based on elastic timing knowledge.

To trace a full year-long production cycle of both honey and golden pomelos in Xiaodu, I designed my schedule by prioritizing seasonal planting activities over some other observations and conversations. Even though I was aware of this priority, it was not easy to track the timing. I had to constantly ask around what villagers planned to do soon. After the conventional greetings of "have you eaten" and "where are you up to," I would add one or two questions: what you are going to do tomorrow/next a few days, when are you going to do the trimming/pollination. Still, too often I was frustrated by their uncertain answers--either they said they did not know, or they gave a date but changed their mind on that day. In more cases, I ran into people riding motorcycles on their way to orchards, decisions they just made the night before or in the very morning.

This morning in early March, I finally caught up Uncle (Li) Biao, Uncle Rich's neighbor and far-linked lineage member, riding his motorcycle to pick up flower buds in his orchard in Ghost-howling Valley. Before that, I had asked several times about his plan, and he was not sure. After riding for twenty minutes and a walk in a meandering path, we arrived at the orchard in a chilly and dark corner in the valley area, covered with big golden pomelo trees, each about five or six meters high. He placed a ladder under a tree, climbed up to the top, and started to snap flower buds with his nails. Every spring, people need to remove excessive pomelo buds to ensure the nutrition enough to sustain a healthy growth. In each flower node, there may be half a dozen of buds, and they randomly pick up half of them. This spring was dryer with less rain than usual, so pomelo trees across Xiaodu had generated more buds than the last year. As he worked for a while, the ground was already filled with white flower buds, spreading like snow. After these bud blossom, the next step of attending pomelo trees would be pollination.

“Sister Red is pollinating in her orchard today. So early.” I started a thread of conversation, hoping to know Uncle Biao's plan for pollination.

“Yes. Ghost-howling Valley is much colder. Not enough sun shine. The blossom should be later than High-South Bamboo Valley (where her orchard located).”

Then I asked him how many days it would take trees to blossom.

“I don't know. Only flowers themselves know. I see it and then I will know.” He said.

I paused at this poetic and witty metaphor, although Uncle Biao spoke in a peaceful and regular voice without stopping his work at hand. I had heard similar answers from other people: “I will know it's time to pollinate when I see that flowers blossomed.” These moments made me realize that the way they “plan” agricultural work was more complicated than setting up a date on a calendar in advance, but rather by observing and detecting clues for the right timing. The clues mostly generated from people's perception of their surroundings: the growing conditions of plants, the amount of precipitation, the temperature and so on. Their method was better summarized by a phrase that villagers often say, “It depends on the time of nature” (*kon tien sii*, literally means “watching the time of sky”). The Chinese word *tien* (m. *tian*) has multiple referents: sky, heaven, weather, and universe. I translate the word to “nature,” which is not to situate *tien* in the popular dichotomy of nature/culture, for rural residents deal with various kinds of man-made or human-intervened activities and devices that have an impact on their decisions, too. The word “nature” refers to things that have timing in themselves, which is not fully controlled by human. These “natural” things only reveal their timing to people with familiar and attentive senses. “It depends on the time of nature”—when villagers say this, they either express helplessness about their limited ability to take charge of their own actions or show hope to signs of beneficial conditions that help them with a smooth growth and joyful harvests.

It is not a simple task to watch the time of nature. The window that people could effectively pollinate is very narrow, for pomelo trees do not have a long blossom period. The most optimum timing for a successful pollination was to finish it within the first a few days after flowers' blossom, before the flowers became too mature. Flower buds did not blossom at the same time—not even from the same tree, so growers had to pollinate again and again to catch up with the freshest flowers. Once missed the best pollination time, people may face huge financial loss in this year's harvest, because golden pomelo trees cannot get pollinated themselves and they need to receive pollen from other trees. Birds and bees may work as a medium, but the number of these animals was not enough to reach the full capacity of so many orchards. The growers thus took on the duty to facilitate pollination among trees. A common practice in this rural area was that they used pollen from the honey pomelo trees to pollinate.

Therefore, to capture the best timing of pollinating required growers to closely monitor flower buds by attending orchards every day. Orchards usually located in the valleys, far from people's houses, so they often took a motorcycle ride to go around their scattered orchards. It took me some time to notice that villagers liked to "take a look" at their own and others' agricultural belongings—trees, vegetable, domestic animals—for it just happened so quietly and naturally, if not secretly, that they needed not tell anyone. They took a look when they were on their way to do other works, or during a walk after supper, or after they sent children to school. Taking a look was not something serious that they should plan to do, but a habit, partly out of duty and partly out of curiosity. I noticed this when I went with villagers on other errands, and they often stopped by a garden or orchard to take a look--sometimes so quick that I did not even feel it was a stop by. In this way, they gain knowledge of the ever-changing world around them: trees planted, flowers blossom, pomelos turn yellow, vegetable sprouts, ducks grow, pigs are

fertilized... As someone grew up in urban area, rural life to me was unchanged and repetitive. The longer I stayed with villagers, the more delicate and abundant details they have shown to me in this little capsuled territory. They are so sensitive to catch the seemingly trivial but vital changes hidden behind leaves, in the corner, or on the ground. By taking a look, they learn and sense the time of nature.

On the same day I followed Uncle Biao's buds picking, in the afternoon, I went to Sister Red's orchard in High-South Bamboo Valley where she was pollinating. She used an empty food can hold pollen, tied with a red string around her neck. Her husband, Brother Liang, collected pollen of honey pomelo trees in another orchard. Sister Red bought a painting brush and extended it with a long bamboo stick. She dipped the brush in the can several times and held the bamboo stick to reach flowers, making sure that the center of each flower, the stigma, gets enough pollen. Because both pollen and stigmas are in light yellow color, it is difficult to discern which flower has been pollinated and which not. This year, Sister Red heard a new method, that is, adding the red yeast powder, a common local food ingredient, into pollen. Yet she was somewhat suspectable of the method and decided to use this red pollen for half of the trees. There were a few thousand trees in her orchard and each tree had several hundred flowers after the picking up. She had to gently brush every single flower spreading all over the trees. For hours she looked up, raised the arm, and twist the wrist--sometimes she needed to climb on the trees to reach the highest flowers. After a day's work, she felt great pain in her neck and shoulder.

While she was pollinating under a tree, she ran into a neighbor whose orchard located next to hers. The neighbor was in a pink t-shirt and carrying with her a brush. Their following conversation showed that the neighbor had taken a look at Sister Red's orchard and compared

with her own. They quickly exchanged information about the timing of each other's trees and their work plan:

Red: Yes, this year it is like this, less rain, so many [flowers]. Last year, there were several [trees] that had no single flower!

Neighbor: [Did you] hire people?

Red: Just me, [I] have not hired people yet.

Neighbor: Just you?

Red: Oh, some [trees] have more, some have less.

Neighbor: Aren't there a lot?

Red: Yes.

Neighbor: Today [I] just started to do [pollinating].

Red: You just started today?

Neighbor: Oh, I did for two days on the hilltop and then it rained.

Red: Oh, just started, me too. [MXYYG0321#4431]

A typical conversation about agricultural production. People always contrast their yields with the years before. The time-adverbials "this year" and "last year" set up the comparison of the growing conditions of trees and flowers. By recalling their experiences in the previous production cycles, they obtain a general sense of the yield of this year, something they are uncertain and anxious about. Villagers often cite "big-small year" (tai xiao nien), a phrase that Uncle Biao and Sister Red both mentioned, to explain the sharp contrast between two adjacent years. If flowers were too few last year, then it is possible to have many more flowers this year. Things are not always good and not always bad. They associate the phenomena (more flowers or smaller fruit size) with their observation of climate features--the timing and amount of rain and

temperature--that are different from previous years.I will explain more about this association in the next section "Projecting Time."

Another common comparison is the one between people. Sister Red and her neighbor were curious about whether the other's trees had abundant flowers and when the other started to pollinate and when to finish it. They tentatively probed into the other side by firstly stating their own progress--but not the exact progress. In this rural area and broader, it is ethically demanding and witty to stay humble about one's own agricultural production. They carefully handled their conversation, trying not to sound bragging about their own yields and diligence. On the contrary, people prefer to show weakness--they downgrade their agricultural income, self-criticize being lazy and incompetent, or complain about their bad luck. By staying attune with others, people cultivate their own persona image as the average, not the outstanding ones, but also not the ones lagging behind. Although the climate condition is almost the same for everyone in the village, the locations, soil, water resource, fertilizer, and human attention vary from orchards. These distinctions become the source of endless comparison among villagers, especially lineage members and good friends.

These moments of comparing each other's work contribute to people's time management. To observe the time of nature is never an individual and one-time activity, but a cooperative effort that is accomplished by multiple encounters and conversations. What underlies the sociality of time perception is their ethical and cultural understanding of how to behave as a good neighbor or how to act as a qualified farmer. Sister Red's neighbor was correct in her conjecture of the workload in High-South Bamboo Valley. Four days after their chat, Sister Red hired three female friends to help pollinate, for she could not finish it on her own before flowers withered away. The time of nature was pressing, and people have to adjust to it.

Projecting time

What intrigues me is that villagers could tell what they suppose to do long before the event, but they sound less certain when approaching it. About pollination, for instance, if I ask people in winter, they would tell me it takes place in late January to Mid-February (yin calendar) in spring; if I asked in late January, they would tell me "oh, it should be next month"; if asked several days before it, they would say "I don't know." Clearly they have some kind of template for them to project the time of nature, while the actual timing needs to be observed and detected spontaneously. It is by associating knowledge and perception that they come to know the right time.

The template of pomelo planting is intertwined with templates of other agricultural products, for most of villagers commit to multiple ways of production--wet-rice, pomelo, vegetable, and domestic animals. Drawing from my conversations with villagers and my fieldwork record of activities that I had participated, I make an timeline of major agricultural activities in a year-long cycle (Pic 4-? Timeline of major agricultural activities). The calendar that I use as coordinate is the so-called old/lunar/agricultural/yin calendar, which is usually one month or two later than the Western one, the so-called "public calendar" or "yang calendar." The coordinate is indispensable in the templates, for villagers need to acquire not only the sequence of activities, but also the estimated calendar time for each task. People only look up in the yin calendar and their accumulated timing knowledge is built solely upon it.

That does not mean that villager always bear the exact dates of the yin calendar in mind, for there is no need to keep tracking of dates as frequently as people do with weekday/weekend in urban area. What is more, the date displayed everywhere on TV, mobile devices, commercial

products, and administrative documents is the yang calendar. People complained about their phones that only displayed the yang calendar, except that a few villagers' phones could show both calendars and they bragged about it around. When villagers are chatting, very often someone would pause and ask, "which day (of the month) is today?" Then people started to recall the most recent time they looked up the yin calendar and estimate by adding days to it; Otherwise, people could search online or look up in the printed calendar. There is no fixed formula to convert the calendars, because every year the gap between them is different. Living with two calendars, one vital to their agricultural production, the other necessary for their engagement with the outside world, rural residents constantly reconcile between them and spend extra labor searching for desired information.

This is a calendar of what people are supposed to do in a year, a chart braided with various threads of agrarian activities. Very common in this rural area is that people engage with more than one livelihood both in the past and at present--now most households in Xiaodu commit to at least three or four major ways of production. It is partly due to Xiaodu's geographical settings--a crowded population in a mountainous area with little flat land. Villagers resorted to both rice production and tree planting to sustain their life. Unlike the stereotype of rural life being tedious and simple, villagers have learned to manage multi-tasking, much more complicated than some highly professionalized jobs in urban area. I am always amazed by villagers' broad knowledge about everything around them: plants, animals, geographies, weather, chemicals, and agricultural machines. Each type of production--wet-rice, pomelo and other plants, and domestic animals--requires specialized knowledge and considerable time and energy to put in. Having known people's multiple engagements makes me wonder why they seem to have so much leisure time hanging around, especially given that they do not work on rainy days.

"It's raining; nothing to do."(*luo yi ei, mo ma zuo*)—one of the most heard phrases in this wet Southern coastal mountainous area.

How do villagers manage time? Time management becomes a popular topic in the rapid-speed urban life, especially among young and middle-aged people who are struggling with work-life balance. My fieldwork in rural Southern China shows that time management is also challenging for rural residents, and they deal with it differently. First, they are not always able to "manage" time; instead, they follow the time of nature in a spontaneous and sensitive way. Second, in order to catch up with the time of nature, they have to engage agricultural works in extraordinary efficiency and intensity to the extent that they severely consume their body and sacrifice their health. These efforts cannot be done without people incessantly observing the time of nature, talking about it, and cooperating to grasp the best timing.

In the previous part, I have explained why people need to observe the time of nature. They sense the timing by associating climate conditions with the calendar in mind--here I use the word calendar to refer to not only the timeline in a year-long cycle, but also a timeline that stretches to the recent years so that people may compare with previous experiences. The time for pollination, for instance, is around mid-February to early March. Villagers start observation in early spring to detect the timing of blossom: if the temperature is lower than the average in past years, then buds would sprout later than usual; and if the temperature is higher, then it is the opposite. Besides, the amount of precipitation influences the number of flowers and the window of pollination--it is less successful to pollinate during rainy days, so people normally avoid these days unless rain persists for a long time; while in that case, flowers tend to be much less than usual and there is less work to accomplish. In this way, they synthesize what they have seen and

felt with their knowledge of the timeline of growth in this area to obtain the optimum opportunity of working.

Once people make a decision of the right timing, they need to race with it by extreme hard work and cooperation. The number of products they are attending is huge--in pomelo's case, often in hundreds and thousands--and they touch and care each product over and over during the whole growth cycle: trimming, flower pick up, pollination, fruitlet selection, bags covering, pomelo pick up, carrying down from hills, and throwing in the buyer's truck or one's own storage. Let alone monthly or bi-monthly delivery of fertilizer and pesticide. During these significant dates, planters work long hours in consecutive days. While I am impressed by how they sense the surroundings with such nuanced sensitivity, I have no intent to romanticize their relationship with the environment in such a agricultural setting, for they themselves think of agricultural works as bitter and hard labor that causes all kinds of bodily pain.¹⁷

For bigger orchards, such as Sister Red's, if the owners, usually a couple, cannot finish on their own by time, they need to "invite," in fact hire, other villagers who have less work at home to work together. I will elaborate on this local network of labor in Chapter 5. Other than significant watersheds in a growth cycle, people display high efficiency in everyday maintenance of their agrarian productions. Villagers often use fragment time to attend to agricultural belongings that need frequent care: they feed pigs or chicken before lunch and after supper, they water their vegetables before taking a shower, they cut some grass during a walk and throw them into the pond for fish, they deliver pig feces under the pomelo trees on their way to watch over bee boxes, or they planted a few ginger while they are eliminating (*ba*) wild weeds. Villagers manage to spend fragment time on these short-time activities so often and quietly that I am not

¹⁷ See also research works on the physical pain in agriculture (Holmes 2013).

aware of it until I see a neighbor carrying a plastic bucket walking by Uncle Rich's house--she is probably going to her chicken pen or vegetable garden, and soon she will be back.

Besides everyday works in their wet-rice fields, orchards, gardens, and pigsty, villagers rely on the time of nature to capture wild animals and plants for good taste and occasionally for sale. People have very uneven abilities on this task--some better at hunting and some better at gathering. These free meals require people to be very sensitive and knowledgeable about a particular species, for these wild plants and animals, unlike pomelos and pigs, do not always appear in the same place at the same time. People have to look for them across the hills during the right season. For example, is the time for winter bamboo shoot, which is also influenced by temperature and humidity. Experienced villagers would go to their preferred places--a valley where they found some last year or a site they heard from their family members--to seek the clues of this delicious food. They may take several trips to dig out a few pieces. Although people often communicate with each other about the timing and sometimes they post photos of their trophies on social media (WeChat), they tend to keep secrets of the location even though the wildlife in the mountains are free to everyone. Only good friends share information of locations and even go on hunting or gathering together (I will explain this in detail in Chapter 5).

Even rural residents who have outstanding ability of responding to and living with changing climate and various non-human species are inevitably troubled by trends in recent years that cultivation becomes increasingly complex with new techniques introduced and that the network of local hiring expands with a greater demand of labor. The challenge especially centers on management of multiple tasks that share a similar time range. This morning in late March, I went to Big-Ground Tail, a valley now filled with pomelo trees, with three neighbors--Aunt Rong, Sister E, and Uncle Feng. They were hired by the orchard owner to pollinate the golden

pomelo. Everyone carried a food can with a brush extended by a bamboo stick--a standard equipment in Xiaodu. They each found a tree to begin with and kept chatting and joking when pollinating. Aunt Rong, the widow of Uncle Rich's cousin, who has been living alone for a few years, started their chat with a complaint about the difficulty of handling agricultural works during busy seasons, a topic soon echoed by two other neighbors. They were choosing between pomelo and wet-rice cultivation as well as that between their own work and the hired job.

Aunt Rong: So, all in all, tomorrow [I] just do my own family's [work] for a day.

Uncle Feng: Let's fight for each own's war, tomorrow.

Aunt Rong: Hmm, the day after tomorrow let's gather.

Uncle Feng: The day after tomorrow, don't know if [the Big-Ground Tail orchard] still needs pollinating. It should need it. (MXYYG0324#0723)

Most Xiaodu residents engage in the same production--wet-rice and pomelo tree planting, so they keep a similar pace in agricultural works. The synchronic ___ creates a problem for villagers to allocate labor between their own and others' orchards. Working for neighbors is rewarded with immediate cash, reckoned after a day's labor, an attractive temporary job to capable villagers. These three neighbors decided to take one day off from doing labor to instead pollinate in their own pomelo orchards, but Uncle Feng worried that once he finished his own work, he might miss the Big-Ground Tail job.

Late March (February in the yin calendar) is the time for pollination in pomelo trees as well as for Spring Planting, i.e. planting seedlings in wet-rice paddies. Earlier in spring, people choose one dry paddy, usually called the seedling paddy, to sow seeds and cultivate them until the seedlings are strong enough to be re-planted into other paddies filled with water. In the collectivization time, villagers "inserted seedlings" (cha yang/shi tian) into the wet paddies, one

seedling a time, a very tenuous work. As the rice yield steadily grows in recent a decade or two, people started to "throw seedlings" (pao yang) into paddies, which is much less strenuous and time-consuming. Even though, people still need to watch for the best timing of throwing seedling, for the replanting requires suitable temperature and weather. The day before they worked in Big-Ground Tail, Uncle Feng squeezed time to throw seedlings in his own paddies and worked until 6 PM. He unfortunately made a serious mistake that he threw them during a heavy rain. Uncle Feng's failure to capture the best timing brought him no sympathy but blame, which became the topic of discussion during his chat with friends:

Uncle Feng: I told my wife [about the wet rice], and she kept scolding me.

Sister E: Otherwise, how [she should respond]? It was raining without a stop.

Aunt Rong: You should watch and wait; you already knew there would be a storm.

Uncle Feng: She said, didn't you know [it would rain]? I said, I knew. I said, I saw A-Song was throwing [seedlings]. A-Song said [the rain] had not come. I said, I wanted to [throw seedlings] and I did it afterwards.

Aunt Rong: I saw A-Jing's son, so diligent, [he] threw before the rain.

Uncle Feng: It is fine to throw them before the rain. I was throwing during the rain. No use. [The seedlings] all floated, after they floated, they turned yellow. She (the wife) asked, had they turned yellow? I said, [turned] yellow. She said, are there any extra seedlings to replace? I said, I just picked up [the seedlings from water] and inserted back [in the soil]. She asked, have they died?

Sister E: So diligent, oh!

Aunt Rong: It's easy to tell her, you should just say, [seedlings are] very beautiful, nothing [wrong]. Then she will not scold you. [You are] so stupid, oh! (MXYYG0324#)

Uncle Feng thought Aunt Rong's suggestion, or teasing, useless, for his wife observed that the afternoon when he threw seedlings was quite cold and heavily raining, definitely a bad timing. He had no way to escape the scolding. Uncle Feng is not that proficient in pomelo planting and wet rice cultivating, compared to two others who kept educating him about the time of nature. Recent years, his wife spent most of the time in the city taking care of their grandchildren and occasionally came back to the village with the kids. Throwing seedlings was used to be his wife's job--as most female villagers take charge of wet-rice cultivation, not their husbands. That partly explains why Aunt Rong and Sister E positioned themselves as more experienced cultivators and they at first aligned themselves with Uncle Feng's wife.

Villagers often say there is nothing to do on rainy days, largely because rainfall impedes the application of certain types of agricultural works. When it rains, the water level in wet-rice paddies rise, so planters cannot secure the seedlings into the soil, especially by using the trendy method of throwing. Severe and heavy raindrops may also hurt the fragile and newly replanted seedlings. Uncle Feng knew it, but he still kept throwing when the rain came--maybe due to his fear of losing behind other neighbors, or due to his promised job in Big-Ground Tail the next day. He made a mistake in time management and decision-making possibly at the cost of this year's rice yield. After he detected the problem, the floating seedlings, he changed the method to the old one of inserting seedlings directly into the soil base. "So diligent," said Sister E, a frequently used compliment, sounding like a comfort to Uncle Feng's extra effort to save the seedlings. Even though he tried, he was still uncertain what would entail from his failure of watching the time of nature.

The three neighbors kept raising the right arm, shook the brush stick to spread pollen, and moved from one tree to another. We walked at the bottom of the valley, under lush trees,

breezing the chilly and wet wind in early spring. Their work at hand brought their discussion back to pomelo planting.

Uncle Feng: Aiya, so dauntingly plenty [of flowers]!

Aunt Rong: Everyday so many.

Uncle Feng: Told you, the season has come, so [flowers] are all striving to blossom.

Sister E: Just these a few days, [flowers] started to blossom together. (MXYYG0324#)

Clearly, they observed the timing and sequence of flower blossom in their own and others' orchards. "Every day so many"--even buds in the same orchard do not blossom on the same day. That means planters have to pollinate all the trees over and over again to capture the freshest flowers.

Their following conversation shows that they not only watched the season and ordering of blossom, but also the clock time for pollinating. They compared their own preferable work time with the fixed hiring time (7-11 AM and 1-5 PM). Sister E's husband planned to pollinate in their own orchard that day, so Uncle Feng asked when her husband was going to do it. Again, Sister E and Aunt Rong, the more experienced planters, taught him something new about the timing of nature. The conversation took place around 7:30 AM:

Uncle Feng: Did [he] go [pollinating], he?

Sister E: [He] hasn't gotten up from bed.

Uncle Feng: [You] said what, [he] hasn't gotten up from bed? No one [gets up] so late.

Sister E: It should be in this way, after 8 o'clock, only after 8 o'clock could people pollinate.

Aunt Rong: Actually, to pollinate the pollen, only, only after 8 o'clock it is useful.

Sister E: Only [at that time] the stem head (stigma) is able to stick [pollen].

Uncle Feng: That's why...

Aunt Rong: [The owner] asked us to do labor, [he] asked people, [you] have no way, you dare not.

Uncle Feng: You dare not so late?

Aunt Rong: No, you don't have enough time. You do it like this (from 8 AM), then [you want to continue to] do it until 12 o'clock, the clock has already turned. You say, is it so?

Uncle Feng: Yes, time is counted as dead.

Aunt Rong: Yes, if it was [your] own family's [trees], then it should be like this.

Sister E: [You] pollinate after 8 o'clock, only in that way it is beautiful.

Aunt Rong: After 8 or 9 o'clock, pollinating is beautiful. Even if I go back to pollinate in the afternoon, it is still better than early morning. Even afternoon's pollination is more beautiful.

Uncle Feng: Then do it at noon.

Aunt Rong: Noon is fine, too.

Sister E: All in all, in early morning, it's still wet, which means that the stem head (stigma) does not know how to stick [pollen]. (MXYYG0324#)

Sister E and Aunt Rong were in an agreement in their observation of the best time to pollinate, a piece of new knowledge to Uncle Feng. They found a linkage between humidity and features of flower stigmas, and that between humidity and time in a day. People could hardly reach an observation as such without meticulous attention and keenly sensation: sense the temperature and humidity, touch the stigmas and detect stickiness, and compare the results of pollination in different times. Maybe Sister E and Aunt Rong are not the first ones to discover the linkages and instead they have heard from other villagers. Yet once an observation becomes a transmittable information, it is able to guide the sensory of its receivers. After Uncle Feng

learned the timing of pollination, he may likewise watch how stigmas change the stickiness in early and late morning and in that way take on the piece of knowledge as his own.

Aunt Rong found a tension between fixed labor hours and the time of nature, a problem that people might not encounter when they handle their own orchards. It becomes a conventional schedule for hiring labor in Xiaodu that people work eight hours a day, four in the morning and four in the afternoon. It goes without saying that the work starts at 7 AM, a time too early for pollination, according to Sister E and Aunt Rong's observation. They thus reflected on the conflict between the time that was "counted as dead" and the more flexible hours that fit the changing conditions of flowers. Experienced villagers always need to adjust their production schedule based on the observation of the time of nature. Fixed labor time is just not the way planters handle their works. Clock time is not new to Xiaodu villagers, but this newly established labor time brings challenges and reflections on their sensing of time. I will expand on the topic of clock time and labor in Chapter 5 Measured Labor.

Situating Self and Others

In their interaction with the surroundings and agricultural belongings, villagers learn and respond to the time of nature via their knowledge and sensing of climate and non-human beings. "Watching the time of nature" is vital to their success in livelihood production, a skill they have to learn and are constantly learning during works and communication with others. By actively sensing the environment and talking about it, people accumulate transmittable knowledge that associates their sensory data with numerical marks of time such as calendars and clocks. These pieces of knowledge also help people project their own life—manage time with families, other planters, understand their hope and expectation. While people perceive the temporality from non-

human beings and climate, they also rely on the geographical settings--rivers, mountains--to spatially situate themselves and others. Sensory receptions become their knowledge to navigate in the complicated topography.

I came to notice people's unique way of situating themselves and others in this Hakka area when I was confounded by their direction words. In Chapter 2, I discuss that villagers ask "where [are you] going" as a conventional greeting and a start of a conversation. In many a case, people just need to answer with an earth-name. While in other occasions, people have a preliminary conjecture of where others are going, and they ask differently. When I carried my bag and stepped out of Uncle Rich's house, sometimes neighbors asked me: "Up (sang a)?" or "Down (ha a)?" A single direction word with a questioning tone--that had been a confusing moment to me. Similarly, villagers may just ask: "Out (cu a)?" or "In (ngu a)?" At first, I understood that if I set out from Xiaodu to the town seat, I was going "out," and "in" the other way around. The daily usage of these direction words, however, continued to remind me that my conclusion was not complete.

Then what do Xiaodu villagers mean by up, down, in, and out? It took me a long time to realize that these words are associated with the direction of rivers, the topology (?) of mountains, and the hierarchy of administrative districts. The juxtaposition of these factors makes the usage complicated, so that people have conventional choices of them based on where the starting point and the destination are. A brief chart I made to show their multiple referents:

Up: Upstream; Uphill

Down: Downstream; Downhill

In: From flat, open area to a narrow, steep area; From outside to local

Out: From a narrow, steep area to a flat, open area; from local to outside

While these referents may seem readily understandable to non-Hakka residents, the actual applications in everyday life are complicated by the overlapping of these referents. To correctly use these terms, speakers should acquire a bird's eye view of indigenous geography even when they are embedded deep in mountains and forests. It is especially pressing for people who live in this community to quickly learn the usage, for villagers mostly omit the destinations in their conversations and a single direction word often suffice to indicate the destinations. To illustrate how villagers perceive their location and situate themselves in a geography with directions, I draw a map of their' usual life scope and frequent routes:

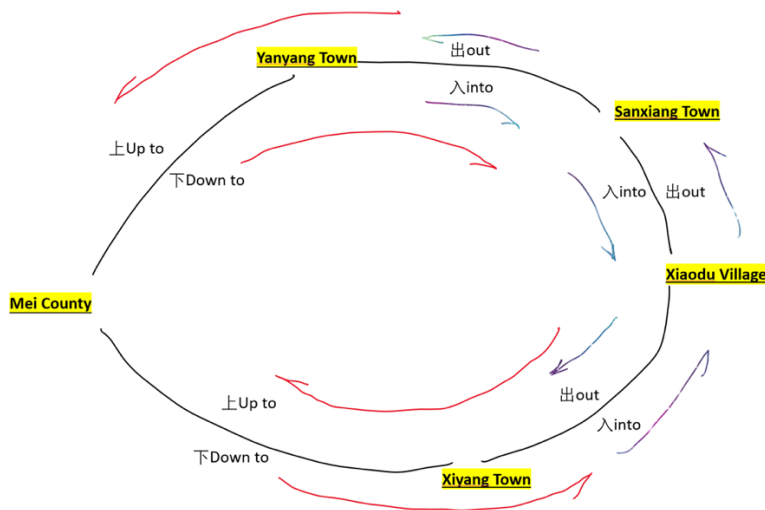


Figure 31 A sketch of the illustration of routes from Xiaodu.

In this map, there are two major roads leading to the county seat. Along the road, villagers often stop by other production teams, adjacent villages, and the town seats. To explain how to use direction terms, I list several routes that Xiaodu people and I often take. Suppose that someone starts from Uncle Rich's house, setting out to the West, taking the S224 and then village roads:

Going to the High-South Bamboo Valley production team, she is "down" (downstream--Xiaodu Stream);

Going to the old town seat next to High-South, she is "out" (from a narrow area to an open area);

Going to the four valleys, she is "in" (from an open to a narrow area);

Going to Red Stone Village next to the old town seat, she is "up" (uphill);

Going to Goose-Lake Town seat, she is "out" (from a mountainous area to an open area/from local to outside);

Going to Mei County Seat, she is "up" (upstream--Mei River).

Understanding these multiple referents and conventional pairs, I was finally able to answer my neighbors' questions--besides using a single direction word, they sometimes ask in this way: "So early (you came) down?" "What time (are you) up?" "Who drove you in?" To acquire these usages, villagers should be familiar with the geographical features of rivers, roads, and mountains in a broad region, stretching to their farthest footprint. Other than these fixed pairs of named places, people apply these rules in their agricultural sites and even urban areas, too. The direction of water and the distribution of mountains are the most important factors they follow.

First, I analyze how people perceive "in" and "out" according to topography. The old town seat is located on a small strap of flat area where people built streets and bazars. From there, people take a wandering road cutting through the hillside to Xiaodu Village. Therefore, going to the town seat is going "out" and going to Xiaodu is "in." Likewise, from the open area of the village-face of Xiaodu to its four valleys area, there is only one road. The closer to the end of valleys, the road gets narrower and steeper. These scenes and feelings directly impress people that they are walking/driving "in." Then what about when people are already situated in valleys--in pomelo orchards, tea gardens, and valley paddies?

In a hot afternoon in August, many villagers gathered in the tea plantation of Uncle Tiny's, the village head, for it came to the harvest time. Sister Qun and her good friend also went there to earn some quick cash. The horizontal tea belts stretch across the whole hillside, all green with here and there someone wearing a yellow hat picking up leaves. When we climbed up to the middle of a tea belt, located in a hill ridge, Sister Qun asked her friend where to go: "So [you/we are] going in or out?" Her friend answered "In." I was confounded by their question and answer, because at that time, I understood that we were standing at an open area and either way of the tea belt stretches to a narrower area (see the Figure 4- , the map I draw). I asked Sister Qun which side was "in" and why. She pointed to one side and explained that it was the direction of her old home, the Liao lineage cluster in Yellow-Mud Valley, the very end of four valleys. Then she pointed to the other direction and said: "That side was the exist of four valleys to the village-face. See that mountain top? That's Sparrow-Tail Mountain." Sparrow-Tail Mountain is right behind Uncle Rich's house that sits at the brim of the village-face.

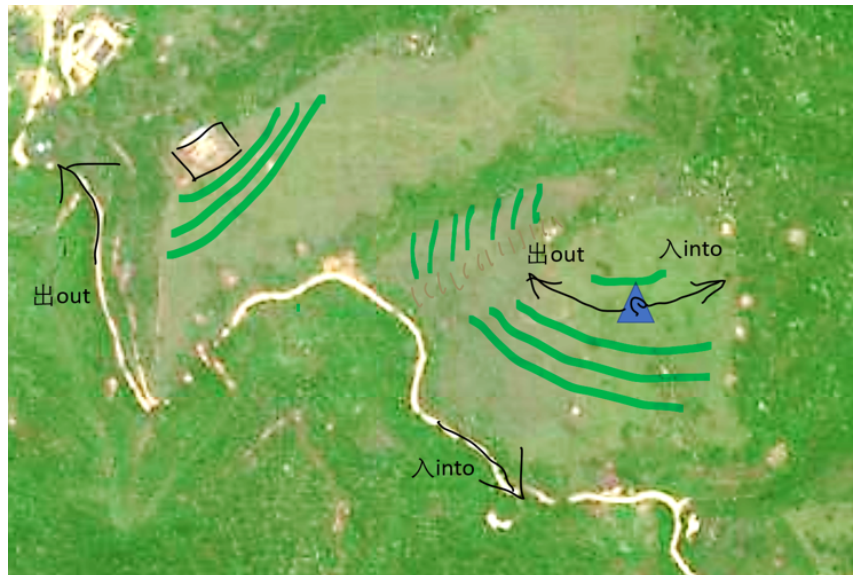


Figure 32 The drafted illustration of the position of Sister Qun and her friends

Uncle Tiny's tea plantation is huge, covering several hills to the north of the main road of the Four Valley, with numerous tea belts curve along the hills like waves. There are a few narrow paths of stairs, located on ridges, reaching to each tea belt vertically. When arrived at one tea belt, villagers would choose one side and keep walking a long way to another path. That is why I was confused by the conversation between Sister Qun and her friend--when we were in the highest point of a wave (the triangle in the map), it seemed to me that both sides of the belt extend to the low conjunctures of another wave, that is, from an open area to a narrow space. Sister Qun's explanation shows that they bear in mind the whole picture of the four valleys, even when they are situating in one small hill among many others. They use the direction of the whole valley area to indicate their direction in a small part of it. At that time, she could not see the end of valleys or the village-face, but she relied on memories and clues to judge the direction. When people navigate in this complicated mountainous area, they hold a bird's eye view of where they are in relations to the village-face and main residential clusters.

Xiaodu villagers used this way of directing themselves in the mountains long before their tea and pomelo planting. In the Pond-head Li lineage's written contracts, people used the "inside" (*nui*) and "outside" (*ngai*) to denote the adjacent portions of forest.

