Cao Qing

THE BANWAN PROJECT, FROM EXPERIMENT TO MODEL?

Rural villages in China are being affected and transformed by an intense national, regional and local process of urbanization. The process affects the physical environment and the architecture. There is strong pressure on traditional village structures that are based on traditional principles for organization, building typology, and iconography. This Ph.D. research is based on a case study of the current development in Banwan village in the Guizhou province.

This thesis focuses on the environmental, spatial, morphological, and more specific architectural challenges and changes in the village. The intention is to establish a discussion of how a traditional agricultural village in a remote part of China populated by an ethnic minority, adapts to the new urban situation, with the intention of not losing itself, culturally, architecturally, and economically.

The investigation reveals that the Banwan experience indicates a new model for rural renovation in China. Referring to the lessons learned, the thesis proposes that several adaptations should be made for the Banwan expert/architect strategy to stand out and work as a possible model in specific situations.

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Contents

ABSTRACT

Rural policies are given priority in China, and governmental and regional funding is allocated to the countryside. Chinese villages are being transformed as a part of the urbanization and modernization process as societies, habitats, and architecture. This Ph.D. research is based on a case study of Banwan village in Guizhou province and is part of a joint program between the Oslo School of Architecture and Design and the Central Academy of Fine Arts in Beijing – "Rural China – the Villages" – the program focusing on case studies of the current challenges and development strategies for Chinese villages.

The rural transformation process is evolving in different ways all over the Chinese countryside, also in the remote parts of the country, albeit often in a less controlled way. The process of modernization through governmental and regional policies places a great deal of pressure on traditional societies, their social organization, and their way of production. Established village structures that are based on historically- and ethnically founded principles for morphological organization, building typology, and iconography are gradually being transformed or abandoned.

Banwan village is part of a traditional habitat for the Bouyei minority. Beginning in 2016, I participated in and later observed a development project aimed at improving the living conditions in the village within the framework of Bouyei traditions and in the context of rapid urbanization. The village renovation was initiated and funded by government resources distributed to the local government. The project was planned and carried out by Professor Lyu Pinjing from the Central Academy of Arts (CAFA) in Beijing with the help of his architectural studio. CAFA provided academic support to the project and chose the Banwan village as a research subject for architectural education and academic knowledge seeking. The project received support from and was documented by Shanghai Dragon TV. Additional funds were also donated privately for the extension and renovation of the local school.

My role in the project was that of resident designer –I participated throughout the entire design and construction process – as well as that of an observer who recorded the impact of the project on the settlement and the lives of households in the post-construction phase. After having been selected as the case for my thesis, I investigated the process, the project, and the outputs as a researcher performing relevant analysis and evaluation. While the multiple identities gave rise to methodological challenges, they enabled me to access more detailed data and informal and "hidden" activities. By working in this way, I sought to understand the reasons for and the significance of each endeavor within the project and grasp the strategies and tactics employed by stakeholders in the specific situations that emerged during the working process.

The thesis discusses the environmental, spatial, morphological, and more specific

architectural challenges and changes in the village and their effects on the local way of life. The intention is to (1) give an understanding of the traditional relationship between the socio-cultural and physical environment in Banwan and (2) to study the challenges and potentials established by the Chinese urbanization and modernization process by investigating the effects in the region of Guizhou, (3) to observe and evaluate the physical and social transformation process in Banwan, parallel to the renovation work and beyond, and (4) to discuss how the recent development project has affected the local situation, what the outcomes are, and what might be learned from this pilot project.

The study intends to establish a discourse on how a traditional agricultural village in a remote part of China populated by an ethnic minority might adapt to urbanization without losing itself culturally, architecturally, and economically. This is achieved by following two intersecting lines of study: investigating strategies for rural China and drawing lessons from the implementation of the Banwan project. The investigation strategies used in rural China, particularly those that have been implemented in the poor Guizhou region, help to understand the relationship between current Chinese rural development policies, rural challenges, and selected development strategies. The investigation provides a broader context for evaluating the specific Banwan project strategy. The second line of investigation – and the main part of this Ph.D. thesis – draws lessons from the ideas behind the Banwan project, the planning of the project, the implementation, and the activities after the project was terminated and the project organization no longer supported the development.

The thesis refers to a broad field of research concerning the restructuring and transformation of rural areas in China. An analytical discussion is established on what I consider to be the three overlapping stages of development: tradition, the local effects of Chinese modernization and urbanization policies in recent decades, and the outcomes and effects of the current development project. The study of place, physical structure, and architecture is inspired by a morphological tradition in urban and architectural research and is based on field investigation and mapping. Studies of the socio-spatial transformation process are based on in situ observations, interviews, and documents from the process.

The Banwan project was an experiment in what I have termed *expert architect-led rural renovation*. The thesis outlines the characteristics of this model, evaluating ideas, organization, process, and outcome, to explore the question of whether the Banwan experience indicates a new model for village renovation in China.

The thesis indicates that the expert architects, deeply involved in the rural renovation, adapted to the conventional role of the architect in terms of attitudes, skills, and working methods. The way of organizing the project gave the architect a unique role in influencing both process and outcomes, but the participative pro-

cess also allowed the expert architects to understand the community and identify collective and individual demands. The main findings are that the project worked as a well-planned architectural renovation of the village. While the process of participation was active and elaborate and influenced both program and outcome, it would have benefitted from a better-organized and stronger local leadership and from a more multidisciplinary team taking part in the process. Some unintended effects were witnessed, mostly related to the management of projects for industrial development based on handicrafts and post-implementation actions initiated by the local government. A major challenge for the project proved to be a lack of capacity at the local level of government and constraints in the institutional mechanisms that handled the development process. A possible role was noted for academic institutes in rural renovation: universities and academies could function as a supportive resource in village development, and a mutually beneficial relationship between villages and academic institutions shows interesting potential.

The thesis also indicates that choosing a Banwan model requires several conditions and deliberate consideration of the site selection. The model applies to a situation where villagers are willing to impart indigenous knowledge to the development project. The model requires an environment where local government can provide substantial political and financial support. Strong community capacity and local organization are required to achieve project objectives and sustainable improvements. Furthermore, the model is best suited for villages demonstrating historical and architectural qualities and where this resource might be used as an industrial advantage.

Referring to the lessons learned, the thesis proposes that several adaptations should be made for the Banwan expert/architect strategy to stand out and work as a possible model in specific situations. Although the Banwan project was well planned, more extensive discussions about the development programs are needed before initiating actions. Prior to the project initiation, there will be a need to strengthen the local organization and prepare locals for what is to come. The local government's capacity to lead and manage a project of this kind in terms of role, responsibility, organization, and policies should also be prepared before the project is started. Evaluations of social effects on the village and the different families are needed as an integrated part of the process. For the Banwan model to work, an effective project management system is required to give the community better control over the decisions being made. Actions for organizational and individual capacity building in the village are needed to ensure effective project management. Another lesson from Banwan is that a multidisciplinary team might be required to address various complex issues raised during the development program. In order to solve potential conflicts during the planning and construction process, formal mechanisms need to be established. Major findings are that the project's time span must be longer than the Banwan project period to access the strategy's full effects and that preparations

for post-construction management of what is achieved and future potentials should be given priority in the project.

ACKNOWLEDGMENTS

Chapter 1

My work and research were initiated as a journey to a project site in an ethnic rural area of Guizhou Province in 2016. After a three-hour flight from Beijing, the 2.5 hour-drive started in Xingyi, the capital of the Qianxinan prefecture and a fast-growing city with over 900 thousand inhabitants. We traveled from a high-rise and newly built urban landscape to the rural areas where patches of farmland are nestled among mountains before arriving at our destination, the Banwan village. The trip revealed a rural landscape in a state of transition and incompletion – conventional expressions like "authentic local vernacular buildings," "unpolished cultural activities," "culturally distinct inhabitants," and "symbioses of ethnic culture into the untarnished natural landscape" were undoubtedly not fitting. The situation in the Bouyei settlement signifies both tradition and the different aspects of changes in rural China illustrated by describing concepts commonly used in the last two decades: A "left-behind village" with the children and the elderly left behind after the young workforce migrated to the cities; a "hollow village," where significant land resource and inhabitants have been lost to urbanization; and the "atomization" describing the weakening relationships between farmers in the community.

The renovation project in which I participated aimed to respond to the unique conditions of the Bouyei village and to address different challenging issues engendered by the urbanization process. In this introductory chapter, I briefly situate the thesis by outlining the context of the project. I then introduce the current challenges in the processes of countryside upgrading. My motivation for this thesis is based on my experience as a resident architect in Banwan, which has led to particular methodological challenges. Finally, I elaborate on the research questions addressed in this thesis.

1.   THE THEME FOR THE THESIS

1.1.   Background of the Study

Over the past century, many Chinese intellectuals suggested and argued for a range of novel policies and campaigns in China, emulating western modernization paradigms or intending to find non-western-oriented paths to modernization. Pan and Wen (2016: 129-130) note that the radical pursuit of modernization was nourished by the founding of the People's Republic of China. The Cold War and the urgent demand for industrialization later continued to provide a strong impetus for all kinds of actions to transform the country. After the *Reform and Open* policy initiation in 1978, modernization also has been the driving principle of rural development policy. Since 2005, the Chinese central government has promoted rural

modernization under the national strategy of "building a new socialist country-side."[1] The primary aims of rural modernization in rural China have been to raise the living condition in the countryside and to develop local welfare comparable to the situation in Chinese urban areas. The strategy – as it has been practiced – can be considered as a deliberate multi-dimensional approach: industrialization and infrastructure development, resettlement of villages and the construction of new small towns, improvement of rural sanitation and housing, and the formation of different kinds of town and village enterprises. Examples of enterprises range from huge farm complexes turning the peasants into agricultural laborers, projects built on a growing market for domestic tourism, and the development of e-trade by the thousands of Taobao villages in China.[2]

I propose that operationally, we may distinguish between three main types of rural transition from a self-sufficient countryside to modernization in rural China. I have termed this *Penetrated Modernization*, *Off-site Modernization*, and *In situ Modernization*.