While the direction words "out" and "in" are built upon an indigenous knowledge of topography of mountains, these terms also indicate an imagination about the relationship between the local and outside. The latter referent applies to a much broader region, even larger than people's common traveling scope. People would say "[going] out [to]" the town seats, other counties, cities, provinces, or countries. Although this usage of "out" is similar to its counterpart in Mandarin and some other languages, I wanted to emphasize that the Hakka usage bears a same logic with their understanding of topography, i.e., "in" means getting narrower and steeper while

"out" means getting opener and flatter. During my fieldwork in Xiaodu and neighboring villages, I was often asked a question "Why do you come to such a mountainous place?" Here people use the noun form "mountain" (*san*) as an adjective to describe their hometown. Not only in Xiaodu, in Mei County seat, I was sometimes asked the same question, for urban dwellers perceive the whole county as a hilly area compared to neighboring cities. Therefore, when Xiaodo villagers say that they are "out [to] Goose-Lake Town" or "out [to] Guangzhou (the capital city)," it is partly accurate in terms of terrain change and partly imaginary as going out of mountainous hometown. While when they asked me "when [are you] out [to] Hunan Province (my hometown)" or "when [are you] out [to] America," the word "out" is more of a metaphor of traveling to wider and faraway places than that of the actual topography.

The orientation and distribution of mountains thus play a significant role in people's everyday navigation in their homeplace and communication to a broader scope. As I explain in the following, there is a hierarchy of choosing direction words: the water flow direction is more important than the landform. For Xiaodu villagers, if they go to the Mei County seat, or Chaoshan area (two cities South to Mei County), or South Abroad (South and Southeast Asia), they will not use the word "out"; instead, they say "up [to] Mei County," "down [to] Chaoshan," and "down [to] South Abroad." Before I learned these usages, I conjectured that people in Xiaodu and Goose-Lake Town say "up [to] Mei County," which meant a movement from a lower level to a higher level of administrative district--from a village or town to the county, until one day I misunderstood an interlocutor's information. This day, I made a phone call to a friend working in the County Land Census Office and I asked him if he was in the county seat. He replied: "Oh, I'm in Waterwheel (Town). [I] have been up for two days," His answer confused me and I asked again: "So you are up in the county seat?" "No, I have been up in Waterwheel."

Later I told this conversation to other friends in my field site and they found it funny, for they thought it common sense that Waterwheel Town was at the upside of the county seat. I learned that people from different towns choose "up" and "down" according to their positions along the Mei River. People in those seven towns in the upstream above Mei County, including Waterwheel, would say "down [to] Mei County." While other seven towns, including Goose-Lake Town, are on the downstream position.

This preference of using water flow in everyday navigation is associated with historical livelihood and transportation in the Hakka residential area. As I analyze in Chapter 3, Xiaodu villagers committed to pine and fir tree planting in the imperial period and Republic Era. They relied mostly on water transportation to sell woods to Chaoshan area. Senior villagers recalled how they tied up woods and floated with them down from Xiaodu Stream to Mei River, and then to Han River, and finally reached Chaozhou and Shantou, coastal port cities. People experienced the same water road on their migration to South Abroad (citation). "Down [to] South Abroad" once became a popular adventure for men, especially those who lacked land and resources, in this Hakka region. After the 1980s, due to the degradation of environment, especially the disappearance of forest, Xiaodu Stream gradually lost its ability to transport people and goods. Xiaodu Stream, with other major water roads in this region, are substituted by more convenient transportations such as highway, railway, and flights. Still, people always say "down [to] Chaozhou" and "down [to] Shantou" even when they drive or take the train.

Trees and Body

Xiaodu villagers have a long history dealing with trees, dated back to the imperial time (see Chapter 3 Ethical Measuring). Tending trees, especially fruit trees, requires an intimate

interaction between human body and tree bodies. By ceaselessly touching, seeing, and smelling trees and fruits, planters grasp a comprehensive understanding of their belongings, the shape, size, living conditions. It is in this way, with corporeal sensations, people learn the ways to describe, quantify, and scrutinize the creatures that they co-inhabit with. In this part, I analyze the kinesics of tending pomelo trees during pruning, fruitlet selection, and bag covering. Trees are rooted in a fixed location, but they are alive and constantly changing. People watch them growing and care for their well-being, to the extent that people make metaphors to liken trees to human and animals.

Trees as Human/Animals

Trees are immovable from their rooted locations during their life time, unless being replanted or destroyed. They seemingly stay static and only show their liveliness by passively waving branches and leaves. These living creatures are much active in the eyes of villagers who spend considerable time tending them.

Late April to early May is the time for pruning and fruitlet selection in honey pomelo planting. In an afternoon, I followed three owners to the Grace-Valley of Xiaodu where their big orchard located. Five years ago, three couples signed a lease of thirty years with the Big-Lake Zhang Lineage (one of the partners is a member of the Zhang) to rent about 500 mu of hills for building an orchard here. Among them, two local couples, including Brother Liang and his wife Sister Red, took charge of daily management and planting. This day, Brother Jun and his wife Sister Ai, the third couple co-partners who lived in the county seat came to Xiaodu Village. Brother Liang was going to teach them how to select fruitlets. Not long ago, Brother Liang hired three so-called experts from a neighboring county to do the pruning work of more than two

thousand pomelo trees in the orchard. The expensive experts (almost three times of salary of a local labor) adopted an aggressive and new method, that is, to tailor the young trees into a "Y" shape, cutting off extra branches and stems. Other Xiaodu growers were skeptical about the method, for they deemed it a waste of pomelo resources.

Pruning and fruitlet selection share a same logic with flowers picking, with a goal to balance nutrition and yield: an excessive amount of stems, flowers, and fruitlets will lead to undersized mature fruit. Following the new method that he learned from experts, Brother Liang realized that fruitlet selection should be ruthless in removing weak and small ones. This suggestion, however, received some initial resistance from the other two partners who tended to keep more fruitlets. Brother Liang thus explained his theory by giving metaphors to liken trees to human body:

Brother Liang: If [the tree] really keeps these fruitlets, when it really keeps them, that would be too many. The next year, this tree doesn't know how to grow big. (Turns to me, changes to Mandarin) Its nutrition can't support it, it will, just as if you are pregnant, after giving birth, it does not grow anymore. Its nutrition can't afford it to grow.

Me: So next year [it] will have less [fruit]?

Sister Ai: Uncle Liang, this, this one, don't pick it.

Brother Liang: Yes, it will not grow, the whole tree can't grow big. Now you want, want to keep [part of the] fruitlets, and [you] want the tree to grow big [after harvest].

(MXYYG0501#5320)

Brother Liang's reason is simple: if they remove some fruitlets, the trees and pomelos will have better nutrition to grow. Even though the other two understood it, it was hard to let go these little fruitlets that would potentially become a product. Sister Ai kept begging Brother Liang not

to pick fruitlets. To perceive a tree in this way, imagining its body as a growing creature that takes in nutrition is readily associated with the understanding of a human body that consumes nutrition to sustain a life. What makes Brother Liang's metaphor sound more apt is that it was clearly a gendered one. A pregnant human body shares nutrition with the baby, just as a pomelo tree that provides nutrition with its fruitlets. And giving birth to a human baby is likened to the ripen and harvest of pomelos. In this metaphor, Brother Liang drew a linkage between the size of a tree body and the number of fruitlets.

Note that when Brother Liang made the metaphor, he suddenly turned to me, a female researcher from outside of the community, and changed from Hakka to Mandarin. Though being an owner, the same as two others, Brother Liang acted as a locally settled manager and an expert in pomelo planting. The couple, who came to investigate in the orchard in Xiaodu because of their friendship with Brother Liang, were novices in this industry. Speaking directly to me in Mandarin, Brother Liang resorted to a third party to establish his authority and convince the two other partners. My inquiring response no doubt encouraged his dissemination of his theory--later, he communicated in a similar way for several times.

They commented on trees, picked fruitlets, and moved to another tree with a good amount of fruitlets. Brother Liang counted the fruitlets and suggested to cut down the number. This time he gave another metaphor to compare pomelo trees and human body.

Brother Liang: [I] just casually count, at least thirty pieces (of pomelos). Everywhere it has pomelos. I told you, here, three, four, five, six, seven, eight...sixteen. More than twenty ones.

Sister Ai: That tree (points to another one) has no [pomelo].

Brother Jun: It has [pomelos] on the top, on the top.

Brother Liang: What [I] mean is, if seriously count it, you, you see this tree of this size, you let it keep fifteen ones, at most fifteen ones. [Otherwise] each pomelo won't be big. [The number fifteen] is also within the tree's capacity to bear weight. (Turns to me, changes to Mandarin) [I] mean it's like people's capacity to bear weight. You, a person who can carry 50 jin, but you ask him/her to carry 100 jin or 80 jin, then you [he/she] can't bear it.

(MXYYG0501#5321)

Fruitlet selection has two aims--one is to make sure pomelos grow to a suitable size, not undersized or overweighted, so that they reach the standard for selling; another is to keep trees growing stronger so that they produce increasing numbers of fruit along time. The best solution is to remove excessive, especially stunted and deformed fruitlets, for they are a waste of nutrition for trees and final products. In this metaphor, Brother Liang drew a connection between the overall weight of fruit and the capacity of a tree. He used an example of carrying (dan) things with a yoke, a common agricultural activity in this mountainous area. During the harvest season, people carry pomelos from orchards down to the trucks or the village-face. Villagers often compare and discuss their ability of carrying things when they engage in this hard labor. Brother Liang's comparison is both an abstract imagination of trees and human body, as well as an indigenously anchored observation.

As we walked along the lines of trees and checked fruitlets, the couple from Mei County gradually accepted Brother Liang's theory of selection. They moved to a tree and scrutinized quadruplets that grew on the same stalk. Sister Ai consulted Brother Liang about her choice of selection:

Sister Ai: Really, I saw him (her husband) picking [it], I feel so heartache. If others pick it, I dare not say anything.

Brother Liang: No, [you] can pick.

Sister Ai: Uncle Liang, look at this one, like this one, it has no use, you look (points at a very small one among three others in the same stem)

Brother Liang: Yes, that one definitely has no use.

Sister Ai: Definitely no [use].

Brother Liang: Say, this one also has no use, and this one also has no use. These [small] ones can't win the [big] ones in fighting for nutrition. (NXYYG0501#5330)

The learning process was uneasy as Sister Ai felt "heartache" when she saw fruitlets picked and discarded. As I will elaborate in the following section "Painful Counts," women often express heartache seeing pomelos dropping from trees. Sister Ai quickly learned the gist of selection that stunted fruitlets were useless. Brother Liang further explained that on the same stalk, the undersized fruitlets cannot gain enough nutrition with the co-presence of bigger ones, an observation that pomelos were human/animal-like in competing for resources. Of course, his point of view, the competition between co-inhabited creatures, is not novel and unique pertaining to this Hakka area, and I would not call it an animation or personification of plants. Yet his words of "win (*yang*)" and "fighting (*zang*)" metaphorically imply that, in his eyes, these trees and fruitlets are questing for life as if they have intentions.

A few days later, Brother Liang made a comment that directly personified trees as intentional beings. He and Brother Jun went to the orchard in Grace-Valley again to examine the three-day work of fruitlet selection. As we climbed from the middle of hillside up to the mountain top, the land became more barren, and trees scattered. Planted at the same time, the hilltop trees were much thinner and shorter than their cohort. But they observed that these frail trees yielded even more fruitlets:

Brother Liang: (Giggles) So dauntingly plenty of pomelos, so many pomelos, you see?

Brother Jun: (Smiles) Yes, don't know why.

Brother Liang: It is today, say, so weak a tree, it even knows better how to bear pomelos.

[I] mean, [it's] afraid of death (gang si). Trees are also afraid of death.

Me: "gang si," what does it mean?

Brother Liang: (Changes to Mandarin) Plants, they are like this. If it thinks that itself is going to die, then [it is] striving to blossom and bear fruit. (MXYYG0504#5472)

They found it strange that these seemingly fragile trees produced even more pomelos than many stronger ones. Brother Liang brought up a theory that dying trees would try to avoid death by making more offspring. The life and death of a tree does not completely depend on the tree itself. Pomelo tree seedlings take at least three years to secure a steady growth and about eight years to reach the abundant production period. Even though their life and fertility span are long, they need constant support of nutrition and climate conditions. Villagers think that if they "abandon" (*diu huang*) trees for a year or so, trees would lose their capacity to bear fruit. If a tree dies or a tree seems to be "useless," planters will chop it and graft the root with a branch from another tree.

It is perhaps Brother Liang's habitual method to explain his theory of planting by linking trees with human body. A few days after his conversation with Brother Jun, Brother Liang hired a few villagers, including Aunt Rong, to work in Grace-Valley. Aunt Rong expressed confusion when she found that some trees bore almost no fruitlets among others with a normal yield.

Brother Liang brought up human fertility as an analogy:

Brother Liang: [Some] keep giving birth (*giung*, literally means "fall down") [to children], some have none to give birth...Shit Bao's [son] is like that, your relative, look at [him], until four or five years [after marriage], [he] gave birth [to a child].

Aunt Rong: No, at that time [his] body was not good, [he] ate medicine, not yet ready to give birth [to a child].

Brother Liang: Isn't it so? Trees are the same. When trees are not yet ready, the flower bud differentiation is not good, [they] are just like that. Soon or later, if you promote flowers [to grow], then [trees] have [more flowers]. I didn't get to promote [flowers], didn't get to do other measures, [I] just spread "Flower Fruit Effective" (a fertilizer). (MXYYG0513#5676)

This time, his metaphor is also a gendered one, by linking pomelo trees with male fertility. Villagers tend to attribute the gender of a baby to the wife, while the conception possibility to the husband. They praised women who gave birth to boys as "one who knows how to give birth (*giung*) to sons." They are more likely to suspect the husband's fertility if a couple has no child for a long time. These conventional linkages make Brother Liang's metaphor readily understandable for Aunt Rong was questioning the ability of a tree to blossom and bear fruit. He aptly associated the under healthy condition of his friend's son with the unbalanced flower bud differentiation--in the latter case, trees grow more branches than reproduction parts. "Not yet ready," by repeating Aunt Rong's words, Brother Liang persuaded her to align with his theory and implied that both human body and trees have changing ability through time.

Mid-May is the time for covering honey pomelos with paper bags. Bagging, a new trend in the recent decade, aims at protecting fruitlets from sun burn, heavy storms, animal stealth, and insect invasion, so that they grow into desirable shape and appearance. Early in a morning, I came to the orchard in Big-Ground Tail Valley with Aunt Si and her three neighbors--Aunt

Rong, Sister E, and Uncle Feng, who were all hired to cover bags there. (I will elaborate on the network of labor and preference of hiring fixed sets of people in Chapter 5.) They divided into two groups: younger ones a group, and more senior ones a group. From the middle of a tree belt, one group chose to go "in" (*ngv*), the direction towards the end of the valley area, and the other "out" (*cu*). I followed the senior group, Aunt Rong and Uncle Feng, who chose "in" because that side had more shade and thus less sun burn. They walked, worked, and talked, as every time people do labor together. Seeing multiple fruitlets that grew on one stalk, Aunt Rong sighed how stunted these triplets or quadruplets were. Uncle Feng then commented, "It is just like raising pigs (*xiu zu*). If [someone] raises too many small pigs, [they] don't know how to grow big. Pomelos are the same. If one stalk bears so many [fruitlets], then [they] won't be big." Similar to Brother Liang's metaphor of linking trees with human body, Uncle Feng drew a comparison between fruitlets and animals. The line between human and animals is readily breakable in many historical or cultural discourses, but the boundary between plants and human/animals is less permeable. It is for those who have been intimately interacting, especially bodily involving, with plants, that boundary is sometimes fussy. In moments like this conversation between Aunt Rong and Uncle Feng, growers are not necessarily romanticizing the relationship between plants and animals, nor are they in a unconscious confusion of the conventional classifications. It is an explicit expression of their observation of the common features and rules of growing across species; it is their theories.

Aunt Rong and Uncle Feng each carried a cloth bag with the paper bags. They carefully tied the bags onto each fruitlet and moved on to the next. Aunt Rong found an exceptionally tiny fruitlet and hesitated whether she should cover it. Just as flower picking and fruitlet selection,

villagers often make choices to save resources to the best chance. Aunt Rong associated pomelos with animals that she raised:

Aunt Rong: How come [the fruitlet] is so [small]?

Uncle Feng: Yes, why not just pick it.

Aunt Rong: Look at its stalk, so tiny.

Uncle Feng: Here are many big ones. Ay, these are enough. [They] share nutrition. Why did [the owner] keep so many [fruitlets].

Aunt Rong: I have a chick, just like this [small], head up and tail up (*tou kiao mi kiao*, deformed/strange).

Uncle Feng: Kill it.

Aunt Rong: But it looks so smart, it is so tiny, ay. It looks so interesting.

Uncle Feng: A cock or a hen?

Aunt Rong: It's a hen. [It] looks so spirited. [I am] laughing to death. How come it is such a hen? (MXYYG0512#5659)

Uncle Feng's solution to both undersized fruitlets and stunted chicken was the same: pick it and kill it. He held up to the optimal theory of allocating nutrition to normal-sized fruit or animals. While Aunt Rong hesitated for a while. This ill-shaped pomelo reminded her of a strangely small but funny chick that she felt hard to give up. She made a smooth transition from plants to animals, both creatures that she had spent considerable time and energy to attend. What haunted her was the adorable behaviors of the chick--it looked smart (*gi lin*), interesting (*qi*), and spirited (*jin siin*), words mostly used to describe human, especially children. She did not detail what behaviors counted as smart, interesting, and spirited for a chick, but Uncle Feng showed no

surprise hearing these descriptions. Her affection for the tiny chick was drawn from her daily observation of its movements, seeing it as a child-like creature.

Kinesics of Tending Trees

Pomelo trees, except seedlings, grow much taller than human, so orchard farmers often need to climb onto tree trunks to do agricultural works. Climbing trees is thus a skill that villagers acquired in the past a few decades, although not everyone is able to do it. What intrigues me is that in Xiaodu, people who know and are willing to climb trees are predominantly women--very seldom are men to climb. This highly gendered labor division indicates not only the major composition of rural labor in this area, but also the particular ways how people interact differently with pomelo trees. Gendered body, especially female body, is stereotyped as more suitable for certain kinds of activities, which renders the body under public scrutinization of its shape, size, weight, and mobility (Martin 2001).

I came to realize that climbing trees was not easy after I failed in an attempt during my earliest contact with pomelo trees in Xiaodu. That was a hot afternoon of May. I followed my neighbors Uncle Biao and his wife, Sister Gui, to select fruitlets in their golden pomelo orchard in Buffalo-lost Valley, a dark and chilly corner near the entrance of Grace Valley. There were about thirty or so pomelo trees, planted two decades ago, reaching at least six or seven meters high (about 20 feet). Trees spread their branches and twigs, with green fruitlets hanging all over, hidden in slush crowns. Thus, they brought a special tool: a pair of scissors with a two-meter-long metal extension. Even using the tool, it was still impossible to reach the fruitlets on top of the trees. Sister Gui swiftly climbed onto the lowest fork of the trunk, stood on two limbs of the tree, and asked me to hand over her the long scissors. She then moved up to a higher fork and asked me: "[Do you] know how to climb trees?" "No." "Try it. The lowest branch." I imitated her

way, used two hands clinging on the branch, and stepped one foot onto the fork, but I failed to lift my body up as the fork was too high for me. "Step on the trunk first," said Sister Gui, pointing at a hollow in the bole. I followed but failed again as it was too slippery to hold me up. Sister Gui laughed: "Then just stay under the tree." I looked up to find her balancing in the middle of the crown and holding the long scissors to approach the stalk of one fruitlet. She squeezed the pincer at the end of the scissors, and the other end cut off the stalk—the fruitlet fell down.



Figure 33 Sister Gui climbing on a pomelo tree.

My failure in tree climbing was partly due to a fear of falling, just as that dropping fruitlet. These old pomelo trees were already tall, but what made them more intimidating was that they were planted on a hillside, transformed from a terrace, which used to

be the valley paddies. "Be aware! Pomelo is dropping!" As Sister Gui shouted to me, I saw a green ball falling down from the top of the crown, patting on leaves as it was plummeting through, hitting on the lower level of the terrace, and continuously rolling down along the slope. The sound of its movement, "boom, boom, boom," echoed in the silent valley. It took a long journey to finally stop at the bank of the bottom creek. Sister Gui showed no fear as she walked among branches high above ground, making the tree shaking with her steps. Sometimes she climbed so high and deep into leaves that I could only capture mosaics of her pink plaid shirt. She moved her body across the limbs as she approached to different fruitlets. She had to leave her both hands free from trees in order to employ the scissors, so she often leaned her back on a branch to support still or crossed one leg around a branch to rest on it. The long scissors became her extended body, a prosthesis, to reach the fruitlets at the brim of the crown. In some moments, I felt that she became a co-inhabiting part of the tree as she curled or stretched her body along the branches and twigs.

Women are usually considered as more lightweight and pettier than men. That is perhaps partially why women are thought to be better at pomelo tree climbing. But in this subtropical mountainous area, a majority of villagers, female or male, have slim body shape. Sister Gui's husband, Uncle Biao, thin and tall, is one of the very few men who I witnessed to be able to climb trees. Even so, he preferred to stay on ground and deal with fruitlets at the crown base. Otherwise, he would use a ladder to get to higher positions. There should be more causes than the flexibility and heaviness of body that lead to this preference. It seems that men are unwilling to climb trees, rather than they are incapable to do so.

Village men tend to use tools such as ladders, chairs, and long scissors; yet women also heavily rely on these tools, too. In fact, women more often discuss and invent tools during

arboricultural works. Tools are indispensable when people find the task is beyond human capability. In their interacting with trees, growers make sense of the ability and limitation of their body by comparing with trees and others' body. They constantly assess the strength, length, weight, and flexibility of their body when tending trees, which is otherwise often unthought or unquestioned. Body height, for instance, is one of the most prominent features of individual appearance, a feature that often leads to stereotypes, discrimination, labeling in social discourses. In arboriculture activities, body height sometimes matters as growers deal with tree parts and fruit high above. In an afternoon in Grace Valley, Sister Red hired several her female friends to cover bags. She stood on ground and failed to reach a pair of pomelos from the same stalk, so she asked Aunt Mei, who often showed pride of being tall in daily conversations, to try it.

Sister Red: See if [you can reach it], you are taller. Just casually touch/grope through (laughs).

Sister Qun: Stand on your tiptoes (giggles).

Sister Red: Don't make her laugh.

Aunt Mei: [I] need to grope to tie up [the paper bag].

Sister Red: Right, [you] are able to grope it! What can [I] do with it?

(MXYYG0513#5669)

Even though Aunt Mei was able to reach the fruitlets by stretching the arms and standing on tiptoes, she needed to "grope" (me=touch, explore with hands) and tie up the bag, for she could not directly see it. She looked aside and used her hands to feel the stalk, hold the two iron lines of the bag mouth, and twist them together around the stalk. Orchard farmers are used to work in this way, feeling and doing things with hands and without sight. Aunt Mei was carefully exploring, and the others were nervously watching. Sister Red asked Sister Qun not to

tease her, because if Aunt Mei laughed, she might drop the twin pomelos clinging on a fragile stalk. After Aunt Mei reached the fruitlets, Sister Red, the requester and employer, complimented her for being taller and more capable. It is in the comparison that they reflected on their bodily weakness and advantages.

Tools thus become an extended part of body for people to work on tasks beyond corporeal ability. In pomelo planting, there are a few commercialized and popularized tools, such as long scissors and electronic scissors (for pruning). People also invent some simple tools, just as the extended brush for pollination. With an extended long bamboo stick, growers are able to pollinate flowers high above ground, which saves them from frequent tree climbing. This preference of tools indicates that climbing trees is not really the best choice for many people, including women.

Sister Red and two female friends were pollinating in her orchard in High-South Bamboo Valley. They compared different sizes of brushes that they could buy on the market and discussed how to reshape the brush by cutting it. Sister Red recalled that Sister Qun, who was not there, only used a short brush and climbed onto tree to pollinate. She found it hard to understand.

If women also favor extended tools to reach flowers and fruit in higher positions, then how does tree climbing become a feminized bodily movement in pomelo planting? I found some clues during the harvest season. August is the harvest time for honey pomelos and November for golden pomelos. Picking and carrying pomelos is the most intensive activity that calls for many villagers to work together. For a few weeks, villagers are busy handling their own orchards and doing labor for others. Unlike smaller sized fruit such as berries and apples, pomelos are large and heavy, so that orchard farmers cannot carry the harvested fruit with them while they are

picking. Thus, people work in pairs to cooperatively collect fruit: one standing on the tree to pick pomelos and the other catching fruit under the tree. That is when the division of labor takes place.

In the early morning when villagers just arrive at someone's orchard, the owners would briefly designate works among the hired neighbors--where to start, move to which directions, and sometimes who works with whom. More often people choose their own positions, and they usually have their familiar partners. At that time, I would hear people, mostly men, say, "Those who have no weight (*mo gin liung*) go up trees," or "Those who are younger go up trees." So naturally women start to climb trees and most men stay on ground--even though some of the women are not lighter or younger than some of the men. (Note that women greatly outnumber men in arboricultural works. I will elaborate on this topic in Chapter 5.) The person who chooses to be on the tree needs to walk among branches, hold the pomelo with one hand, use a scissor to cut off the stalk with the other hand, briefly tailor the twigs so that it will not hurt people or other pomelos, and throw the fruit to the person under the tree. The partner on the ground needs to catch the pomelo with care--sometimes the fruit is dropped from several meters above--bend down and put down the pomelo into piles. The pair has to frequently change their locations around the tree to find the best route for passing the pomelos through branches and twigs. In this way of cooperation, people on the tree have more bodily movements and multiple tasks, acting quickly and flexibly; while their partners on the ground stay steadily and keep looking up and waiting. Both partners pay attention to each other's movements and the delivery of pomelos. Occasionally, they may fail to cooperate, and the pomelo drops to the ground. People around them would turn to take a look and the one who misses the fruit shows embarrassment and guilty.

Body weight is usually put under scrutinization when people compare and comment on each other's choice of climbing trees. They may even ask someone, jokingly, how heavy she/he is. There is no standard for a safe weight to get onto trees, but people have their own judgments about the ability of themselves and others.

This afternoon when Uncle (Zhang) Chi, Uncle Rich's affinal relative, hired people to harvest pomelos in Only-Peak Valley, two relatives of the Zhang lineage had a conversation about body weight and tree climbing. Granduncle Ngian--I called him with this title because he had a high generational rank, but actually he was in his forties--came to help his relative and also good friend Uncle Chi. He walked to a bunch of people and started to arrange partners, commanding them as if he was the orchard owner. A senior woman, who stood under the tree, asked him why not climb onto trees himself. Ngian answered that he was too heavy for it, which was questioned by this lady:

Aunt: You look, Aunt Hua has so dauntingly big weight (*gin liung*), even [she] dared to climb onto [trees].

Ngian: [People with] no weight should not be afraid of it.

Aunt: She, a person who has such blessing (*fu qi*, an euphemism to say that someone is fat), she dares to go up [trees]. You take a look. She just got used to [climbing] up trees.

Ngian: Can [she] do it? That pomelo, can [she] reach it? Can't reach it, then don't go there. Just use the [long] scissor to pinch it.

Aunt: Granduncle, so you should not say that people who have weight don't do [climbing trees], oh!

Ngian: Ah, yes. (MXYYF1104#2587)

This aunt was elder than Aunt Hua and Granduncle Ngian, and she addressed them from her children's position, a common addressing way among Hakka speakers. She was not able to climb trees, but she kept watching and reminding those whom on the trees to be careful. She criticized Ngian's attitudes and educated him with an example of Aunt Hua, a plump relative who was almost twenty years elder than Ngian. Her choice of the example showed that she reflected on gender, age, and body weight as factors for decisions of tree climbing. At that moment, she questioned why an elder and equally heavy woman dared to climb trees, not this young man. It was an ethical lesson that made Ngian embarrassed and no words to refute.

The word "weight," gin liung (m. jin liang), literally means the measuring units gin (0.5 kilogram) and liung (one tenth of a gin). In daily communications, villagers openly comment on people's body weight, not necessarily offensive--I am not exempt from their judgment, either--as well as the weight of wet-rice yield, pomelos harvest, and domestic animals. Weighing by sight becomes a habit of people to assessing their surroundings. One night, when I was drinking tea at Sister Qun's house, I heard the sound on the tile roof. I was curious what animal was that. "Should be that wild cat, it often comes here recently to catch mice." "Oh, how big is it?" "Not big, about three gin." "How do you know?" "I saw it several times." She never caught or held the cat, but she conjectured the weight by seeing it. I certainly was not expecting an answer as "about three gin" to make sense of the size of a cat, so I asked her "how big is a three-gin cat." She pointed to a group of ducks in her yard and said: "It's about that big." Her conjecture of the size seemed to be less accurate than that of weight.

In the conversation about tree climbing, both the senior aunt and Ngian mentioned courage, "dare" and "afraid," which indicated that they thought it potentially dangerous. Compared to flexibility, strength, and balance, people always emphasize the linkage between

body weight and safety. It seems to be the duty of people on the ground to remind the partners on the tree to watch out and stay away from the thin part of branches, just as Ngian's suggestion to Aunt Hua to give up a pomelo that was hard to reach. Villagers say that there are a few accidents of falling from trees. During my multiple times of stay in Xiaodu, I have not witnessed or heard of any, but I did hear cases of men falling from ladders and hurt their ankles.

The gendered labor division is perhaps associated with the conventional style of working in pairs during the harvest. Choosing partners is not a difficult thing. It takes place smoothly, as familiar friends and neighbors often walk together to somewhere in the orchard to start a day's work. If two people pair in the morning, they are likely to continue to be partners for the rest of the day. This partnership is temporary and casual, for most people change partners the next day, or even during the work. It is also common for a woman and a man to work in a pair, although sometimes people tease them, or they make jokes about themselves. In an afternoon in late October, I went to Uncle Biao 's orchard in Big-Horizon Valley where he hired several villagers to pick pomelos. He partnered with a woman from the neighboring Upstream Village, when his phone rang. The other side asked him if only he and his wife were there, and he teased his female partner by answering loudly: "Yes, I am picking pomelos today. What just the couple? Many couples here. Oh, yes, just the couple here."(MXYYF1024#2202) His last sentence made the woman laugh out loud and repeat the words: "Just the couple!" A while later, he made a joke about another woman A-Mi, a Vietnamese who married to Xiaodu a dozen years ago. A villager asked A-Mi why not partner (da dang) with Uncle Biao. He immediately took over the floor: "No, I asked her with whom [to work] together. She didn't want to [work] with me together." A-Mi giggled and said nothing. In agricultural activities such as wet-rice cultivation and fruit planting, women and men usually cooperate on the same tasks in both collective times and after

the de-collectivization (reference). Villagers are sensitive to gender, and they often make it obvious by teasing others. These jokes are not necessarily offensive, even some of which are sexually implied. Sometimes it is women, especially elder women, who first bring up sexually implied jokes in a conversation.

The tendency of women to climb trees and men to stay on the ground coincides with this kind of joking metaphor to liken working partners to couples. In Xiaodu, the age gap in marriage is generally wide, although it is narrowing down in recent years. Many middle-aged and senior female villagers are much younger than their husbands. This partly explains why the majority of the rural labor in this area consists of women. The contrast between wives and husbands is characterized as younger vs. elder, lighter vs. heavier, and swifter vs. sluggish. Tree climbing, a job that requires balancing skill, strength, good vision, flexible and quick movements, is feminized as the ideal stereotype of a wife.

Painful Counts

People get hurt in their intimate interaction with agricultural belonging--not serious injury, which is rare, but repeated and accumulated hurt. It is through the painful body that they measure their effort and engagement to these creatures. Elaine Scarry in her book *The Body in Pain* (1987) explores the relationship between body and voice, pondering on how others become visible or cease to be invisible through verbal and material presentation of pain. She scrutinizes the inventions of expressing physical pain that is otherwise unfelt and unknown to others. Communication of pain, sometimes, is not so effective as it takes extra effort to explain their own sufferings to others (Sontag 2004). During both agrarian and everyday activities in Xiaodu, the choice of voicing or silencing of bodily pain indicates their social and ethical concerns. The long-term torturing of body in heavy labor reverberates among people who share the same

experiences and induces co-produced reflections on social relationships and human/non-human interactions. In this part, I focus on how pomelo growers, women in particular, make painful jobs explicit by remembering their labor in a numerical way.

These days in late May, I was following a group of women doing labor in an orchard in Grace Valley. Sister Red hired her female friends to cover bags for her honey pomelo fruitlets. After a day's work, at night, Sister Qun, my best friend in the village, also one of the most capable female farmers, came to my room in Uncle Rich's house. She brought two of her kids here and we had a chat. I saw scratches on her hands and asked her why. "Thorns on the trees!" She scrolled up her sleeves to show her forearms, covered with pink, short cutting marks. "My arms and thighs, all over, are covered with these scratches." I suddenly recalled that orchard farmers always wore thick, long sleeves clothes even during the unbearably hot summertime. "I saw Sister Red, she is the same, full of scratches," said Sister Qun. I asked her if thick clothes and gloves could help preventing thorns. She said anyway the thorns would penetrate anything made in cloth. Pomelo trees, especially younger ones, have long and sharp thorns on stems. I tried covering bags in three different orchards, but I only covered those fruitlets on the brim of the crown base. Orchard owners reminded me to watch out thorns, and I did not get hurt for the skirt twigs have few thorns. Unlike me, Sister Qun and her friends stood deep into the crown, leaned on the trunk and limbs, push aside branches and leaves, and explored every fruitlet across the corners. It is hard to imagine that they have to endure such pain while they are working long hours and joking around in the meantime. The scratching of pomelo trees is too common and inevitable to the extent that they need not to talk about it during the work. They get used to the on-and-off tingle and keep silent for most of the time. The pain is piled up and obviously felt afterwards when they stop working and scrutinize their body. "When I get back home and take a

hot shower, it feels really hurt," smiled and shrugged Sister Qun. Collective labor has such a magic that it moderates, or benumbs to be more accurate, people's pain and hurt, until they return to themselves alone and start to scrutinize their body. The most aching moment is usually the next morning of trying to get off bed to embrace the same arduous work of the day before.

People's downplaying of thorn spiking during work may also due to their focus on the handling of pomelos, the heavy, bulky fruit that grow on thin and long stalks. They cover them with bags and twist the iron lines around the stalks so scrupulously and gently that they often, probably without intention, crook their little fingers. Instead of declaring the hurtful experiences on their own body, villagers, especially women, often express "heartache" towards pomelos. They feel pity for pomelos that are eaten by mice or wild boars, turning dark by sunburn (ni sao), by rainfall (sui sang, literally "water injury"), or failing to grow big in competition with others. Yet they feel most regretful and sad if it is them, the human attenders, who cause the death of fruit.

The next day after my chatting with Sister Qun, I went with the same group of women to the Grace Valley. We arrived at a flat ground at the mountain top, planted with young trees. Six people divided into pairs to cover bags and each pair occupied one tree next to another. They brought small scissors to cut excessive leaves, so they could more conveniently cover the bags. Aunt Mei, the tall and most talkative one, accidentally cut a stem with a fruitlet hidden in the leaves. She showed embarrassment for her mistake, especially right under the eyes of the owner, Sister Red, who said nothing. Aunt Mei kept talking about pomelo dropping and the heartache she felt for a while, until she brought up her husband's negligence in their own orchard as an example. Her words echoed with other women's feelings for the loss of pomelos.

Aunt Mei: Zang A-liang (her husband) cut the most [pomelos]. I laughed at him, I said, I just cut a few, oh. Then [he] said, so big pomelos, how come [they] "boom, boom," dropped and rolled away?

Sister Qun: Then [he] said "fuck."

Aunt Mei: Yes. (People laugh.) Naturally (cii yan xin), [if a pomelo] is cut, [people] would heart ache (xim tung), Aunt Red, oh.

Sister Red: Even [those are] one's own [pomelos], [one] would scold [oneself].

Aunt Mei: Isn't it heartache?

Sister Red: Then [he cut] so small [pomelos].

Sister Qun: Then [he] said "fuck." (Laughs)

Aunt Mei: I said, [I] give [you] no meal this noon. I said, [pomelos] "boom, boom" rolled away, so naturally [people] would heart ache.

Aunt Xin: How wretched, sometimes, there is only one [pomelo], so big, so beautiful, but [it] is cut.

Aunt Mei: Today you cover [bags], it is the same. Sometimes, three or four [pomelos] are crowded together [on the same stalk]. [You have to] cut one. Ay, his mother's twat. Naturally, heart aches. (MXYYG0513#5666)

I often hear people say the word "xim tung" (heartache), either as a verb or a noun, when they cause a loss in their property, especially agricultural products. Sometimes, villagers express heartache when they are doing labor for other people. To feel pity or sad for one's own belongings differs from that for other people's--the latter is an imitation of the former feeling that extends from oneself to others. This conversation in Grace Valley became a moral lesson that Aunt Mei endeavored to decipher to her employer and co-workers. Her storyline moved from her

current work in Sister Red's orchard to her husband's careless work in their own orchard the other day, and then returned to the job of covering bags "today". She juxtaposed these two situations--mistakes in other's and one's own orchards--by introducing a concept "naturally" (*ci yan xim*). She interpreted heartache as a spontaneous bodily reaction towards the loss of fruit, regardless of ownership. In this way, she tried to convince people, especially Sister Red, that she cared about these pomelos no matter whose they were. It was a keen observation that she made through a reflection of her own feelings, but it was more of an ethical claim that she cared about her job in Grace Valley.

As I have analyzed, climbing trees and expressing heartache is stereotyped as female bodily and verbal actions. What surprised me is that carrying pomelos, such a seemingly masculine activity, is also undertaken mostly by women. Carrying things with a bamboo yoke (*dan*) is heavy labor that requires strength and it causes sustained pain on shoulder, spine, and back. Similar to tree climbing, carrying pomelos (*kai iou*) is a specialized skill that only a group of villagers--most of them are middle-aged and senior women--are still capable or willing to do it. These people are the most popular labor during the harvest season, because for most orchards, owners need to hire people to carry pomelos from the trees to a flat area where buyers come to collect them. Carrying pomelos is not only gendered and age-specific, but also one of the heaviest activities during pomelo planting. Through carrying the heavy fruit, villagers count their effort and measure the pain in the body.

The next day after the couple, Uncle Biao and Sister Gui, finished picking pomelos in Buffalo-Lost Valley, they hired twelve neighbors--seven women and five men--to transport pomelos from piles under trees to a flat ground at the valley entrance. After we arrived at the valley entrance in the early morning, people smoothly diverged and took on their designated

tasks: Sister Gui led all seven women and only two men to walk into the pomelo orchard; while Uncle Biao and the other men stayed in the flat ground to prepare for collecting pomelos. In Sister Gui's team, every person was carrying a yoke and two empty bamboo baskets that they brought from home. I followed them to walk on a narrow path along a shallow creek, cross a few small bridges made by two trunks of wood, climb up several old terraces, and finally reach her orchard where golden pomelos were piled under five dozen of trees. People talked, joked, and laughed in a high morale. They dispersed to different piles, squatted down, put pomelos into baskets until they were filled, tied the baskets to the yoke by wrapping ropes around it, placed the yoke on their shoulders, made a sudden effort and stood up with the weight. In a few minutes, this group of people were all loaded and started to return by the original route. "Just stay there," they suggested to me and laughed, "You don't have to walk with us. We will come back!" They would, because they were going to repeat this route for many rounds.

I still followed them, noticing that they clearly reduced chatting and laughing. The weight on their shoulder forced them to focus, especially when walking on the slippery path, covered by moss. When they returned to the valley entrance, Uncle Biao and others had put a large plastic cloth on the flat ground, where people could squander all the pomelos onto it. People unloaded and, without a lingering, carried the empty baskets and turned back to the orchard. Aunt Rong, the humorous widow of the Pond-head Li Lineage, was among the carriers, too. People compared each other's baskets--the size, the style, new or old, when she suddenly turned to me and repeated what she said to others just before: "The host (dung ga) said that because I was an old person, I only needed to carry two half-baskets." She was in her sixties and her body was thin and frail, although she was not the eldest among the carriers. A full load of pomelos in two baskets mounts to 60 to 80 gin (about 66 to 88 pounds). Aunt Rong could not bear a full load, so

she put less pomelos in each basket. She kept explaining this and seemed to feel sorry that other people fulfilled theirs. While she was loading pomelos, she murmured: "So heavy, heavier than a stone!" Then she found that the baskets were too heavy for her, she took one deformed pomelo out of a basket and mumbled: "Aiyo, throw away a stone!"



Although people are joyfully chatting from time to time, carrying pomelos is no doubt an arduous labor that causes increasing pain during the work. Just as that people would count how many bags they have covered while doing labor, these carriers also count how many "rounds" (zhuan) they have delivered, even though the orchard owners do not take it into account as an evaluation. When Uncle Feng, one of the two men who joined Sister Gui's carrying team--the other man was hearing impaired, finished loading two baskets and just started the return journey, he ran into a woman who arrived with two empty baskets. "How many pomelos are left in that pile," asked her. Uncle Feng looked back and said: "It still needs three or four rounds. This is my

ninth round." He translated the amount of pomelos into his experience of circulating, because he knew the capacity of a round in terms of the weight or number of pomelos. "Finish this pile, and it will be time for lunch (i.e. 11 AM)," said Uncle Feng. He estimated the time for three or four rounds and expected to end the morning's labor after that. I have observed that villagers often count on purpose or not, their labor in ways they engage with agricultural products--by bags, weight, amount, rounds, and so on. The heavier work they commit to, the more likely they calculate the effort by specific numbers. Agricultural activities are torturing human body to the extent that people remember and measure the pains they have experienced.

These carriers were probably among the last ones in the village who could take on this job. "In the future, there will be less and less people who know how to carry pomelos," sighed Uncle Feng. "Young people don't know how to carry," replied Aunt Ju, a short and slim lady in her late sixties, a diligent laborer and an avid gambler, one of my favorite persons in Xiaodu. "Young people's bone is soft," she laughed, "Old people's bone is stiff." I often hear villagers say that their "bone is soft" (gu tou ruan) when they feel weak or after they finish some arduous work. Aunt Ju's comparison of young and senior people ironically contrasts with social stereotype that younger ones are more capable in strenuous activities. The seven women and two men were almost all in their fifties and sixties. Younger labor is increasingly scarce in rural area; and even though there are some younger villagers, they choose not to take the carrying job, the most painful job. That is why orchard owners feel headache about hiring carriers--sometimes they need to invite people from neighboring villages.

If people with stiff bone are more capable of carrying pomelos, then why there are far more women carriers than men--not just in Sister Gui and Uncle Biao's orchard, but I have witnessed too many cases. I never hear of a saying that women's bone is stiffer than men, or that

women have more strength than men. Overall, in this Hakka region, women take on more heavy labor than men--Sometimes men bragged about this phenomenon. On the narrow path in Buffalo-lost Valley, I followed this group of women going back-and-forth across the orchard. Among green trees and yellow pomelos, their pink and red plaited or dotted shirts make the scene bright and joyful, just as their high voice of chatting and laughter. They brought this delightful bustle and noise all the way to the valley entrance where Uncle Biao and other men were standing next to a huge pile of pomelos, with hands rest on the waist, waiting. Three buyers had just drove their truck in and parked next to the pile. They randomly took some out of the pile and commented on them. Uncle Biao and his male friends defended the quality of their pomelos. They talked in a low voice, with serious look on their face. The merry carriers dumped this new round of pomelos onto the pile and quickly left, leaving men to continue the negotiation. At that moment, I saw how gender was marked by space where they occupied: women took over the orchard, handling trees and fruit; while men possessed the concrete road and flat ground, dealing with management and transactions. It is precisely what I have seen in other agricultural activities in this region: women do the work, and men do the talking. The favoring of communicative labor over physical labor makes the division of labor among men and women at odds with social characterization of their biological traits.

Carrying pomelos with a yoke is doomed to disappear in this area. People created other ways to solve the problems. In recent a few years, some big orchard owners purchased large, solid plastic baskets with handles, with a capacity to hold 80 jin of pomelos. During the harvest season, either two people together lift one plastic basket, or three people lift two baskets. Every laborer--young and senior, women and men--is able to do it. But these plastic baskets are much

more expensive than bamboo baskets, so only a small number of families would like to invest in the new tools to respond to the scarcity of labor.

Villagers often imagine what otherwise ways to solve their problems of labor. Back to Buffalo-lost Valley where Sister Gui and her team carried pomelos, they brought up the topic of how robots replaced human labor. They were squatting and loading pomelos into baskets, when someone mentioned robots that carried a tray in restaurants and calculated in supermarkets. A woman in the red plaited shirt, Aunt Zhang, believed that robots could one day carry pomelos. Her optimistic conjecture was questioned by Aunt Ju, my funny neighbor, who squatted next to her. Later, Sister Gui and other women also cast doubt on this brave speculation.

Aunt Zhang: Nowadays everything is doable. So sciency (ko ho).

Aunt Ju: Using robots to carry pomelos? Then what do human do?

Aunt Zhang: Don't be so silly.

Aunt Ju: [Robots] can carry [pomelos]? Then you just see. I just don't believe it.

Aunt Zhang: Easily [people] can do it. Don't be so silly.

Aunt Ju: Oh, [unless] they make marionettes (diau sien hi), then they could (laughs).

Aunt Zhang: In the future, it will be sciency.

Aunt Ju: Unless they send electricity up [to mountains], that's different. I told you.

Sister Gui: Using robots to carry pomelos, that's impossible. [Pomelos are] on the mountain tops.

Many people: Yes.

Sister Gui: Don't [robots] need electricity? (MXYYF1025#2224)

While they could imagine how robots carry a tray or calculate in a cashier, they found it difficult to envisage one carrying pomelos, a skillful (specialized) and painful activity that they

have been doing for years. Aunt Ju, who always talked loudly and liked to argue with people, was strongly suspicious about the conjecture. "Then what do human do," she thought carrying pomelos should be a human job. Replacing human with robots makes human nothing to do--what a profound reflection on human labor in a nervous transition to an artificial intelligent age, a future that is perhaps too "sciency" to conceptualize. Then Aunt Ju visualized a robot similar to marionettes, although she could not help but laughed at her own idea. Marionette (diao sien hi), stringed puppetry, was once a popular entertainment in Hakka area, but it can be seldom found today. A puppetry carrying a yoke with pomelos loaded in bamboo baskets does sound quirky, but reasonable. Her imagined robots mimic the human shape and behaviors, operated by human with electronic strings. Her argument was echoed by other women who thought electricity to be the most challenging to realizing the robots. Electricity is nothing new in this rural area, but it only covers residential clusters in villages. For orchards deep into valleys and high on mountains, owners have to put up poles and pull out extra lines. Only a few growers who managed large orchards were able to build a line. The economic disparity among villagers is particularly showing at this point of mechanization in agriculture.

Less than a year after this conversation in Buffalo-lost Valley, the owners of Grace Valley orchard built a "Crossing-Mountain Dragon" (*guo san liung*), steel tracks along the slopes from mountain tops all the way down to the valley. Villagers with a simple training can drive a gasoline-powered rail car on the track to transport pomelos and fertilizers. The county agricultural bureau funded this project to promote mechanization and modernization in agriculture. A rail car is far from a human-shaped robot, or a marionette, but it as well replaces these middle-aged female carriers and created new jobs--driving cars--for men. This technique has been experimented in the neighboring Fujian Province for some time, and the Grace-Valley

orchard was one of the first testers in Mei County. But people do not expect the Grossing-Mountain Dragon to be popularized soon in this rural area, for it calls for considerable investment, which, most orchard owners cannot afford. For a long time in the future, human carriers are still in great need to transport pomelos and fertilizers.

Tactile Numbers

In previous sections on temporal-spatial perception and bodily interaction with trees, I analyze the ways the body acts as a departure for exploring human and non-human beings in a quantified manner. It is through keenly observation and constant reflection that people learn and relearn how to reckon themselves and things around. In the following, I focus on the embodied habits or skills of using the body as a measuring tool. Here I use the word “embodied” to emphasize not the process of learning, but the intentional or unintentional utilization of habitual ways of bodily perceptions. Once a corporeal tendency of perceiving certain things becomes embodied, this propensity contributes to specialized knowledge and proficiency in this field. By dissecting ethnographic moments in agricultural business, I show how embodied techniques enter the fields of interactions and bring consequences in social relationships.

I particularly look at instants where people are aware of their embodied ability to quantify things and use it as a leverage in claiming authority. For orchard farmers, it is common for them to weigh things by sight and touch in everyday production. When it comes to the transactions of pomelos, this skill of perceiving the weight becomes necessary and sometimes advantageous during the negotiation between buyers and sellers. Buyers and sellers often bargain over the selection standards of pomelos at the scene of collecting products. As I show in the ethnographic case, a mastery of weighing things by hand is useful in competing for authority in this uneven

relationship between purchasers and farmers. The explicit attention to the materiality of goods and the sensation of bodily skills are mediated by meta-level moral interventions in face-to-face bargains (Keane 2008).

Every year, about a month or so before the projected harvest, pomelo purchasers from other places, sometimes with designated local middlemen, would come to Xiaodu Village to negotiate price and sign contracts. [Continue to explain why farmers have limited power to bargain with buyers, their uneven relationships, etc.]

This morning in early November, the harvest season for golden pomelos, Brother Min hired a group of villagers to harvest in his orchard at the Big-Ground Tail. They had been picking and carrying pomelos for a few days and it came to the wrapping up time when the buyers from another town drove their truck here to collect the products. People heaped the pomelos on a flat ground in front of the village committee hall, displaying them for the buyers to oversee the final step: uploading pomelos onto the truck. This is usually the most contentious occasion between buyers and sellers—buyers tend to raise the standard of fruit selection, while sellers seek to bargain over the standards and squeeze in as many pomelos as possible. Standards are negotiable because they can hardly be measured in a quantitative manner, such as the degrees of “sun burn,” “rain harm,” and “pest damage.” It often depends on how strictly the buyers are following their criteria. There is one standard that seems to be measurable—the minimum weight. In the contract of fruit booking, buyers would note clearly the minimum weight, be it 1.6 gin, 1.8 gin, or 2 gin, for their regular price. Any pomelos below the weight are either rejected or purchased with an extremely low price. The criterion, however, is flexible, too, for in most of circumstances, it is impossible for people to gauge every single pomelo in the harvest. They have to draw from their experiences and judge by sight or touch.

For Brother Min's pomelos, the buyers set up the minimum weight of 1.8 gin (1 gin and 8 *liung*). They walked into the heaps, squatted down, swept over the fruit, picked and chose the deformed pomelos out. They were the type of the pickiest buyers. After a little while, the unqualified pomelos had mounted to a big pile, no doubt a heartache scene for the growers. Not only the owners, but those neighbors who were hired to upload pomelos expressed their discontentment with the harsh selection. Brother Min stood close to the pile, watching them. He bent down, picked up a small pomelo, and hefted it in his right hand. "This one should be above [one] gin and eight *liung*," he said and then put the pomelo on an electronic scale next to the truck. "Oh, [it's one] gin and eight-eight [*liung*] (1.88 gin)." (#2625) He threw the pomelo onto the truck with a smile of success, as if he won a bet in guessing the weight. With his experiences of measuring things by sight and touch, he challenged the buyers' selection and re-defined the pomelo as a qualified one.

Brother Min's re-examination made the buyers more cautious in their culling of the products. One buyer, a middle-aged man from another town who was obviously the leader of the four buyers, picked up one pomelo, handed over to Brother Min, and said nothing. Brother Min knew what he was supposed to do. He held the pomelo in his palm, cast upwards a few times, and gave a conjecture of the weight. This time, his estimation was again accurate. He was in a light mood and made a sexually implied joke about weighing things by hand:

Brother Min: (Hefts the pomelo in the right palm) This one, [I'm] afraid, is above [1.8 gin]. This one is even heavier than the previous one.

Buyer: You decide it.

Brother Min: Speak, speak, speak of "hand weight" (*su cung*, meaning to weigh things by hand). (People smile.)

Buyer: Oh.

Brother Min: He should know it. (Puts the pomelo on the scale) [One] gin and nine liung (1.9 gin), [the scale] says.

Uncle Feng: To see whose hand gesture (su sii, meaning to weigh things by hand) is more accurate.

Brother Min: Hmm. [This one is] even heavier than the previous one. (Throws the pomelo onto the truck.)

Buyer: Don't worry. [Your] hand is too tired after picking [pomelos]. Do it later.

Brother Min: (Laughs, moves his right hand upwards and downwards with the palm facing up, as if he is still weighing the pomelo.) No, he said he wanted to see my "hand weight," not saying what else (alluding to another word with the same pronunciation, su cung, "handgun," which also means masturbation). (#2626)

Instead of saying "hand gesture" (su sii), as Uncle Feng did, to refer to the movement of weighing things by hand, Brother Min emphasized twice his word choice of another word, "hand weight" (su cung), which implied a sexual joke. Buyers and the hired neighbors smiled as a reaction to his joke. This was, of course, not Brother Min's invention to make fun of these two words with the same pronunciation. It is an often-cited pun among men during agricultural works. Not merely sexually implied word games, villagers, especially men, are fond of playing puns in daily conversations. Brother Min's jest about weighing pomelos was somehow different from what he would do with his village fellows, because this time, he was joking with someone not so familiar, an outsider, a buyer who was in a more dominant position at the acquisition site. Both purchasers and orchard growers view themselves as experts with different specialized skills in the pomelo business. Brother Min's re-evaluation of the unqualified pomelos challenged the

buyers' authority and thus created a tension between them. A joke may serve as a possible repair to their jeopardized relationship.

Weighing by hand is common enough a practice in agricultural production, especially in pomelo planting. In every stage of the year-long cycle, pomelo farmers frequently evaluate the growth conditions of fruit, either when they are still hanging on stalks, or when they are picked and assessed for sale. It is through long-term engagement with their arboricultural products that people learn to reckon the weight by looking at or holding them. Almost all villagers, as I observed, are able to estimate the size and weight of their fruit, domestic animals, or wet-rice yields. Some of them are exceptionally proficient in making such a judgment. Brother Min is one of those who have mastered the skill of weighing pomelos by bodily perception. In the conversation, he actually made two correct estimations of the small pomelo that the buyer handed over to him. For an immediate feel, he said that the pomelo was a qualified one, i.e., above 1.8 gin. Then he compared it with the previous one as if he still memorized the feeling of it. The scale proved his guess: the second one is 1.9 gin, heavier than the previous one, 1.88 gin. It was a very narrow margin with a gap of 0.02 gin (about 0.02 lb).



Figure 34 Brother Min weighed a pomelo in his hand, with the purchasers and neighbors watching.

The electronic scale silently stood by side of the truck, but it was an engaging actor in their bargaining of selection standards. Each time when Brother Min spotted a negotiable pomelo, he put it on the scale to validate his conjecture. The scale acted as an objective and unquestionable judge in this buyer-seller competition for authority. At first, people's attention was drawn to the ability of weighing things by sight and touch, as if the scale was just an auxiliary prop. After a while, they moved the focus to the scale itself and distinguished these two methods of weighing: the bodily perception of weight is a skill that people could brag about and make jokes of but using an electronic scale to weigh things is a serious and to some extent offensive way to claim authority.

After the buyers finished culling of pomelos and villagers had uploaded all the others onto the truck, Brother Min and the hired villagers gathered around the unqualified pile and looked for mistaken ones. They successfully saved some and then, the leading buyer started to

show impatience and anger. When a female neighbor picked one up and asked Uncle Feng to weigh it on the scale, the buyer stopped him doing so and suggested to accept it as a qualified one. His grumpy attitude led to a sarcastic commentary from Brother Min and that neighbor, a woman in her sixties who had been watching him picking up pomelos from the pile.

Brother Min: (Picks up one pomelo and hefts it on his palm) This one, oh.

Buyer: (Takes the pomelo from Brother Min's hand and throws it into a basket) Ay, whatever, take them all.

Neighbor: (Points at a pomelo) That one.

Brother Min: Oh, let him (Uncle Feng) weigh it on the scale, take it to the scale, weigh it.

Neighbor: (Squats down, picks it up, and gives it to Uncle Feng.) Yes. [If he/buyer] has doubt then take it [to weigh it]. [If it is] above [one] gin and eight *liung*, you (Uncle Feng) take it [onto the truck].

(Uncle Feng Walks to the scale with the pomelo.)

Buyer: (Waves his hand, raises the voice) Any [pomelo], just take it. No need to weigh it. Aiya! Just take it, take it.

Uncle Feng: (Smiles) Then I just throw it [onto the truck].

Buyer: Take it, take it, take it. Throw it up, throw it up. Really, really! I am not so serious (*ngin ziin*).

Neighbor: He (Uncle Feng) would like to weigh it on the scale, then let him weigh it, if [he/buyer] doesn't believe it.

Brother Min: [If he/buyer] doesn't believe it, then weigh it on the scale, just ask the "dumb" (a *zii*, literally means the dumb people, also means a scale in Hakka).

Neighbor: Yes, why [being] so stupid.

Buyer: One or a few pomelos, don't be so serious. Aiya! Just [throw it] like this.

Neighbor: He (Uncle Feng) goes to weigh it, then let him do it.

Buyer: I said it! Don't say anymore, really! (#2628)

While the buyer stood right next to the pile and people, Brother Min and his neighbor did not lift their heads and looked at him when they talked about him. They kept persuading the buyer to allow Uncle Feng to weigh the pomelo on the scale, omitting any address term, “you” or “he,” to refer to the buyer. They talked in a low voice, as if they were just murmuring to each other, but their comments were actually directed to the buyer. This way of addressing made their persuasion easier, and perhaps less provoking, although the buyer was still irritated by their improvised play. There is a tacit understanding that the hired neighbors would speak on behalf of the orchard owners. This aunt clearly took Brother Min's side and they echoed each other's words to form a congruity in swaying the buyers.

In this moment of argument, the buyer and seller, interestingly, exchanged their typical positions with regards to weighing methods. Usually during a bargain, it is the buyers who prefer an electronic scale to evaluate pomelos, while the sellers would favor loosening the standards by using mere sight and touch. Here the choice of tools became an ethical issue, rather than mere economic concern. Brother Min had gained the buyer's trust in weighing pomelos by hand, so the buyer accepted some from his selection without requesting to validate the weight via the scale. But this time, it was the neighbor who chose one. Brother Min, perhaps for the sake of prudence, suggested Uncle Feng to weigh it on the scale. The neighbor's words “[If he/buyer] has doubt” explicitly framed the action of using tools as a sign of distrust, implying a criticism towards the buyer. Later, she brought it again by using the term “believe” (*siong sin*), which was echoed by Brother Min, to make an ethical judgment on the buyer. The buyer then showed anger

and asked not to employ the scale—before that, he did not refuse using it when Brother Min and Uncle Feng took some on the scale. His infuriated reaction indicated that he captured her implied accusation and defended for himself twice that he was not so serious (*ngin ziin*), a word that could be contextually a praise or criticism. Even though the buyer was an outsider from another town, he felt hard to keep a meticulous way of examining pomelos and created a stingy persona among villagers whom he barely knew. The ethical judgment of picky buyers was strong enough a challenge for him to go against his will.

The Hakka nickname for a scale, the dumb (*a zii*), is an apt description: a tool that does not talk. “Just ask the dumb,” said Brother Min, a seemingly contradiction—if the scale does not talk, then why ask it. A scale is able to make voice by showing numbers in a silent but affirmative way. It is the image of objectivity and non-bias that makes the scale a token of seriousness. Scales provide a different value of accuracy from using the body as a tool. A scale displays an exact number that is non-reputable; and a bodily perception of weight produces a less “accurate” number, usually a numerical range. But the inaccuracy or uncertainty is sometimes more useful in a negotiation, for people find it less “serious” and therefore less offensive. Contrasting to the cold and silent tool, corporeal perception is warm and noisy, a more humane and friendly way.

It was also the neighbor’s acrid words and her back-and-forth dialogue with Brother Min that made this distinction between tools and the body so obvious. Very common during the final stage of pomelo transactions is that orchard owners and their families or neighbors would play such a word game to talk the buyers into a less rigorous standard. While men often directly bargain over the price and criteria, women, especially senior women, seem to be better at chattering to work around their goals. This kind of talks is usually among villagers themselves as

if they are gossiping without the presence of buyers. Their chatter and comments are heavily loaded with moral judgments and euphemism, sometimes with sarcastic jokes.

The buyer's annoyance made the air awkward. His behavior led to a mockery from the previous aunt and another female neighbor. Sometimes a mockery could be rude, but sometimes it helps relax the nervous mood. This time, Uncle Feng tried his "hand gesture," but failed:

(Uncle Feng hands over a pomelo to the buyer.)

Buyer: Yes, take it, take it. (Throws it into a basket)

Neighbor 1: Threw it so heavily.

Neighbor 2: What a devil temper. (People laugh)

Uncle Feng: (Picks one up and puts it on the scale) This [pomelo] is one *liung* less [than 1.8 gin].

Buyer: No need to weight it on the scale. This boss (referring to Brother Min), this noon, picked up some pomelos. I saw that, he picked up pomelos, so accurate, he is. (#2628)

Weighing fruit by sight and touch is not mastered by all farmers. People err, of course, in estimating the size and weight. Uncle Feng seemed embarrassed by his miscalculation, looking at the buyer with a sheepish grin, despite that one *liung* (about 0.1 lb) was not a significant gap. The buyer repeated his refusal of using the scale, but he preferred Brother Min to evaluate the weight by complimenting on his ability of accurately sensing the pomelos. As an experienced grower, Brother Min claimed authority in this skill, which granted him some leverage in the bargaining. His weighing by hand and the voicing of it was not merely practical but also performative, a showing off of personal skill that helped bargain in a more agreeable way than a scale. Or one may aptly call it a bluff, for the uneven relationship between buyers and sellers would not be completely changed by boasts of bodily techniques, implied sexual jokes, or

chattering with ethical judgment. At the end of the day, farmers will still be filled with both joy and loss from the harvest, with a large pile of unqualified and therefore unsold pomelos, and a stack of cash for their underpriced agricultural products.

Chapter End

It takes extra exercise to accurately connect one's corporeal perception with particular numerical standards. In phenomenology-oriented studies, scholars tend to emphasize the unconscious status or seamless process of perceiving the world, even when people are dealing with numbers (Lave 1988). People may perceive things, such as a geometrical shape, without tacitly counting its sides or lines (Merleau-Ponty 2002). But there are other moments when people pay attention to and articulate about their effort of counting and calculation. Brother Min's measurement of pomelos was a deliberate activity which he accomplished not only with intention, but also by spelling out the numbers. With such an awareness of what he aimed to do, he came to a self-reflexive status to actively perceive and describe his feelings. The voicing out of bodily experiences brings what might be otherwise unnoticed up to the front, becoming an explicit part of social interactions where these named or defined experiences carry with consequences. That is when an embodied habitus or skill, such as weighing things by hand, gives rise to a reflection and re-examination on authority and power relations.

Chapter 6 Real Sciences

Chapter Map
Organic Intellectuals
Deciphering Geography
Stove and Wife
Gamblers' Theories

One evening after dinner, six or seven neighbors gathered in Uncle Li Jiang's house, drinking tea and chatting. People were comparing buying a flat in Meixian and living in the countryside. According to Uncle Li Wang, a cousin of Uncle Li Jiang, the surplus toilets were a shortcoming of many apartments in Meixian. Others all echoed his saying, "Too many toilets are not good." *Fengshui* has been a thing for villagers for unanimous reverence of taboos. As for *fengshui* behind house layouts, Uncle Li Wang said that "Reasonably, *fengshui* should be a real science," which won agreement from Uncle Li Jiang and others. This saying was familiar to me in this Hakka area. The recognition of *fengshui* revealed people's uncertainty about its positionality. *Fengshui* had long been defined as feudal superstition by the government and mainstream media. Since the Opening-up, especially the 2000s, as the government relaxed its control over folk activities, including those related to *fengshui*, it received new definitions from the Internet and even the academia, such as "art," "philosophy," or simply "knowledge."

In this chapter, I analyze the possibility of multiple sciences, that is, how theories with different assumptions are accepted and how to find ways to reconcile contradictions in those theories. Numbers still play an objective role in various scientific theories as both tools and symbols of authority. This shows that numbers are flexible conceptually, regardless of strict sequencing and definitions. Coupled with various units, they lead to the appearance of multiple standards of measurement. Numbers are indispensable for measuring the area and texture of land, the yield of crops, or calculating the psychic power of *fengshui*. This chapter focuses on birthdate, a commonly concerned index, and a somehow mysterious number. I also analyze people's use of *fengshui* in combination with their birthdates in determining the auspicious locations of houses, burial places, and kitchens. People even use their birthdates as lucky numbers to gamble. Birthdates can only be changed by modifying legal files and ID cards or falsifying memories. But those fake ones are not taken as the real ones. Given the importance of birthdates and ages, many people learned to calculate birthdates quickly by zodiac signs. People usually correlated their birthdates with their living environment and objects such as cooktops, houses, topography, and hydrology as references.

The notion of science has long been controversial in political, academic, and public discourses in China. The concept itself is hegemonic and exclusive. Since its introduction into China, the notion of science has clashed with indigenous disciplines and knowledge. Since the twentieth century, both the Nationalist and Communist governments have promoted scientific governance, while classifying some indigenous knowledge as "traditional" or "superstitious." These imported sciences became a modern, objective model and a new faith for the people (Bréard 2019; Liu 1995). People are also seeking to position certain indigenous knowledge systems in a new light, especially Chinese traditional medicine, which has been strongly

advocated as a science that can compete with Western medicine with the government's support (Chiang 2018; Farquhar 1996). In Anglo-European scholarship since the mid-twentieth century, scholars were interested in Chinese technologies in agriculture, medicine, astronomy, geography, and engineering (Needham 1959; Low 1999). In parallel, the proliferation of scientific fields and the encounter between the so-called East and the West have led to the emergence of many debates about real science and pseudoscience in Chinese society (Greenhalgh and Zhang 2020). What was previously deemed superstitions was reinvented and redefined when the possibilities of commercialization became salient (Chu 2010). *Fengshui* is not classified as a science or technology but is more associated with religious beliefs and philosophy (Feuchtwang 2003). Although there are some geographers who discuss the rationality of *fengshui*, the government has never given *fengshui* a proper name, but rather tacitly acknowledges that it belongs to the category of superstition. Nevertheless, after the Opening-up, the government has been tolerant of *fengshui*, allowing it to revive as an active business activity, especially in China's southeast coast.

Fengshui seems to be thingy, and its relationship with the knowledge about *fengshui* (geomancy) is not a straightforward description and interpretation. It is never explained what exactly *fengshui is*: similar to the Earth God in the mountains, similar to the stove deity, similar to the omnipresent *qi*, similar to the astrological zodiac that determines fate? Why does *fengshui* exist in the shape of mountains, in the flows of water, in the distribution of woods, and in the house layouts? Very often, in people's conversations, *fengshui* and geomancy seem to be equivalent and interchangeable. When people said, "this house has good *fengshui*," *fengshui* would appear to be a geographic pattern that was already there, preceding the existence of the house. The words were also a compliment to the architects of the house or the people who chose

the site for their good *fengshui* theory. A majority of Sanxiang villagers enjoyed talking about *fengshui*, and they had some knowledge of it. But they never applied this knowledge themselves to choose the date, the direction of the stove, or the gravesite, for only professional *fengshui* masters had the ability—though their competence varied—to employ this knowledge and effectively interact with *fengshui*. In some rituals, *fengshui* seems to be imagined as a dragon, visible in the shape of a mountain, that can be summoned by the most capable *fengshui* masters.

Geomancy is such a confusing, hybrid discourse, just like many other theories. The seemingly objective scientific evidence is structured with social knowledge laden with cultural values (Longino 1990). For those who wrestled with clashing theories about these landscapes, they were not explicitly assuming the existence of multiple worlds, or multiple natures. Multinaturalism as an assumption may not apply to *fengshui* as it is not one culture, multiple natures (cf. Descola 2013). Cadena in her book *Earth Beings* engages with her indigenous interlocutors in the interpretation of their surroundings, and notes that this understanding is resistant to translation in the colonial language (2015). One's mix of *fengshui* and other sciences is also not seamless and coherent, but full of questions and contradictions. Perhaps it is not so much multiple worlds as an uncertainty (Nadasdy 2021) that invites people to carefully test and validate multiple theories as they collide.

Organic Intellectuals

Uncle Liao Xiang was a village cadre, vice director of the Sanxiang Poetry Club, *fengshui* master or geomancer, funeral emcee, root carving enthusiast, and flower farmer. His multiple capacities kept him busy all day long, but it seemed to be no contradiction. His experience was inspiring for other fellows in the village. His friends, including those in the town

and county, all recognized his talents. He worked as a miner for many years when he was young. During that period, he would read poetry and study *fengshui* under a kerosene lamp after coming home from mining work, regardless of the overwhelming fatigue. Later, he worked in a tofu workshop. He learned to serve as a funeral emcee in the village in charge of funeral preparations, writing elegiac couplets, presiding over funerals, and recording red envelopes from guests. According to him, a clear mind, accounting skills, and proficiency in calligraphy were crucial for a funeral emcee. As he gained some reputation, he taught the young village secretary of the next village, the grandson of one of the founders of Sanxiang Poetry Club, about working as a funeral emcee.

His career reached a turning point when joining the Sanxiang Poetry Club. The club was founded in 1983 with the donations from the villagers and financial support from the town government. Although He was already in his forties when joining the club, he soon became the best poet and was known to the fellows in other places, even in Hong Kong and overseas. Thanks to his reputation built in the club, he was elected as a village cadre at the age of 50. Villagers all guessed that his winning in the election could be attributed to Teacher Chen Shu, the head of the club, whose two sons were town cadres. Chen Shu highly recognized his ability and publicized for him. Liao then handled numerous tasks in the village committee, such as collecting agricultural data, managing the collective forests, filling in forms and files, communicating with the cadre in residency from the town's agricultural station, etc. Just as he was highly efficient in his other activities, he could also finish the village committee tasks. As mentioned in Chapter Four, the village committee's workload had been greatly reduced since the 2000s. However, village cadres occasionally had to spend considerable time on large-scale projects, such as the Land Right Authorization and population census.