Penetrated Modernization refers to the urbanization process of the suburban village close to urban fringe. In origin, the penetrated modernization of rural areas is primarily a political and economic phenomenon. Yeh et al. (2013) claim that cities become metonyms for development, and urbanization became the main means for China's modernization strategy. Cheap land, less traffic congestion in the urban fringe, and the friendly environment of neighboring rural areas provided the necessary conditions for urban expansion. During the process, villages played an active role as entrepreneurial agents in transforming rural land into factories, leisure landscapes, housing for migrant workers, and residential blocks (Bolchover and Lin, 2013).[3] The suburban villages became an ingredient of the Chinese city. The power of cities penetrated different fields of adjacent villages, changed peasants' modes of production, lifestyles, and mentality, and then merged the villages into the urban agglomeration, transforming the villages into nodes that played specific roles within the metropolitan systems. Peasants could enjoy the convenience of infrastructure and the improved social welfare brought on by urbanization, but customs and collective memories mostly faded away. The local society was economically, socially, and culturally assimilated into the metropolis, although – as proved in a book on urban villages edited by Shannon, De Meulder, and Lin (2014) – sometimes the villagers' right to the land was kept, and the village continued as a prosperous economic entity.[4]

Off-site Modernization describes the migration to wealthier regions and the separation from the original place of residence, either temporarily or permanently. I would argue that the flow of migrant labor to wealthier districts based on personal initiative and the government-led population relocation projects are the main forces behind off-site modernization. There has been a widening income and living

standards gap between poverty-stricken rural areas and wealthier cities. Policies and urban expansion have pushed young rural labor forces to leave their villages for much of the year to work at the construction site of cities in factories and in the service industry. This process was an essential and integral part of China's – economically speaking – very successful urbanization and modernization. Data shows that by 2017, 286.52 million migrant workers had left the countryside in search of work in urban areas; this corresponds to 20.94% of China's total population.[5] The total number of migrant workers in China increased steadily until now, with approximately 292.5 million migrant workers in China in 2021.[6] Although the *hukou system* (more discussed in Chapter 1.2.1) restricted formal migration processes and made citizenship difficult, differences in living standards between rural and urban areas and the abundance of possible jobs in the cities, and a taste for urban life encouraged family migration. Subsequent migration from rural to urban areas left the elderly and sometimes the children of migrant workers in the villages, which were then left nearly unoccupied seasonally and yearly, leaving hollow villages with buildings that were falling to ruin and a dysfunctional social infrastructure.

To eliminate poverty, crop failure, and famines that might result from ecological disruption – such as deforestation, erosion, and land degradation – large-scale government-led ecological resettlement programs aimed at alleviating poverty and promoting modernization and environmental preservation have been implemented in the Guizhou Province since 2012.[7] One effect of these programs is the movement of villagers to expanded local towns and thus the abandonment of the villages. Eventually, the process involves the building of new centralized villages. These resettled sites contain rows of newly built residential buildings; new community schools are added, and technical infrastructure is improved.[8] However, adapting to the major socio-cultural changes from self-sufficient farming to unfamiliar modern life has been difficult for many relocated populations. When resettled residents exhausted their loans, or their businesses failed, adverse economic effects have been shown. The economic outputs in the new situation are incompatible with the wages in the metropolitan areas, and the competence of the villagers does not fit the job market.

In situ Modernization should be seen as a general strategy for reducing rural-urban disparity and as a method of achieving locally-based modernization. Most of the villages – especially in the more remote areas often inhabited by ethnic minorities – cannot achieve modernization, relying solely on resettlement schemes and other off-site modernization. However, in terms of ecology, the villages might be developed sustainably, they contain both physical and immaterial heritage values, and there is potential for local modernization and economic prosperity. In order to achieve the goal of constructing a society in which everyone is comfortably well off (*xiao kang she hui*), initiatives and development programs based on the existing settlement pattern have been tested. These programs could be considered in situ

modernization.

The objective of modernization formed the core of national rural policies in China. Many scholars have discussed the relationship between modernization, tradition, indigenous culture, and rural development and tried to examine and determine the contradictions and eventual potentials in combining *modernization* and *tradition*. A question – absolutely relevant to this thesis – is whether *the modern* and modernization are always in opposition to *the traditional*. Modernization in Chinese society has generally been linked to urbanization and the development of an 'urban condition.' A fundamental discussion in this thesis is whether and eventually how modernization can be seen to operate differently concerning the rural, cultural heritage, and ethnic authenticity?

Poston and Mackerras claimed (1994) that modernization is based on the assumption that societies evolve along parallel linear paths from an irrational, technologically limited traditional society to a modern, rational, and technologically advanced society. They seem to draw an evolution path/ trajectory from traditional society to modern society. Based on such assumptions, poorer rural areas historically were represented as being "less developed" than wealthier urban areas. The implication often was that their development relied on implementing the same policies as were pursued in modernization processes in urban areas.

Anthropologist Wang Mingming[9] (1997: 122-123), however, represents a more contemporary approach asking: "Is there an irreconcilable contradiction between tradition and modernization?" and "Has modernization destroyed authentic tradition or brought cultural revitalization?"[10] He gives a primary critique of the Chinese rural modernization processes, summing up (1997: 121) that they have been based on assumptions that a clear boundary should be drawn between tradition and modernization. Meaning that the establishment of a modern social economy must be based on the breaking down of traditional social patterns and the disappearance of antiquated cultural ideologies.

Oakes (1998) also indicates that a discourse on different aspects of "cultural development" has influenced the shifting narratives of modernity in many regions in China. "Splendid China" tourist parks and the "proliferation of old towns" – examples where traditional culture is intensively used, even exploited in the modernization process – are criticized by Oakes (1997: 41). Claiming that this exploitation demonstrates a contradiction between the desire for modernity and the preservation of tradition, Oakes indicates that traditional culture might indeed be modernized without a population (a village) losing their ethnic identity. The decisive factors and what counts are where, who, what, and how rural modernization is operated. Such repositioning of cultural value may dovetail with in situ modernization to valorize indigenous knowledge and practices.

The policies and approaches behind the project I was a part of in Banwan, and that is discussed in this thesis, tried to put the principal approach described by Oakes into practice. The ethics and values in this approach are also my own. Therefore, my evaluation of the project is the description and discussion of a project that I, from the start, genuinely believed in.

My thesis investigates a rural area in Guizhou as a settlement structure and site for rural upgrading (Figure 1.1). The entire Guizhou Province as a territory may be seen as a testing-ground for Chinese rural strategies[11], most of which are considered in situ strategies. Located in Southwest China, Guizhou is in the process of being transformed from a remote region into a new economic powerhouse for China through infrastructural programs, innovation and economic enterprise, strategies for alleviating poverty, renewal of housing and village infrastructure, programs for domestic tourism, and design intervention involving heritage values.

Figure 1.1: Location of Guizhou. Beijing is shown in red. (Source: Author)

New strategies have evolved, some of them involving architects, designers, and urbanists receiving funding through the new programs. It may also be pointed out that the unique landscape character of Guizhou and the cultures of the ethnic minorities there have been both attractive and challenging for many Chinese architects involved in in-situ processes in the villages.[12] The architects have displayed a set of different approaches, readable through their projects. Some are investigating the rural economic potentialities and using these studies and ideas as a basis for their work, whilst others are involved in aesthetic pursuits, creating a modern inter-

pretation of a historic cultural vocabulary. Other architects have attempted to repair the rural landscape, for example, landscape damaged by vast infrastructure projects through re-naturing or creating architectural and spatial programs.[13] Most of these projects involve evaluating strategies, and most seem to bring something back to the neglected areas of Southwest China.

The Banwan project led by Professor Lyu Pinjing at the Central Academy of Fine Arts in Beijing is an example of in situ modernization by design intervention. The project is experimental in terms of its intentional local grounding, its design strategies, programming arrangement, and the network of stakeholders involved in the project's whole process.[14] The Banwan project aimed to pursue sustainable development locally and may be considered to represent a *specific typology* of in situ modernization. One main characteristic of this typology is to put substantial effort into design intervention. However, the team developing the project did not limit the aims to physical structures and aesthetic performance but also focused on cultural space preservation, local cultural heritage, sustainable development, traditional settlement protection, and building the community's capacity.

Eastern China is, for the most part, highly developed and modern. There is, however, a substantial disparity in the country between urban and rural regions and between the east and the poorer rural areas in the southwest, west, and north. In recent decades, when the situation in rural China has once again been brought into political focus, scholars – often university-based public intellectuals – have contributed their knowledge and expertise to rural construction in Western China, especially in ethnic minority regions. Expert architects were fully involved in each step of the pilot project, *the Banwan Project*, which was funded by and received political support from the local government. The team of architects developed design schemes, organized a wide variety of resources, and acted as a mediator in discussions between the involved stakeholders. The project outcomes are complex and involve physical structure, social infrastructure, and local economic activity. The short-term and long-term influences on local livelihood and culture are difficult to evaluate. The full influence of the project is challenging to quantify, and effects are still being relieved as the post-project phase develops. Furthermore, collaboration with mass media ensured that knowledge of the project reached a broad audience, and project methods and outcomes were disseminated as part of the broad academic discussion on rural strategies in China.

The process, effects, and consequences will be evaluated and discussed in detail in this thesis. The author was part of the team that developed and built the project. An advantage of this position is excellent firsthand knowledge of the process and events, but the position is also challenging, standing back and evaluating my own and the team's actions in a situation of complex loyalties.

1.2.   The Challenge of Current Countryside Upgrading

1.2.1. The rural challenge in China[15]

Bringing prosperity to the less developed parts of the country and thereby leveling out the disparities in living standards between urban and rural areas is a primary goal of Chinese policy, and its high priority is clear in decisions from the 19th Party Congress in 2017. Ellefsen (2018) tells the story of a student in the *Countryside Construction Program* at the Central Academy of Fine Arts in Beijing who, seeking to understand the rural strategies of China, compared the policies to the American space program of the 1960s: both were very ambitious and optimistic, had abundant funding, and were trying out different ideas to explore vast space.[16] However, with no transparent and political sound strategy determined, it appears to be a practice more similar to trial and error. While the analogy might be unfair, it does depict the complexity of rural China and the multitude of different strategies tested.

A unique and intelligent action in Chinese labor policies was bringing the young sons and daughters of peasants to the cities to build the new environments, thus supplying an inexpensive, reliable, and abundant workforce to power industrialization in the period when China took on its huge share of global production. Migration to the cities took place within the framework of the *hukou* system, which restricted demographic and social mobility by not granting the new workforce full citizenship rights. Formally, their status, democratic rights, and accessibility to welfare services – such as free kindergarten and schooling for children – were linked to the village or town that the worker had left behind for the rapidly growing cities. While the policy worked very well in terms of modernization, urbanization, and increasing production, large parts of the Chinese countryside were somehow neglected by the urbanization policy and even deteriorated in terms of the economy; the living conditions there came to lag far behind those of the new middle-class in Chinese cities. Perhaps more seriously still, the situation affected food production. The arable land in China accounts for 9% of the global resources – this has for decades diminished every year as land has been used for urbanization – and 19% of the world's population lives in the People's Republic.[17] Agricultural land is thus also scarcity in China. The situation became problematic when Chinese agriculture did not show an increase in productivity. This resulted in discussions on ownership, property rights, innovation, and the possibilities for industrializing food production in the Chinese countryside. To quote Lyu Pinjing, vice president of CAFA and chief architect for the Banwan project, from a publication from the Countryside Construction program in 2018: "With the increasing rate of Chinese urbanization, the decline in rural areas in recent years became the focus of our society. Issues regarding the countryside and agriculture are essential in Chinese policies, and the central government is now paying extraordinary attention to these problems".[18]

Of the 1.4 billion people who live in China, around 550 million live in the countryside, most of them in the flat and almost entirely cultivated plains along and between the great rivers in Eastern China, where villages are situated in close proximity to one another.[19] China's rural poor are mostly concentrated in the central regions and especially in the western region, living in scattered areas in deserts, hills, mountains, and on plateaus. The number of villages in China is disputed due to the lack of commonly accepted definitions. An Internet search shows estimates that range from 1 million to 3 million; some claim that one-third of the world's villages are found in China.[20] The most generous of these numbers must certainly be historically based and include "urban villages" that have merged into metropolitan development, abandoned villages, and the categories "administrative villages" (the 5th level in the Chinese system for the government), "natural villages" and "ethnic villages." The two lattermost categories – natural and ethnic villages – are not reflected in terms of government, as their status as villages is based on morphological, functional, and cultural criteria, i.e., defined as such because of the villagers' rights to cultivate their land and the culture of ethnic minorities.