Uncle Liao Xiang said he was not a professional geomancer, for he could only help with choosing the cooktop's direction and identifying important dates and would not be able to help with selecting the burial ground. There were two types of geomancers who chose the burial ground, namely, those who knew how to identify the site and the date of burial, and those who could also perform the ritual of Summoning the Dragon during the burial. In Meixian, Geomancers were graded by criteria not limited to their knowledge and ability. For Sanxiang people, those geomancers with skills handed down from ancestors were the most reliable, followed by those formally trained by famous masters. In comparison, self-taught geomancers were at the bottom. Uncle Liao once showed me a bunch of notebooks he recorded from referentially valuable books, which were cherished by patrimonial geomancers to study *fengshui*.

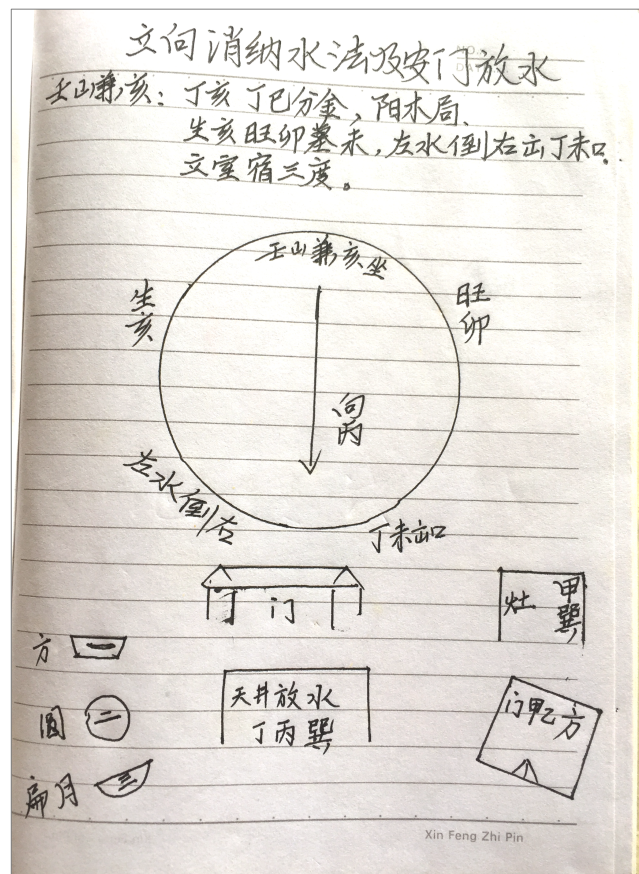


Figure 35 Uncle Liaoxiang's notebook for learning about how to locate the front door and canals of a house.

He spent days and nights on his *fengshui* notebooks because of his keen interest in such knowledge. Some villagers joked that he could learn more skills to make money. Almost all villagers were interested in *fengshui*, which was one of their favorite topics to chat about after supper. Those better at talking about *fengshui*, predominantly middle-aged and senior men, gained much social capital, and drew attention in conversations. Only very few people would study *fengshui* seriously. There were a large number of books about *fengshui*, including some fortune-telling books, in Uncle Liao's house, even more than his poetry books. Although he only helped people with simple tasks like choosing the cooktop bearing and moving dates, his notebooks contained other activities including a detailed record of the selection of a burial ground. Once I asked him why he could not choose graveyard sites. He shook his head and said that the book knowledge was insufficient for good practice. "I don't accept the task at will. I will be blamed for mistakes and get tormented with the stings of conscience," he said. It seems that there was no such standard, except for inheritance and apprenticeship, for the power of geomancers, but geomancers themselves perceived and judged it as well. Another formally trained geomancer with a certain reputation in Sanxiang, who was a retired county cadre, never accepted the task of Summoning the Dragon at burial ceremonies. However, he recorded many chanting texts for Summoning the Dragon in notebooks that he showed me. As to the reason for his refusal, he admitted that he lacked that power: "I could recite the texts. But it's no use. Can't summon the dragon out."

Uncle Liaoxiang was not the only cadre I knew who understood *fengshui*. *Fengshui* was popular in political and commercial circles as a mysterious and sophisticated branch of knowledge. *Fengshui* and fortune-telling, which were defined by the authorities as a category of

feudal superstition, were enthusiastically discussed by civil servants and merchants in this Hakka region (though not limited to this region). Although they tacitly regarded them as a hobby, they seldom talked about them outside of their comfort zone. As some famous Qigong masters had been criticized by the mainstream media in recent years, they were more cautious in this regard.

In his *Prison Notebooks* (1971), Gramsci distinguishes between organic intellectuals and traditional intellectuals: Organic intellectuals are professionals with leadership characteristics who emerge from their socio-economic groups and intentionally maintain ties to their class. Traditional intellectuals, on the other hand, are scholars who occupy a higher level of hierarchy, and who seem to estrange themselves from their time and social structures. This classification is an essential argument in his theories against hegemony with far-reaching implications. Scholars have suggested removing the Marxist core in Gramsci's discussion of organic/traditional intellectuals for a more extensive analysis (Laclau and Mouffe 2001). Gramsci's classification is arguably confined, both in the analysis of racial dominance (Bernard-Carreño 2010), and in the hierarchy of power in a colonial context (Ramos and Yannakakis 2014). Some scholars have suggested extending the category of organic intellectual to the coalition of subordinate groups in social movements (Humphrys 2013). In some sense, all traditional intellectuals are organic, and vice versa. People are not entirely unreflective about the social categories to which they belong, nor do they easily denunciate such a connection, an issue shared by all intellectuals (Eribon 2013 [2009]). The overemphasis on the responsibility of organic intellectuals for the groups to which they belong may as well be a defense for the authority that employs incentives and punishment to discourage or glamourize this kind of enterprising behavior.

Although Gramsci also concurred in his broadest sense that all people are intellectuals, he suggests that only a minority have a "function of intellectuals" (1971), and that his use of the

term intellectual refers to this latter meaning. This narrower definition of intellectual conforms with the tendency in the professional and the vernacular discourses. I certainly have no intention of ignoring the fact that intellectuals are already a generally accepted label in wider circumstances and the remarks about the responsibility that these more culturally capitalized people should bear (Said 1996). I would wish to push the already blurred boundaries of the intellectuals even further, to the point that Gramsci, though agreeing, has not chosen, namely, to apply the term intellectuals to a much more expansive scope, to all intellectual beings. People who interact with those labeled as intellectuals have an indelible contribution and influence in the process of knowledge generation. Moreover, intellectuals are not a stable vernacular definition, especially in China's recent history, where the definitions of intellectuals have been subverted, stigmatized, and reshaped by the state and the public (Andreas 2009). In what are perceived to be intellectual-driven projects, it is actually an intersection of people with diverse ideologies. Some of these people are vital components of these exchanges, despite the fact that they may be at the disadvantageous position of the intellectual hierarchy. These people, who are not generally considered intellectuals, deserve to be regarded as learners, explorers, and challengers, that is, people also with what might be called the intellectual functions.

Deciphering Geography

One afternoon, Aunt Si, on the way to feed her pigs, saw her husband Uncle Rich, and several neighbors discussing the geomancer's grave selection while sitting on the low wall of the yard. One day previously, Aunt Guixiang, her aunt-in-law, had hired a geomancer to choose the graveyard site for her recently deceased husband. A piece of level land under a pomelo tree had been chosen according to the geomancer's divination. But they didn't realize that the tree

belonged to Uncle Rich and Aunt Si until Aunt Si herself noticed. She joined people's chatting there and said, "It [the burial ground] would have no use! I'll dump pig manure in there. It would have no use." She sounded angry and helpless. This time, the geomancer's choice led to a conflict over land property among lineage members and even disclosed another controversy over graveyard selection more than a decade ago. The discussion about this dispute continued among them, who thought that choosing a burial ground in other people's farmland was improper, as it would bring inconvenience to the garden's owner, especially Aunt Si, the manager of those trees. What's more, placing an urn under a pomelo tree was even weird. One neighbor said that people dared not manage the pomelo trees anymore. Aunt Si repeated her point loudly: "I'm not afraid of that. After using the pig manure, the place would have no use!" Urns were buried everywhere across the mountains. I learned about people's fear of nameless urns and stories about retribution for destroying urns, but some people made it clear that they were not afraid of such things.

Aunt Si's standpoint was quite intriguing to me, as she upheld that the choice was a mistake for Aunt Guixiang because pig manure would make the burial ground "useless." The neighbors present seemed to grasp her logic and did not disagree. It was a moment of multiple theories mixed seamlessly. She did not explain why pig manure would affect the validity of the grave and what "useless" means. Despite the dirty appearance and awful smell, pig manure, an exclusive resource for families with pigs, had long been used as a nutritious fertilizer for paddy fields, vegetables, and fruit trees. Did "useless" mean that the grave would lose its miraculous power? What was the source of the power—the location, landform, soil, or something hidden—a deity or something—underground? Was the earth a whole? What about the earth god widely worshipped in the Hakka area? How did the manure change that power? Those issues may have

come up in their conversations before; or a new issue or a new combination of issues may have emerged instantly. According to the daily communication among fruit farmers in Sanxiang about fertilizer, bio-fertilizer was the best choice, as it worked better than chemical fertilizers and would neither damage the soil nor affect people's health. In comparison, toxic chemical fertilizers invaded people's bodies through fruits and vegetables grown in contaminated soil. Fruit growers' explanations indicated their understanding of various chemicals and were in line with some ecological discourses, though the word "environmental" was absent. But the fertilizers' impact on the land's miraculous power had never been mentioned, let alone the difference in the impact between biological and chemical fertilizers. During their agricultural talks, people were only concerned about the chemical impact of fertilizers on the soil and plants. Pig manure, however, was no longer a good fertilizer when correlated with urns, something that was totally unrelated otherwise. People may have been highlighting what they considered to be its negative attributes, such as being filthy, permeable, and insulting. From here, I will analyze how the geomancer (hired by Aunt Guixiang a day before the chat just described) chose the burial site in reference to the birthdate of the deceased, the bearing identified by a compass, and specific geographical features.

In broad summary, this geomancer or *fengshui* master was a native expert who negotiated with his clients in finding a gravesite in the mountains to bury the ashes of the deceased. This linked the living and the deceased, and enabled the remains of the deceased and the unique location to work jointly to bring blessings to future generations. I will examine the possibility of multiple sciences, and explore the ways in which people accommodate theories with different ontological assumptions and seek mediations between these theories when they contradict each other. The landscape is understood as an actor that delivers auspicious or unfortunate fates to

people who are entangled with it; yet the earth only reveals its effectiveness to people with esoteric or professional knowledge, those who can read the geographic textures. In this Hakka-speaking area of China, geomancy masters found themselves in an awkward position as they sought to find a balance among geomantic knowledge, agricultural usage, kinship, and farmland laws. My ethnography shows how people collaborate in transforming the damaged and governed ecologies into a symbiosis between the living and dead. Even though the state has promoted public cemeteries, the first generation of urban migrants still tend to choose their future graves back in rural hometowns. This anxiety around finding auspicious graves goes along with rural residents' uneasy settlement and agricultural production in an increasingly marginalized and desolate countryside. At the conjunction of nostalgia for longstanding traditions and the changes brought by urbanization, people live with clashing theories of "staying with the troubles" and making sense of a shared territory.

The *fengshui* masters, or geomancers, may be regarded as indigenous experts, because although their profession is widely classified under a rubric of traditional knowledge, most of them are only recognized within a narrow territory—a village or a few neighboring villages—unless they have gained enough fame to extend beyond their vicinity. Their indigeneity also lies in the fact that the theories and tools they employ are distinct from those of external experts, such as geological prospectors, agronomists, and/or GIS surveyors, who travel to rural places to conduct research. The theories that these outside experts carry with them legitimately qualify as the "sciences," that is, academic disciplines that are admitted by educational institutions, the government, and the public. The positioning of *fengshui* is more complex. People who are closely involved with *fengshui* in their everyday life can hardly conceal their interest in and acceptance of it. Meanwhile, they understood that this science is "traditional," especially after

being stigmatized as "superstition" in government policies for a long time. Young people, especially those who work and live in the city, are not usually attracted to fengshui. But many of them have to hire a geomancer to inspect the house, pick a date, or select graves, out of deference to their parents' wishes.

Fengshui has been described as a secretive body of knowledge and an extremely complex system. But the fact is that both geomancers and the public participate in fengshui activities in a fragmented manner. People acquire these fragments of knowledge through daily smalltalk or through observation of fengshui-related events. Every conversation or fengshui event is a live teaching. People invoke fengshui knowledge to express their preference for a place or their opinion of the people associated with that place. *Fengshui* masters often explain in a sentence or two why they selected the location. Their epistemic authority lies in their identification as fengshui masters. They occasionally give references to clients, but these explanations in just a few words do not necessarily involve citing any source of authority beyond their own expertise. Of course, people may also, in some cases, question the judgment of a particular *fengshui* master.

Fengshui has become an integral element in the imagination of a traditional China and has long attracted researchers, both academic and folk. Many of these academic works carry a hunting curiosity, rendering fengshui an outdated or abused research subject. Despite the influence of the government's campaign to dispel superstition and the lukewarmness of the academic community, fengshui-related activities have been very active in some areas of southern China, especially since the 1990s. I suggest that the study of fengshui must move beyond the excessive focus on doctrines, including the *I Ching*, and instead consider fengshui as a popular hobby, a commercial practice that requires collaboration and compromise between *fengshui* masters and their clients. People's conception of divine or spiritual power interacts with a

legal sense of ownership, which may be seen as an extension of property relations.

Anthropologists have long pursued studies of property relations, conventionally categorized as customary, and compared them to Western laws (Hann 2003). Studies in Melanesia find that objects are taken as intrinsically attached to persons or certain social relationships, to the extent that they are inalienable from the subjects who once possessed them (Weiner 1992). In the case of the fengshui selection of gravesites, people associate personhood and spirit, with material properties that are recognized by their neighborhood and the state.

The day before Aunt Si and Aunt Guixiang argued, Aunt Guixiang had hired a geomancer from the adjacent village to search for a burial site for her husband. In the early morning, the Li family had all gathered in the courtyard of the ancestral hall to discuss the details of the funeral. Geomancy master Zhong Rongshu had sat at a wooden table, flipping through a little red book, a feng shui reference book that anyone could buy at town bazaars. He had calculated the auspicious orientation of the grave site based on the birth year of Uncle Li Guoyuan: southeast sitting.

People then began to discuss where they could find a spot to fit this orientation. Aunt Guixiang proposed Rock Heights (Chazi Gang), the hillside on the left of the ancestral hall, which included her family's land, as well as the former ancestral graves of the Li lineage. People talked about the appropriateness of Rock Heights to find the site with this orientation. They twisted their bodies and gestured in different directions, imagining where exactly such a graveyard should be located. The geomancy master took a red bag of rice that the host family had prepared for him, following Aunt Guixiang to look for an auspicious spot. Her son, Brother Tong, who lived in Guangzhou most of the time, accompanied her. Uncle Li Biao, a relative who had lived in the area and knew well the procedure of gravesite search, also joined them up

the hill. The Li lineage members were very generous in asking me if I would like to have a look, as they thought I was interested in "cultural" stuff. After checking my Chinese Zodiac sign to make sure it would not conflict with this event, the geomancer agreed that I could follow as well.

We began walking up a mountain trail, flanked by pomelo orchards that were converted from terrace fields more than a decade ago. But the previous terrain remained, and one could easily discern the terrace's steps. Walking to an overgrown corner, Aunt Guixiang urged the geomancer to check what she considered to be the ideal fengshui place, a location that belonged to their family, and around there were many burial sites. She persuaded him by noting that "in the past, down there, it was also my land. Let's go down there, only that way we could see it. There were once so many bones (cremation urns). They moved them away when they made fengshui (formal graves). There was once a (grave). In the past, people say it was the big burial of Uncle Er. Today, it has gone for a long time. There are not any bones. I don't know where they went" (#4819). It seemed to her that many people had chosen the place as a fengshui site to store the urns of their families, and this indicated that it had been recognized by a number of geomancers. The geomancer, Mr. Zhong, echoed her beliefs, and he later responded: "Right, it must be benefiting those people, so they all put (the urns) there" (#4820). He reaffirmed Aunt Guixiang's logic that a beneficial location maintained that power, which could be validated by time and community. Aunt Guixiang's son, who was not familiar with geomancy, asked: "Would it have any impact?" Aunt Guixiang said in a grumpy tone: "How could it have any impact when they are all removed?" She believed that the beneficial locations were still usable for future generations as long as they were vacated. The geomancer did not rebut her opinions either.

The geomancer, however, refused to proceed to the place which she described as being full of bones, because the path ahead was covered with thorns and weeds. Aunt Guixiang used a sickle to quickly cut through the weeds, some of which were taller than she was. The geomancer waved his hand, turned around, and walked back. Thus began the following conversation:

Geomancer: Don't go that far.

Aunt Guixiang: There, it is also my land. It is not too far, oh. Don't [give up], let's find a more beautiful place. Wherever there is my land, you go with me and take a look. Let's find a more beautiful place. (Video recording #4819)

Afterwards, especially after the dispute with Aunt Si, Aunt Guixiang still held a grudge against the feng shui master for not obeying her wishes. She kept complaining that the geomancer had refused to go with her to her desired spot simply because he was too elderly to reach it conveniently. The geomancer retreated to the previous level of the terrace, and he stopped. Looking around, he climbed up to the upper level, where there were several pomelo trees. He squatted on a paddy ridge, holding a fengshui compass in his hand, rotating the disk to identify the direction. He asked Uncle Li Biao to nail two stumps in his designated locations and connect the two with a red thread. He then told him to use a sickle to draw a line on the ridge, perpendicular to the red thread. The intersection of this line with the red thread identified what he considered the proper burial site.



Figure 36 Uncle Biao helped the geomancer to set up the reference lines

This was a typical fengshui grave selection, followed by the cremation and the funeral. But before the funeral, the selection unexpectedly triggered a dispute over land ownership, which involved another fengshui grave selection more than a decade ago.

Early the next morning, the Li lineage members were having a breakfast provided by the host family in the courtyard of the ancestral hall, where the outsourced funeral company had built a green shed. Aunt Si stepped into the courtyard, loudly questioning Aunt Guixiang, her aunt-in-law, as to why she had picked an urn site located under her, Aunt Si's, pomelo tree. Aunt Guixiang disagreed and said: "The place that you said, it was my abandoned rice field. Your family weeded out and planted the trees." She was more than ten years senior to Aunt Si. She assumed that the disputed land had been lent to Aunt Si after her family moved to the metropolitan Guangzhou. Aunt Si said in a determined manner: "I told you, it is not. I will not cultivate on your land, absolutely not. Let my husband take a look." Aunt Si was known in the village for her frankness. Her husband, Uncle Rich, was sitting nearby at the time. Confronted by

Aunt Si's strong voice, Aunt Guixiang instead brought up an old story in the early 2000s, when Aunt Si's father-in-law, Uncle Rich's father, passed away and people picked a gravesite for him.

Aunt Guixiang: A-Si, you listen to me. You buried your father, that fengshui grave, all the surrounding [area] was my land. Don't be so emotional.

Aunt Si: That I don't know.

Aunt Guixiang: You listen to me. The place where you made a fengshui site for your father, all the surrounding [area] was mine. But I thought I didn't care. Our own family moved out to Guangzhou. Our own family didn't get to cultivate it. If you would like to do it, then give it to you. You people also didn't ask for my permission. I didn't care about it, either. (#0819)

Aunt Guixiang used a similar story from the past, namely that Aunt Si's father-in-law's gravesite had occupied her land, to create moral pressure on Aunt Si. She emphasized twice that "I didn't care" (*mo siungguon*), which felt possibly disingenuous given that she immediately thought of the incident and remembered it well. As a woman who had married into this village, Aunt Four said that she did not know, though she was at that time married. Here Aunt Guixiang chose the term "your father" (*m a pa*) instead of "your father-in-law" (*m ga guon*), the latter being more frequently used, but also seemingly more distant. She continued with her opinion on the grave selection years ago and segued into talking about the current dispute. She gave a long telling of the history:

"Li A-Shu (Aunt Si's father-in-law), his grave, all land was mine. Half was mine. More than half. I am not shy to talk about it. I also didn't do anything. I thought, he was so close a relative, and that was just so tiny bit of a place. I didn't care. [The grave of Aunt Guixiang's husband] would not take too much space. Under the spot, at the foot of the ridge, all land is mine."

Aunt Si promptly took over the conversation and echoed her words: “Yes, that is correct. Under it, at the foot, the land is yours.” Aunt Guixiang was talking about Li A-Shu's burial site, and the next moment she talked about her husband's burial site. She considered the two events together, arguing that her land used for the grave was a debt that Uncle Rich and Aunt Si owed, which, a decade later, they should return in a similar form. Aunt Si avoided mentioning the previous incident, in which she had not been involved, and only focused on the current problem. She, as the person in charge of the day-to-day management of pomelo trees in her family, would later have to face the cremation urn mounted under her tree.

Uncle Rich responded that it did happen at that time. Aunt Guixiang said to him: “I also think that living in Guangzhou, I can’t cultivate my land on the hillside. If you people wanted to do something, then I’d let you do it. I didn’t say what, that was my land, oh, you should pay me some money, oh. A-Cai (Rich). Speak from the conscience.” She mentioned again and again living in the metropolitan Guangzhou, where her son reportedly made a high income. After the Opening-up reform in the 1980s and 1990s, numerous people migrated from the rural areas to the cities. The fields they left behind in their hometowns were either lent to relatives and neighbors or otherwise abandoned. If it was only a small piece of land or a handful of pomelo trees, there was no charge for lending to others. If it was a burial site that involved other people's property, it was possible to negotiate and settle it for a certain amount of money. Aunt Guixiang regarded it as a favor that she didn't charge, and she asked everyone to "speak from the conscience" (*pin lionsim gang*), a phrase she repeated twice in this conversation. Aunt Guixiang's depiction of herself as a generous kin member left Aunt Si in a moral dilemma.

Aunt Si kept calling for Uncle Rich to take a look at the selected spot, but he didn't answer. Aunt Si then switched to a new angle to convince Aunt Guixiang that the place was not

favorable. As a fruit grower, she suggested Aunt Guixiang visualize the influence on the burial site. Since people often used a hoe to weed and fertilize the pomelo trees, she warned Aunt Guixiang that this might harm the urn.

Aunt Si: No, you cut it though and put [the urn] into the ridge, and then I hoe the ground, if it collapses, then it is not my [fault] .

Aunt Guixiang: It won't be. Just a tiny bit spot. Wouldn't cut it so deep. Brother Yuan [Guixiang's husband] is so old, you can rest assured.

Aunt Si: That is not the thing that I am afraid of. I mean, I am afraid that I will use the hoe, if it collapses... (#0819)

Aunt Guixiang supposed that Aunt Si was scared of the urn, as was common. When picking honeysuckle or ferns in the mountains, women often expressed their fear of unknown urns. Aunt Guixiang explained that her husband died at a very late age. Dying at a very late age was considered harmless, while the death of a middle-aged or younger person, especially if the death were accidental, was inauspicious (Mueggler 2017). Aunt Si interpreted her worry that her agricultural work might disturb the grave, including the pig manure she later mentioned, which was used to fertilize the pomelo trees.

Finally, Uncle Li Jiang, who was more influential in the Li lineage, came forward to speak. He did not go to the site, but as soon as he heard Aunt Si's complaints, he knew which piece of the field they were talking about. He said, "I know every field in Rock Heights with my eyes closed." Uncle Li Jiang was an old production team leader who had participated in land measurement and calculation during collectivization in the 1970s, and later he had contributed to land allocation to households in the 1980s. He confirmed that the pomelo tree was at least partially owned by Uncle Rich and Aunt Si. He said that when the geomancer went up to the

mountains, they should have asked him, but unfortunately, he was busy with other funeral preparations. At this point, there was a resolution of the dispute between Aunt Guixiang and Aunt Si. Everyone had to accept the fact, because once a geomancer had picked a location, people would not easily change it.

Hence fengshui activities are not something that can be accomplished by a geomancer alone. On the contrary, such activities, including finding a grave, selecting an auspicious day, and planning a house, can only be achieved by a geomancer collaborating with his clients and the clients' family and friends. His expertise is taken for granted, because having become a fengshui master, he must have an origin—either a family inheritance or an apprenticeship with a legitimate mentor. Finding auspicious graves is one of the main businesses of fengshui masters. People describe this activity as if the fengshui master is free to walk on the mountains and choose the best spot. Their choice is always restricted by other factors: land ownership, land use, the historical connections of the clients, and even physical conditions. While people regarded fengshui as a significant science for life events, they also reconciled this science with other theories, their understandings of law, kinship, and agricultural knowledge.

Stove and Wife

In the past three decades, China has experienced the largest size of human migration, millions from rural to the urban. Suburban areas become a middle ground connecting people who migrate out and those who stay in the villages. It is a tide that elder generations who live in rural areas use up their savings to buy apartments in the county- or town-seats for their urban working children. After years of planning, Uncle Rich and Aunt Si finally paid the down payment of an apartment in Meixian county seat for their son. Like many other villagers who had also

purchased properties in the county, they invited a geomancer to choose dates for installing the kitchen stove. The apartment was bought for the couple's son, but what the geomancer focused on, during the whole process, was not his clients—the father or the son, but a girl who did not show up at all. By repeatedly asking about the relation between the son and his girlfriend, the geomancer established and reinforced the linkage between the stove and wife, and that between birthdate and auspicious time. Analyzing the recontextualization of the geomancy ritual in contingent circumstances, I discuss how esoteric knowledge became perceivable and comprehensible to outsiders and how social relations were redefined and negotiated in the performance of knowledge.

How do people apply acquired knowledge to contingent circumstances? To put it in another way, how do people recontextualize formulaic knowledge in uncertain situations? I explore the question by examining a geomancer who selected auspicious time for installing the kitchen stove, a ritual that requires much talking between the ritualist and clients. The selection of dates was based on the information that clients provided. A geomancer often encounters problems when applying his knowledge, mostly formulaic, when there is uncertainty. This case shows that intertextuality is an important technique in applying knowledge to uncertainties. In particular, I focus on how intertextuality works in recontextualizing knowledge in uncertain situations. I am focusing on formulaic knowledge that is acquired through the decontextualization and recontextualization of particular forms. Any knowledge, of course, is formulaic in a broader sense, but some types of knowledge have a more rigid requirement for keeping the forms consistent. An exemplified type is ritualist knowledge, which is this case of *fengshui*.

Knowledge is always underlying linguistic activities in that philosophers have long considered language as a theory of knowledge. Linguistic anthropologists study knowledge in

two major ways. There is a body of literature on the linguistic forms that indicate epistemic conditions of knowing and not knowing (Kärkkäinen 2007; Stivers et al 2011). The asymmetry of knowledge among people entails a scholarship on epistemic authority that affects the positioning of interlocutors (Fox 2001; Heritage and Raymond 2005; Lempert 2008). Another way to study knowledge in linguistic anthropology tends to emphasize on the commonly shared knowledge. Scholars analyze the everyday interactions under the language ideological frameworks (Irvine and Gal 2000; Keane 2007). Cultural concepts are shared knowledge in specific groups that underlies interactants' co-construction of interactional texts (Silverstein 2004). Cultural concepts or objects are linked and recontextualized across historical processes (Keane 2015). I approach the topic of knowledge by focusing on the intertextuality in social interactions that helps recontextualize the formulaic pieces of knowledge. The concept of intertextuality becomes increasingly favored in recent years' scholarly works (Bauman 2004; Gordon 2009). Tanner links this concept with her early work on repetition and recontextualization (Tanner 2006; 2007 [1996]). Drawing on this body of literature, I will analyze the recurrence of words and topics throughout the ritual that helps recontextualizing formulaic knowledge.

Early in the morning, I came with Uncle Rich and his son to their newly bought apartment in the county seat. He invited his son-in-law's father (I use "in-law" to label him) and the son-in-law to come with him. Uncle Rich's in-law, a large pomelo orchard owner, is his good friend in the village, whom he trusts and often seeks advice from. As I will show in the analysis, his in-law plays a significant role in the ritual, for he knows more about geomancy, and he is a closer acquaintance with the geomancer. We waited a while outside of the building, and then the geomancer, Mr. Zong, also arrived with a driver. After we stepped into the door and walked to

the living room, the geomancer said: “Beautiful! Wide Enough!” Uncle Rich smiled, clearly happy to hear that. People chatted in detail—the balcony, the price, the decoration. The geomancer then took out a coppery compass, covered with red silk, out of his black leather bag, and started to adjust it to detect the direction of the apartment. He commented: “the front door is so beautiful! The Qian (direction) door!” Uncle Rich’s in-law kept talking about how great the apartment was, while the geomancer directly asked to see the kitchen.

Selecting auspicious dates is a ritual that involves a lot of talking. A geomancer does not just pick up the time out of nothing. He asks many questions. He needs information feeding from the clients before he can make any decisions. The first step of selecting dates is to find out who takes charge in the household. That is, to find out the eligibility of birthdate. For a house, the auspicious time and direction are associated with the husband; while for the kitchen, these are associated with the wife. The wife is taking charge of the stove, so the installation of the stove is linked with the wife. Such linkage is what most residents there, especially the elder generations, are familiar with. This piece of knowledge is underlying the whole process of date selection without a doubt. Compared to Uncle Rich and his son, the geomancer seems to care more about the stove=wife formula in that he constantly brings back to this topic and tries to fix the problem. Once the geomancer stepped into the kitchen, he asked Uncle Rich a question about age:

		Hakka Transcript	Free English Translation
01	<i>Geom</i>	<i>gio se a?</i>	How old?
02	<i>UncleR</i>	<i>ngi sii ng</i>	25.
03	<i>Geom</i>	<i>ngi sii ng o?</i>	25 oh?
04	<i>UncleR</i>	<i>xim kiu han m tien tau o!</i>	(He) has not married a wife oh! [Smile]
05	<i>Geom</i>	<i>lai o. ngi sii m han ko yi.</i>	Son, oh. 25 is fine.

Table 9 Asking about age (Part 1).

The geomancer’s first question, “how old,” does not specify whom he is asking about. In Line 03, he repeats Uncle Rich’s answer with a questioning tone, which suggests that he comes to know that the apartment is not for the elder couple, but he guesses that Uncle Rich is referring to his daughter-in-law. It is until Uncle Rich adds that the one who is 25 has no wife when the geomancer realizes that Uncle Rich is talking about his son (see Line 05). For the geomancer, this is not an ideal setting: the wife is missing according to the formula. Then he looks for other ways to work it out by checking if Uncle Rich and his wife are the ones who live in the apartment:

	Hakka Transcript	Free English Translation	
01 Geom	<i>he va gab sud sang ngin, ngi siib ng se ngin.</i>	(It is) said that (you were) born in the Jia Xu (Year), 25 years old.	[look at the son]
02	<i>ng den ngin oi song loi zu ge mo, he sao ge?</i>	Do you [Plural] come up (to the county) to live here? Or Seldom?	[look at Uncle R]
03 UncleR	<i>he sao, ciu gi vi zu.</i>	Seldom. He takes charge.	
04 In-Law	<i>dong ian, i gi vi zu.</i>	Of course, he takes charge.	
05	<i>ng, ng, ng, se moi xiau gio se a?</i>	Your, your, your girl...how old is she?	[Turn to the son]
06 Son	<i>ngi sam</i>	23.	
07 Geom	<i>biang zi. hab ged</i>	The Bing Zi (Year). Matched.	

Table 10 Asking about age (Part 2).

The geomancer moves his questions from the son to Uncle Rich in Line 02. The son is working in a factory in a metropolitan four hours’ drive away, so the geomancer assumes that his parents would live there instead. In that case, he can take into account Uncle Rich’s wife as the wife in charge. Both Uncle Rich and his in-law deny it and point back to the son. The in-law repeats Uncle Rich’s words with an emphasis “of course.” He probably gets the idea that the

geomancer is trying to fix the problem of the single son, because he mentions that the son is dating a girlfriend. By directly asking about her age in Line 05, the in-law shifts focus from the elder couple to the son and his wife-to-be.

Note that in Line 01 and 07, the geomancer converts the age to the stem-and-branch calendar year (*ganzhi jinian*), a traditional way of reckoning time in sexagenary cycles (60 terms in a cycle). He converts the age of 25 to the Jia Xu Year, and 23 to the Bing Zi Year (as I charted below). The complicated stem-and-branch calendar is no longer used in people’s everyday life. It requires a fair amount of extra work to recite the calendar and transfer between the calendar and age. The geomancer’s quick response shows his expertise in converting between multiple calendars. Drawing from the stem-and-branch calendar, he will select the auspicious time for installing the stove.

Person	\longleftrightarrow	Age	\longleftrightarrow	Stem & Branch Calendar
Son		25		Jia Xu Year (甲戌)
His girl		23		Bing Zi Year (丙子)

Figure 37 Age and Stem-and-Branch Calendar

The geomancer then goes on asking where the girlfriend is from, and people chat for a while. He confirms with Uncle Rich that the two young people have not married (see Snippet 3, Line 01). This question is what he cares most in the following ritual:

		Hakka Transcript	Free English Translation
01	Geom	<i>ge m tien ngib mun ge ha?</i>	That (girl) has not (married) into the door, right?
02	UncleR	<i>m tien.</i>	Not yet.
03	Geom	<i>han m tien ngib mun han hi ng koi fo og.</i>	(She) has not (married) into the door. Then it is you [look at the son] who turns on the (stove) fire.

Table 11 Who turns on the Fire

If the girl is not part of the family, then the geomancer cannot calculate time according to her birthdate. He suggests that the son should turn on the stove fire, which contrasts with the common geomantic formula:

Object	Birthdate
House	the husband
Kitchen	the wife

Table 12 Geomancy Formula

So far, it seems that the geomancer has accepted the fact that the son has no wife yet, but later, as I show in the following analysis, he, again and again, comes back to the topic of marriage. He seems to be upset by the violation of the rules, i.e., matching the stove with the husband. There is an uncertainty that intrigues the geomancer: will the son marry the 23-year-old girl in the end? He is eager to get a confirmation and therefore he keeps asking questions to the son and Uncle Rich. Uncle Rich and his close family members know that his son has been dating with the girlfriend for a few months, which is not long enough for marriage to their point of view, but they did not say this to the geomancer. The son shows embarrassment whenever the geomancer asks him about his relationship with the girl. He either keeps silence or just walks away from people.

People follow the geomancer walking out of the kitchen. He takes a tour to see other rooms in the apartment. As he walks, he makes decisions bit by bit. “For 25-year-old people, (they) all turn on the (stove) fire at 10’o clock, “and he continues to pick up the ninth day of the ninth month in the Lunar Calendar. Step by step, he comes to the final decision of “four nines”:

	Hakka Transcript	Free English Translation
01 Geom	<i>si zag giu ciu koi fo.</i>	Four Nines. Turn on the fire.

02	In-Law	<i>giu ngiad cu giu, giu diam giu.</i>	The Ninth Month, the ninth day, nine o'clock, forty-fifth minutes.
03	Geom	<i>biang zi sang gin.</i>	(The girl was) born in the Bing Zi (Year).
04		<i>biang lug ia cai sii.</i>	For Bing , the auspicious (time) is also Si .
05		<i>ng gab sud sang gin ia he si si koi fo.</i>	You were born in the Jia Xu (Year). (You) also turn on the fire at the time of Si .
06		<i>tin ie, ciu an ni ciu zo ded o.</i>	Decided. This is good.

Table 13 Selecting Auspicious Time (Emphases added).

In Line 01, the geomancer changes his previous decision of 10'o clock to 09:45 in the morning. In Hakka area, people refer to the forty-fifth minute as the “ninth character.” In this way, the auspicious time makes up four nines, which is easy to remember and aesthetically beautiful. The in-law explains the four nines for Uncle Rich and his son—clearly, the in-law is more familiar with the geomantic procedure. In Lines 03 and 04, again, the geomancer brings up the girlfriend when he gives an explanation of why he chooses 09:45 A.M. as an auspicious time. This time falls in the category of Si (巳), a stem-and-branch clock equivalent to the two-hour block from 9 to 11 A.M. As I show in Chart 3, in this short snippet of conversation, the geomancer has made two indexical associations: 1) the son's age (25) to the time of Si (10'o clock falls in the category of Si); and 2) the girlfriend's stem-and-branch year (Bing) with the time of Si.



Figure 38 Selecting Auspicious Time

Now the problem seems solved. No matter who takes charge of the kitchen stove—the son or the wife-to-be, the auspicious time for turning on the stove fire is the same. What a coincidence!

The geomancer does not explain why the 25-year-old son should turn on the fire on 10'o clock. He uses the encompassing term “all” to indicate that the association between 25-year-old and 10'o clock is commonly adopted. Later he changes the time to 9:45 am and implies that as long as the time falls in the Si block, it would work. But the geomancer does give a quote to support the linkage between the girl's birthdate (Bing) and the auspicious time (Si). In Line 04, he says “For Bing, the auspicious (time) is also Si.” The quote is from a widely recited piece of knowledge for geomancy practitioners. The original text is “for Bing and Wu, the auspicious (time) is Si” (丙戌祿在巳). By this quote, he is making an indexical association between Bing and Si. Even though other people there, including Uncle Rich and his son, have no knowledge about this quote, they show no doubt or question to the geomancer's explanation. It is taken as a piece of professional knowledge.

Now that the geomancer has decided the date and time. He walks to the living room, ready to write an omen for Uncle Rich. He takes out a little red book (the geomancy sourcebook), a pen, and a piece of red paper, putting them on the tea table. People all gather around him. Before he records the auspicious time, he brings up the girlfriend, asking Uncle Rich to confirm with him again. From his question, people move to discuss what counts as an eligible marriage in general:

Free English Translation

-
- 01 Geom The girl now is for sure, right?
02 UncleR Well...

- 03 Geom Any possible change?
- 04 UncleR (They) haven't registered. Dare not to tell. [Smile]
- 05 Geom Then it doesn't **count**.
- 06 In the past, there was a saying— "Money is not paid yet; rice not calculated yet."
- 07 UncleR "Money is not paid yet; rice not calculated yet." [Both smile]
- 08 Geom It doesn't **count**.
- 09 UncleR Yes.
- 10 Geom Yes. It only **counts** when you light firecrackers.
- 11 Son-IL If (they) register, it is Okay, too.
- 12 In-Law After (she) comes into the door, (they) invite people to the (wedding) feast, and they have registered, it **counts**.
- 13 Geom Yes, it doesn't **count** if (they) haven't lit firecrackers.
- 14 Have (they) registered?
- 15 Nowadays, it is legal only when get registered.
- 16 To light firecrackers, that is the etiquette;
- 17 to get the marriage license, that is legal.

Table 14 Discussing Marriage. (Emphases added. For the Hakka transcript, see addendum.)

The snippet shows a highly poetic textual organization, co-constructed by four interlocutors. The geomancer repeats the word "count" (*suon* 算 or *suon su* 算数) to emphasize the eligibility of marriage. In the village, elder generations often consult a geomancer to calculate if their son and future daughter-in-law are matching for marriage. This geomancer, who has already commented on Uncle Rich's son and his girl as "matched" (see Snippet 2), shows continuous interest in the outcome of the two young people—will they get married? The question itself is beyond his profession, but the answer is linked to the eligibility of the wife in this house. The geomancer keeps coming back to the question, which indicates his anxiety about the missing

part in the formula of “kitchen stove=wife.” The geomancer is linking the uncertainty of the relation between the son and girlfriend to the uncertainty in the selection of auspicious time.

By repeatedly saying the word “count,” the geomancer keeps coming back to what he takes as the most urgent question in the ritual. The conversation, however, moves to a broader understanding of marriage. The son-in-law and in-law join in the discussion of what counts as an eligible marriage. People resonate each other’s words and agree upon two forms of marriage: one is the registration of marriage license, and the other is a wedding feast with firecrackers, as I show in the following chart:

	Eligibility of marriage	Form 1	Form 2
04	UncleR	Registered (登记)	
05	Geom	Count (算数)	
08	Geom	Count (算数)	
10	Geom	Counts (算数)	Firecrackers (纸爆)
11	Son-IL	Register (登记)	
12	In-Law	Counts (算)	(Wedding) feast (请酒)
13	Geom	Count (算)	Firecrackers (纸爆)
14		Legal (合法)	Registered (登记)
15		Registered (登记)	
16		Etiquette (合礼)	Firecrackers (纸爆)
17		Legal (合法)	License (结婚证)

Table 15 The poetic structure of Snippet 5.

This poetic textual organization shows that the geomancer and his clients have come to congruence on the validity of marriage. In the beginning, the clients emphasize the registration while the geomancer the firecrackers (which means the wedding feast). After Line 12, when the in-law includes both forms of marriage as evidence, that the geomancer concludes the topic by labeling the two forms as the legal and etiquette, respectively.

By repeating the words of “count” and “firecrackers,” the geomancer makes an indexical association between valid marriage and the legitimacy of the girl as the wife of the house, which further links to the eligibility of the auspicious time. There is a slippage from the validity of marriage to the validity of date selection. The underlying logic is that as long as the girl is officially married into this house, the auspicious date will be validated, as if there is a necessary, or natural, linkage between the girl’s birthdate and the auspicious time for kitchen stove (as in Chart 3). This logic is telling that the geomancer is not selecting the date subjectively, but he is the one who finds the objective relation between the birthdate and auspicious time.

In the whole process, Uncle Rich’s son had very few words, silently standing by the side. Uncle Rich answered most of the questions that the geomancer asked his son. The young man drove more than four hours from his workplace to the county-seat for participating in a ritual that he had no interest in. He did not initiate a topic (never in the first of a pair part); instead, he avoided most of the questions by keeping a distance from the geomancer, watching people outside of the kitchen. He probably would not imagine that the ritual turned out to be all about him and his girlfriend, a topic he even seldom talked about with his parents.

When the geomancer is writing the omen, he asks again about the girlfriend. This time, the son finally answers the questions himself, but apparently, he is not willing to answer them:

	Hakka Transcript	Free English Translation
01	Geom <i>ge gim ngiong ei oh? ng ge zag ngi siib sam se oi guan sii mo?</i>	What's the situation now? Your 23-year-old, is she going to take charge?
02	UncleR <i>m tien va. ho ho</i>	Not yet. Ho ho. [Smile]
03	Geom <i>sia ciu sia song hi, hau mo?</i>	Write (her name) down, OK?
04	Son <i>a?</i>	Ah?
05	Geom <i>ngi siib sam se a.</i>	The 23-year-old ah.
06	Son <i>ko i a.</i>	[Pause] OKay.
07	Geom <i>m me, ng gim iu sii gan hi den gi mo?</i>	No...Do you have time to register now?
08	Son <i>mo, mo am kuai.</i>	No, not so fast. [Walks away. Uncle Rich smiles.]
09	Geom <i>ciu mang oi guon ei.</i>	Then no need to care about that.

Uncle Rich, again, answers for his son in Line 02, but the geomancer keeps looking at the son directly and going on to another question. The son shows confusion about the questions. In response to the geomancer's suggestion, he pauses for a while and says "Okay" in a low voice. But the geomancer is not happy with the answer—after people's discussion of eligible marriage, now he has adopted a new standard: registration. This is no doubt an embarrassing question to the son, who quickly denies it and walks away to another room.

The ritual of selection dates is formulaic in some sense and flexible in another. It is formulaic in that the stove is supposed to link with the wife, and the birthday with auspicious time. But ritualist knowledge can be flexible when there is uncertainty. In this ethnographic case, the geomancer is upset about the missing of the wife in the formula. He repeatedly asks about the relationship between the son and his girlfriend to show and reinforce the ritualist linkages. The intertextuality of the topic of marriage throughout the ritual helps validate the auspicious time.

Before he left, the geomancer tried to comfort the son by explaining again that the auspicious time fit both. He suggested the son to get registered when they had time, and he added at last: "That, that is no big deal." But it was, I guess, a big deal to the geomancer who constantly revisits the topic of marriage and asks embarrassing questions to his young client.

Gamblers' Theories

Aunt Ju was an interesting neighbor who lived near S224 road in Xiaodu Village. She, a slight 60-year-old, was short and skinny, with a permanent tan. She kept doing farm work with bare feet in the village. Although she did farm work like this for decades, oftentimes the villagers teased her: "Don't stones hurt your feet? Doesn't the cement road burn your feet?" She had a loud voice, so even the people across the street could hear her curses. The two things she repeatedly cursed for years were her neighbors stealing money from her and the village head ruining part of her field when repairing riverbanks. Her husband was about ten years older than she was. After a stroke, he could only walk with a limp with his two hands curled before him. Their sons lived in Guangzhou all the year round. Aunt Ju became the backbone of the family who managed household affairs and made money. As one of the most hardworking daily laborers in the village, she went through many orchards and tea gardens and worked day in and day out. When evening came, she was the most hardworking gambler. As soon as she finished eating and taking a bath, she waited in Uncle Rich's mahjong room, watching other neighbors playing Three Card Brag (M. *zha jinhua*). People used to laugh at her: "Busy making money during the day, busy losing money at night. All done for nothing!" Most of the teasers were themselves gamblers or onlookers. The games that could be considered as "gambling" have long been a popular pastime in the countryside, especially during the night.

For the most part, the government deems gambling illegal, but people find grey areas in gambling-related laws, and thus subtly avoid legal risk. Still, gambling is far from an honorable hobby. People even borrowed words from mainstream discourse, describing it as "an ugly habit," but they never seemed to be bored with it. Common analyses of gambling addicts take on a critical and condescending voice, indicating that these gamblers have "wrongly" estimated the probability of luck, input and success, both out of dopamine and giving credence to marketing strategies (Mazur 2010). Such an analysis implies that gamblers could keep themselves more apart from gambling if they only realized the rules of gambling games and the "actual" probability. This kind of God's view overlooks the meaning of gambling itself as an intelligent activity that requires gamblers to consume their time and energy. Gamblers tend to analyze their abilities to understand, calculate and self-discipline, comparing theirs with other gamblers or their ideal types. Gambling is an intellectual activity that matters to gamblers. Even in those seemingly easy games where people simply lose themselves in repetitive movements, they retrospectively analyze their own behaviors and desire to win (Schüll 2012). I am particularly interested in how gamblers learned, shared and applied their theories of gambling, and how they connected themselves with many more invisible "dealers."

With reference to the attractiveness of gambling, both academics and their interlocutors share similar interests: "Gambling is his/her nature" (psychology); "the black sheep"; "greed for money"(morality); "playing with friends"(sociality). I more than once heard Sanxiang people sighing that planting and selling pomelos was "like gambling." It was an interesting analogy to show that they found similarities between the pomelo industry and gambling: estimations, observations, adjustments and dealing with or accepting force majeure factors. Fruit growers had a keen eye for weather and the market and tended to predict what would happen throughout the

year. Pomelo growers suffered from droughts and floods, but they continued farm work until the harvest season and started making preparation for the next year. As I wrote in Chapter Four, village people, in fact, had plenty of spare time, but they could not leave their orchards for a long time and thus had no choice but to kill time in the village. When night began to fall, after having their supper and taking a shower, some village people habitually went out of their houses to gather with neighbors such as in the courtyards, on the streets, or in mahjong rooms. Profits from growing pomelos was getting lower year by year, but there were few ways and means for seeking a livelihood. There were also few choices of pastimes. TV programs were not designed for rural residents. A majority of the middle-aged and senior people I knew were not interested in watching television, because TV dramas were about urban stories and TV shows were filled with celebrities of whom they had no knowledge. (Television stations didn't use Hakka except for Meizhou Station.) Many senior villagers disliked Mandarin TV programs. In the last couple of years during my fieldwork, National Radio and Television Administration requested that local radio and television stations drastically cut the usage of dialects. It was during this period when smartphones prevailed in the rural areas, and villagers began to watch or read videos or articles shared by others on the most popular social software, WeChat. Despite all this, there were those who failed to use smartphones or preferred to gossip face-to-face about people, farmlands, orchards, and the market. Gambling games allowed people to immerse themselves in a shared village space and brought them merriness and excitement.

The word "gambling" (M. *dubo*) is largely derogatory. What kinds of games are labeled as gambling and what kinds of games are deemed legal remain controversial. During collectivization, gambling of any kind was strictly prohibited. Once found gambling, people would be put into ideology education classes. After the Opening-up reforms in the 1980s, many

activities deemed as “traditions” came back to people’s life (Hsu 1988). Especially starting in the 1990s, gambling such as poker and mahjong had been growing in popularity (Steinmüller 2015; Osburg 2013). Whether these games were illegal depended on villagers and the police feeling each other out, and the answer to this question was ever-changing. “Crime of Gambling” generally refers to the behavior of gathering more than three people to engage in gambling and then betting a certain amount of money. There is no law that stipulates which games are legal, and that leaves much wiggle room for people to play within. There is a blurred boundary between legal and illegal games, and their differences rest with some "illegal" elements.

There were a few small shops which also served as mahjong parlors in Xiaodu, and Uncle Rich’s small shop was one of them. People could play other gambling games besides mahjong here. Mahjong was commonly played by four players and had been mocked as "the quintessence of China" by netizens. The game and its regional variants were widely played throughout China and have also become popular in Chinese diasporas (Oxford 1993). The same six or seven aged men always occupied the innermost room of Uncle Rich’s mahjong parlor. The room was so small that the onlookers had to be on their feet. These people quietly played mahjong for low stakes there. They often spent the night in the smoke-filled room. Uncle Rich’s living room, by contrast, was always noisy. It was a spacious place for two mahjong tables and a dozen chairs. Most people gathered at a table by the window where Three Card Brag was played. Three Card Brag was similar to Texas Hold 'em, but the former had simpler rules. The player who had the best hand and had not folded by the end of less than betting rounds could win all the money bet for the hand. Every night when I had dinner, I would hear motorcycles outside Uncle Rich’s house as the most active gamblers gathered in quick succession. They stood in the yard or sat on the courtyard walls, gossiping and waiting for other players. Uncle Rich turned on the light and

the fan in the living room and put the tables and chairs in order, and people began to file in while asking who wanted to play. At the very start, there were a far greater number of onlookers than players. Those who wanted to play began to egg the onlookers on to join the game. People loved to ask Aunt Ju to join, and she always looked on for a while. People said to her, "Come to play! You play every night!" She smiled and moved her chair forward a little. Sometimes she would continue to refuse to take part in the game and insist on just looking on. She and other three or four middle-aged women were regular players of Three Card Brag, and they often played using wages they had earned that day from temp work. Young married women played for a while occasionally and went home early. As I analyzed in Chapter 5, many women did temp work, and there was no need to turn over the cash they earned to their husbands. The several women who often played the card game held the purse strings in their houses, so their private money was relatively disposable. Aunt Ju sometimes lost money and would laugh at herself with others: "Today's work has been done for nothing!" Her self-mockery was bitter, but it was with perfect assurance, because it was the money she earned, and she could earn it back the next day.

Uncle Rich was also involved with a more secret gambling operation, which we almost never talked about. Fellow villagers came to his small shop every day. They did not buy things but just told Uncle Rich or Aunt Si a string of numbers. He or she would take notes on what they said. Uncle Rich left home on his motorcycle every Tuesday and Thursday night. Two hours later, he would come back. From his nervous look, I could guess that he was very sensitive about it. At first, the players who played Three Card Brag in the living room asked me if I knew what Uncle Rich did. I just smiled and said nothing. Without doubt, there were busybodies who directly talked about Uncle Rich handing in "buying numbers in the mountains" regardless of the embarrassment of others. "Buying numbers" referred to the Mark Six, a legal lottery in Hong

Kong, but banned in mainland China. "The mountains" they mentioned were somewhere deep in the Four Valleys. Four lineages had lived in the valleys, but now they almost all moved out.

There was a secret base for the banned Mark Six and another sort of gambling, Baodou. It was said that, on gambling nights, they sent a lookout person to the only road that went to the Four Valleys. For years afterwards, I never asked Uncle Rich where and how he dealt with the numbers. We both knew it was illegal, and we didn't talk openly. Interestingly, those fellow villagers who bought numbers were sneaky and underhand while I was there, but later, they did not hide from me and continued talking about numbers when I walked by. Some of them even asked me about my zodiac animal or invited me to analyze the "clues" to find out lucky numbers.

In Sanxiang Town, I was often asked about my zodiac animal. After I answered, people would immediately say the number of my age. If this was a more polite way to ask about age, then why they would say the number out anyway? The speed of their calculations surprised me. It was no easy thing, especially for beginners. "What's your zodiac animal?" The answer would be one of 12 animals, and each animal occurred once in a repeating twelve-year cycle. The guesser also judged the person's age from appearance. For example, the 50-year-old and the 62-year-old shared the same animal.

Aunt Mei was a frequent visitor of Uncle Rich's small shop and hardly ever did temp work. She played cards and gossiped during the day, then played Three Card Brag and bought numbers in the evening. Neighbors often enviously teased her, "You have such a good fate, you don't need to work." Once she left, they gossiped about her beautiful daughter who was a rich Beijing man's mistress and sent home enough money for her mother's gambling. Aunt Mei almost never missed buying numbers. She won several small prizes at odd times, but her investments were far larger than her income. When she bought numbers in front of the small

counter where Uncle Rich did accounts, she would say the Chinese zodiac animals: Pig, Dog, Ox, Sheep, Rooster...Uncle Cai or Aunt Si noted down a string of numbers instead and asked her once in a while for confirmation. One Tuesday afternoon, she read comics on the newspaper in front of the counter, a common strategy that the figure-buying people used to find clues. She saw me just getting off a bus at the door, and asked me, "Little Long, I'll buy you, okay?" I knew what she meant. I often ran across people in rural Meixian who asked to buy numbers based on my age. I told her my zodiac animal was Tiger, so she added my age to the string of numbers she chose.

The next morning, some people grouped around Uncle Rich's counter to discuss who won the prizes when I was on the point of going out. Uncle Rich was not that vigilant for the moment and said to me with a smile, "Little Long won a prize last night." People laughed. I asked if that meant Aunt Mei had won the prize, and he answered, "No, it was not your Tiger, but your Dragon." He was referring to the fact that my family name, Long, also means dragon, which is another one of the Zodiac animal signs. Uncle Rich paused a moment and said, "No, it was 43, so it was not a little Dragon, but an old Dragon." Everyone laughed. That was a joke played especially for those who were familiar with zodiac animals. He meant that a person who was about my age and whose zodiac animal was Dragon should be 31 years old. The lucky number the night before was 43, so he called it old Dragon. In my earlier stay in Sanxiang, when I had no knowledge of their theories of buying numbers, I asked people why they bought the numbers based on my zodiac animal. Most of them answered; because they met me that day; because I had not shown up for a long time; or because they just wanted to "try luck." It was a popular theory to add a number one came across recently, or a number (age) related to a person one had come across. The randomness of lotteries was just like the randomness of meeting

persons or things. Some people bought numbers from Uncle Rich by asking him to choose the numbers as he pleased. Others bought the same series of numbers for consecutive weeks. Yet others chose their numbers according to the choices of people in front of them.

Since 2000, the prevalence of buying numbers had made people use this skill in a more extensive and flexible manner. This skill has even been considered as a basic skill for those who kept buying numbers. These frequent number-buyers often used zodiac animals when communicating among themselves. For example, one would ask, "Are there any animals worth buying?" The other might answer, "I don't know. I bought Pig and Sheep." When Uncle Rich discussed the prize winners with neighbors, they would often use zodiac animals rather than numbers. But that was not really a secret coding. The middle aged and senior people in the village were used to converting Zodiac animals into numbers. Frequent number buyers could be more skillful at it, to the extent that other people may have connected this habit with the Mark Six lottery. Once I was with Sister Qun and her husband tending vegetables in their vegetable garden. Her husband talked about his uncle, but he only remembered his zodiac animal and had no knowledge of his age. "His Zodiac animal is Horse, how old is he?" he asked Sister Qun. She answered, "How would I know? I don't buy numbers." Her husband also didn't buy numbers, but it took him a little while to work out his uncle's age. Sister Qun connected this skill of number conversion with the habit of buying numbers. In saying so, she cleverly satirized those who loved buying numbers and effectively refused to answer the boring question her husband asked. Sister Qun was slow at working out the age represented by an animal. When she exchanged ages with me, or mentioned another's age, she tended to use the year of birth. Her younger friends in the village also used the year of birth, although some of them were born and brought up there. Sister Qun's satire on villagers who were fond of lotteries was not uncommon. Others who did

not buy numbers also laughed at people who were obsessed with buying numbers and said that these people were asking about Zodiac animals and calculating them all day long. The Zodiac system has classified people into twelve animals and connected people of different Zodiac animals together. The lottery fans calculated Zodiac and studied numbers all the time. They linked together what they had observed in daily life to find out the hidden clues. It was both a skill and an intellectual game in which people were actively exploring the world.

In Southern China, there was a popular theory of buying numbers, namely finding clues in the newspaper. This theory had appeared since the prevalence of the Mark Six lottery in mainland China (Bosco et al.2009). It was still popular during all these years when I conducted the fieldwork. In Meixian, people who bought numbers liked to analyze *Southern Rural Newspaper*, which was published by Guangdong Province Southern Press Group, a state-owned enterprise. Its target readers were rural residents, and it was published three times a week. Several copies of newspapers were available free of charge in each village. Since Uncle Rich's small shop was one of the places where neighbors gathered, the messenger always delivered a copy to him. On Tuesday mornings, those frequent number-buyers would take a leisurely walk around the front door of Uncle Rich's small shop, and ask around, "Has the messenger delivered the newspaper?" The messenger on his motorcycle often delivered two newspapers, namely the *Southern Rural Newspaper* and the *China Elders Newspaper*, but people were only interested in the former. As soon as they received the newspaper, they directly turned to page 14, which included the lottery and satirical cartoons. The lottery part announced the results of the legal lotteries, including sport lotteries and welfare lotteries, which were subordinated to the Ministry of Civil Affairs. What, I wondered, was the relation between these legal lotteries, cartoons, and

the Mark Six in Hong Kong? People said they had no idea. But they were interested in studying the satirical cartoons, mostly about family life, work, political corruption and fraud.

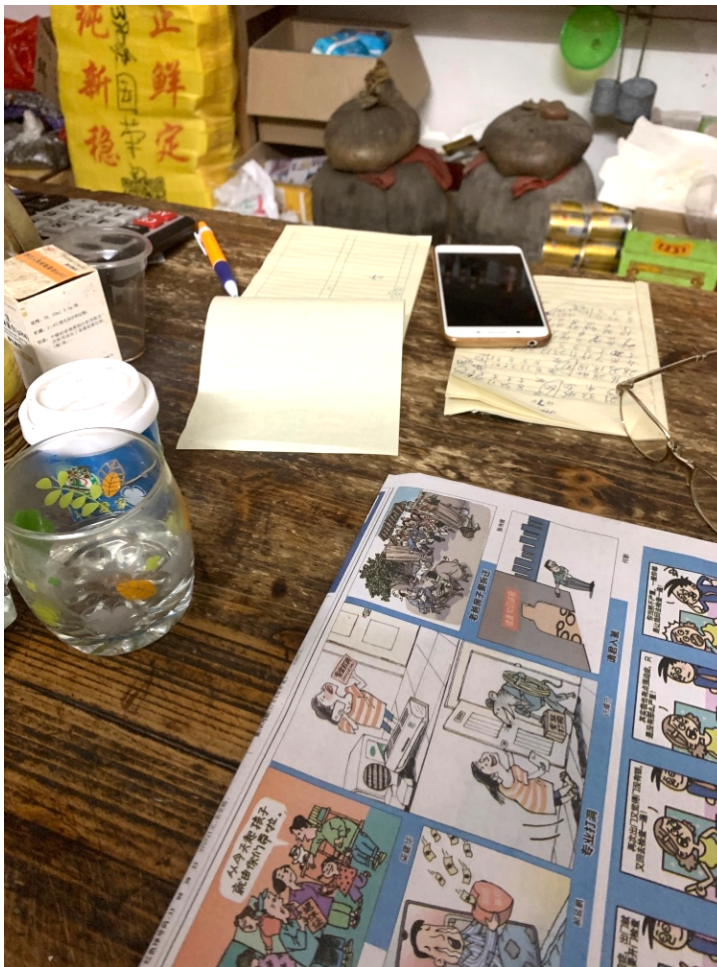


Figure 39 The satire cartoon in Southern Rural Newspaper on Uncle Rich's counter. The notebook was the one they used to record the numbers.

By the evening when it was time to buy numbers, some people gathered in Uncle Rich's living room and analyzed these cartoons to find the hidden numbers. People sometimes asked me with the newspaper in their hands, "Come here, tell us what you see?" I often pointed to the animal in the cartoon, "A rooster?" Hearing my answer, they grinned. I asked them what they had seen, but they just smiled. These neighbors gathered to analyze the cartoons and asked each

other, "What do you see?" It would be a strange question on other occasions, but in this case, it was like an exercise for those who bought numbers.

One time I asked Aunt Si why she looked for clues in these cartoons, for she was fond of examining them with a magnifying glass in her hand. She was surprised by my question, and asked me, "Then why are these cartoons placed under the lottery results?" It was a sharp question. Page 14 of the *Southern Rural Newspaper* was always filled with lotteries and cartoons, a weird combination. The upper half of page 14 followed the story of the lucky ones who won the jackpot, while its lower half warned people against advertisements for health products and door-to-door sales. Besides the strange juxtaposition of lotteries and cartoons, people also mentioned that the issuing dates of the *Southern Rural Newspaper*—every Tuesday, Thursday and Sunday—were identical with the open dates of the Mark Six in Hong Kong. It sounded like a conspiracy theory about the Mark Six, but I never heard people explaining who disclosed the information behind the newspaper and what the connection between the newspaper and the dealers was. Bosco et al.'s article mentions that there was rumor that the government intentionally disclosed information (2009). There are more theories about the conspiracy and marketing about legal lotteries that are supported by the government (Hull 2020).

I came across people who examined the cartoons of the *Southern Rural Newspaper* in other villages and Mei County seat. Some people betted in legal lotteries, while others invested in the Mark Six. Some people also included cartoons from other newspapers such as the *Yangcheng Evening News*, a government issued, Guangzhou-based newspaper. It was unlikely that the rumor was an inducement to people to play the lottery, for they would create other theories, even if there was no theory of finding clues in the newspaper. When they met strangers or encountered strange things, they shared their analyses with other buyers and wondered what

numbers all these phenomena stood for. It was a space for thinking, guessing, and communicating.

Gamblers' theories were just like other theories which allowed people to make mistakes, and sometimes to be successful. Uncle Liao Shunlai was completely infatuated with the *Southern Rural Newspaper*. As a senior member and one of the earliest leaders of the Sanxiang Poetry Club, Uncle Liao was a "cultural" person who gained respect in this area. I found a great number of his poems in *Rose Myrtle*, a publication of the poetry club. Two committee members of the poetry group, Uncle Liao Xiang and Uncle Zhong Tianchi, invited me to visit Uncle Liao Shunlai this morning. He was 91 years old and lived in the nearby Huangsha Village. Tall and thin, he was dressed in a white shirt and grey suit pants, with a strong voice. For him, the two committee members were his juniors. He excitedly introduced his friend's painting hanging on the wall and the poems inscribed on it. Later, he took out a poetry anthology and discussed the poems in it with his two poetry friends. He had an impressive memory and recited poems he had written long ago.

It seemed to be a typical gathering of poetry club members, but it was interrupted by Uncle Liao Shunlai's son who just went back home. His son was in his sixties, a doctor in the village's health center, and also a friend of the two committee members. He seemed unconcerned about protecting his father's "face" and began to complain that his father indulged in the Mark Six and studied buying numbers day and night. He criticized him for having squandered money on gambling. Uncle Liao Shunlai looked glum and responded to his son's complaints with silence. Suddenly, he got to his feet and went to his bedroom. His bedroom was a dark but spacious room, stacked with all kinds of books and paper. After a while, he came out with a bundle of newspapers in his hands and told us he had studied the Mark Six for several years and

proved that the lottery did disclose the numbers. We were sitting on the sofa, and he walked to the sofa and sat down. He opened a calendar full of numbers and turned to the latest open date of the Mark Six. He used a magnifying glass and read the winning numbers written on this calendar. He said, "For example, this figure, 22, could be found in the newspaper." He took out a copy of the *Southern Rural Newspaper*, turned to page 14, pointed to the dog in one of the cartoons and said, "Look, Dog stands for 22" He seemed to be referring to the fact that that year, people whose zodiac animal was Dog could be 22 years old. He then turned to another page and pointed at one character of the title of an article. He wrote the character on his palm with his finger while counting the strokes." There are 22 strokes," he said excitedly. After that, he also found the number 22 in other pages of the newspaper. His two poetry friends who had passionately discussed the poems with him smiled awkwardly and echoed, "Oh, oh, oh." His son kept on criticizing him and complained that he was getting mixed up in his old age and believed these unfounded things. They continued arguing about it until the doctor's wife asked us to have lunch.

After leaving Uncle Liao Shunlai's house, Uncle Liao Xiang and Uncle Zhong said that they had heard about Uncle Liao Shunlai's hobby. They felt sorry for their senior friend who was obsessed with the lottery, but they also found it amusing. They two did not play any lotteries , for they believed that only the "uneducated" were crazy about it. They thought it funny that these believers were finding clues about the Mark Six in the newspaper. "Those who believe it can always find out some clues," said Uncle Liao Xiang. "It doesn't matter. His son is a doctor. He has money," Uncle Zhong Tianchi added, smiling. I never thought a visit to this famous local poet would put me in an awkward position where I had to see him being brutally criticized by his son in front of the guests. Later, I heard that his son took charge of the family and was mad about

the money his father had squandered on gambling. Uncle Liao Shunlai talked about buying numbers with an enthusiasm that was even greater than his interest in poetry. The quantity of poems he wrote in the recent decade was declining and far less than the amount he wrote in the 1990s when he was the leader of the poetry club. He did not join the WeChat groups of the Sanxiang Poetry Club or of other poetry clubs. He was instead fully occupied in analyzing those newspapers, finding clues, exchanging them with other buyers and betting heavily.

Diligent and earnest, he did his own research without a break. He believed his theory, put it into practice and spent all his money on it. He was devoted to records and took pleasure in sharing. He was a responsible theorist. Buying numbers was defined as gambling and considered as a bad hobby by his family and some friends, but for Uncle Liao Shunlai it was an interesting intellectual activity. Buying numbers redefined his analyzing ability and re-positioned him as a different sort of intellectual person. In some sense, his puzzling about buying numbers was similar to his paying excessive attention to wording in writing poems. Perhaps he was more enthusiastic about the former. Both hobbies were considered rewarding. Writing poems brought him fame, while gambling might bring him fortunes. Uncle Liao Shunlai continued to think as he aged, which proved his existence and meanings. As a respected local intellectual, he was keen on gambling, something younger intellectuals cared nothing for. Such a contradiction also applied to his positioning in the family. His dignity as a master of the house gradually slipped away, so he tried to look for dignity in a field which he believed he could control. It was contradictory, because he tried so hard to prove his theories to his family, but only received questions and taunts. In the newspaper-stacked bedroom of his luxurious villa in the village, Uncle Liao Shunlai was quixotically brave enough to stick to beliefs that his family failed to understand.

Dealers and players expected all participants in their gambling operations to be qualified in mathematics and to be familiar with the gambling rules. They considered players who were unfamiliar with the rules or unable to calculate as extremely offensive; this exactly shows that gamblers deemed the games an intellectual activity that required thinking. When playing mahjong and cards, players were involved in a competition of abilities. Even in gambling games with no mutual competition, players sat in judgement over each other's ability. Baodou (Treasure Box) was a gambling game prevalent in Meixian. The rule was simply to bet on the direction of the dice with a pattern on it.

Baodou as a betting game between the players and the dealer was illegal on all occasions except funerals. The police turned a blind eye to playing Baodou at funerals. As soon as the dealers of Baodou heard of any funeral date, they would ask for the host family's permission to play this game. Those funeral hosts also wished it to be noisy and bustling. The dealers were locals who covered business in some villages and were familiar with the villagers. They would pay the funeral organizers some etiquette money for the meals. The organizers usually spent two or three days preparing for the funeral. Then the funeral lasted for two days. During this time, the host family provided meals for family members, workers and neighbors who gave a hand. The dealers would put a big round table in the courtyard where the funeral was held, and a flood of players and onlookers who lived nearby would gather there.



Figure 40 A crowd gathered at the funeral to see people playing Baodou, and the outermost onlookers had to stand on the stools.

Gamblers kept asking about news of funerals and would hurry to attend the latest one. Playing Baodou was common at a funeral, but people were a bit upset at those who cared about nothing but gambling, and would criticize them for arriving too early. Most friends and relatives would only play Baodou during the night of the funeral, when in any case they had to stay up on watch. Of course, like all other funeral attendees, the visitors who intended to play Baodou needed to take a bow in front of the portrait of the deceased, console the family members and give them some etiquette money. Although the police gave tacit consent to playing Baodou at the funeral, people kept a wary eye on strangers. At my appearance, some people, especially the dealers, would ask who knew me.

People took much higher bets on Baodou compared with other games. Baodou had prevailed in Hakka areas a long time ago. There was a place called Only Left Peak in Xiaodu, a flat ground on top of a mountain deep in the forest, which was also the residential area of the Zhang lineage. People said that an ancestor of the Zhang wallowed in playing Baodou and ended up losing all money, leaving only a bare mountain top. When playing Baodou at the funeral, people tended to bet with a 50 yuan or 100 yuan bill. The bills put on the table did not represent their actual bets. Players could fold the money in half once or fold it in half twice to stand for 50% or 25% of the denomination. Those who bet on the positive directions (up, down, left and right) and those who bet on the directions in the corners would win prize money of different proportions.