The issues surrounding the urban-rural relationship were raised at the 18th National Congress of the Communist Party of China in 2012. One of the main challenges established at the meeting was the modernization of the Chinese countryside. The policy was linked to ambitious intentions to improve food production, reduce rural poverty, improve welfare services, and develop a stronger rural consumer market within China. In the preparatory material, experts assumed that urban growth over the next twenty years would continue at the same rate as in recent decades. In order to be able to handle urban growth operationally, congress stated that at least half of the increase of the urban population in China in decades to come should happen in small and medium cities and that policies, strategies, and economic funding should be established for addressing rural challenges.

Seen from above, eastern China looks like a patchwork carpet of villages that gradually merges into urban structures; however, China's remote southwest region is dense with mountains and peaks that isolate the rural village from the urban area. The pattern is a function of climate, agricultural resources, and water availability, but the peculiar Chinese village habitat with its small and intensely cultivated family plots is also a product of history. Chinese production was based on the peasant family and comprised family units, often tied together in village clans. The pattern of the organization was very different from the landowner–serf/slave system that established the pattern of cities and rural estates in the Greek and Roman civilizations around the Mediterranean (Figure 1.2). There is no need to glorify this picture; the situation of a debt-ridden peasant family renting their cottage allotment from a rich peasant might bear similarities to serfdom/slavery. Since 1949, Chinese policies have reorganized village rights to the land from family-based entitlements to collective ownership and back again. Today, there exist both villages organized

as collective production units and villages organized as a set of family production units. The basic morphology of the Chinese countryside and the villages has survived through history. However, Chinese agriculture is still primarily based on the intensively cultivated family plot. Politically speaking, the very sensitive question of land reform and industrialization of agriculture is looming but has yet to be confronted fully to date.

On the other hand, China's two million or so villages show great variety and complexity, from poor to ultra-rich, from isolated to fully integrated into the global culture and economy. Moreover, the setting for these villages varies from paradisiacal fertility to barren, dry land with little productivity. In this complicated situation, rural policies and government strategies for the countryside are many-faceted, sometimes overlapping and adding productively to each other, and sometimes contradictory.
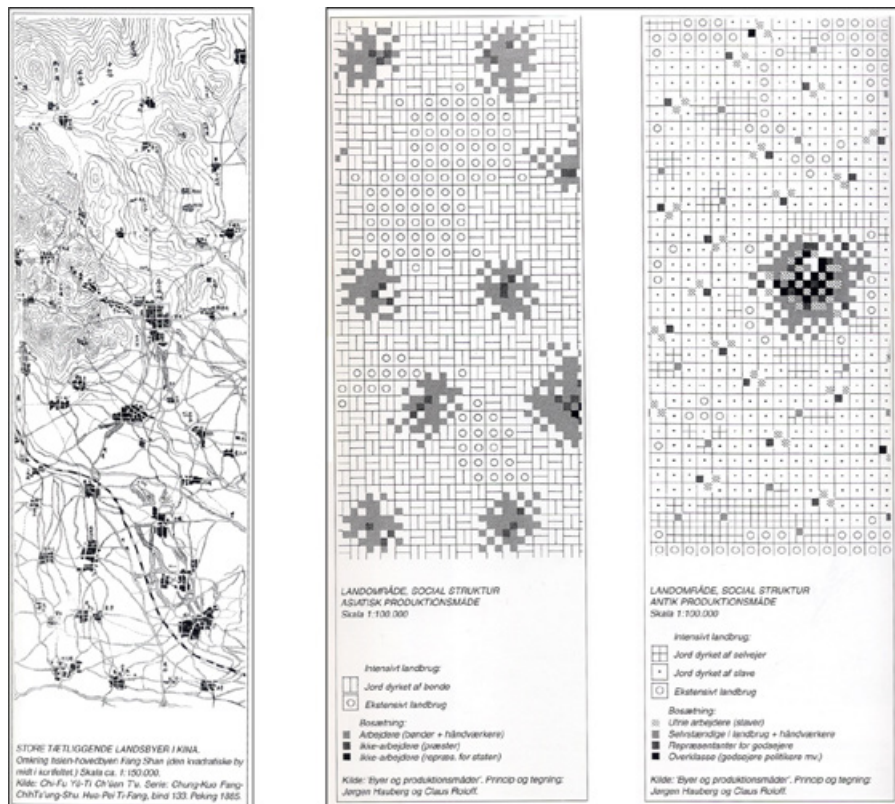
Figure 1.2: Differences in rural settlement systems. To the left is a traditional Chines settlement structure around the main city of Fang Shan (1885). The two diagrams to the right show the principal differences between an Asian settlement and social structure (middle) and way of production compared to the slave societies of European Antiquity (right). Facsimile from Barnow, Finn, (2002) p. 14–15.[21]

1.2.2. Challenges in Guizhou

Guizhou is considered part of the Zomia region[22] (Scott, 2011), located in Southwest China. Historically, the area was situated in between the powers of Southeast Asia and the Han-Chinese regimes to the north.[23] Because the territory did not link to the Chinese river transportation systems, Guizhou was a political and economic hinterland that developed somewhat independently of the Chinese regime. At times, the region was considered "barren and profitless" (Oakes, 1998: 83). Guizhou is not only a periphery region but also – and predominantly – a mountainous region: mountains and hills cover 92.5% of the province area (Wu, 2015). The average elevation is about 1100 meters. The limestone (karst) environment that covers most of the province is relatively unproductive and vulnerable, limiting the capacity for arable land. Guizhou is, in popular speech, known as a territory in which "the sun never stays more than three days in the sky; the land never stays flat more than three feet" (*tian wu san ri qing; di wu san chi ping*). Until a few decades ago, the majority of people in Guizhou lived in rural villages scattered in the mountains, wherever agricultural resources were accessible.

Compared to most parts of China, the province has been poor, with a large percentage of the population living below the poverty line.[24] The province is far from the fast-growing and prospering metropolitan regions in the eastern flatlands and along the main rivers and transportation corridors. Moreover, industrialization based on natural resources has been weak since 1949 and limited to primary industries like forestry and hydropower plants.

The government program *Development-oriented Poverty Reduction for China's Rural Areas* (2011-2020) mapped out (Figure 1.3) 14 contiguous destitute areas in China.[25] Three of these are situated in Guizhou.[26] Among the factors responsible for the poverty are the poor natural environment; peripheral location, laggard infrastructure and uneven regional development (relatively rich cities, poor countryside). All of these factors pose challenges for rural upgrading in the region.

The natural environment in these 14 contiguous destitute areas is relatively infertile and ecologically fragile. Some areas experienced environmental deterioration due to soil erosion and biodiversity reduction caused by irresponsible development and overpopulation or government/regional plans and action that omitted environmental considerations. The Guizhou Province serves as a good example for the examination of how geographical characteristics affect rural development. Porous carbonate rocks, where rainfall can quickly drain away and leak into the underwater system, cover the majority of lands in a mountainous environment. The bedrock was exposed to soil erosion and deforestation during the process, leading to rocky karst desertification. Cultivating these thin and acidic soils, most local cultivators – like their predecessors – can only produce basic agricultural products for their self-sufficient society. The intensified desertification has led to many natural disas-

ters, such as landslides, falling rocks, and avalanches. Climate change has made these kinds of disasters more extreme. To reduce the harmful effects of natural disasters, the provincial government launched the *Ecological Resettlement Project* in 2012, which planned to move more than 2.04 million people out of environmentally fragile areas between 2012 and 2020.[27]
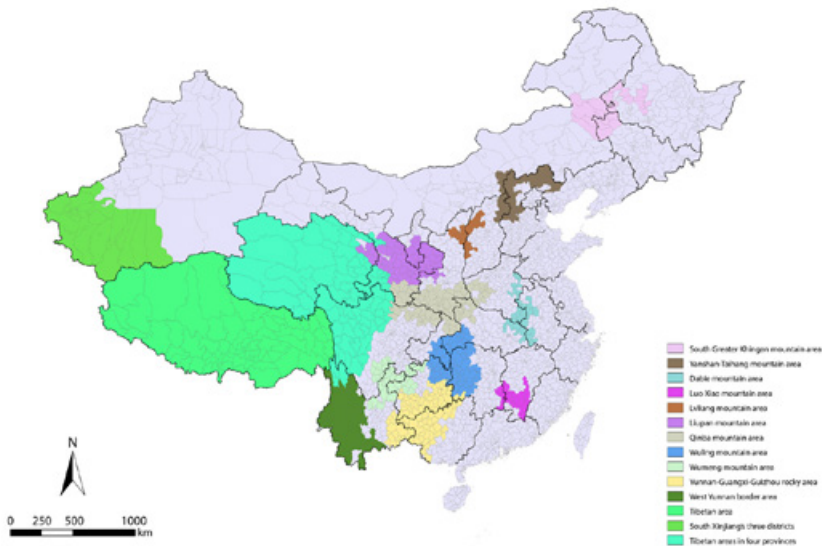
Figure 1.3: Diagram of 14 contiguous destitute areas (by the author). The data was obtained from the *Outline for Development-oriented Poverty Reduction for China's Rural Areas* (2011-2020). (http://www.gov.cn/gongbao/content/02011/content_2020905.htm) Banwan village is located in the Yunnan-Guangxi-Guizhou rocky area.

Spatial location and unfavorable geographical conditions are also key factors behind regional inequality. The 14 contiguous destitute areas on the map are all peripherally situated, mainly in the hinterland of western and central China and in remote and relatively high-altitude areas. Travel and transportation difficulties have been principal factors limiting economic growth and trade relationships with more prosperous regions. The relatively isolated environment affected the flow of commodities, information, and talent exchange and severely inhibited cultural and commercial integration. Even though infrastructure projects have been built and reshaped the underdeveloped regions, the complicated geographical conditions, the necessity for ecological protection, and the difficulty of highway construction increase the maintenance cost of infrastructure and place a financial burden on local governments. The government program *Outline on Poverty Reduction with Transportation Construction in Contiguous Destitute Areas* (2011-2020) was established to accelerate the construction of national expressways, highways, rural roads, and

bridges. Improved infrastructure was supposed to strengthen regional integration, boost trade, initiate better utilization of natural resources, develop industries, and release the vast potential in domestic tourism.[28]

1.2.3. Challenges in minority communities – in China and Guizhou

One of the challenges of the Banwan project was that we were working in a community inhabited by villagers from one of the Chinese ethnic minorities. That is: a group of people with a shared culture, tradition, language, history, etc., living in a country where most people are from a different ethnic group.[29] According to Chinese definitions dating back to the 1950s, China is home to 55 officially recognized ethnic minority groups[30] that constitute a population of nearly 125 million.[31] Ninety-one percent of the total population can be classified as Han origin. And the ethnic minorities, often referred to in the official terminology as *minority nationalities*, constitute about 9 percent.[32] Yuan (2015) arguably states that minority policies in contemporary China have been robust and supported ethnic culture and identification. As early as the 1950s, each ethnic group and its territory have been legally and politically established, also as a part of the policy to unify the country (Maurer-Fazio and Hasmath, 2015). In 2000, the Chinese government initiated the so-called "*Great Development of Western China Strategy*" to reduce the income gap between regions and nationalities through industrialization, creating employment for workers belonging to ethnic minorities.[33] However, because of historical, geographical, and possibly political reasons, there is still a big gap between the ethnic minority areas and the areas to the east regarding economic and social development.

China entered the stage of understanding "culture as capital" in the 1990s when culture started to be reconstructed to generate revenue (Wang, 2001). The ethnic culture was considered – by central and local government and local minority people – as a resource to gain a share of government support, private investment, and market benefits. Multiple interest groups within the arts, academia, government, business, and mass media took part in reconstructing the spectacular cultural landscape. Since then, expressions of minority culture have become an important branding: traditional settlements and architecture, folkloric art performances, and handicrafts have developed into commodities competing in domestic and global markets (Luo, 2018). Good-looking houses and folk performances that offer a live visual experience to the tourists are a primary concern for developers (Hillman, 2003; Notar, 2006; Yang, 2011). However, scholars (Yang, 2011, Luo et al., 2019) have questioned the cultural representation in state-sponsored ethnic tourism associated with certain standardized cultural forms often considered inauthentic by local minority groups. Moreover, the inhabitants' rights and interests may be

constrained because their capacities and voices in a process combining real estate development and by the use of tourism were overlooked (Wang and Yotsumoto, 2018). Therefore, the process of commodification and commercialization associated with tourism might be dubious as a means to strengthen a place-based sense of identity.

Historically, ethnic minority communities in the southwest provinces of China were the most inaccessible and seen as a mystic and forbidding (Luo et al., 2019). Ethnic minorities in Guizhou include more than 14.05 million people, making up 36.44% of the total population in 2020.[34] Guizhou is characterized by its diverse groups of ethnic cultures, and the region's population is one of the most multiethnic in China. The province is home to eighteen of the registered minorities, such as the Bouyei, Miao, Zhuang, Yao, Yi, and Dong. Moreover, there are eleven different languages spoken in these varied ethnolinguistic communities.[35] The majority of ethnic minorities reside in rural villages. Guizhou still shows the second-lowest urbanization rate – 46.02% by the end of 2017 – of the Chinese provinces.[36]

Undoubtedly, there is a global notion that ethnic villages somehow must be transformed into modern societies. In 2005, the Chinese government issued the policy of *New Socialistic Countryside Construction*. According to this initiative, Guizhou carried out action plans, focusing on infrastructure construction and village renovation to eradicate poverty in rural regions. The new rural policies also revealed challenges and affected the minority communities. New development models and opportunities for employment and income touched all aspects of village life. However, in my opinion – referring to the Guizhou context – the struggle on the regional and village level to meet ambitious, quantitative expectations in many minority communities often did not cater to local social, economic, and cultural needs. This strenuous pursuit for quantifiable and visible achievement and economic yield brought new challenges to minority regions in Guizhou. Unexpected social issues were generated throughout the development strategy implementation, uneven distribution of resources turned into a significant problem in the villages, and ethnic identity reconstruction issues were not handled.

One example very relevant for the discussion of the Banwan project, the need for better education in minority groups was not handled properly. Provincial illiteracy in Guizhou rates among the third-highest in China according to the 7th National Population Census (2020).[37] The illiterate and semi-literate population groups are mainly found in ethnic areas in Guizhou.[38] In addition, many children in rural China speak ethnic languages at home, making it difficult for them to become literate in Chinese at school. The education system has not been able to thoroughly combine teaching in the native ethnic language with teaching Mandarin Chinese. Motivated by such uneven educational resource distribution, the central government is currently endorsing a policy of school consolidation,[39] the purpose of

which is to centralize schooling, improve the central primary schools in the local townships, and close down rural schools. There are of course major side-effects of moving the school, both as an educational and cultural institution, out of the village and transferring local children to stay during the week-days out of their local community. For example, local campus violence is associated with social problems for rural pupils (Xu and Liu, 2018). Although the school in the town theoretically (and in numbers) might give high-quality education, one might doubt that the village pupils in the new environment benefit academically and socially. For sure, the re-localization of schools drains resources, human capital, and life out of the villages. The uneven distribution of social and welfare resources, exemplified by the school consolidation policy, has been a key challenge in the Banwan project and will be discussed in Chapters 5 and 6.

Another critical challenge for discussing Guizhou's minority communities is how to preserve ethnic identity and nurture their cultural heritage. Most minority groups in Guizhou traditionally have no written language (Scott, 2011). Instead, their literature – myths, legends, songs, folktales, and sacred scriptures (e.g., *Mojing* in Bouyei settlement) – has been orally transmitted. Given the condition of oral over written histories, the culture and history in many minority societies have gradually been lost, contributing to what might be described as the decline of cultural consciousness. And this is entirely understandable. Take vernacular building construction in minority communities as an example; building traditions and skills are in minority communities not carried and taught by books but through oral and practical apprenticeship models.

Moreover, in recent decades, modernization and waves of the market economy have reached remote ethnic regions through consumerism, mass media, and political propaganda. As a result, the influence from what might be called "Contemporary Chinese culture," "the Urban culture of China," "or the Majority Culture" is overwhelming, leading to acculturation and the inevitable and complicated mixture of cultures.

1.3.   The Project

1.3.1. The geographical context of Banwan

Before discussing the Banwan village specifically, it is necessary to briefly describe the location and geographical situation that have conditioned local identity. Qianxinan Bouyei and Miao Autonomous Prefecture are territories for two different ethnic groups located in southwestern Guizhou. Like most of the province, Qianxinan is dominated by karst topography were gullies and valleys interlock, a hilly landscape in which peaks rise, each one higher than the next. The villages are dispersedly located, and many ethnic settlements are situated on isolated and

formerly rather inaccessible mountain slopes.

The triangular-shaped Ceheng County in the southeastern part of Qianxinan is situated at the confluence of the Nanpan and Beipan Rivers (Figure 1.4). The county borders Anlong and Zhenfeng Counties in the northwest, is adjacent to Wangmo County across the Beipan River on the east, and faces Tianlin, Leye, and Longlin Counties in the neighboring Guangxi Province on the other side of the Nanpan River to the south. Ceheng Bouyei Autonomous County was established in 1965, becoming the only Bouyei autonomous county in China until the Qianxinan Autonomous Prefecture was established in 1981. About 172 500 (2015) Bouyei people live in Ceheng County, representing 75.25% of the total population. Yata town is one of thirteen towns in Ceheng and the administrative center for the Banwan village. The Yata town is located 19 km from the Ceheng County seat and has a population of 19 180, of which 94.3% is Bouyei. In Yata town, there are 11 administrative villages[40] and 80 villager groups.[41]

Figure 1.4: Location and administrative boundary of Ceheng County. The darker green area shows the administrative boundary of Yata town, and the orange area is the administrative boundary of Banwan village. (Source: Author)

Banwan village is situated about 25 kilometers southwest of the Ceheng County seat, near the border of the neighboring Guangxi Province on the other side of the Nanpan River. Banwan administrative village (Figure 1.5) comprises three natural villages and six villager groups with 370 households and 1 628 people (based on data from 2015).[42] About 92% of them are Bouyei. At first glance, Banwan resem-

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bles an ancient settlement like those often portrayed in Chinese landscape paintings. On a second glance, however, one discovers that the village contains many new constructions that break the spatial rules of the traditional village morphology. In 2014, Banwan was selected to the list of "China's Traditional Villages."[43] The design team – the team and the process of carefully choosing the site will be described in Chapter 5 – selected this ancient Bouyei settlement as the site for the pilot project.[44] The picturesque character of the village was attractive; The cluster of traditional wooden stilt houses located among green rice fields on the northeast-facing slope of the prominent Bugong Mountain.
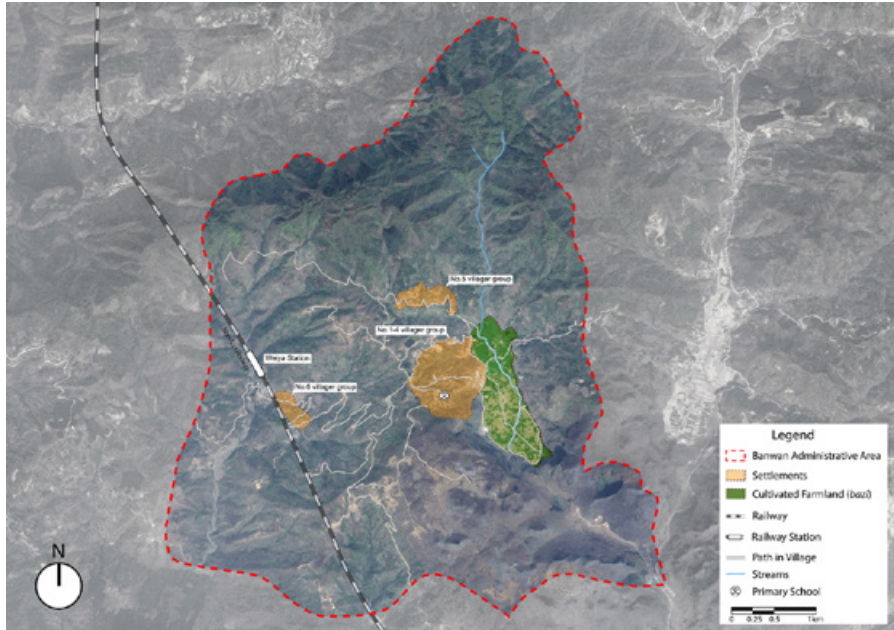
Figure 1.5: Map of Banwan administrative village. Predominantly Bouyei people inhabit villager groups NO.1 to NO.5. No.6 is inhabited by a Han Chinese group that moved to Banwan village from Xingyi in 1966. (Source: Author)

1.3.2. Habitat – characteristics of the Banwan village in terms of livelihood

According to statistics, Banwan is an *impoverished village*.[45] The Bouyei in Banwan lived in an upland remote mountain habitat for many generations.[46] Their subsistence and ways of life had mostly been independent and autonomous. Given that priorities were given to urbanization and the development of China in a global economy, the consequences for villages like Banwan were economic marginalization during the last decades' transition to the socialist market economy.