On the last night of Uncle Li Guoyuan's funeral, the courtyard of the Li ancestral hall was crowded. People played poker on three tables and played Baodou on one big, round table. It was about 9 p.m. when people finished with the main funeral rite, Dalianchi, presided over by Xianghua Buddhist monks and nuns. The Pond-head Li members spent the night on watch and waited for Chushifa, a ceremony where some representatives of the families and neighbors summarized the life of the deceased. Neighbors who wanted to play Baodou also stayed here. Several women of the Li lineage including Aunt Si were serving night snacks, "mouse rice noodle soup." The table of Baodou was surrounded by twenty or thirty villagers. They made noise and laughed loudly. Aunt Hong moved close to the table, too. Tall and strong, she stammered over the words and smiled fatuously all the time. She was in her forties and lived on the hillside behind Uncle Rich's house. Unlike her silent husband, she was always idling about the streets of the village. Everybody said she was "retarded" with a "broken brain" and laughed at her for taking a bus to saunter in the town, for paying vegetable dealers more money, for

wearing the same smelly clothes every day, for excitedly helping others with reaping even though they did not pay her. She was one of the few adults in the village who was as free as a child. That night, Aunt Hong joined the game of Baodou and bet a 20-yuan note on a direction. It turned out that she won the bet, and her victory was greeted with howls of laughter. An onlooker said banteringly to her, "You made some money, huh?" Aunt Hong heartily bet the money she made on the direction again. This time she was correct, too, but just like those who lost it, she also turned around and was about to leave. The dealer shouted at her, "Hey, take the money you just made!" Onlookers explained that she had "problems in her brain." Aunt Hong, happily, came back to take the money and flattened the creased notes. A dedicated female player who sat in the inner circle and who often played Three Card Brag in Uncle Rich's small shop kept a straight face and exclaimed, "She doesn't even know how to calculate (*suon*)!"

Her expression was grim, and she repeated what she just said. The dealer began to shake the dice box and then put it down, and the players handed their bills over and placed them around the dice box. Aunt Hong mumbled, clasped the notes and was slow to bet. The onlookers egged her on to bet and said, "You won the bet, you should continue!" "Are you afraid of losing?" Aunt Hong took out a 20-yuan bill and placed it beside the dice box. At this moment, a young man who had kept standing aside and hadn't bet for a long time followed suit and said, "Oh, let me just follow her. Perhaps fortune favors fools." People's expressions solidified for a few seconds, and they seemed to think about what the young man just said. They could change their directions or follow suit at this very moment, but nobody changed. The dealer opened the dice box, but Aunt Hong lost the bet this time. The onlookers laughed. The same female player who criticized her also lost the bet and repeated her point, "She doesn't know how to calculate!" After that, Aunt Hong bet twice and lost all her principal and rewards. She clapped, took a leisurely walk

with a smile and chose to be an onlooker. People chatted and laughed as before and paid no attention to her anymore.

This brief interlude at the funeral pushed people out of their comfort zones, challenging the habits they had formed around playing Baodou..The social image of Aunt Hong and her winning the bet twice in a row formed such a sharp contrast that people began to wonder if there was a pattern. Aunt Hong was no typical gambler. She likely had only vague ideas about how to play Baodou and appeared only to copy others' examples. The neighbors questioned her cognitive ability, just like they laughed at her knowing nothing about arithmetic, her shopping, her doing work and her being ignorant of suffering losses in daily life. She went out by bus every day, and people also criticized her for wasting money. I was later surprised to learn that Aunt Hong used her relative's senior bus card, which meant her bus trips were free. But people still believed that she wasted money by going around for nothing. Those who blamed Aunt Hong behind her back were mostly senior men. When they talked about how Aunt Hong failed to recognize the value of money, they often shook their heads and looked irritated. Aunt Hong could not make income but always threw money away, so her neighbors frowned upon her. Her mental disability and inability to earn discomfited the villagers. They knew that she had been born like this, but they could not help judging her, as if she had chosen to be like this.

When a person who could not count the money, such as Aunt Hong, still went gambling, people were amused, especially the onlookers who kicked up a fuss and ridiculed Aunt Hong as if they were watching a farce. However, Aunt Hong won the bets twice in succession, and that changed the situation and upset those who took gambling seriously, such as the dealer and that female player. It seemed that Aunt Hong playing the game offended them. The imbalance between perceived intelligence and luck upset people. The young man had the courage to follow

her bet. After doing this, he specially explained what he had done with the phrase, "fortune favors fools," which upset both the dealer and the players. The young man's statement was a cliché that conformed to the moral evaluation of calculating people. In Hakka, the word "calculating" (zing) is a frequently-used adjective that is both approving and disapproving. It can be used to describe human beings or even animals as smart. In Sanxiang, people were profuse in praising others, especially children and young people, as "calculating/smart." At the same time, people often criticized their peers and senior neighbors for being "calculating," and saved their greatest criticisms for individuals whose tricks were obvious, or easily discovered. For example, a neighbor had once spread the lie that his roosters had been raised in the countryside, when in fact he bought them just ten days ago. His lie was discovered, and he did not make it to sell the roosters. Neighbors commented on this and reached the conclusion that being calculating could produce bad results. In like manner, those who were not calculating ended up with a good result, because they were more prone to be trusted. But the young man extended this moral logic to "fortune favoring fools," and it became no longer a positive and educational thought but a negative understanding of gambling. The young man thus turned this originally interesting game into an absurd one. If someone who was unfamiliar with rules and did not "think" still was able to win, then it would seem unnecessary for "serious" players to spend so much time pondering and evaluating. Baodou was considered perfectly random, but players were absorbed before having a bet and often hesitated before putting the bet down. They analyzed the decisions they had made and referred to other players' choices. Following suit was their usual practice, and they particularly followed those who had won several bets because there had always been players who had a higher winning percentage. But after the young man followed Aunt Hong, there was a brief silence in the crowd, and no one else followed her.

The small disorder caused by Aunt Hong indicated that gamblers, though talking and laughing, were serious about this game. The female player's angry words, "she doesn't even know how to calculate," was her articulation of grievances, because she thought Aunt Hong broke the rules. Gamblers not only analyze their own but also evaluate others' cognitive abilities. This was a gauging of self and other, in both competitive and non-competitive gambling games.

Writing more than a decade ago, Bosco et al predicted in their essay on Chinese underground lotteries that the gambling fever would fade soon, as the investments defied the nation's new economic logic (2006). Even though the lottery today is not as thriving as in the 2000s, it has not yet vanished. I think Bosco et al were partly right, in that they indicated that rural residents viewed gambling as an investment that only "smart" men can do well. Whether this logic fits the new economy needs further discussion. Most rural residents viewed Rural Credit Cooperatives as institutions collecting deposits and subsidies unavailable for government cardholders. This type of bank card, inaccessible to online banking services, can't be used for online shopping or stock investment. Taobao, China's largest online shopping platform, is not even available to the massive number of rural residents, simply because they can only apply for Rural Credit Cooperative cards with a rural *hukou* (registered permanent residence). In the last two or three years of my field study, or the late 2010s, some rural residents who returned home after years of urban living began to sell pomelos on online stores, while some WeChat groups also set their bases in towns, villages, and country fairs. Most participants, however, were the younger generation proficient with smartphones. Those who had come through the collectivization era now lived in the countryside and had very limited disposable savings and investments, though many of them had made a living in big cities after the reforms. In my

opinion, Bosco et al should go one step further based on their initial finding that gambling was an investment, rather than stop to judge whether its logic fits a certain conclusion in economics.

Chapter End

There were limited investment projects and sources of entertainment available for rural residents amid the plentiful leisure time that farming afforded. Gambling games, legal or illegal, became a space for intellectual practices in the form of social contact. Gambling was not only economic and entertaining, but also a cognitive challenge embracing an active way of thinking to overcome boredom and meaninglessness. With little intention of over-romanticizing gambling and ignoring the potential harm and suffering of gambling addiction, I would like to add a touch of de-stigmatization to rural habitual/occasional small stakes gamblers, by highlighting that people are thinking individuals in gambling activities, both inside and outside the game. Thinking is so important, since it not only allows people to kill time and establish a connection with the world, but also defines subjectivity and positions interpersonal relationships in a crowd. The necessity of intellectual activity is not confined to specific occupations and classes. The pursuit of meaning and innovation is more of a universal human need. Most gambling games involve numbers, and this calls for pleasure in counting, calculating, and reasoning.

Aunt Hong appeared to be incomplete as an intellectual being, and that incompleteness rested not on her incompetence but on the fact that she was disallowed, discouraged, and discriminated against in many ways. Her ability to comprehend may have been somewhat limited, but the gap between this and an ideal status of normality was incalculable. When she bought vegetables at the town market, helped people at the rice harvest, or made a bet at the *baodou* gambling table, she was treated with ridicule and criticism. Whether she was incapable of or refused to fulfill the responsibilities expected of her as a rural woman—chores, farm work,

child-rearing—was also ambiguous in villagers' assessments. When she placed bets at the gambling table, people were surprised and amused by her behavior, something that was taken as normal for others. Her subsequent subtle actions that did not conform to the rules were again quickly interpreted by neighbors as her original status, believing that it was because she was incompetent. It was only the astonished question from the dealer, asking why she didn't take her winnings, that showed that the dealer didn't see her as an incompetent person at least before that moment. She was, until that moment, about the same as the other players in the dealer's eyes. Perhaps the question of whether Aunt Hong is an organic intellectual is like the question for any other individual. Maybe a better question to ask is at what moment are people no longer treated as competent intellectual beings? And, at what point is their intellectual ability encouraged, and at what point is it socially denied? Aunt Si, who associated manure with the spiritual power of the earth, used this theory to refute the choice of the geomancer. Uncle Rich's friend joined in urging his son to get a marriage license, thus helping the geomancer set the orientation of the stove. Aunt Mei persistently observed, communicated, and bought lottery tickets every week. Similar to her was the poet Uncle Liao Shunlai. All of them, whether considered "educated" or "uneducated," were competent intellectual beings who, through their own senses of self and their creative use of knowledge under specific social settings, had realized themselves as human individuals.

Chapter 7 Calculated Relationships

Chapter Tour

Earning Desired Selves

Networks of Temps

Grafting

Interesting Jobs

Timed Body

Reckoning of Labor

Give a Hand (ten siu)

Buying Husbands Cigarettes

Leave or Stay

Aunt Si came back home from the pomelo orchard, tired and sweaty, to find that Uncle Rich who stayed in his little store and watched TV for the whole morning was waiting for her to feed the pigs and cook lunch. She looked grumpy and kept murmuring: “I feed the chicken, I feed the pigs, I grow the rice, I grow the pomelos...Whatever needs me to do.” “You shouldn’t calculate (*suon*) in that way, I built the house, I opened the store, I purchased the pigs,” Uncle Rich argued in a loud voice that left her in silence. Similar complaints and arguments between my hosts often took place during my earlier days in Xiaodu. The next year when I returned to the village, as a network of temporary labor became more established in that rural area, Aunt Si had started frequently doing temp (or temporary) jobs for pomelo orchard owners. “Now your Aunt Si buys me cigarettes,” Uncle Rich once said with a wry smile, apparently as self-mockery, when he was occupying the counter of his little store that was losing business. Buying one’s husband

cigarettes was a conventional saying in this Hakka region that was used to tease those men who relied on their wives for a living.

Earning Desired Selves

Here I analyze this painstaking and costly transition of women gaining what they see as more desired selves by helping their neighbors with agricultural works for cash. The newly flourishing network of temp labor in this Hakka area forced rural women to explicitly reflect on their problematic taken-for-granted free domestic labor that feminist theorists and activists have likewise questioned. However, unaware of the theoretical nuances of these debates, they did so in their own words on their own terms. Village women have often been portrayed as diligent and strong for their taking charge of both family chores and heavy agri-food work. Associated with this image is a persona of being intellectually indecisive and socially submissive. Yet now this stereotypical opposition of Hakka femininity has evolved due to the emergent market needs of skilled workers, mostly middle-aged women, in the pomelo industry. Wives have continued taking over the family's physical labor, but they have gained social leverage after their agricultural labor has become marketable and monetized. The shift and risks in marital relationships that were brought by the labor market has also resulted from the conventional linkage between money and masculinity that would otherwise have remained unchallenged.

Deleuze in his article "What can a body do" ponders on the concept of body to understand that what people usually take as natural default is not some final symbolism, but is open to explication (Deleuze 1992). Butler in her conversation with a disability activist once cited Deleuze's discussion of the body in this article to liken disability studies to gender studies. Scholars in critical disability studies suggest that the discrimination and neglect of the atypical

body often derive from social definitions of desirable ableism (Campbell 2008). The idealization of particular body types creates a social control of unfavored shapes and behaviors. Along the same vein, gender stereotypes emerge through the normalization of favored personae so as to disadvantage the marked others. These discussions intersect with the current discussion in important and subtle ways. The marital property relations and gendered division of labor in this Hakka region entitled the husbands to be considered as desirable persona, with absolute authority over material and social resources. The wives, on the other hand, took over arduous physical work that was generally perceived as low-skilled, while their intellectual abilities—calculating, financing, managing—were often silenced, discouraged, and even paralyzed. The social consensus and the marriage system, resulted in the creation of unwanted selves, i.e., dependent subjects who were unable to freely dispose of their time, energy, and profit. However, the unequal status of women was contested and resisted when the temp market unlocked women's economic capacity and shifted the power relations between husbands and wives. By working for neighbors for cash, women temporarily gained more desired selves and had a stronger voice in determining their own actions. But they faced a heavy cost from deteriorating family relationships, increased social pressure, and especially not least, even threats to their safety and health.

Masculinity has been often tightly associated with money in China and some other areas; especially with the idea that earning money is considered a male duty and aspiration (Smith 2017) and that men who engage in irregular and non-traditional industries with meager incomes face increasing social pressure (Cook 2018). This places rural men in multiple hierarchical relationships. They, as compared to their urban counterparts, have been marginalized and subject to restrictions in employment paths and livelihoods. But in the family and rural domain, men

have been in more hierarchically powerful positions in relation to women. Rural men have struggled to continue past business practices and are reluctant to accept new temporary jobs, while simultaneously facing the monetization of their wives' labor. On the one hand, these low-income husbands have counted on their wives to earn cash; and on the other, the husbands have exerted greater social pressure on their earning wives and have even increased their control over their bodies and conduct. On the other, some husbands have cooperated with their wives or handed over control of their wealth to their wives, something that was taken as alternative masculinity in the village (Cook 2015). From my observations, women who crafted desired selves by earning money experienced exceptionally rough bargaining with their husbands to do so.

Women who gained independent purchasing power thus acquired property autonomy, as in the case of male selves, subverted from their embodied female selves. Traditionally women marrying into the village possess no ownership of property, and the profits from their labor for the family remain in the hands of their husbands. The patriarchal structure has made women a commodity on the marriage market (Rubin 1975; Freeman 2004) and has subjected women to complete dependence on men after marriage. The more abled self is not a self that hides its true intentions beneath the surface, but rather a self that emerges from practicing authority that is previously attributed to the husband, especially the authority to control the proceeds of one's labor. Judith Butler counters the essentialization of gender by noting that gender is constituted through the daily embodiment of social categories and norms (Butler 1990). This subversion of female self may not necessarily take place over a long time, but rather in the short term, or even in a moment. When a wife gives her husband her own money to buy something, it is a performative moment wherein she occupies a more authoritative position. It is the performativity

of gender stereotypes (Morris 1995) that makes the subversion of male/female typical selves so salient. The discourses of modernization and globalization have opened up the Chinese urban middle class to talk more publicly about desire (Rofel 2007), yet rural residents still have had limited avenues for public expression of this topic. The complaints among women and their quarrels with their husbands that I observed showed an awareness of this inequality and their desire for change through “narrating the self” (Ochs and Capps 1996). The newly gained desired self, of course, was not a constant or some kind of switch all at once, but emerged as a changing relationship that is entangled with the self, the body, and belonging (Wolputte 2004).

I now turn to analyze the redefinition of the female self in rural areas, with a particular focus on women's own reflections on their inability to take charge of their own labor income. Although the topic of free domestic labor has been widely addressed since the second feminist wave, these discourses have remained within the domain of scholars, activists, and urban middle-class. In rural Meixian, women became vocally explicit about the issue and even came into conflict with their husbands and male relatives because of the burgeoning pomelo industry and the increasingly well-established local labor networks in response to the labor shortage caused by the mass exodus of able-bodied male workers. Although the rising discourses among the women with whom I spoke have not directly challenged the presuppositions of men as more “cultural” subjects by default (Ortner 1972; Strathern 1980), they have questioned the husbands as more abled persons in earning and financing. It is the monetization of human labor that prompts people to redefine certain kinds of bodily effort as sources of capital and thus contest the legitimacy of the same domestic toil that is otherwise doubtlessly unpaid. Even though women gained more leverage in individual finance after working for fellow villagers, they inevitably contributed their earned wages to support their households and felt it was impossible to escape

excessive domestic obligations that are conventionally ascribed to them. Having turned their extra time and energy into family support, rural women still encountered escalating conflicts with husbands and accusations of being “lustful females (*siao ma*).” When marital conflicts escalate, women have limited means to escape from toxic relationships, for they face high financial risk and social stigmatization after the divorce (Alexy 2020).

This analysis of the emergent self-reflection on women’s abled selves thus exposes the limitation of the term “housework” as an analytical focus in feminist theorization of housework vs. wage work. While the growing labor market in rural Meixian provided women a chance to mull over the value of their labor, they showed less reflexivity on the routine taking care of the family, which was generally understood as “housework (*M. jiaowu*).” Rural women revealed the hidden exploitation by comparing their agricultural labor—such as pollination, pruning, bagging, pesticide delivery, harvesting, and all the practices they called “doing trivial things (*H. zo se*)”—for neighbors and families, respectively. It was the quantification of these identical tasks that made them sensitive to the unequal marital relationships. As for the narrowly defined housework, including cooking, cleaning, laundry and childcare, these jobs were mostly unaddressed in women's voicing out of gender disparity because these were still unmarketable in this region.

It has been a seminal move to point out that housework is human labor that deserves monetary equivalence and social appreciation (Federici 1974; Frazer 2013). Scholars have suggested that family is not a coherent unit, but a locus of interest conflicts (Hartmann 1981). The gender division of labor within a family underrates and undervalues women’s contribution not only in housework, but also in reproductive labor (Folbre 1982). As women increasingly engage in wage work, they gain leverage at home, but also prolong their working hours with both

wage work and household chores (Hochschild 2012 [1989]). Scholars and activists cast doubt on unpaid housework as obligations, and advocate to recognize women's physical and emotional labor in family management. The term "housework" is, however, restricted in its relevance to rural communities because of women's commitment to a broader range of labor that includes agricultural production. The alternative term "domestic labor" would cover agricultural work in rural households (Delphy 1984; Baxter and Hewit 2013), but this umbrella concept, as I analyze in the following, requires further detailed classification, for rural residents in Meixian largely undertake both self-sufficient production (wet rice, vegetables, poultry) and economic agri-food work (pomelo, tea, pigs). While these two types are understood as notably different in terms of value. The opposition between domestic and wage labor thus ignores the more nuanced indigenous categorization of labor. This chapter thereby zooms in on rural women's sense of self, which arises from their comparably distinct forms of the same economic agri-food labor: free labor for the household versus paid labor for village folks.

Female bodily movements are widely assumed to be more restrained, less powerful, and less willing to take risks (Young 1980). While in this rural Hakka region, women handled heavier farm work and stepped up to more dangerous and arduous tasks, such as climbing trees and carrying fruits. As I analyzed in the previous chapter, rural women's robust and valiant image failed to grant them a greater social privilege and authority. Rather, insofar as women took responsibility for all self-sufficient cultivation, cash crop planting, and animal husbandry, their strenuous physical labor in these productions were simultaneously taken for granted and deemed less skillful and therefore less valuable than the other tasks largely performed by men. The new monetization of manual labor subverted women's unwanted selves—a physically robust yet intellectually weak person—as the labor network brought about a redefinition of their body and

daily performance. Women gained growing sway over their intellect and social leverage, a more desired self, especially in agricultural investments, livestock decisions, labor hiring, purchases of valuables, and even in mortgages for their children's homes in the city.

A Network of Temps

The first time I saw Sister Red, it was a summer night in Aunt Feng's little shop front in the Yang House where some women went to dance at night. She dyed her hair red, which immediately reminded me of the word "red (M. *hong*)" in her name. She and several female friends were practicing the "plaza dance" (M. *guangchang Wu*), following online videos; while her husband, Brother Liang, drank beer and ate boiled peanuts with a few other men at a table next to them. Sister Red was enjoying the music and dances, laughing loudly and discussing the movements with others. Her dressing, temperament, and way of talking did not fit in this languid village, although she grew up here, in a house a few yards away from Aunt Feng's shop. She had a mysterious sense of fashion and bravery, in sharp contrast with the other villagers I knew, especially as most women cautiously managed their behaviors to guard endless gossip and judgements.

The next morning, I saw Sister Red again. It was in my best friend, Sister Qun's contracted pomelo orchard in a neighboring village. Sister Red and several women went to help the couple bag pomelos to protect them against the sun and rain. She looked different from the night before, wearing a green camouflage uniform, with a cigarette in her mouth. She swiftly climbed onto pomelo trees and bagged the fruit. Her skills and dedication showed that she had been doing it for years. I did not expect, at that moment, that in the following several years of my

visits and stay in Xiaodu, she would play an increasingly important role in the labor market in the village.

For quite a time, Uncle Rich was unhappy to see me hanging out with Sister Red. “Don’t get too close to her,” he said several times at the dinner table. When I asked him why, he could not give an exact reason and he often just said, “Don’t learn to be bad.” His fragmented words from time to time indicated what he was concerned, perhaps just at what many other villagers thought of her: she was divorced and remarried, her ex- and current husbands were gangsters in the county seat, she invited women to dance and sing karaoke, she smoked. At that time, Aunt Si also seemed to side with Uncle Rich, and considered Sister Red and several of her close female friends to be bad role models. Over the next several years, though, Aunt Si’s attitude moved further away from her husband’s, especially since she went to do temp work in Sister Red’s orchard many times.

I called her Sister Red as my best friend introduced her in that way, though I could tell she wasn’t young. She was in her early 50s and surrounded by a group of much younger female friends, many of whom also dyed their hair brown or yellow. Her dashing generosity and management skills gave her a rallying influence. I later learned that she was the eldest daughter of Uncle Chen Guoxuan, one of the first people I talked to after arriving in Xiaodu Village. People introduced me to this “cultural man,” a former town cadre who ran the cultural station and who broadcasted daily to the villages. In the 1990s, he transformed a large area of farmland into an orchard as a village enterprise. After his retirement, he was enthusiastic about the cultural business of his lineage and participated in the compilation of the Chen’s genealogy. The seriousness and prestige of Uncle Chen Guoxuan made me more intrigued by his daughter who had been away for years and returned to her maternal home with her husband, an unusual case in

the village. Upon her return to her home village, she and her two brothers managed two of the largest orchards in the village.

Sister Red had been back in the village for more than ten years by the time I met her . Very few daughters came back, but many sons or daughters-in-law returned after living in the city for some time. Almost every middle-aged person I met in the village had “returned” from some city. The word “return” (*zuon*) refers specifically to returning to one’s hometown. I once said that I would briefly leave and then *zuon* Xiaodu. Then A neighbor laughed and said to me, “You used the word *zuon*! You’ve made here your second hometown!” Those who had left and then moved back to Xiaodu often mentioned their trajectory in the city, although they condensed their experiences in factories or small businesses into brief summaries. The past experience of making a living in the city seemed quite apart and unconnected to their present life, but it left traces, just like the violet black marks on Sister Red’s eyebrows and eyelids. I noticed that she appeared to be wearing makeup whenever she went to dance or to do farm work. Sister Qun later told me that it was because Sister Red had gotten permanent eyebrow and eyeliner tattoos in the city, but she regretted it these days. This “permanent” makeup made her distinct from the other women in the village, because no one else wore makeup at all. As to whether Sister Red regretted her other experiences in the city, I don't know. She never felt like talking about it. Once during karaoke, I asked her how she spoke Cantonese so well. She said lightly, “I used to work in Guangzhou,” and changed the topic. The word “work” (*song ban*) refers to office work in general. Her and her husband’s old stories were considered legendary by others. Sister Red’s husband, Brother Liang, grew up in an affluent family in Mei County. When he was young and cynical, he joined a street gang. He fell in love with his big brother’s wife, Sister Red, and later married her. The big brother hurt him with a knife for this. Brother Liang used to brag about his

glorious past as a *guhuo zai* (“gangster,” Hong Kong classic gangster film) after he got drunk, but never mentioned his and Sister Red’s passionate stories from back then, at least to me.

Daughters who married out returned to their maternal home only after having ended their marital relationship. Sister Red was the only one who brought her husband and her husband’s brother, both non-local, back to Xiaodu, something that was considered very controversial. To help her husband’s brother, who was in debt from drug addiction, she took over her seriously ill brother’s large orchard in High-South Bamboo Valley, a village business founded by her father in the 1990s, which had since been contracted out by the family. Her husband, her husband’s brother, her father, her brothers—all the male family members heavily influenced her decision-making. By the last year I lived in Meixian, she had decided to stop dancing at Aunt Feng’s little shop and instead dance at her own house. She said she danced and slimmed down, but Brother Liang, who ate peanuts and drank beer on the side, was gaining a bigger belly. For the sake of his health, she did not go dancing. Brother Liang had been drinking more and more over these years. His favorite liquor also expanded from “foreign wine” (brandy) and beer that he bought from Meixian to the popular fruit wines in the village, such as plum wine. The couple summoned their friends for dinner at home almost every night, drinking and talking late into the night. Occasionally they would have a rooftop party. They built a shed on the roof of their small flat building and took up an old brown leather sofa, a glass coffee table, a wooden dining table, a few chairs, and a big stereo. Sister Red connected her tablet computer to the big stereo and blasted out music that could be heard for quite a distance. Five or six “sisters,” as they always called each other, would put on their pretty dresses—they definitely wore pants when they worked during the day—and would sit on the sofa chatting. Brother Liang would sit at the round table with his male friends, drinking beer and talking. The husbands of the sisters “couldn’t get along”

with them, except for the husband of one sister who would join their party. In Xiaodu, men sometimes gathered at their so-called brothers' houses for dinner and chatting late into the night. At those male-dominated gatherings I've attended, women were most often responsible for serving the food, making tea, and cleaning up the trash on the table. The men, on the other hand, told jokes in loud voices, urged people to drink, and smoked cigarettes. While at Sister Red and Brother Liang's party, the sisters' chattering voices were equally as loud, and they interspersed their conversations and jokes among themselves with the men. Sister Red's rooftop party allowed the sisters to relax more than a party in the dining room. The rooftop was wide and empty, and people could feel free to be close or far away from each other. From time to time, Sister Red stood up and danced to the music, also calling out others to join her: "Come, Baby (the nickname of the youngest sister), take a look at this dance video and let's learn it." The cheerful plaza dance music surrounded the roof, and the sound seemed to be swallowed up by the silence of the valley as soon as it rushed out of the shed. Their house sat in the middle of their orchard with no lights around it. The bright rooftop was like an isolated island in the midst of the endless darkness. As I watched my friends laughing and eating, and the cool mountain breeze blowing by, I suddenly had a sense of anachronism.

Just as Sister Red had demonstrated her rallying power at the party, her leadership extended to orchard management. A few years after her return, Meixian experienced a boom in pomelo cultivation, with increasing numbers of people jumping on the trend and transforming excess paddy fields into pomelo orchards. Meixian government had been supporting pomelo production, calling out the slogan to make Meixian the "Hometown of the Golden Pomelo." Those first orchards, built in the late 1990s and early 2000s, came into peak yield seven or eight years after the saplings were planted. Around 2010, the price of pomelo rose rapidly, especially

for the newly introduced “Triple Red” breed. When I first came to Xiaodu in 2012, the price of Triple Red pomelo was 3.5 yuan per *jin*. In 2019, the price had dropped to half of that figure. Rural Meixian witnessed an influx of residents into the pomelo industry. People were seeing fierce competition and complained that others were irrationally joining the bandwagon. Still, old growers continued to widen the areas they could yet exploit, and new growers readily leveled their long-deserted fields and hills. Many households didn’t grow enough rice to feed themselves. “It’s cheaper to buy rice,” villagers said. Excavators often drove through the village. Master Liao, an out-of-towner who drove the excavator, was always busy going into people’s fields to turn the barren, overgrown soil, or dig some pond mud for fertilizer. He also drove the excavator into the mountains to push down trees, bury shrubs and grass into the land, and create terraces for planting fruit trees. Ten years after they took over the pomelo orchard from Sister Red’s brother, Brother Liang and two other long-time friends, one of whom he met in Meixian, leased 300 *mu* (about 49 acres) of forest in Xiaodu Village and developed it into a pomelo orchard, located in Grace Valley. Sister Red was not listed as a shareholder, but she was actually one of the managers. The couple gradually formed a pattern of hiring helpers—relatives, friends, and neighbors. As they ran their two large pomelo orchards, they soon were among the leading employers of temps in the village.

Grafting

In Sister Red’s closest circle of sisters, she especially took care of Sister Qun, my best friend in Meixian, who was some fifteen years younger than her. Whenever Sister Red needed to hire people, she would ask for Sister Qun, for she needed money the most. I met Sister Qun on the first day I came to Xiaodu. She was in her early thirties, fit and strong, with short hair. Her eyes were like the crescent moon when she smiled, with neat, white teeth and a mole near her

lips. Uncle Li Guotai told her, the daughter-in-law of his deceased sister, to take me to interview a former guerrilla, even though I had not requested an interview with such a figure. She rode a giant motorcycle and sat her one-year-old son and six-year-old daughter in front of her. She moved forward and saved part of the seat behind her for me to sit on. No helmet, two adults and two kids on a motorcycle—it struck me as way beyond safe. But with many neighbors curiously watching, I stepped onto the motorcycle. She drove fast on the rough mountain road, and I held onto the bottom of her shirt and kept begging her to drive slower. She laughed loudly, “Can't make it move if I drive any slower!” Her boldness on the motorcycle was just like the character she showed afterwards. She was always the most talkative, loudest, and most competent one in the crowd. Perhaps it was this kind of courage that made her dare to leave Xiaodu Village after I ended my long-term fieldwork, eight years after we met. During those eight years, she ferried me numerous times on her motorcycle to people's houses or orchards, or to the old marketplace in the town. We often got together from time to time to chat, go to meet friends, or take her children to play.

People in the village said that Qun grew up as an orphan, raised by her aunt, and her family was poor. At the age of sixteen, she was brought to Guangdong Province from her hometown in Sichuan Province by an old villager who married into Xiaodu and she was introduced to Liao Da, the nephew of Uncle Li Tai. Liao Da was seventeen years older than her, and his parents had already passed away, leaving his home in shambles. Uncle Li Guotai said they liked Qun as soon as they saw her and thought she was smart and spirited. The senior relatives were satisfied with the bridal candidate, but Liao Da had been unable to make up his mind and had considered it for more than a month, letting Qun stay in the village and wait for a message. At the urging of Uncle Li Tai and others, Brother Liao Da finally agreed to keep her.

The next year, their first son was born. Sister Qun later told me that her father had not passed away but had gone to work in Fujian Province and started a new family there. She remembered the train ride from Sichuan took a long, long time. She seemed reluctant to talk about her encounter with Liao Da back then. It was an arranged encounter with a single direction of choice. This girl traveled for the first time, taking a train across the greater part of China to a strange village, to a strange man, to be his bride. People were only concerned with Liao Da's thoughts but assumed that this little girl had accepted this match long before her long journey began—at least, they assumed, her elders had agreed. I can hardly imagine what it was like for her to wait for more than a month in the village. All the villagers knew that she was a bridal candidate, living in the lineage's house not far from Liao Da's and waiting for a decision. After this decision, she either stayed and started a family or went back by train, whose travel expenses would be paid by the suitor that had rejected her. If Liao Da had not hesitated for an unusually long time—a hesitation that puzzled and even angered the elders who arranged the match—then this matchmaking might not seem so absurd. If Liao Da had immediately expressed his opinions, perhaps the matchmaking would have appeared a little more ordinary, as if both individuals had their eyes on each other. But Liao Da's refusal to take a stance made the inequality in this matchmaking so obvious and so uncomfortable. Uncle Li Tai kept urging Liao Da: "You can't make a young girl wait so long; it's not appropriate for her to live here; it will ruin her reputation to live here for a long time; people in the village are looking at us like we are a joke." They tried to maintain some basic etiquette and decency with the matchmaking, and the embarrassment they felt was indicative of the potential moral risks. On the whole such a matchmaking did not strike the other villagers as odd, but as soon as one of the steps went beyond conventions, people began to question the rationality of the whole thing.

Perhaps Liao Da's hesitation and the taken-for-granted acceptance from Sister Qun also foreshadowed the ending of their story. Since the match, Qun was cut off from her maternal family until the popularity of chatting software and smartphones arrived years later. I once asked Qun what she thought of her aunt, the person who raised her and consented to let her travel to Guangdong. She thought her aunt and other relatives were being kind to her, for they thought Guangdong was a rich province and that she could have a good life if married there. "But there are also poor places in Guangdong," Qun said with a laugh. More than a decade after she left home, these maternal relatives gradually grew important in her life again. These included her aunt, her father who still lived in Fujian, her cousins, and her half-brother whom she had never met. When her oldest son was already fourteen years old, she returned to her hometown for the first time, taking her children by train and sending "big red envelopes" to relatives she hadn't visited for a long time. The trip cost more than 10,000 yuan, quite an extraordinary sum for Xiaodu people. She explained that her relatives believed that she must be more affluent in Guangdong and thus she couldn't give any less money, otherwise they would see her as stingy. Since then, in our conversations, she often brought up her relatives, who had stayed in touch with her through WeChat. After years of marriage, she had become eager to be reunited with her maternal family members. The understanding she showed for her relatives who let her marry a stranger as a teenager, and her growing attachments to them as she reached middle age, made it difficult for me to see it as simply a "transaction," though the matchmaking was in many ways simply that. Without any possessions, she settled alone in the Liao lineage and had since taken on the task of housework and farming, as well as that of passing on the lineage surname. That matchmaking reminded me of the occasion when I watched Brother Liao Da graft a pomelo tree, a skill for which he was known to specialize in and that the other villagers sometimes invited

him to do for them. He cut a section of an unsprouted branch from a robust red pomelo tree and prepared it to be inserted into an old yellow pomelo tree as a rootstock. He used a knife to carve wedge-shaped notches in the cross-section of the branch and the rootstock so that the two would exactly fit together. Then he tied the two firmly with plastic wrap in loops to ensure they would not break easily. I asked him how he knew if the graft was successful. He said, if the branch sprouted new shoots, it should survive. Otherwise, he would have to cut it down and re-graft another one.