Historically, the Banwan community structured their livelihood around the green rice fields and the limestone mountains, where the poor soil quality and widespread erosion gave low yields. The villagers combined farming and various activities to utilize topographical and environmental situations. On the upper slope of the mountain and in the valley, villagers used different cultivation patterns, combining planted crops, kitchen gardens, and animal husbandry with the main local crops, including paddy rice, maize, and beans. The rice harvest was kept as a daily staple food and a raw material for making liquor. Maize was planted in April and harvested in mid-August. Peasants removed the maize husks and dried maize inside their dwellings. This was usually to feed major domestic animals such as swine, cattle, goats, and chickens. Banwan's cultivated land per capita area is 0.6 mu (0.04 ha), much less than the average national number of 1.43 mu (0.095 ha) per capita. This, together with the barren soil, is the main reason for the limited agricultural outputs and low agricultural income.

The income gap between Banwan village and richer districts is considerable in terms of cash. However, the living standards remain stable because the village still holds a customary self-subsistence economy. The *dwelling garden* (Figure 1.6) is one such subsistence activity. A dwelling garden is generally attached to the front of a homestead. A woven bamboo fence encircles the area and prevents wild animals from entering. Although the garden is a small patch of field, residents cultivate various crops throughout the year to meet family needs. For example, Chinese cabbage, pumpkin, wax gourd, and chili were cultivated in different seasons and provided an important daily food. In addition, pigsties and chicken houses were built adjacent to the dwelling garden; the stems and leaves of many vegetables were used as fodder for these domestic animals. In this way, peasant households have a supply of nutritious and fresh organic food and meat at almost no cost.

To increase agriculture production and gain more crop diversity, the local government chose to develop animal husbandry and introduced various cash crops. In 2002, as the first governmental investment in local agriculture in Banwan, the local government gave each household in Banwan twenty black goats to restructure agriculture production. With animal husbandry introduced, the livelihood changed, and the Bouyei could earn money by selling black goats. The government introduced sugar cane in 2012 to create cash income for the peasants. The crop was sown in February and harvested in January of the following year. Over 70% of the households came to cultivate sugar cane on their farmland, at a yield of four to five tons per mu.[47] At a price of 500 RMB per ton, the harvest would generate an income of 2 000 – 2 500 RMB per mu, minus expenses. Sugar cane is sold to the Nanhua sugar factory located in Ceheng County.[48] In 2012, due to market changes in local agricultural production, the farmers started to grow tung oil, cole flowers, and oil-tea camellia as profitable cash crops. Tung oil, camellia oleifera, and Chinese nut were cultivated in the upland fields.[49] The price of Chinese nut is 2 RMB per *jin*

(one jin equals 0.5 kg), and tung oil cost 1 RMB per jin in 2016. Camellia oleifera needs at least three years to mature and to yield large quantities of fruit. One mu of mature Camellia oleifera can generate an income of over 2 000 RMB.

Figure 1.6: Every household clears a small area close to their home. The "courtyard economy" gives villagers access to sufficient fresh food for daily life. (Source: Author)

Many Bouyei people began to seek work in more affluent rural districts and cities due to the labor market situation. Li Yushan, the deputy village director, in an interview[50] told me that his opinion was that the Guizhou Rural Dilapidated House Renovation program[51], initiated in 2008, provided subsidies to individual families for the renovation of their houses. However, the subsidies were insufficient if the family wanted to construct a new house. Many villagers left the village to earn enough money to cover building costs. From then on, agriculture (also with newly introduced crops), animal husbandry established with government funding, and temporary work away from home constituted the main subsistence activities.

The families' acceptance of 20 black goats, planting of profitable cash crops, and working away from home suggests that the Bouyi locals are not averse to change and may be seen as a rational response to the actual contemporary situation. Take sugar cane cultivation, for example; it is more cost-efficient than rice cultivation, fertilizer is only necessary every third or fourth year, and field maintenance is lower than most other crops. In addition, cultivating sugar cane made it possible for peasants to leave Banwan for months to find temporary work and earn addition-

al money. The locals combined crop planting and migrant employment to achieve both an effective and practical earn of livelihood. Nearly all grain- and cash crops were sown and harvested in August and September, and post-harvest activities followed the cropping schedule (Figure 1.7). Many young migrant workers returned to the village to help parents and relatives with the harvest. Harvested crops were gathered on the farmland and distributed to the different households. Sowing activities started days after harvest.

Figure x. Annual cropping schedule of agriculture

	February	March	April	May	June	July	August	September	October	November	December	January
					Rainy season							
Maize			S				H					
Rice			S					H				
Cole Flower		H						S				
Sugarcane										S H		
Tung Oil Fruit								S H				
Tea Oil Tree								S H				
Chinese Chestnut								S H				

S: sowing, H: harvesting
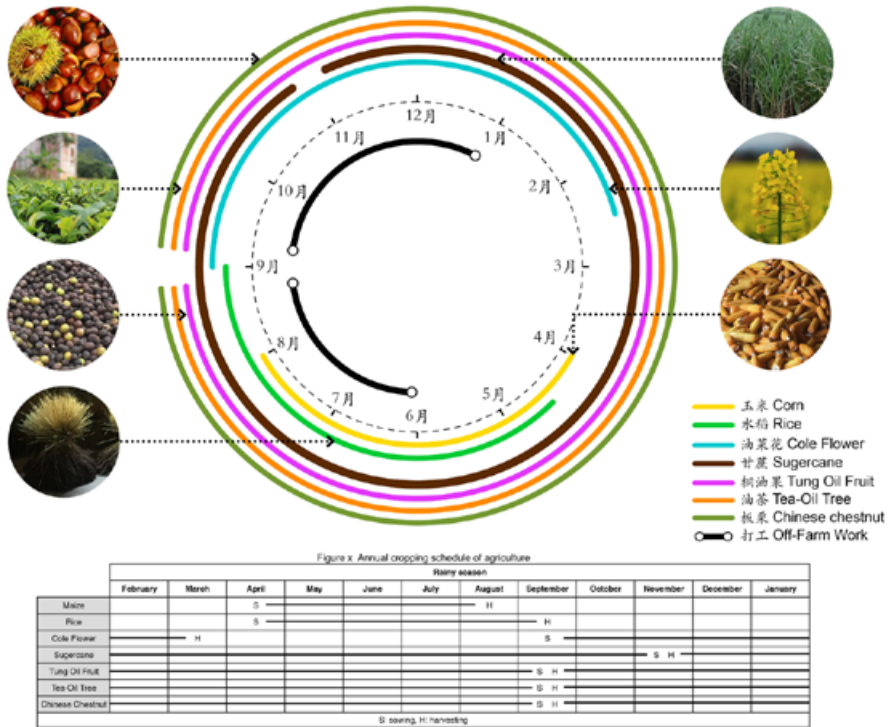
Figure 1.7: Annual crop schedule in Banwan village (Based on the Chinese Lunar Calendar). (Source: Author)

A negative effect of the seasonal labor outside the village led to a shortage of manpower that weakened the village's ability to involve in other production activities in the established farm calender. Wine-making, embroidery, and Bouyei opera performance are no longer events that engage the whole family. Fall in the price of products of pastoral farming and cash crops also stimulated migration.[52] Although migrant workers send a portion of their income back to their families in the village, this cannot stimulate the endogenous dynamics of the poor groups and can only be a temporary solution. The consequences of these changes are that ties between young farmers and rural communities have weakened. And it is an open question whether their interest and ability to invest locally and participate in rural renovations will also be weakened.

1.3.3. Place – the Sacred Mountain

In ancient times, the Bouyei had turned the geographic shortcomings into geomantic assets by endowing the landscape with divinity. The hill people – the Bouyei – are deeply attached to the mountain region in which they live and to which they have adapted (Figure 1.8). They painted the landscape with meanings and narratives wrapped in tales and myths.
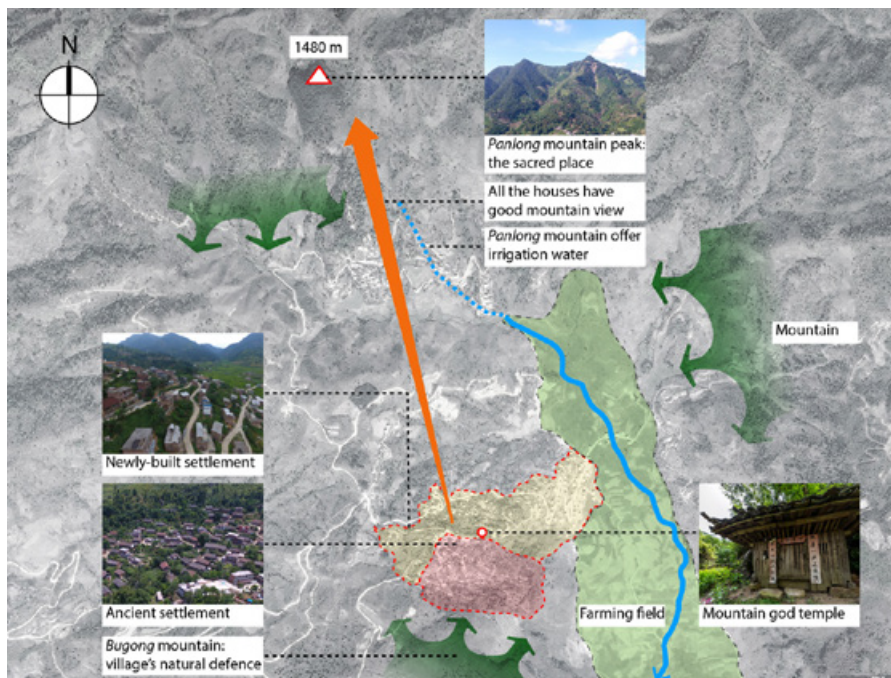
Figure 1.8: Bouyei people believe that the mountain god is a natural spirit embedded in the mountainous environment. This pantheistic belief establishes relationships between divinity, nature, settlement, and agro-pastoral life. (Source: Author)

Panlong Mountain – the sacred place – has influenced daily life and has been a location for worship and pilgrimage. The mountain has conceptually formed the environment, assigning meanings and providing the principal layout for practical functions and the structure of the village. Panlong Mountain can be considered a multi-layered place that serves two kinds of purposes. The first of these is a pilgrimage, inherited from the legendary hero of the Ming Dynasty, Cen Guan, dating from when an army from Guangxi settled down on the Panlong Mountain.[53] The migrating army from the outside never posed any serious threat to the local community; instead, they seemed to have lived in harmony with the residents, protecting the village from attacks by bandits from. Many elderly local and local scholars, in particular, still revere the memory of Cen Guan, and a sacred clearing

on top of the mountain is used ritually twice a year.[54] Divinity prohibits access to the peak outside of the festival time. Another function is that Panlong Mountain provides constant water for drinking and irrigation. A well-known Guizhou proverb describes distinct ecological niches occupied by different ethnic groups: "The Han live in townships, the Bouyei live by waters, and the Miao live on mountaintops." This proverb attests to the importance of the Bouyei's association with water in densely mountainous regions. The streams flowing from Panlong Mountain assured a water supply and provided sufficient irrigation water for cultivated land and freshwater for everyday survival. Elder locals, raised in pantheistic beliefs, describe Panlong Mountain as a metaphor for the village's patron saint. Moreover, mountain worship has been rooted in many aspects of the community's life. The Bouyei, when establishing their villages, usually carefully selected a site where no part of the dwellings would be shaded by hills to the east, west, or south. The Banwan people built their settlement on the northern slope of Bugong Mountain, where they received neither the light of the early sunrise nor that of the late sunset; this was not only in order to guard the rear flank but also in order to face north and keep watch over the sacred Panlong Mountain and the irrigation land.

The story and literature recorded in *Mojing* – inherited and recited by the zhai lao (priest or shaman) – recount that the ancestors of Banwan settled on Bugong Mountain due to the geographical advantage of an easy-to-defend terrain.[55] The Bugong Mountain slopes vary from 850 m above sea level at the bottom of the valley to 1 200 m at the mountain ridge behind the cluster. Banwan was built as a tight cluster, presumably for defense purposes, with the multi-purpose dwellings built close together. Over one hundred stilted houses adapt to the changing topography of the hill slope of Bugong Mountain. One inherited rule is that houses should face Panlong Mountain: the sight of the mountain from the balcony of each dwelling would bring sacredness and lucky to every household.

To understand a village, one must understand its geography and spatial patterns. A village is more than an aggregation of houses; it is a distribution of human activities across the landscape. All behaviors and practices in Banwan village, including agricultural production, ritual movement, and festivals, are related to the mountainous landscape, defining the habitat and influencing the settlement structure and its boundaries. Fukuta (2005) attempts to elucidate the traditional Japanese folk villages by categorizing them into different spatial compositions, which include settlement (site for dwellings), cultivated land (territory for production), and mountain forest (site for resource collection). This village spatial pattern interpretation offers us an approach from which to investigate the habitat. Both Bugong and Panlong Mountains and their surrounding limestone hills represent Bouyei's material production, spiritual life (symbolic space), and social activities (Figure 1.9).
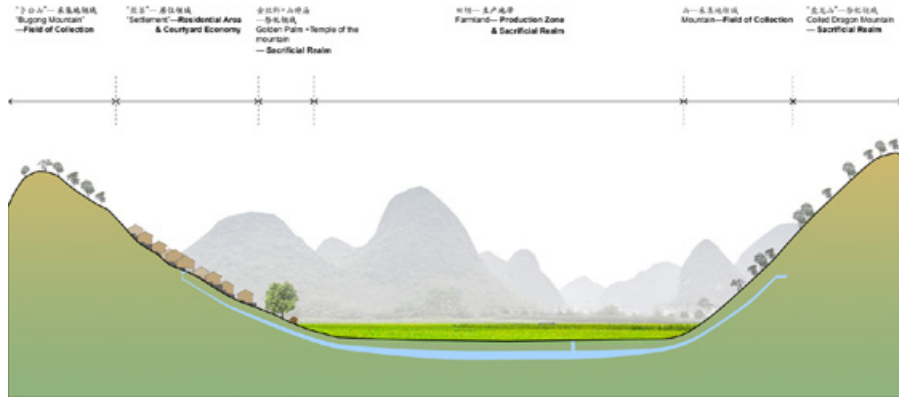
Figure 1.9: "The spatial boundaries of Banwan; resource gathering areas – settlement – sacrificial realm – paddy land. (Source: Author)

1.4.   The Banwan Project as My Case Study

Historically, the minority settlements in Guizhou belong to the "margin of western China" or the "Chinese frontier," ecologically and physiographical diverse from the fertile Chinese plains and river valleys. These different margins might be added into a "triple overlapping region": a mountainous and sparse area, a multiethnic area, and an impoverished area.[56] The development challenges are complex, even after thirty years of *Reform and Open Policy* that has changed Chinese society substantially. Banwan village is a concentrated expression of how the structure and character of the complexity in rural areas and is, therefore, an interesting village case study. The ethnic historical patterns are still observable in Banwan, the marks of changing economic and policies towards ethnic minorities can be read, and the village shows an all-around and varying degree of adaptation to urbanization and modernization in terms of architecture, production, and choice of livelihood and attitudes to indigenous culture. The pilot project for village reconstruction might involve many parts of cultural, social, and economic processes in the village, and the project may be discussed both as a case and as a possible model.

The initial objective of the Banwan project was, however, not to establish a general model for poverty alleviation in the numerous Chinese villages but to explore an architectural strategy possibly adaptable in particular situations. The objective of my evaluation of the project is also to discuss the strategy as a possibly adaptable model in specific and limited situations. In the recent decade, rural renovation projects promoted by architects, artists, and social activists have sprung up in villages all over rural China. The projects show great diversity due to differences in conceptual ideas and the geographic, historical, economic, and cultural complexity of the rural areas.[57] Scholars have summarized and debated the origins, history and models of rural construction.[58] However, to fully understand the model and effects

of any rural renovation, a long-distance-based categorization will be insufficient. Considerations of historical, geographical, economic, ethnic, and cultural conditions in the specific region and place are needed. Usually one would find significant differences in the economic foundation of the projects, in the social and cultural conditions, in the priority between the challenges and needs, government management and support from the local community, and in what might be called the "development potential."

The Banwan renovation is a pilot project and establishes research material for evaluating a specific approach to village revival. My research on the expert architect-led renovation interprets the regional and local conditions, the ideas and organization of the project, the process, and the local effects. In addition, I intend to document and discuss the rural village's various reactions to the process and the physical transformation and to cover the stakeholders' intentions, reflections, criticism, and solutions to the issues encountered.

Observing the rural society and its renovation practice gives access to an essential and unique material from a Chinese perspective. The case might be termed paradigmatic – non-typical, but with future implications – aiming to gain academic reflection employing knowledge gained from practice in rural reconstruction and evaluation of the local outcomes of that practice. This dissertation focuses on the spatial and social transformation before, during, and after the rural renovation practice in Banwan village. The themes discussed and dealt with in the project vary from small design interventions addressing practical livelihood issues to the design and planning of the entire village for future development. Each architectural project addressed different themes and problematic issues engendered by the urbanization process.

I was fortunate to be the resident architect of the Banwan Project in 2016. Over six months (from July 2016 to October 2017), I represented the project and had frequent contact with various groups active at the grassroots level, local peasants, and many other practitioners with specialist backgrounds engaged in rural areas in Guizhou. The in situ rural renovations in Banwan demanded site work and provided an opportunity to explore and examine the deep meaning of the local conditions in rural architecture practice, as well as to examine the transformed role of the architect when devoting oneself to rural reconstruction.

When carrying out the renovation, I held the multiple roles of the resident architect, observer, and evaluator. I received regular feedback from peasants, the local government, and the construction team, aimed to improve the subsequent design work. The feedback also provided material for evaluation and reflection related to my academic research. Although the renovation work was designed to meet pragmatic needs, the intention was also to manage the economic, industrial, social, and cultural implications of the rural reconstruction. My research position was under-

standably complicated. In the research at hand, I have had to clarify and distinguish between my roles as (1) resident architect; (2) field supervisor; (3) a member of the expert architect team; (4) an observer, and (5) a researcher performing relevant analyses and evaluation. My position and eventual biases will be discussed when presenting my research design in Chapter 3. Already in this first chapter, I will line up my time-line of Banwan studies:

• I was recruited into the doctoral program at the Oslo School of Architecture to explore parametric design. This did not work, and I took a break in China from my studies, intending to link to the CAFA/AHO research program on Chinese rural development.

Through contacts at CAFA, I was able to gain a position in the Banwan project.

• I was a resident architect of the Banwan village reconstruction project and participated in the project from concept design to site construction from July 2016 to December 2016. As a resident architect, I worked closely with the leader of the team of architects, with the client, and with the village leadership. I was responsible for achieving the design objectives, but I also met challenges balancing clients' needs with the requirements of quality, efficiency, value for money, and service improvement.

• During this period, I also filled the role of a field architect. Physical renovation work produced conflict, and my role was to supervise the work and handle conflicts. My role as a supervisor undoubtedly was colored by my acting as the resident architect. I had to manage and control but also give full consideration to the needs of the community/villagers and implement the project handling different understandings of design ideas and schemes. There are plenty of potential conflicts between the interests of preservation and transformation and the precise and silent needs of the local population.

• In this study, I use the concept "expert architect," referring to the noted architect from the School of Architecture at CAFA in Beijing, and "team of expert architects," referring to the group of architects working with him. The project brought me in close contact with Professor Lyu Pinjing, who headed the renovation of Banwan. Needless to say, attaining the necessary distance in my evaluation has been a challenge.

• The project is still under development at the time of writing. However, I have followed the project by conducting regular field investigation.[59] When visiting, I have filled the role of a researcher, observing, collecting facts and opinions, and evaluating.

• Generally, to fill the role as a researcher has been my ambition throughout the whole project:

An observer of activities of both insiders (local peasants, village cadres, and sages) and outsiders (architect team, local authorities, and the construction company) in reflective practices;

An observer of others through informal interviews, conversations, discussions during the fieldwork, Ph.D. seminars, workshops, and advanced training courses about "Countryside Construction" – the term used in CAFA research and education. Here, "others" denote all the participants in the Banwan project and the scholars who have visited Banwan); and

An evaluator assesses the performance and effectiveness of the development programs in terms of physical and social consequences.