The Control of Energy

One evening, I heard that Sister Red was hiring friends to work on her pomelo orchard the next day, so I asked Sister Qun if she would be going, too. “I want to go, but I can’t. I have to work for my neighbor tomorrow.” Her answer intrigued me because I thought that working for Sister Red and for a neighbor should be the same. “Your Brother Liao Da doesn’t allow me to work for Sister Red because these days we are swapping (*M. jiao gong*) with our neighbor.” She then explained that the two families agreed to help each other by doing the same days of labor in exchange, as they often did in the past years. “Of course, I want to help Sister Red. I can get money if I help her. If I help my neighbor, I get nothing. All the money from selling pomelos belongs to Brother Da, not me.” The monetization of labor led to Sister Qun’s redefinition of her otherwise unquestioned obligated free labor for the sake of her family, without the reward of material or emotional gratitude. It was her friend, Sister Red’s payment to her for the same kind of labor which made her realize a camouflaged exploitation had existed for many years: working for a neighbor in exchange for help in her family’s orchard would not bring her personal income. Her husband felt it was hard to afford and was not willing to hire villagers in busy planting seasons, so he made a deal with their neighbors to trade off the couple’s labor, but more often, it

turned out to be his wife's labor. It remained taken for granted that a husband, because he was the owner of the house and land, had managerial authority in assigning work to family members, so much as that he owned his wife's labor.

By prioritizing swaps over paid labor, Brother Liao Da confined her to the family domain and exchanged her extra time and energy for his profit, without feeling the need to compensate her for her labor. It was this economic logic and the ethics of family-first altruism that left many rural women impoverished. They had extremely limited means to save money independently and therefore relied on their husbands to pay for their essential and sporadic needs. Being married into the village for more than eighteen years at that time, Sister Qun had almost no individual savings. "Brother Da holds the money tightly in his hands," she said. Her husband collected all the earnings from selling pomelos, honey, tea, pigs, fish, and ducks that they co-planted or raised. In an example I will expand upon in a later section, he also forced her to take out of her meager income for children's tuition and clothes. At a particularly difficult time, Sister Qun's aunt in her hometown secretly sent her 3,000 yuan and asked her not to tell her husband. This is especially surprising given women's maternal relatives seldom provided support to married out female family members. The vibrant rural labor network in recent years instead empowered women who maximized their physical labor to work in addition to their obliged domestic tasks. Sister Qun was grateful that Sister Red always invited her to work in her orchards, hoping to help her build her personal savings. Sometimes she would rather work for Sister Red than working for her husband, especially after they quarreled or fought over trivial things. Still, she chose family work first when there was a time conflict, under Brother Da's pressure and her sense of responsibility.

Until two or three years before she left, villagers would often evaluate Sister Qun positively: she was smart and could speak Hakka in three months—“people couldn’t tell she wasn’t Hakka;” she was hard-working, skillful, and strong, and could carry a hundred pounds of fertilizer by herself; she got along with her family and neighbors; she “knew how to give birth to sons.” Though during that same time, her relationship with Liao Da became terribly strained. I later recalled that the roots of these tensions had become knotted from much earlier and was somewhat related to her friendship with Sister Red. That summer, Qun's youngest son had already started kindergarten. “Plaza dancing” suddenly began to be popular in Xiaodu, that is, groups of people dancing together in the open air, even though this hobby had been trendy in urban areas for more than a decade. When Sister Red went to Aunt Feng's store to dance at night, she always called on Sister Qun. Liao Da frequently expressed his outrage at Qun's dancing and fought with her on several occasions.

Sister Qun had grown her hair long and dyed it brown by then. She would put on nice clothes, sometimes a dress, and, around eight o'clock in the evening she would ride her motorcycle to Aunt Feng's little store. When she passed by Uncle Rich's house as she often did, she would stop by and ask me if I would like to go along. Uncle Rich and Aunt Si got mad at Qun sister for dancing, too, and once pronounced judgment upon her at dinner. They repeated their points of view: plaza dancing was a hobby for urban people, urban people had free time, but rural people had to do farm work, they were tired from working during the day, and they shouldn't dance at night anymore. I heard these comments from other neighbors too—both men and women. I thought that plaza dancing was like playing mahjong/poker and chatting over tea, common evening pastimes for people in Xiaodu, but villagers saw dancing as different and physically strenuous. One said, “How can I have the energy to work the next day if I dance?”

The exercise of dancing was considered to take away physical energy that should be used in proper places. It was unruly and indulgent, a matter out of place. Women's role as the primary laborers for farmwork, housework, and caregiving should limit the amount of energy they spend on self-entertainment. Dancing differed from other pastimes also in that the sport was highly gendered. Making movements in public that clearly demonstrated their femininity—hip twisting, head tossing, spinning, and leg lifting—was considered frivolous and sexually suggestive. Uncle Rich would occasionally yell, “Who's she dancing for?” At the few plaza dance gatherings in Xiaodu, the dancers were all women and girls, while many of the onlookers were male neighbors, smoking cigarettes and chatting. Uncle Rich stood in the shoes of his maternal nephew, as if he was embarrassed on his behalf.

During the hour or so when Qun was out dancing, her three children would be watching TV and playing in the living room. Brother Liao Da was not interested in those TV entertainment programs. He always sat on a small stool in the courtyard outside the living room and sang mountain ballads to his online friends on WeChat, with his phone on high volume. The slow Hakka mountain ballads and the fast-paced Mandarin from TV blended into an odd auditory experience. “Who else listens to mountain ballads these days?” Sister Qun couldn't stand to hear the sound drifting in the courtyard. “He's only in his fifties, why does he act like an old man?” When she heard Liao Da playing the ballads, she felt there was a “generation gap” with him. Even some senior people in the village laughed at Liao Da's passion for mountain ballads and thought it was obsolete. Qun wanted to escape from those boring evenings with nothing to talk about with him. After she finished washing the dishes and bathing the children, Liao Da always prevented her from leaving the house. He even threatened to lock her out of the house if she insisted on going. The two large heavy wooden doors were installed by Liao Da when he built

the house himself. The doors became the boundary of their relationship in his words, as if when Sister Qun was out of the house, he would lose control of her. At one point when their quarreling eased somewhat, Liao Da once lamented over tea, "It's impossible to tie someone to you." But later, he became even more susceptible, always calling to check if Sister Qun was at home or Flat Pond where their own orchard and fishpond were located.

It was also from that year that Sister Qun began to go more frequently to Sister Red's orchard to do farm work, together with a few other sisters. She worked hard, moving from her own orchard to other people's orchards, and dancing from time to time at night. For a while I felt that she was just consuming energy to capture that brief moment of self and to earn the labor fee that she could put in her pocket. As she saw it, any energy that was drained actually resulted from her regular and inescapable commitment to her family—caring for her three children, growing rice, pomelo and tea, and raising pigs, ducks, and fish. Yet beyond these tasks, she still had no autonomy over the rest of her energy expenditures. She was expected to use her extra hours to swap with her neighbors in exchange for free help, or to reserve her strength and stay at home at night. It was when friends like Sister Red who offered her jobs that ran counter to her husband's expectations that made her clearly aware that the effort she was putting into her family was free and endless. This shift in interpretations was accompanied by increasingly frequent arguments between them. Sister Qun started to articulate her demands for arranging and retaining the value of her labor, as well as her dissatisfaction with her husband's arbitrariness over the family's property. I wondered what finally made her determined to leave, whether it was their disputes over money, the mountain ballads echoing in the courtyard, or the rows of teeth marks that Liao Da left on her shoulder. After they both began to reckon with the changing nature of their relationship, what was previously taken-for-granted was no longer the same.

“Diligent Hakka Women”

Pride in Hakka Culture was displayed everywhere in Meixian. In the last two decades, the Meixian government devoted itself to promoting the Hakka Culture and invested a great deal of funds to brand themselves as a tourist city. I saw sculptures and posters showing Hakka folk culture with images of women at work, often accompanied by the words “diligent Hakka women.” Such stereotypes prevailed in Hakka museums, folklore parks, decorative paintings in hotels, and in books and articles on Hakka Culture. “Diligent” seemed to be a commonly used praise, but the “diligent Hakka woman” was often juxtaposed with other Hakka elements, including Hakka food, clothing, their migratory past, and farming traditions. Some articles even cited missionary books from the early twentieth century that referred to the industriousness of Hakka women. This association of the word “diligent,” a generic adjective for human personality, with these cultural symbols created throughout history suggested that certain behavioral traits were, in fact, essentialized and highly gendered.

People in the village also occasionally mentioned the diligent Hakka women in their conversations, especially in reference to rural women doing heavy agricultural work. Unlike the gender division of labor in some other rural areas of China, such as the neighboring Chaoshan region, women in the Hakka region were the main bearers of heavy agricultural work. At a dinner table—while doing fieldwork, I would somehow attend various meals, many of which filled with “men’s talk” —a Meixian man and a man from Hunan Province talked about the difference in the gender division of labor in the rural areas of their respective hometowns. The former said with pride, “Hakka women do all the housework and farm work. Men don't need to work, so that means we Hakka men are the real men.” The atmosphere froze because of this

embarrassing joke. The Hunan guest said, “Don't say that. It's said as if we Hunan men are not real men.” Everyone in the room laughed.

Aunt Si and Uncle Rich's squabble over household work, as I recalled at the beginning of the chapter, was a moment of reflection on responsibilities and rights: Aunt Si enumerated her excessive work and complained about the inequality between them, while Uncle Rich answered her with a simple reason that he owned all the living and production materials. Aunt Si's moral critique hardly competed with Uncle Rich's economic reasoning. It was not until sometime later, when she earned steady income from her labor, and meanwhile, Uncle Rich's business slumped due to his fiery temper and the burgeoning online shopping, that then Uncle Rich started to share some light work. Having been drinking cheap wine for a long time, Uncle Rich became too frail to handle heavy work. Whereas his wife, who was ten years younger, still took charge of most of the household work and production.

Gender division of labor was conspicuous in this rural area, for there was no great variety of available livelihoods in agriculture and arboriculture. As I showed in Chapter 5, villagers mostly engaged in the same kinds of production: planting wet rice, pomelo, and vegetables, as well as raising poultry. Women in their 30s to 60s were the major labor force for all these activities, while their husbands participated in selective means of livelihood or particular phases of the production.

Villagers used the word “*zo se*” (*zo*=do, *se*=small, trivial) to denote all kinds of farm work, including planting crops and raising animals. As the character *se* showed, people's daily agricultural production was mostly fragmented, spontaneous, and miscellaneous, unless it was the busy season. Women were supposed to commit themselves to “do trivial things” or “doing smallness” for the family. They were responsible for not only housework at home, but also self-

consumed and marketable produce. Villagers in this region all engaged in multiple means of livelihood, so they in fact spent a substantial time in doing smallness. Thus, women were always occupied with various agricultural activities, one after another, patched together and crammed into their daytimes. But precisely as the word *zo se* implied, these practices were underrated as trivial and simple. Women's industrious labor provided food and a major source of income for the whole household, but it was belittled without appreciation.

The underlying notion behind gender division of labor was that men should do business rather than do trivial things, especially self-sustaining cultivation. Doing business (*zo sang ngi*) was particularly valued by people of this Hakka region, a convention that they often traced back to imperial times when it was the prevailing practice for men to go out to seek business down the Mei River to Chaoshan coastal area or even to South and Southeast Asia. The arable land for wet-rice cultivation was scarce in this mountainous area, insufficient to support households. Since the 1990s, many men went to urban areas to "find money" (*zao qien*), leaving wives and children to keep the ancestral land and houses. Those who stayed in or returned to the village looked for a means of livelihood that could bring them monetary income, especially quick cash. They took over non-agricultural occupations in the village: bricklayers, decorators, electricians, cooks, butchers, excavator drivers, pharmacists, shopkeepers, etc.

As for those men who did not secure a steady occupation, they tended to find temporary jobs while at the same time participating in certain kinds of agricultural works that involved going out for business. In this mountainous area, wet-rice, and vegetables were only for family consumption, not for the market, so it was no doubt the wives' responsibility to cultivate them. Instead, their husbands oversaw economic production: pomelos, pigs, honey, fish, or ox. In late imperial times and the Republican era, male villagers in this rural area engaged in spur and

fir tree planting, which was halted after the socialist movement in the 1950s. In the 1990s, the Mei County government promoted building pomelo orchards. At that time pomelo planting became the major source of income in Xiaodu. Women were still the primary laborers who took care of the economic crops and animals. Everyday cultivation and feeding were understood as doing smallness, and therefore women's responsibility. Whereas the husbands tended to focus on the transactions: buying seedlings, negotiating with middlemen, signing sales contracts, looking for boars, weighing and selling pigs, etc. As I analyzed in Chapter 5, while women were the major physical labor in agricultural production, men performed authority by talking—assigning work to hired village fellows, negotiating price with purchasers, chit-chatting about the market with neighbors. Men's communicative labor in these transaction scenes was highly valued, to the extent that the fact that they spent much less actual time working seemed to be more important than women's long-term of doing smallness.

Gender division of labor was not merely a preferred choice, or no choice, of occupations, but also a differentiation in lifestyles. To fulfill the conventional obligations, women needed to squeeze every bit of time and energy into doing smallness. This is what Aunt Si did in a typical day: In the early morning, she got up and fed pigs and chicken. They did not have a habit of having breakfast. She then went to work in the pomelo orchard, either for her own family's or others', or in her wet-rice paddies. Before noon, she fed the pigs, chickens, and dogs. Then she came back home to cook lunch. After washing the dishes, she took a rest before she went to do her afternoon labors. Around dusk, she fed the pigs, chickens, and dogs, watered the vegetables, and then came back home to cook dinner. Afterwards she washed dishes, cleaned the room, and boiled water for guests who might come to play mahjong or poker. Some point during the night, she might use the washing machine to wash clothes and then hang the laundry on the roof. Her

only leisure time was in the evening when there were no or very few guests and she might watch TV on the bed at night for about two hours. After the guests left, she cleaned the floors, took some notes of the store business, and went to sleep. Meanwhile, Uncle Rich spent his days entirely at home or in his little shop, watching TV or videos on his phone. Since Aunt Si went to do labor on a fixed basis, he sometimes took over the tasks of animal feeding and cooking lunch.

During my stay with them, Aunt Si was always on the move, and often outside home. Most of the times when I came back to Uncle Rich's house during the day, he would tell me that "Your Aunt Si went out to *zo se*." The same was true for the other middle-aged women that I knew in the village. Different from a "housewife" figure who spent most of the time within the house, female villagers extended their footprints to the rice paddies, vegetable gardens, pomelo orchards, and chicken coops, some of which were located far away from home. As a contrast, I found male villagers spending a considerable time at their own or neighbors' houses. People usually kept the front doors ajar when there was at least one person at home, so that neighbors could just knock and step in. During the day and night, it was men who sat around the tea table, drinking and chatting for hours. The male homeowner should serve guests by constantly boiling water, steeping tea, and pouring tea into their tiny teacups whenever they had just sipped. It was called kung fu tea and required a great deal of attention and movements. Small talk was a significant social space for women, too. But they mostly found time to chat after a half-day's work, when they just returned from the orchards, or after they had finished supper and taken a shower. Unlike men who sat down inside and drank tea, women liked to gather around the yards, sitting on the cement dwarf walls or simply standing. Their chats were usually short, as they needed to go home to cook meals or do the laundry.

For those men whose occupations did not require working on a daily basis, even when there was a lull with no tasks or clients, they generally continued to stand by and let their wives do smallness. The gendered distinctions in occupations even extended to people's practices in agricultural production where women largely undertook the heavier and more strenuous tasks. As I analyzed in Chapter 5, when people cooperated in busy seasons for tasks such as pollination, bag covering, and harvest, it was women who climbed onto pomelo tresses and who carried pomelos with a yoke back and forth between the orchards and the flat ground where men negotiated price.

The sharp gender division of labor in this rural area severely limited women's options of education, occupations, income, and lifestyles. Adult women were confined within their own households, keeping the fire in the stoves, the floors cleaned, and the food cultivated. The notion that men were better at doing business and skilled jobs went so far as to restrict young women from higher education and professional training. Wet-rice, vegetable, pomelo, and poultry provided stable income to sustain households. These familial resources of farmland, forest, and houses became workplaces for rural women, but also something that trapped them in ceaselessly doing trivial things, in doing smallness.

Interesting Jobs

At dinner that day, Aunt Si asked me as usual, "What are you doing tomorrow?" I told her I planned to watch the fertilization in a pomelo orchard. I said, "Let's go to work together." In her usual persuasive tone, she said, "What we do is more interesting." By "go to work (*song ban*)," she meant the regularized temp job, doing cleaning on the highway, she and a dozen other villagers, mostly women, had recently found. The next evening, these neighbors had finished highway temp work and returned to the village. A neighbor who had gone to work with Aunt Si

named Sister Gui Xiang stopped by Uncle Rich's store to chat and invited me to go to work with them. "Let's go to plant grass. Very interesting, oh!" I had seen her excited look often on the faces of other women working as temp laborers. Since the 2010s, an increasingly rich network of temp labor opened up more possibilities for rural people, especially women, to try new and interesting forms of work.

Working for one's own family is not always joyful. Betty Friedan in her classic book *The Feminine Mystique* shows that the fashion of being a housewife in post-war America led to an increasing rate of depression among women who chose to stay at home (Friedan 2001 [1963]). While the term "housewife" does not readily apply to rural Chinese women who engage in both housekeeping and agricultural production, they are likewise confined to familial domains and hardly have their own choice of occupations. Even though women in my field site were versatile in multiple means of production, the farm labors with which they were occupied were mostly repetitive, year after year.

David Graeber in his thought-provoking research (Graeber 2018) criticizes that contemporary large scale hierarchical organizations have created a considerable number of jobs that their practitioners deem as meaningless. These jobs mostly gather in large companies or institutions in urban areas. While farm works' values seemed to be explicit, for people's effort directly generates concrete produce for self-consumption or sales, yet rural residents may similarly feel bored, unmotivated, and exhausted by hard labor. Women, obligated to undertake onerous tasks and deprived of sharing in the monetary profits, challenged this heavy labor by considering it a boring burden.

Familial paddies and orchards were the workplaces for couples, an extension from their private homes to public spaces. Wet-rice paddies and vegetable land were mostly located in flat

and open areas, the so-called “village-face,” near people’s houses. When people worked in the paddies, they were readily seen by village fellows passing by. Whereas pomelo orchards and other production sites were in mountain valleys, far from residential clusters and neighbors’ watch. These enclosed places became replicas of home spaces, covert, away from witnesses. Couples brought their own way of interacting from home to these exclusive workplaces. The tension at home and the unequal relationships in family work may even make the sites dangerous to women. One Saturday morning, Sister Qun took her two kids to Uncle Rich’s house to find me. We planned to take the kids to a park in the Goose-Lake Town seat. Half of her face was swollen, her mouth bruised, and her gums were marked with blood. The evening before, she was beaten by her husband when they were working in their pigsty. Their pigsty was built in Yellow-Mud Valley, a quiet corner that almost no others would pass by, on the way to their pomelo orchard and fishpond. She said, “I felt tired, so I sat on my motorcycle. Suddenly, he slapped my face hard. My whole self was dumbstruck. After a while, I finally came back to myself. I just lifted the yoke by my side and smashed it onto his arm.” I was appalled by this incident. “Maybe he was angry to see me taking a break,” She guessed, but she did not want to ask him, either. During the whole event, they said nothing. She thought that Brother Da was displeased that she went to the pigsty after she finished a half-day’s temp in Sister Red’s orchard. He was always opposed to her doing labor for others. Sister Qun had drained herself by working back-to-back in multiple places, the familial and others’ properties. After she fought back with a yoke, she quickly rode away on her motorcycle and left the pigsty, where she later refused to go for some time.

I observed the ways some couples worked together in their pomelo orchards—they often walked into different paths, far away from each other. Most of the time, they did not talk to each

other, just focused on the tasks at hand. Otherwise, couples often split days and did not go to the orchard at the same time. These same orchards, however, would immediately become cheerful places once they were open to hired village fellows. Even farm work that people would do for their families on a daily basis was enlivened by the presence of their neighbors. This network of temp labor allowed people to try jobs they were unfamiliar with or had never even done before. I was amazed at the ability of these women to quickly adapt to a new job. As intellectual individuals, people often showed a sense of excitement about new things.

One day, after a couple of invitations from my Aunt Si, I finally followed her to work on the highway. At seven o'clock in the morning, Master Yang, a highway project manager living in Xiaodu for a while, drove a big, green truck to pick up fifteen villagers, thirteen of them women, from three villages. After he parked the truck next to a bridge over the highway, we took a long walk up a hill to a steep slope, barren and devoid of vegetation. Their task was to plant grass seeds on this exposed hill left over from the construction of the highway. The group joked and laughed as they carried small buckets down from the hilltop and spread the grass seeds on the slope. After that they pulled a huge piece of plastic film together to cover the hillside. They finished the job before it rained. On the return trip, they met another highway cleaning truck. Their fellow villagers were watering the green belt in the middle of the highway. The driver honked to greet them, while Aunt Si and her co-workers laughed at them: They were watering in the rain! Then there was more laughter and teasing.

Aunt Si joined this highway maintenance work relatively late. Several of her female neighbors had already participated for more than half a year. Uncle Rich never agreed to let her go because the job involved up to twenty days a month, during which time, Uncle Rich had to take on some of the work that Aunt Si was supposed to do, such as preparing the food for

cooking and feeding the pigs once at noon. Aunt Si still took care of most of the housework and farm work, by piling it up at 6:00 in the morning and after work at 5:00 in the evening. Unlike Uncle Rich, who looked tired while sitting in the store all day, drinking wine and watching TikTok videos, Aunt Si was always occupied, whether she was at the highway work or not: on days when she was not at work, she often went to do temp in her neighbors' orchards. Her enthusiasm for going to work on the highway was always evident in her face and in the pleasant discussions she had with her neighbors who worked with her. She never talked to Uncle Rich about her work, and Uncle Rich didn't care to listen. She kept telling me that her work was “interesting.” Later, I often recalled the time when she and her co-workers stood at the top of that barren hill, looking across the forest and over the wide-open valley, chatting about the delightful view, the harmful effects of eucalyptus trees, and the cows in the distant terraces. At that time, she was away from home for a while, trying new things with her friends, and it made her sparkle with joy. Except that we did not realize—or perhaps did but ignored—the dangers hidden behind the hillside from the cars speeding along the highway, a risk borne by these rural women in search of their aesthetic, intellectual selves.

Timed Body

Clock time played a progressively significant role in agrarian life, too. This was due to not only the increasingly intertwined relationship between the urban and rural, but also villagers' needs to coordinate farming activities with other fellows. As I have analyzed in Chapter 5, rural residents often used clock time to match their observation of agricultural phenomena, such as the optimal time to pollinate pomelo flowers. Clock time may provide a rubric, though not accurate, for capturing the ever changing “time of nature.” Yet in Xiaodu and its adjacent region, what

foregrounds clock time in villagers' daily life was an emerging convention of timing: the fixed work timetable for doing temp or "small labor" (*zo siao gung*). This newly established labor time made people meticulous about their schedules in agricultural and even other practices.

Not long after I came to do fieldwork in this Hakka area, I noticed that people read clocks in a different way. They told time by giving the numbers of the hour hand and minute hand on a clock plate. For instance, "two o'clock five (*liang diam m*)" referred to "2:25" rather than "2:05" or "2:50." This way of telling time often confused me, because I had to convert the minute hand number to minutes, that is, to multiply the number with five, until I finally became familiar with the conversion. Once I learned this way, I got used to translating time by visualizing the image of a clock with its hour hand and minute hand. Villagers themselves were practicing this kind of translation, too, just in a more proficient manner. When they looked at the four digits of time, either 12-hour or 24-hour format) displayed on phones or electronic clocks, they still spelled out the clock format: four o'clock eight, eight o'clock six, etc. When the time was between one and two o'clock, people omitted the number "one" and just say "clock four" and so on. Reading the clock had so deeply framed people's sense of time that they used the clock format to denote a period of time, such as hours and minutes. "How long before lunch?" "One piece of clock (*i zag zung*=1 hour). "When will the work be finished?" "Still three pieces of characters (*sam zag sii*=15 minutes)." Character, or *sii* (M. *zi*), referred to the minute hand numbers—one character meant 5 minutes.¹⁸

As the emergence and establishment of the new temp work network in this rural area, villagers relied more and more on clock time to grasp temporalities. Working for neighbors and village fellows had a long history dating back to imperial times, such as long/short labor (Cohen

¹⁸ People in the Pearl River Delta of Guangdong Province also used a similar way of telling time.

2005) and swap labor. The recently established work time became the rigid requirement for and the evaluation by which the majority of villagers arranged their daily life. Since the 2010s, villagers gradually established the fixed work time for hiring labor in agricultural and arboricultural sites, in a similar manner to that of factory workers. Work time was standardized as follows:

7 A.M., people gathered in the work site

10 A.M. or so, a short break, employers were supposed to bring snacks such as biscuits, bread, candy, or buns

11 A.M., the end of morning temp work. People went home to have lunch and take a nap. (Employers only provided lunch in a few of the heaviest jobs)

1 P.M., the beginning of afternoon temp work

4 P.M. or so, a short break with snacks

5 P.M., the end of afternoon labor. Suppers were never included unless the employees were hired from other towns or counties, which was a rare case

This schedule was strictly kept for all agricultural activities: pruning, pollinating, spreading pesticide, fertilizing, fruitlet selection, bagging, harvesting, carrying fruit, and even other works—exploiting a new orchard, getting rid of weeds, making a concrete road in the orchard, or building a house. The fixed work time became a protocol unnecessary to explain before hiring. As I elaborate in the following sections, employers simply ask their lineage members, neighbors, and friends to help, without telling them the gathering time and payment. In Chapter 5, I show how villagers sometimes reflected on the conflict between fixed work time and the time of nature. Climate and non-human beings had their own temporalities, which were much more flexible and spontaneous than a fixed work time. Even so, people just followed the

schedule and arranged their lives accordingly—when to have meals, take a bath, pick up (grand-)children, play mahjong, and of course, do housework and agricultural works for their own family.

Different from piecework, the local rural labor was monetized and measured by the time of input. Orchard owners calculated people's wages based on how many half-days they spent, rather than the amount of work output, such as the number of trees they pollinated, fruitlets they have covered, or the weight of harvest. In the section “Painful Counts” of Chapter 5, I show that people, both owners and those who come to help, would count their effort in terms of their bodily movements. People often judged and compared each other's competence and achievement in the same unit of time. But people who were more capable would not be better paid; instead, they earned a greater chance to be hired. This evaluation method made people focus mostly on their working duration. To strictly follow the fixed schedule was not only conventionalized and habitual, but also ethically demanding for both the hosts and workers .

Quitting time—11 A.M. and 5 P.M.—often turned out to be an intricate and implicative moment. Hiring orchard owners mostly wished to stick to the last moment, while hired villagers hoped to finish no later than the promised time—a little ahead of time was more favorable, as a bonus. Unlike most urban workplaces where time was clearly presented with a hyperbolized clock, villagers worked in orchards deep into mountains and no one was wearing a watch. When they felt that it drew near the time, they frequently took phones out of their pockets and reported it to each other. “What time is it?” “Ten o'clock nine (10:45). Almost done.” Time information and the mood of clock-watchers were contagious among hired villagers. More often people scattered among trees across the orchard. They looked around and observed others—if other people started to pack their water bottles, coats, and snacks, they would follow. Those who

worked near the employers usually obtained the first signal of quitting time confirmation and they brought the news by walking down the hills or yelling up the mountain top. Sometimes employers seemed to have forgotten the time, villagers delivered the hints by loudly summarizing their job: “Almost enough for the morning;” or “Still need to continue in the afternoon/tomorrow.” Senior workers tended to make their voices heard and sometimes they declared to finish work themselves when orchard owners did not yet: “Come and go! Good to eat lunch, oh!” People just kept spending extra labor on this kind of tacit and troublesome communication of time.

Reckoning of Labor

At noon on one November day, the two-day pomelo picking in the High-South orchard was over. Three relatives who had just participated in the pomelo picking gathered in the living room of Sister Red's house to rest for a while, sitting lazily on the sofa and chatting, with the fan blowing. Brother Liang sat by the window, holding a pen and a notebook, writing something. He looked up and asked, “Did Shrimp come yesterday afternoon?” Shrimp was the nickname of a female neighbor. “She came,” Sister Red said, “she came yesterday morning, too.”

This year, they harvested more than 100,000 *jin* (1 pound=0.9 *jin*) of pomelo and hired more than 20 people to pick it. At the end of picking, Brother Liang recorded the workers for reference to pay them money. Their conversation showed that it was difficult to keep an accurate record of the people without timely confirmation with Sister Red and other close relatives who also helped supervise the work. Some people only showed up for part of the harvest, and this added to the complexity of keeping track. Not long after, on the year-end accounting day, Brother Liang, Sister Red and the other partners of the Grace Valley orchard gathered in Meixian

to verify the accounts together. I saw the accounts that Liang was responsible for. It was a thin notebook that densely recorded the expenses from 2014 to 2018, including every time they hired people to do small jobs. In these tables, copied below, he recorded temp work from April to September 2018.

The image shows two pages of a handwritten ledger for the year 2018. The pages are titled '2018年人工' (2018 Labor) and '2018年人工' (2018 Labor). The ledger is organized into columns for dates, names, and various activities. The activities are listed in the rightmost column and include: 摘果 (fruit picking), 捉虫 (insect removal), 选果 (fruit selection), 套袋 (bagging), 摘瓜 (pomelo picking), 除草 (weeding), 吊柚 (pomelo hanging), 开晒 (sun-drying), 摘柚 (pomelo picking), 吊柚 (pomelo hanging), and 开晒 (sun-drying). The entries are marked with triangles (Δ) and circles (○) to indicate work time. The bottom of each page has a total sum: 692 on the left page and 2851 on the right page. The notebook pages are from 'Xin Feng Zhi Pin Bannu23'.

Figure 41 Brother Liang’s notebook for recording temp jobs in one of their pomelo orchards

Brother Liang kept the identical way of logging throughout the years. He listed people's names in the first row, wrote the date of the work in the leftmost column, and specified the content of the work in the rightmost column, including bud picking, insect removal, fruit selection, bagging, pomelo picking, weeding, etc. The way he recorded the work, i.e., using triangles and circles to represent the work time, was similar to how people calculated labor points in the collectivization era. In Chapters 3 and 4 I discussed that after the production team was established as the “primary accounting unit,” the effort and earnings of the team members

were measured in terms of labor points. The scorekeeper recorded the daily work of the team members and published it every day, so members could discuss and dispute it. In Meixian, what I learned was that the scorekeepers used a triangle to represent half a workday and a circle to represent one whole workday. The method was adopted even after the labor points system had ended. I had seen this method of recording labor in other people's handwritten logs, such as the labor spent to repair the lineage's ancestral hall. Brother Liang never documented labor points during the collectivization period, but he too followed this approach during my time in the field. Despite the historical implication of the use of these graphics, the network of temporary workers of today was quite distinct from the collective labor back then.

Compared to Sister Red who devoted considerable labor to communicative tasks, Liang was the one in charge of keeping the books. He would take his account book to reckon the revenue and expenses with the other two partners. This record-keeping and auditing practices gave him the authority, symbolizing that he was the manager, the overseer and the decision-maker. In a similar vein, Uncle Rich kept a record of the income for his little store for more than twenty years since he opened it in 1998. But for the daily sales of some items, it was often Aunt Si, if she happened to be by the cashier, that took temporary notes. Uncle Rich was the one who examined and summarized in his formal notebook tally.

In Brother Liang's notebook of the orchard's laborers, he never put his own name on it, for he was the partner, not a small laborer, whereas Sister Red's name was always the first one in every row of the record. She was directly involved in all the projects in the orchard over the years, except for technical work such as driving a tractor. Every time when they needed to hire people, she would also work in the orchard with others, filling the required time. Brother Liang may go to the orchard with her, but not for doing temp work. Only during major production

activities, including bagging and fruit picking, did he put in long hours to carry out the work. Most of the time, Brother Liang handled driving the neighbors and transporting the fertilizer to the orchard. This was the proposal that Brother Liang and Sister Red discussed and brought up to their business partners, i.e., he owned the shares and started to receive dividends once the company was able to make a profit, while Sister Red would be working as a small laborer to earn some daily income for the family. A pomelo orchard was a large investment, and it would take at least five years for the trees to grow and stabilize their yield before they could be profitable. Sister Red's timely cash income was like a salary that the couple withdrew in advance. While this was a practical plan for them to alleviate the cash pressure on the family, it also put Sister Red in the position of underling, failing to appreciate her substantial extra contribution. She was in fact the manager of the orchard, as was Brother Liang, and she was involved in all the orchard management projects throughout, a fact that the other two partners also recognized. She and Brother Liang worked together to purchase fertilizer, select, and cultivate seedlings, hire non-local experts to shape the branches, arrange for the construction of concrete roads, build the “over-hill dragon,” i.e., the transportation tracks, and engage in quarterly and annual accounting meetings.

And on top of that, Sister Red undertook the task of contacting and arranging neighbors and friends to carry out the daily labor in the orchard, not an easy task at all, especially at a time of severe labor shortage in the village due to the massive population exodus. As I will continue to analyze next, hiring people requires a wide and solid network of connections (*guanxi*). As in Liang's logbook, the people who regularly worked in the orchard were female friends of Sister Red. In this rural area, women were the main labor for agricultural work, so Sister Red was somewhat more convenient as a labor manager than her husband. This gender division was

motivated not only by Sister Red's social preference, but also by a consideration of avoiding suspicions from the strict public opinion in the village. Some agricultural work, such as spraying pesticides and weeding, was often carried out by Sister Red and two or three female friends heading out to the orchards deep in the mountains together. The unfairness of Sister Red being paid as a small laborer was that she actually devoted as much managerial labor as any other partners. Besides, she spent a lot of additional time and energy to foster her circle of friends, both for her own socializing needs and for maintaining her work circle with personal connections.

Give a Hand (*ten siu*)

In Sanxiang, orchard owners mostly invited relatives, neighbors, and friends to do temp jobs, so they adopted a range of linguistic techniques, including euphemisms and omissions, to weaken the distancing and power differentials that emerged from their ad hoc employment relationships. People continued to interact with each other outside of the workplace, especially those regular employers who paid extra emotional labor to maintain friendly relationships and downplay the awkwardness of monetary transactions. Most of this emotional labor was performed by women on both sides of the employment relationship. While this was extra labor, women also benefited in some ways from the social network they built through doing temp work, allowing them to actively foster their connections outside of their families and justifiably spend more time socializing.