1.5.   Research Questions

My motivation for doing this thesis is derived from my firsthand working experience in the Banwan village. The general objective is to understand how the physical transformation of the village may sustain local ethnic culture as well as adapt to the new "urban condition" of the Chinese countryside. I begin by evaluating the driving forces of community transformation over the past twenty years from the perspectives of economic, cultural, spatial, and architectural change. I then interpret and evaluate the process and outcomes of the Banwan project in which I took part. I discuss the activities and strategies organized and developed by the local government, architects, local peasants, and other stakeholders and their attempt to delineate the Bouyei community. I evaluate whether and how the new set of sub-projects are embodied in the rural landscape, as well as the effect on local biodiversity, the structure of the rural economy, the pattern of rural settlement, and the daily routine and lifestyle of the Bouyei people. Thirdly, I discuss the qualities of what might be called the "design-driven Banwan model" and the possibility of using this model successfully in other Chinese villages. These discussions intend to answer the research questions described below.

My general research interest is:

How a traditional agricultural village populated by an ethnic minority in a remote part of China might adapt to the new urban condition without losing itself culturally, architecturally, and economically?

To address this question, I do a case-study and formulate the following sub-questions:

1. What are the key strategies and models for village upgrading in contemporary Chinese rural policies, as learned from studies in the Guizhou province?

2. What may be learned from the complex process of transformation in the village

environment of Banwan before the project was initiated, especially in the recent period – from 2002 to 2016 – when many governmental initiatives for rural upgrading were launched?

3. How might the cultural and intangible cultural heritage of a minority be a driving force in the process of improving the conditions in the village and reshaping public space?

4. How may the expert architects perform a unique role in the process of rural renovation, how does this part affect other roles and relationships, and what are the limitations of this role.

5. Does the Banwan experience represent a possible new model for village renovation in China, and if so, what might be learned from the case-study in order to refine the model?

This first chapter outlines my work with the thesis: on Guizhou province, Banwan village, and the Banwan project as empirical material for my case study. Many of the facts and arguments will be rediscussed in depth in the following chapters. My research questions guide the discussion of approaches based on literature studies in the following chapter and the analytical perspectives defined in Chapter 3.

Chapter 2

This chapter intends to use literature to contextualize the study of the Banwan pilot in relation to academic investigations of projects with similar characteristics. This implies providing my understanding of flaws and limitations in the previous studies of rural renovation, and establishing approaches to interpret and evaluate architectural practice in a rural/village context. In Chapter 3 – also referring to literature studies – I will discuss specific research methods and establish my research design.

2.   APPROACHES TO THE STUDY OF THE BANWAN PROJECT

The primary motivation of the Banwan project research is to evaluate the renovation performance, its consequences to the community, and the reference significance to other architectural interventions in the rural area. The literature selection and the structure of how the review is presented are based on the presumption that my study can benefit from participating in the design activity. Experiences had been gained, and empirical material was collected while I was involved as an architect in the rural renovation. Additional material was collected, interpreted, and analyzed when I, in the post-construction phase, assumed the role of a researcher.

2.1.   The Limitation of Current Studies of Architect-led Renovation

Tu and Long (2017) stated that rural renovation emphasizes human intervention to effectively promote the positive evolution of rural areas in a predetermined way. Many studies of rural renovation have focused on the character of the *leading role* in the realization of rural development and as means for categorization of rural development activities. Ding et al. (2016), for example, noted that the typology of rural renovation practice could be divided into three types: government-led type, farmers' endogenous type, and society-aided type. Firstly, in their categorization, the government-led type refers to a practice promoted by central government or local government to guide rural development through policies, initiatives, planning, and projects. Secondly, farmers' endogenous type refers to a practice predominantly based on local resources and farmers' capacities rather than initiatives and resources imported from outside. Finally, the society-aided type refers to practices promoted by social groups or individuals such as social elites, charities, enterprises, and educational institutions aiming to help rural development. These three categories differ in ideology, the way they are promoted, internal logic, scientific rationality, and regulatory arrangement. The Banwan project, in some respects, belongs to the socio-aided type, recruited from a disciplinary and social elite and

rooted in the Central Academy of Fine Art in Beijing. Otherwise, it is difficult to put the project into one of the categories. However, the Banwan renovation was sponsored and supported by the local government financially and politically and led by a group of architects and students who proposed a development strategy, which was assumed to evolve into a kind of community-directed and community-managed process. Banwan, therefore, was somewhat an original model and a first test and, in fact, spans over all three categories.

In China, there has been a policy shift in interests toward rural development and rural reconstruction (Yeh et al., 2013). Vernacular architecture and traditional settlements have become a primary interest for architects and are regarded as attractive sites for architectural projects (Baan et al., 2017). Architectural practices are now becoming an important form of rural renovation including different sets of actors and demonstrating varying results. Most of the studies of these architectural interventions have focused on the introduction of contemporary architecture into vernacular settings (Baan et al., 2017; Meng, 2017); discussions about how professionals from the discipline of architecture should approach issues in rural communities (Bolchover and Lin, 2013; Zhao et al., 2016, Huang, 2014; Luo and Zhao, 2015); the limitations and challenges of architectural intervention (He, 2015; Ye and Huang, 2016) and the interpretation of new rural architecture (Wang, 2007; Liu, 2010; Zhang et al., 2016; Zuo, 2020). These studies reflect a Chinese research tradition in the very field I am studying. However, these studies focus more on the general features and operational rules, and these rules do not investigate the processes and evaluate the outcomes as well as ignore constraint conditions "on the ground," like social and cultural specificities and the scope and interests of different actors taking part in the process. The general approach to the discussion might be illustrated by how the Architectural critic Zhou Rong (2015) has classified the current practices in rural construction into three schools: the *culture school*, the *technology school*, and the *society school*.[61] Firstly, referring to Zhou Rong's article *Three Issues of Rural Constructions*, the culture school refers to practices applying architectural elements to echo the vernacular environment and create a sense of a historical "cultural landscape" or even nostalgia. Secondly, the technology school emphasizes the technical application of vernacular construction and materials' use and processing. Finally, the society school aims at spatial reconstruction to rebuild the community and, simultaneously, strengthen the sense of identity in the village. The categorization might work for some architectural projects in rural areas; nevertheless, more sophisticated and ambitious projects like Banwan, in my opinion, do not entirely fit in these boxes.

More operational for the discussion of the Banwan project are the evaluations by the rural construction practitioner Zuo Jing (2020), arguing that the Chinese architects involved in rural construction should not only act as designers of buildings but also as designers of rural society. Meaning that their approach must include

economic, social, and cultural challenges.[62] An obvious question to this statement deals with the capacity of architects and the limitations of architectural knowledge. So, are other disciplines needed in projects with the ambitions that Zhou Rong describes? It is an important question related to Banwan and the project evaluation. The architects in Banwan took on challenges that are the specialties of other disciplines, seemingly confident that they (we as architects) could handle them properly. In order to advance my knowledge, I wrote one of my articles in this thesis with the help of an important anthropologist who strongly knew Banwan.[63]

Somehow arguing for the Banwan approach, Huang and Hung (2016) note that in-situ design and local grounding of decisions and construction is an effective way of implementing architectural programs. They also point out that in situ practice has prompted architects to constantly adapt their strategies to differing circumstances. Very little, as already mentioned, has been written about the process of architect-led rural renovation and its actual impact on local communities. The literature on architecture intervention in China tends to focus more on general strategic characteristics. In my opinion, there is a need for thorough research into significant case studies that both trace the background for the project, the evolution of the architectural work, and the outlining of implications and impacts. Generally, long-term, systematic observations – a finding from my literature studies – are often neglected in research on rural renovation. However, these missing parts are crucial to evaluate a specific project's effects and draw conclusions related to specific development strategies. How the architectural strategies are implemented in the village, how organization and power relations between actors put their marks on the process, and how architectural ideology meets local culture are important perspectives we need to look into when studying a specific renovation work. As a carefully selected example extracted from a group of village modernizations, the Banwan project might be considered unique and highly revealing for understanding rural renovation in China and a critical case for evaluating a specific renovation strategy. The origin of the project, local context, the implementation process, interactions of involved actors, and the consequences are all critical elements that need to be evaluated comprehensively in the development intervention research.

2.2. Describing and Interpreting the Architect-led Renovation

2.2.1. Understanding the built environment

The term *rural renovation* has multiple and ambiguous definitions because academics from many disciplines (e.g., sociology, geography, economy, and architecture) contribute to the literature. The understanding of *place* and *place identity* are important concepts within this field of study. The concept of place is in the litera-

ture of architecture and urbanism primarily used to describe the physical characteristics of the landscape, construction, and buildings. There is an established tradition in defining place in the relationship between the built and the cultural landscape. Looking at the basic literature behind urban morphological analysis[64], the idea of the *locus* (place) is an essential concept in Aldo Rossi's book The Architecture of the City (1984). He initially posits the concept of locus: "the *locus* is a relationship between a certain specific location and the buildings that are in it. (1984: 103)" The Norwegian architectural historian Christian Norberg-Schulz (1979), from a phenomenological point of view, introduced the concept of *genius loci* (the spirit of place), pointing at the relationship between landscape and architecture as a basis for local identity and memory, and as a phenomenon to be analyzed as grounding for new architecture. Both the tradition of Rossi and the tradition of Norberg-Schulz have inspired my understanding of the built environment of Banwan.

However, when approaching the study of Banwan, the village also must be discussed as a socio-cultural situation. Geographers Seamon and Sowers (2008) raise a query: is the place merely a synonym for location, a unique ensemble of nature and culture, or is this understanding too limited? Likewise, Doreen Massy – in her frequently quoted article (Massey, 1991) on the understanding of place – underlined that a progressive concept of space should consist of changing conditions within a time span. She injected the binary opposition between the constructs of the local and the global and proposed a theory of a "global sense of place." In her sense, the identities of places are inevitably unfixed and are full of internal conflicts, and place specificity results from its long internalized history. There is a fact that "it is constructed out of a particular constellation of social relations, meeting and weaving together at a particular locus" (Massey, 1994:154). In a lecture given to the rural construction course at CAFA[65], professor Karl Otto Ellefsen noted that the concept of "place" should be interpreted from more dimensions, which included the local level (vertically rooted traditions), national level (development strategies and policies for changes), and the global level (horizontal economic and cultural forces). Drawing on this analytical framework, I proposed – in my first research article on the Banwan project (Cao, 2018) – the *Policy-Livelihood-Culture* driven interpretation model for settlement change. In this interpretation model, (national and regional) policies and development strategies are opportunities and act as engines for change; (local) livelihood patterns provide financial support and bring about changes in consumer attitudes, and (national and global) cultural intrusion leads to the transformation of belief systems and concepts. This model, in addition to morphological analysis and the investigation of genius loci expressed in local culture, helped me to understand the specificity of place and local vernacular architecture as a set of different socio-cultural layers both referring to traditions and to the process of modernization and rural policies from the Chinese revolution and onwards.