One night, Sister Red, Brother Liang, and a group of friends gathered at Brother Min's house for dinner. They had decided to harvest pomelo at the High-South Bamboo Valley orchard the next day. Half a month before that, a merchant from Hunan Province signed a contract with them to purchase pomelo and set a time frame for picking pomelo. The final harvest time will be

determined by the farmers according to the weather and ripening conditions. We drank and chatted for a while, after the meal was almost finished. Sister Red started to arrange the manpower for picking pomelos and instructed a few friends at the table to come the next day. She lit a cigarette, took out her cell phone, and started looking through her contacts. She began by calling her neighbors. “Shrimp, free tomorrow? Come help (*ten siu*, “give a hand”) picking pomelo! Okay, that's it, uh.” In the most concise way possible, she scheduled a helper. Then having called her neighbors and a few of her best female friends, she asked those at the table, “Who else? Oh, Sister Liao Xin.” She continued making a bunch of phone calls, pausing sometimes to count how many helpers she had secured, and kept asking, “Who else?” People at the table gave her some ideas. “Oh, A-Hai.” She recalled a young man from the adjacent village, a person whose main business was banquet catering and who did not do temp work, but he would occasionally follow his friends to their house for dinner. She called and asked A-Hai to come give a hand in picking pomelo. She listened to the other side for a few seconds and said, “Aiya, come *ten siu*! At least come to drive the transfer cart!” The cart she was talking about was a gasoline-powered crawler cart they bought to transfer the piles of pomelo under the trees to the open area where they were collected, one of the lightest tasks. “If not, just come and take a look, it's also good.” The orchard owners often asked relatives and close friends to help organize tasks on busy days. After convincing A-Hai, Sister Red rang a friend nicknamed “Boss” who had long been doing fruit business in an urban area and happened to be back in his hometown, and she also asked him to come over to operate the transfer cart or just take a look. Adding her close relatives, she figured there were twenty-five or so helpers and thought that was about enough.

Sister Red consistently employed the word *ten siu* for hiring people to do temp work, a popular expression in this region. For her closer friends—some of whom grew less pomelo at

home—she convinced them to postpone their own farm work: “Pick your pomelos one day later,” “Just come *ten siu* for one afternoon, okay?” Despite her use of euphemisms, her tone was persuasive, especially when talking to her younger female friends. She also asked her friends to bring their friends and neighbors along: “Anyone else? You call them together to come *ten siu*.”

Sister Red already figured out what kind of tasks to assign to these people before she made the phone calls. She did not mention the time, meeting place, and wages for doing temp work in these calls, for all these details were already known to them. In the previous sections, I analyzed the fixed time of temp work formed in the Sanxiang area, regardless of the type of labor. The meeting place was at the entrance to the orchard, as people all knew. What required her additional planning was how those who lived beyond walking distance and without transportation would reach the orchard. She usually suggested people to carpool or motorcycle-pool. Later that night, I received a WeChat message from Sister Red, telling me to wait in front of Uncle Rich's house, and that Sister Qun or Sister Pang would take me with them when they passed by on their motorcycles. Brother Liu Liang and Sister Red would also take a few people on the way to the orchard in their pickup truck. As for the payment, it was a fixed rate—picking pomelo was 150 yuan a day, which included lunch. At that time, there was established a standardized wage rate in Sanxiang, differentiated by the technical complexity and the intensity of the work. This was:

110 yuan for bagging pomelos

120 yuan for pollinations, pesticides, fertilization, weeding

130 yuan for pruning, fruit selection, house construction

150 yuan for picking pomelos, carrying pomelos

The fixed price saved people the embarrassment of asking for their salaries, but it also blocked people from bargaining and from changes in the market. Even for rare jobs for which recruits were unsure of the pay, employers did not mention the wage when they were hiring. On several occasions, I was in a tea plantation or a mountain villa, I heard people working there whispering in the absence of the employer and asking if anyone knew the wage—"I don't know;" "One hundred and twenty, at least." They just made guesses. This deliberate avoidance of direct talk about wages shows the embarrassment people felt as monetized labor changes neighborhood relations. It was similar to the use of the euphemism *ten siu*, for in other contexts, *ten siu* more often meant unpaid help. Talking about money contradicts the intention to moralize about helping.

Sister Red's managerial talents were on such full display at this table-side pomelo picking arrangement. I had never seen a male dominant dinner where people would patiently listen to a woman making more than a dozen phone calls and help her think of candidates. She was looking for hiring as many people as possible to quickly pick, load and transport 100,000 pounds or so of pomelos to the barn. Picked pomelos lost moisture and were prone to go bad, so if the harvest took a long time, it would affect the selling income. At that time, villagers were also all busy with harvesting their own crops, so it was very difficult to hire helpers.

The harvest was the most spectacular group effort of the year. Sister Red's social circle was almost fully present. First promised were her two brothers and sisters-in-law with their adult children. Her father, Uncle Chen Guoxuan, who was in his eighties and had just had heart surgery, showed up to supervise the entire process. Sister Red gave priority to inviting neighbors, i.e., people from the same production team or neighboring production teams, mainly women, who could easily reach the orchard in High South Bamboo Valley. She did not forget to ask

several women she usually hired. Friends who were close to Sister Red felt the need to go to Sister Red's orchard to give her a hand. Sister Qun was often restricted by Brother Liao Da from helping Sister Red in her orchard for the last a couple of years before she left, but she would still try to squeeze in some time to *ten siu* on such significant occasions as picking pomelos. Sister Red's ability was so evident at a time of rural labor shortage. Ten years after she returned to her hometown, as she had managed and provided a growing number of jobs for the village, people's assessment of her changed. Much later, sometimes when she and Brother Liang parked their pickup in front of Uncle Rich's door to tag along with me to the orchard, Uncle Rich would tell me with a smile, “(Your) Sister Red is here.”

Good Husband

One morning Sister Red hired several of her female friends to work in her pomelo orchard in Grace Valley. During the break, while we were chatting and having snacks, people made fun of Sister Pang, a woman married into the village from a neighboring province. A sister nicknamed Shrimp, who was said to “have nothing to talk” about with her husband, teased Sister Pang: “Old Pang, only you have such a good fate (*miang*), you have such a good husband, so pretty, so white, whatever you say he would listen to you.” Other women all laughed and continued to add: “Yes, your husband was so diligent, he gave his money to you.” Sister Pang giggled, shyly, for her friends had joked about it many times. Her husband was hired by a wealthy village fellow to work on a pig farm.

A good husband in their opinion was analogous to the stereotype of an ideal wife in this Hakka region: good-looking, hard-working, and submissive. Sister Pang's friends were jealous about her having a husband who performed in a manner resembling a typical wife. They did not compliment on what were usually understood as masculine attributes, such as being decisive,

confident, or physically strong. Rather, they emphasized his mild and docile temperament. For the appearance, they characterized him as pretty because his skin color was light, a sign of being gentle and tamed, unlike many other villagers who were deeply tanned after years of outdoor activities. These friends' definition of a good husband implied their desire to take control and gain respect in the marital relationship, something that they severely lacked, fought for, and had not won yet.

Similar to other occasions when they brought up the same topic, this group of friends especially envied that sister Pang's husband relied on her to handle family finances and make decisions on expenditure, a rare case in the village. The majority of the wives who then lived in Xiaodu grew up in this Hakka region, married in from a neighboring lineage, village, or town. Having no mandatory dowry along with them, women were married into husbands' households with bare hands. While the husbands, who were mostly much older, possessed houses, paddies, forests, and other living and production materials. This sharp contrast of possession and dispossession seemed to explain the disparity between wives and husbands after their marriage. Underlying the husbands' unquestioned authority was a straightforward economic logic: the resource owners had rights to obtain profits that their properties generated, whereas wives used their labor to exchange for food and shelter. It was exactly Uncle Rich's words, "I built the house, I opened the store, I raised the pigs" that suppressed his wife's fleeting moment of rebellion.

More than half a century after the Socialist movements that advocated men and women were equal, rural women still did not possess land as their male families did. In the de-collectivization reform in the 1980s, the government policy clearly stated that the collective farmland should be distributed to rural residents per capita, regardless of gender. It was

implemented well that adult residents were equally allocated with land, no matter whether they were men or women, married or not. But in the following two decades, a policy, to keep land ownership within the village, required any newly married out women to return their wet-rice land back to the village to be reallocated to new adults. Marrying out here referred to marrying out of one's own production team. As I explained in the introduction chapter, each production team in this rural region was a lineage, and women should not marry their lineage members, which meant that women who were married must return their land. Entering a marriage for these women meant losing their properties, and therefore being deprived of their source of authority and respect in both natal homes and new households.

Thus, the economic logic not only subordinated women to a less authoritative position from the beginning of their marriage, but also prevented them from accumulating wealth and power by long-time efforts. Because it was the husbands who provided necessities for life and production, they indisputably took charge of distribution of money and held income as their savings. After working for the family for their whole adult lives, many rural women kept almost no savings and had to ask husbands to pay for their daily or occasional needs. Sister Pang's friends complained about the pecuniary disparity and yearned for a sway in family finance, and therefore an increasing influence in family affairs and their own life.

Sister Qun and her female friends often joked around about their marriage and husbands. They always teased Sister Pang and envied her good fate in her husband. They would rather explain the differences in marital relationships with an abstract concept. It was fate, lucky or not, for a woman to enter a particular kind of marriage—she may obtain a happy relationship with an amenable husband who generously gave away his authority in family affairs and finance; or she may end up fighting with a husband who exploited and abused her. Attributing these experiences

to merely someone's fate, belied the sense that they felt impossible to overcome and change their circumstances, so that they could only accept it and live with it. People often took the economic disparity as their own peculiar destinies. A "good husband" in their definition was but an exceptional case in the village. One or a few good husbands cannot help rural women from their struggles with the financial predicament that was deeply embedded in the gender discrimination of property ownership, division of labor, and kin formation. Let alone these good husbands were far from role models in the village—they were called a "*lao shi*" (honest, obedient, gullible) person by other men, not necessarily a negative word, but definitely not a compliment.

Buying Husbands Cigarettes

Chatting with Aunt Si at noon one day, I asked her why she didn't use a mobile phone. She told me Uncle Rich would not buy her one. Something seemed to abruptly cross her mind, and she gave me a sly smile, "Xiaolong, go ask Rich to buy me a mobile." I agreed. Uncle Rich complained as usual at supper that Aunt Si was late home from orchard's work. Aunt Si, sitting opposite, winked at me right away. Following that, I suggested she buy a mobile phone to check time whenever necessary. She turned to Uncle Rich and smiled. He mumbled awkwardly, "You can watch the clock instead, and are likely to lose the phone at work. You don't have to call anyone..." Their argument lasted a little while and ended with Uncle Rich's firm refusal. Almost all her peers in the village had their own mobile phone, while some were even using a smartphone. With the rise of pomelo planting, temp work networks just began to catch on in Xiaodu Village. Aunt Si sometimes did a half-day or one-day temp work in others' orchards. She went to the workplace with her small electronic alarm clock in a plastic bag, about which other villagers often made fun of. When I came to Xiaodu the next summer, she was already the most

active temp worker there. One day, she knocked on my door, and asked me to teach her how to set an alarm on her phone. I was surprised, “You have a mobile phone!” She said with a smile that Uncle Rich at last had said yes to buy her one. She took out a small, old-fashioned red mobile, the kind only with basic functions. I told her to click “Contents” first, then “Ok,” and finally to choose and set an alarm. She observed my actions carefully, asked a few more questions, and went downstairs satisfied. I guessed she felt too embarrassed to ask her neighbors as they all had a mobile early on and she was a late adopter of the technology. She had been often taking temp jobs, sometimes in the neighboring village or town, which ultimately convinced Uncle Rich to buy her a mobile. For quite some time, Rich did not allow her to insert a SIM card. She laughed at herself that her mobile was nothing different from an alarm clock. Later, she began to do cleaning for highways on a regular basis. It was then that she, at long last, had her own phone number.

I had somehow forgotten that Aunt Si was only fifteen years older than me though I could also call her sister. In the last few years of my stay in Xiaodu, we became closer and closer, and she showed me some sort of maternal and sisterly care. Such an attitude, entirely different from that from when I just came here, took shape as she started to temp more frequently, along with a reversal of her relationship with Uncle Rich. When she was able to briefly withdraw from household chores and got a greater say, I could clearly see a happier, more social trait. Owning a mobile phone enabled her to take a ceremonial step, or something of a rite of passage, towards a more extroverted social self. It meant a lot for her to have her own number. She had since then become a contactable node in the social network, linking herself more directly with her family and neighbors. She thus got a chance to communicate with others, without relying on her husband and the phone at home. Although her mobile was, for a time, only used to answer her

husband's calls to urge her to come back early, an accessible mobile number was a symbol of a part of herself split from a bound couple. After a time, some neighbors began to call her directly asking her to help in farm work the next day.

Initially, only a few women joined in when the highway cleaning company came to recruit workers in Sanxiang Town. Aunt Yuxiang was one of them, and the only one in Xiaodu Village. Her husband and child were out of town, and she lived alone. After a year or so, the cleaning job became quite sought-after, and after supper interested women would ask if there was any new vacancy. Its daily wage was about 1/3 less than temp jobs in the village, but it required more frequent work—they could work 20 days a month at the busiest time. Uncle Rich doubted Aunt Si's interest, "If you work outside, who will feed the pigs, chickens, and plant pomelos at home?" If it weren't for the fact that they had bought their son a house in Mei County as his new family's home, Uncle Rich might not have agreed to allow Aunt Si to do highway cleaning, since they had spent all their savings, and even borrowed some money from relatives to pay off the 40% down payment. The high monthly housing loan placed a heavy burden on the couple and their son, who was working at a Guangzhou auto factory. At the same time, Uncle Rich's business at his small store got worse, as villagers could go to the market town fair nearby by bus to buy cheaper daily necessities. Some neighbors were unwilling to buy things or play mahjong at his store due to his increasingly explosive temper. Besides, the couple could not always make a profit from their pigs as a result of the unstable pig prices. The money earned by Aunt Si from temp work hence became the main source of income for the family to repay the loan and cover daily expenses. By late afternoon, she would often ask her neighbors if there was any temp work the next day.

It was during those days that Uncle Rich started laughing at himself with the neighbors that Aunt Si would buy him cigarettes. That was how villagers laughed at men who live off women. Uncle Rich always loved to drink a liquor called “Golden Brandy,” which was actually alcohol blended, when tending the store. He drank more and more at stressful times, shot after shot, sitting at his counter. Two or three middle-aged bachelors in the village would have a silent drink with him at his store from time to time. The blended liquor wore him down, made him weaker by the day and unable to do any physical labor. Neighbors whispered his alcohol addiction, and that his body would be “useless” if he continued drinking. Contrary to the ailing body, his swearing became even louder. Almost the whole neighborhood could hear his curses. Aunt Si, however, became happier in the eyes of villagers. She often joked and chatted with others during the short breaks of temp work and idle time after supper. Uncle Rich became sensitive to his wife’s delight in working. He always checked in on her with calls during her working hours or right after work. The mobile gave her a social self to contact others independently, but also became a means by which her husband could exercise control over her. Sometimes, Uncle Rich would call her when she was working on the highway. He kept calling but often failed to get through. He stood at the side of the street in the doorway, cursing towards the direction Aunt Si’s truck would drive her to work, as if his voice could be conveyed to her along the road.

Sister Qun knocked on my door that night. She told me her mobile was smashed by Liao Da, her husband, and asked me to help her buy a second-hand phone on Taobao. The couple often had quarrels and fought at times. Sister Qun started to take a before noon part-time job in Sanxiang market town that year, and she sometimes temped in her or others’ orchards. That was when her image in the village saw a total reversal. Liao Da complained all over the village about

his wife's frequent temp work outside, and vividly described the oddness of her not answering her phone. His words implied doubts about Qun, giving rise to speculation from the neighbors. All the villagers knew that they quarreled at times and even fought, which frightened kids into crying and screaming. The elders, especially males, who used to rave about Qun, began to criticize her. Uncle Rich scolded her in the street several times, claiming that he was so disappointed with his nephew's wife. Some others were taking her side. Uncle Tiny, the village head, once spoke for Qun at a lineage feast, calling her the most hard-working, capable wife in Xiaodu. Qun's friends also sympathized with her situation. They thought Liao Da was cranky, but they would also secretly comment that Qun was "too grumpy," too frank, and never gave way to her husband. Sister Red wanted to help her, but she was concerned about Liao Da, so she reduced the frequency of asking Qun to temp, "I can barely ask her to help. The couple might quarrel again later." Sister Red styled herself as a peacemaker, and persuaded Qun to be more tolerant of her husband.

Sister Qun failed to have any private money, because Liao Da forced her to take all of her wages to rear their children or add to the family income. As the fall semester was approaching, he still refused to pay for the three children's tuition and asked them to turn to their mother. When the daughter cried asking if she could continue her studies, Qun promised to pay for school. She had already paid a lot for food, daily necessities, and children's clothing. But each time she asked him to pitch in, he would ask in return, "Where's your temp money this month?" Liao Da was seen as a stingy man by Qun's friends, who suggested she not be so generous. She had no choice and gave in. "He just wants to bleed me dry," said Qun. She had no idea of how much savings Liao Da had. Their joint income from planting and breeding over the past two decades was all kept and managed by her husband.

Consequently, Liao Da announced his dissatisfaction with Qun's temp work outside their home in a spectacular way—He smashed the most expensive mobile phone in the village, which he bought for her three years ago when they were on good terms. As he felt she was evading his control, he vented his anger onto the body of that mobile phone, a personal belonging symbolizing independence, unrestraint, and privacy. That worked. Qun became very angry, disappointed, but so panicky that she came to me at night for help. She wasn't sure how she could live without a mobile phone, she said. The mobile phone smashed by Liao Da, despite that it was bought by him and that he owned all the money of their family, was deemed by her to be her personal item, something distinct from those shared items like television, refrigerator, and wardrobe. The incident remained sort of a scar on Qun, something that she would bring up constantly afterwards. There had never been a squabble or fight that came up so frequently from her lips.

Over the year that followed, Liao Da, albeit not intentionally, destroyed Qun's most treasured item again, an item that she thought to "own." That prompted Qun to rethink their relationship. That afternoon, when I just returned to Uncle Rich's house two days after leaving for Meixian on errands, I heard the neighbors gathering there discussing, "Liao Da drove the car onto the roof." They were excited about this bizarre, funny story. By the time I got to their house, the car had been lifted away, leaving a few big holes on the roof and some fallen tiles in their daughter's room. Their house was built halfway up the hill, next to a concrete road going up the hill. Liao Da was driving on that road. After the wheels got stuck in a ditch, he kicked the gas pedal too hard, and then the car leaped out of the road and onto the roof of his roadside house. Fortunately, Liao Da and their daughter, who happened to be playing in the neighbor's yard, did not get hurt. Although Qun felt pity for the new car, she did not seem to act angry at this

dramatic accident. She talked about and laughed at it with the neighbors. Even her six-year-old son, a kid who theoretically knew well about how to drive a stick shift, described his father's behavior as ridiculous. A month before that, after Liao Da knew that his relatives planned to sell their old car, he persuaded Sister Qun to buy it with her savings, and promised he would pay to build a garage. With the rise of pomelo planting those years, many villagers started to buy three-wheeled motorcycles, while very few bought cars or pickups, to carry people or pomelos. That car was transferred under her name, Sister Qun told me proudly. It was Liao Da who drove it most of the time, but he always emphasized that he had paid the driving school and the driver's license test fees for them both. The car, after being badly damaged, was bought by a friend at a very low price. Sister Qun thus lost most of her money that she spent on it.

A few days later, I was invited to Sister Qun's home for dinner. She and her kids kept teasing Liao Da about the car crash. He smiled awkwardly and explained that he was just "careless," which made everyone laugh. Sister Qun turned to me and said with a smile, "Tell your brother-in-law to refund me for the car." Liao Da hemmed and hawed without giving an answer. With that relaxing and humorous family atmosphere, I was caught quite off guard when I learned what happened five months later. In retrospect, her use of the word "refund" at the time seemed to have foreshadowed what would be a protracted, troublesome, and complicated communication. The word suggested that she was treating the car as personal possession and holding her husband responsible for the damage he had incurred. For a while, she made this request in an easy and relaxed tone. She said her husband was "likely" to pay her back, after all, the whole village knew the ins and outs of what had happened. After a while, she was getting more serious as her request was rejected, and in the end, she begged him to pay half the cost of the damage. Her hope failed her, and she lost a large chunk of money she had earned through

temp jobs over the years. Before she lost the car, Qun felt she was the owner of it—the ceremony of registering the car in her name was sufficient proof. But after the car was gone, and after Liao Da repeatedly refused to “refund” her, she discovered that the car, along with all her personal savings, was “rightfully” her husband's, which he could use at will, and her husband's property was never hers. “Nothing in this house is mine,” she lamented on one occasion. Qun had once talked about the legally alleged “community property,” considering it a dead letter because no one in the village took it seriously. Even personal belongings were somehow tied to other family members, like in a bundle of relationships. Though many items in the family were shared, possessing a relatively personal item of one's own evokes identification. Women's ownership and control of their personal belongings gave them a sense of autonomy.

Leave or Stay

Despite all the signs, I, also her family members and friends, was shocked by Sister Qun's sudden departure from home. We had chatted on WeChat for months after I completed my fieldwork. The story fast-forwarded to five months later after her car was gone. By that time, China had roughly gotten Covid-19 under control, and she told me she was training to become a maternity matron in Sichuan. I was surprised and asked her if she planned to live in Sichuan. She said she planned to go to Beijing or Chengdu, but would not return to Guangdong, the place that made her heart break. She finally took this step. Perhaps this scene had been rehearsed in her mind many times.

I know that such a story will be described in the village as someone “ran away,” or someone's wife “ran away.” Two years ago, a woman in the Li lineage, who did not speak Hakka and whose husband was working in Guangzhou, left Xiaodu, leaving behind two young daughters for their grandparents to bring up. The word runaway would only be used for women

who escaped from a marriage, indicating that they were married to someone far from home. The husbands did not have to run away because that was their parents' home. In other words, even if a man dwelled in town and almost never returned, leaving the wife and all the young kids behind with his grandparents, it was totally acceptable. Runaway implied that a wife did not belong to the village, or their husbands' family, and that they were literally “trapped” in a strange land. There were also cases when wives returned after they ran away. Sister Pang, the one who was said to have a good husband, was a case in point. She returned home several years after she had left quietly (rumor had it that she was working in the city). Some sisters in a WeChat group asked Qun to come home regularly and visit them. “That is not my home,” Qun replied.

Later, I learned that Sister Qun had demanded a divorce a few times before she finally left Liao Da, and only then did Liao Da finally agree to a divorce. They went to the Civil Affairs Bureau in Mei County together with their marriage certificates and the household register book but were told to go back and think it over. They could come back in a month if they really want to get divorced. This matter coincided with the launch of the latest Chinese Marriage Law, featuring a mandatory 30-day “cooling-off period before divorce.” The article caused a huge controversy among netizens. When they returned to the village, Liao Da regretted and was reluctant to divorce. By then, Qun's elder son had already grown up and was about to go to a vocational school in Guangzhou. The younger son was in second grade, and Liao Da wouldn't let her take him away whatsoever. He eventually agreed to let Qun go back to the village in a few months to take her daughter and live with her in Sichuan.

Besides the initial astonishment, I was gradually overwhelmed by Qun's despair and sadness. I felt disappointed in that mountainous village at Mei County that I used to feel so attached to. Before I left Xiaodu and returned to the university campus, she had said to me that

when I left, there wouldn't be anything interesting left behind anymore. Then I had the same feeling. A Xiaodu without Qun was not a place I'd like to visit. Until then, I didn't even realize that she, as a young woman traveling across China to start a life in Xiaodu, one who had never showed interests in the Land Right Authorization, local history, Hakka Culture, pomelo growing techniques, or the Sino-US trade war, had become an integral and imaginable source from whom I could learn about Xiaodu. I was also regretful that I, due to my position as a researcher and my close relationship with the Li lineage, also her in-laws, didn't give her more support. The state of their marriage was like a "tug-of-war," sometimes intense, sometimes eased up. They would jokingly argue, in a few days following a fight, why Liao Da came to clear the pimples on Qun's face when he couldn't fall asleep. The physical and emotional wounds, as well as the conflict between them over financial management, were irreconcilable and irreparable. All this repeated pain in life, though covered up by the daily trivial things, was all revealed by Qun's resolute departure. The in-laws who had blamed her and the neighbors who had criticized her seemed to begin to sympathize with her; after all, this departure seemed miserable. Twenty years ago, she had married into the Xiaodu with nothing; twenty years later, she left the place empty-handed, unable to take her children with her, or even change her own registered residence.

For sure, there was something else I was concerned about in Xiaodu Village. One year after Qun left, Uncle Li Tai told me in WeChat that Aunt Si had been involved in a car accident the day before while working on the highway. She was badly injured, still in a coma. My mind went blank at the bad news, then I was overwhelmed with remorse. It reminded me of a work-related mishap people were discussing before long—a woman from a neighboring village was accidentally killed by a car on the highway. On that day, Aunt Si happened not to take that job. She talked with Uncle Rich about another two women from neighboring villages, both killed

similarly. She reasoned, according to what she overheard, that the project manager failed to place any traffic cones as required, and the women didn't notice the imminent danger when crossing the highway. Since then, I would exhort Aunt Si to be more careful, but such advice seemed more formulaic than effective. It is easy to be indifferent to strangers' sufferings, taking it for granted that the same misfortune wouldn't happen to those around them. From the members of the Li lineage, I learned more details about the accident: They did use the traffic cones this time. A “careless” truck passed by at full speed and her clothes were hitched on it, dragging her for dozens of meters before throwing her off the highway, only for her to roll off the hillside. The appalling experience was a torture to me. I couldn't imagine how scared she was at that point.

After four days in a coma, Aunt Si finally woke up, but remained in the ICU. For the next two weeks, she had many surgeries on her cervical spine, pelvis, and leg bones. The post-surgery rehabilitation was also lengthy and painful. After one month in the rehabilitation hospital in Meixian, she was sent home in Xiaodu for further recuperation. After quite some time, Aunt Si's son told me that she could walk with crutches, “just like Uncle Neng next door.” The said Uncle Neng was a neighbor in his seventies. After a stroke, he could only walk with a limp. For more than a decade, he had to rely on his wife, Aunt Ju, to support him with some temp jobs. The thought that Aunt Si, who used to be thin but agile, now could only move about in the village in such a way, made me sad. The power and strength she used to impress us with as she was working constituted a striking contrast with Uncle Rich's fragile image. At work, she seemed to find the better self she had long desired to be, a self even Uncle Rich's roar would not intimidate, at least for that short span of time. But no one could expect she would end up in such a tragic way. She was finally caged at home, though not the way Uncle Rich had wished. I don't know whether her SIM card was still recharged when she was home.

Chapter End

Auntie Si's injuries returned her to the state she was in before she could go out to work as a day laborer, a typical female self, a self that was hardly able to decide for herself and control her own body. But her handicapped body only further reinforced that she should previously be considered fully functional, fully able, not just as a physical laborer, but as a capable decision-maker and a calculating being. The devastation of her body in the accident cruelly proved that her previous self, a self that was incapable of taking complete control and ownership of her energy and time, was absurd, and that she was socially disabled. She was re-trapped, involuntarily, within the confines of her home. This may seem to be the price of her quest for a more desired self, but these women chose the highway temp job despite knowing the risks. Jobs similar to highway cleaning were expanding and diverting the most dangerous tasks to rural residents during agricultural downtime.

I heard that after Sister Qun left, Sister Red remained as usual, inviting people to her home for dinner, singing and dancing on the roof from time to time. She and other sisters occasionally left messages in Sister Qun's WeChat, saying they missed her, but Sister Qun did not express that she kept her attachment to Xiaodu. With a dramatic and decisive attitude, she made it clear that she did not want to be trapped in that shabby little yard filled with mountain ballads and continuing to entangle herself with Liao Da over finances. After that she took on her own life with her daughter, she controlled her own time and effort as a male made self in the family. But it was still an incredibly difficult life, as she had no education or job experiences in those twenty years, which left her with a blank resume to tackle the intense urban/suburban labor market. Her departure was also a cut-off for herself from her vast network of family and village relationships. In her new family where it was just her and her teenage daughter, she no longer distinguished between laboring for her family or laboring for herself.

Ending/Unending

David Graeber argues in his *Utopia of Rules* that bureaucratic systems are ideally designed and overestimate the fidelity and competence of administrative staff, thereby resulting in oversights, mistakes and difficulties in implementation (Graeber 2016). However, my study on land quantification shows, precisely because the bargaining, rule-changing, or sometimes even deliberate mistakes and oversights arising from interactions between rural landholders and grassroots cadres and technicians, the imperfectly designed project could finally get underway. Although such bargaining can be understood as collusion for some benefits, people's painstaking effort in most cases was nothing but a compromise to make possible the almost impossible vision of government. Utopia in Graeber's view refers to the bureaucratic system that seems feasible in design but can hardly meet the designed standard in implementation. Utopia, in this China's context, is the national project that is unachievable in design, but is achieved with flexibility, by people's pouring intensive intellectual labor, including communication labor, mostly unpaid or minimally compensated. Why did they strive to implement the imperfect bureaucratic system and governmental policies? Were they spending so much labor simply under the weight of moral, political, and legal rewards and punishments?

The Land Right Authorization was originally an impossible task. No well-established agenda and detailed steps of this national project were provided on how to implement multiple technologies, recover fields that no longer existed, facilitate smooth communication between various groups of people, and handle the complexity of human-land entanglements. When I came into contact with staff of the Authorization office, GIS survey company managers, town and village cadres, and landholders from the outset, I learnt about their confusion and doubts. Among them, landholders and grassroot cadres were the most skeptical. As the project was more than half done, it came the most difficult time, when almost all participants were tired out, not knowing how to cope with the unending mistakes. “It’s impossible to complete it!” I often heard complaints like that from the staff at town agricultural station and village cadres.

The Authorization Office of Meixian and the project team of Southern Digital Technology Company were the terminals for the Authorization of the entire county. I was surprised at how they lacked connections with Agricultural Bureau and Authorization Office of Meizhou City and Guangdong Province. All problems that the staff failed to resolve would be fed back to Meixian Authorization Office, which then sent staff to villages and towns to handle these problems. Except for very few irreconcilable land disputes, most problems were resolved through the mediation of the cadres, staff, and relatives. It seemed to me that the complexity of problems they handled had far exceeded the capability expected for a land survey department. In a way, the office was also a court, agricultural bureau, and land resource bureau. Land Right Authorization was somehow finally done, precisely because people creatively handled those issues left out in original design, by drawing fields that had already disappeared on satellite maps and measuring with tapes the lands that were filled with fruit trees and can hardly be measured with a GPS sensor. The creativity was not only a result of the rewards and punishments, such as

land use certificates and political performance, but also because they were exhausted and overwhelmed by its enduring, tedious procedures and just wanted it to be over as soon as possible. Such social affects, or desires to get cracking on fulfilling an oppressive task, turn out to be so evident throughout the Authorization. The high-intensity method of statistics throughout the collectivization era was a burden for people both at that time and many years after the de-collectivization movement. The Land Right Authorization project was far from being a routine practice for landholders and town/village cadres, but a sort of interruption, or a rupture.

Likewise, the government's requisition of data is a crude but long-running design reliant on numerous organic calculating intellectuals. Although statistical departments have designed a variety of forms, the filling of forms requires creative means of data collection. Most of the time, the collection quests, layer by layer, will come to the people themselves. I expand organic intellectuals to those outside the institutions and who are even excluded from "cultural" groups and see all people as intellectual beings. A calculating person is a mixed evaluation in various contexts, resulting in people being circumspect in displaying such abilities to prevent negative ethical evaluations (Yan 2009). It does indicate, however, the value of numerical practices for people's sense of selfhood, social relations, and grasps of the worlds. One of the themes of this dissertation is to examine how people's intellectual abilities are mobilized, modeled, discouraged, and redefined. Taking people as organic intellectuals, I questioned how the state's requisition of numbers and statistical domestication was extracting and manipulating people's calculating labor, and meanwhile, transforming the contributors of state's big data into the subjects of state policies.

During the Covid pandemic, Goose-Lake Town, where Sanxiang was located, issued a notice requesting people returning home from other places to "actively self-report" to the village

committee or subdistrict office timely. Many Sanxiang residents forwarded the notice into WeChat groups, urging relatives out of town to remember it. Such a request would not been considered normal before the pandemic. During the collectivization, people were tied to their collective, namely the production brigades and teams. They must report and apply to the collective before they went to other places, or even made purchases out of town for the collective. They would bring a letter of introduction to explain where they came from when visiting other communes or units. As people were about to forget such experience of reporting and asking for approval, a pandemic seemed to lead back the strict social control to their daily life. Taking the moral high ground, people reminded those who intend to come to Goose-Lake Town to self-report with the government “responsibly.” This was not only a social responsibility to protect more vulnerable groups, but also a kind of administrative pressure, since consequences were always there whether you report or not. Those who report would be given close attention and required to take Covid tests and be quarantined at home for a certain period according to the areas they have travelled through. Those who do not report timely as required, once found or reported by others, are likely to receive an administrative fine, apart from taking tests and being quarantined. If the person has been in close contact with any confirmed cases, he or she may also face an administrative detention. It is only when these administrative regulations had become radicalized that they may provoke resistance and discontent. Yet this does not mean that conventional regulations should be taken for granted. The distance between extreme control and lighter control may not be too far. This travel reporting requirement demonstrates that even though the government developed high-definition cameras across the country in recent years and used cell phone GPS and "health QR codes" to keep track of people's contact networks, as well as a network-wide, real-name transportation system, the government was still unable to monitor

people's whereabouts in real time. The state still had to rely on self-reporting, an ancient and cumbersome technique.

Two years after the Land Right Authorization in Meixian was finished, the Goose-Lake Town government sent out a *Letter of Intent on Not Abandoning Farmland* to farmers, asking the household heads to fill in and sign it to promise how much farmland they won't leave uncultivated. Li Gan, Pond-head production team leader, sent this form to WeChat groups asking the team members to fill it out and send back to him. Meixian's Authorization report showed that vast amounts of fields had been left waste. This figure should be far smaller than the actual number, because in my trips with them, people were often seen counting those waste fields as farmland. People had no idea how serious this letter was and what the likely outcomes would be. This form asked people to fill out their intentions—it was not a survey on the status quo, but an acquisition of their future intentions. This may sound like a more casual data collection, but maybe a sign of further control. That is, people were required not only to self-report their land conditions and travel trajectories, but also their plans and ideas. This kind of self-analysis and self-criticism, which bore the resemblance to recent histories, revived in people's lives so readily, delivered by cell phones and the Internet.

What this doctoral dissertation is likely to leave unfinished is a more provocative argumentation, an alternative route. When it came to directly describing the people whom I knew and tried to empathize with and for whom I was grateful, it was challenging to take a more distancing, therefore maybe crueler, stance to understand the infiltration of authoritarian that was temporarily acceptable, that had become habitual, but that was always on the verge of dramatic change. Perhaps in parallel research, I could have envisioned a more decisive perspective, a harsher examination of myself. Such an examination includes whether I am in utter despair of

bureaucracy, whether I am in disbelief in the state as a political form, and whether I am relentlessly renunciate of any reason for powerful entities' seizure of personal data. Whether this is a political/ethical position or a methodological move worth trying, I'm not sure yet. In my subsequent research, I would want to perhaps go further down the path of experimentation to see if I can glimpse a path to subvert this logic of requisition of data—not just be critiquing it; and if I would no longer involuntarily defend the powerful because of having seen people gaining rewards in the process.

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