2.2.2. How to describe the architecture of the project in the context

In studying the architecture of the project, my intention is to follow Paul Oliver's statement, "to *dwelling* is to live in, or at, or on, or about a place" (2003: 15). It is important to keep in mind this associate verb – *to dwelling* – the term suggesting that to dwell embody a remarkable diversity of human behaviors and practices. In his well-known book, *House Form and Culture*, Amos Rapoport argued that an understanding of behavior patterns is "essential to the understanding of built form" and that "forms, once built, affect behavior and the way of life" (1969: 16). In his view the forms of vernacular buildings result from "the aims and desired of the unified group for an ideal environment" (1969: 47) and sociocultural forces "become of primary importance in relating man's way of life to the environment" (1969: 48). In their studies of the architecture of fishing villages in northern Norway, Karl Otto Ellefsen and Tarald Lundevall state that a capacity of the trained architect is to "read the built environment as an expression of a given society" (2019, 32-33). They applied a research approach where architecture as a discipline and as signs of history and memory is used to gain historical and social knowledge of local society.

Given the role of an architect, I was trained to describe and investigate architecture by the use of morphological studies.[66] Referring to Ellefsen and Lundevall (2019), the morphological understanding of a built environment, a building, or a project should "entail reading the physical surrounding as a text that provides information about a society and its history through constructed and every new 'layers' on top of the old ones." (2019: 33) In the research of formation and evolution of mountainous settlement in Guizhou, Zhou Zhengxu (2016) showed a great interest in the linkage between "survival pressure (geographical and historical barrier)," "livelihood," and "settlement space." These studies inspired me because *holistic space* (physical environment)[67] was discussed in a broad social context, and because architecture and physical environment provided a spatial morphology and an ethnological material as a prism to read society.

In light of the architecture (vernacular and modern), the construction activities, people's practices, and the initiated programs and events in the Banwan project, one can observe how various specific elements accumulate into a process of evolving place, and the process might be interpreted as layering with different sets of linkages. The architecture of the Banwan project cannot be described solely by its morphological and technical characteristics. In the mid-1930s, sociologist Wu Wenzao (2010) combined human ecology and ethnography to create a methodology of *community study* that has been influential in China. He proposed different research perspectives (either with a "whole community" perspective or with a "partial" perspective) for rural communities and expanded the research beyond the

field of social relationships. His way of thinking extends the discussion of architecture and its cultural materiality and sociality. In addition, Wang Mingming (2016) suggests a way of understanding a case or a project picked for analysis. He reversed the relationship between the *whole* and the *part* proposed in Sahlins' article "The whole is a part" (2009) with "parts as wholes." The logic of "parts as wholes" indicates that architecture in a village should be seen as part of a more extensive social system. These phenomena reflect society. However, the parts not only have the "shape" of the society as a whole but also might embody the very essence of society in dynamic development. Thus, investigating the part (architecture) also means investigating the whole (community).

My task in the thesis is not primarily to appraise aesthetic performances of architecture or judge the architectural quality of the built environment in the Banwan project. Rather, I am interested in how and why society and renovation activity produce the physical surroundings, how the architecture express social and cultural meaning, how the architecture act as a tool or engine for promoting the community, how the architecture responds to new needs, how architecture create a new cultural/social/production framework, and the functional performance of the new built environment.

2.2.3. Interpreting the Banwan project through actor perspective

It is important to recognize that many stakeholders are actively involved in the architect-led renovation (Wu, 2015a). New relations, networks, resource constellations, and identities are formulated and reconstructed during the development process (Woods, 2011). However, the possible gap between intended social change and the community's actual adaptation to the architectural interventions might generate unpredictable consequences and even failure. For example, the Chinese government initiated the resettlement program to improve the relocated population's living and working conditions. However, many relocated people from the abandoned villages still suffered severe social and economic consequences (Huang, 2017). Another example absolutely identified as an architectural intervention is Wang Shu's Wencun project. Zhao and Cheng (2018) question the actual effects of the project. They find the architectural elements used in Wencun to be Wang Shu's identifiable style, found in his previous projects, refer to field investigations criticizing the impractical spaces established by design, and conclude that Wang Shu's vernacular architecture practice in Wencun gives priority to the architectural style, to the extent that is ignoring the villagers' basic needs. The critiques of those development interventions still focus on how the general concepts extracted from the development strategy "failed" to achieve the expected goal. As is the case in the main body of rural development in China, the discussion of the agency of involved

actors and the interactions, negotiations, and social struggle that take place between these actors were largely ignored.

Tian (2017) is one of the scholars that find the existing interpretation and evaluation models for rural development dissatisfying. Tian criticizes that the research on social development lacks empirical material from lived experience. He points out that the social development research should not only care about the general rules of practice operation but also establish the complex link between the "small" phenomenon of individual actors and the large-scale "domestic" and "global" worlds. He believes that the experience of individual actors in the development project should be refined and summarized. In his well-known book *Development Sociology: Actor Perspectives*, Norman Long (2001) states that all forms of external interventions are bound to enter the world of the individuals and social groups affected by them. He suggests a dynamic understanding of development intervention and social change is needed. This understanding emphasizes the interactions between external and internal factors and the decision-making process depending on actors' interests, consciousness, and actions. Norman Long points out that the actor approach intends to study and explain social phenomena by understanding individual motivation, purpose, and interests and emphasizes the process of cooperation, conflict, and co-construction of social life among the actors. He called this method the "actor-oriented approach." In his view, the purpose of the actor-oriented approach is not to find general or universal rules, processes, and trends but to understand how individual actors (such as farmers, workers, entrepreneurs, officials, and others) actively shape the process and outcomes of development interventions.

In the article I wrote in collaboration with Chen Yiyang (Cao and Chen, 2019), we applied the terms *negotiation behavior* and *action tactic* to point out that any production process depends on informal and random activities that cannot be formally pre-designed in the planning schemes. Such schemes tend to ignore the essential characteristics of living social reality and, if unfunctional, may easily damage the interests of the target groups and eventually lead to the failure of the design schemes. In response to critique and renewing Chinese development sociology, some scholars interpret development intervention from a micro-level perspective. Attention is paid to the participatory development tools, targeting groups' rectification, and the formulation of intervention policies or programs. Plummer and Tayler (2004), in their study of participatory approaches in China's community capacity building, note that community participation served as an effective tool to empower the local communities to achieve their priorities. They disagree with the cognition that "failed" development interventions are more attributed to the so-called shortcomings as effects of lack of capacity and little knowledge in the community. Dong (2008) notes that the peasant is not always in a weak position, and sometimes they even have the upper hand. Dong considers the resistant actions of the peasants as a potential power platform to fight for rights and interests. This is a revision to the

traditional perception of the peasants as "weak" actors and provides different interpretation perspectives for social development and management.

Ye and Li (2009) consider that the disadvantages of the traditional policy implementation and top-down government or expert planning have been challenged by establishing micro-level perspectives. They noted that the rural development intervention process is a field full of cooperation, conflicts, and struggles, which lead to the complexity and unpredictability of development consequences. In her book *Encountering the Local*, Li (2015) notes that the various values and interests of the different actors/roles determine their respective strategies in development intervention. Their interaction reshapes the contents and results of the intervention, and the intervener and the intervened actors change dynamically during the process. Therefore based on this cognition, Li elaborates the methods for capturing the responsive logic of local actors taking part in the development intervention. She presents four different methods to be generally used. The first one is the interface analysis which aims to examine and interpret related actors' heterogeneity in terms of knowledge, views and preference, interests, and power. The second is a tactic analysis that seeks to unveil how various actors utilized available power, social networks, and resources and employed them during negotiations and conflicts to achieve anticipated goals. The third is discourse analysis, which is a valuable way of exploring the significance of particular cultural repertoire and how they interact and interpenetrate situationally, and the final method is conversation analysis, which aims to understand social interaction and social structure through analyzing the language and context.

All these four methods, or ways of working, proved relevant in the analyses of specific interactions and negotiations in the Banwan project, and as Li states – and as this is relevant in the Banwan case – these conflicts and negotiations might lead to complexity and unpredictability in the execution of the project. Questions very relevant to the analyzing the Banwan case are raised in Li's book (2015: 2): When the development intervention is implemented in the local community, will the local actors, as the beneficiaries of the project, readily accept the external assistance as proposed by the project leadership? What are the local actors' responses to the development interventions, and what are the reasonable explanations for these responses? And the final question deals with the outcome and asks to what extent the intervention did promote local development? From a social science point of view that must be incorporated in my study of the architectural project in Banwan, these questions are the core issues of research. However, the actor analyses also need to be situated in the macrostructure (regional/national, political/social/economic) to interpret and understand how external forces and frameworks interact with the locally involved actors' intentions, aims, and interests.

2.2.4. Interpreting the Banwan project through "process-event analysis"

Scholars have introduced and argued for different ways of approaching rural renovations. For example, Ji and Kang (2019) introduced the *Pingnan renovation project*, which seeks to develop rural villages through art intervention, acting as a vehicle for attraction and a means to strengthen the sense of place and the community identity. Li (2017) introduced the *Haotang renovation project* that aimed to introduce internal finance systems that helped to establish new rural organizations and a credit system that enabled the activation of rural financial capital. The publisher Homeland (2018) introduced the *Songkou renovation project*, resisting large-scale demolition and construction. Instead, the project starts with small- and medium-scale pilot spatial constructions to guide villagers to understand the value of ancient towns/settlements and to encourage and enable social and civic participation. However, when evaluated as general strategies, the reporting focus on positive outcomes. Detailed implementation process descriptions are hard to find, and it is difficult for readers and critics to verify causal relationships between the planning concepts and the achievements. As Hoggarth and Comfort have pointed out, "it is often difficult to demonstrate a clear connection between inputs, outputs, and outcomes" (2010:193). The process-event analysis is a tool to approach these relationships.

According to the Chinese social scientist Sun Liping (2001), the "Process-Event Analysis" refers to a social analysis method that tries to get rid of the conventional structural and institutional analysis methods and instead grasp realistic social structure and social process in the light of events and process formed in people's social actions. Sun proposes the "process-event analysis" strategy to uncover the events and logic often not easily readable in a process. According to Sun, the actors' relationships in rural practice do not constitute a fixed and static structure but refer to a specific and dynamic process. He, therefore, argues that social reality can only be adequately interpreted and understood when it is considered a dynamic and evolving process. The core of "process-event analysis" is to grasp the diversity and complexity of the practical forms and specific operational logics within the stakeholders' interactive processes. Process evaluation provides a lens to examine the constraints in terms of political, social, cultural aspects, and other practical difficulties. The process and events in rural renovation projects are influenced by national or regional policies, the interests of the stakeholders, and the design philosophy of the builder or the architects. The process often emerges instantly and spontaneously, and the final observable outcomes are not always easy to trace. For example, Liu (2018) explores the complexity of a traditional vernacular architecture renovation. She argues that the constant tensions and distinctions between local craftsmen and external architects reflect the difference between the indigenous building approach and the modern professional architectural system. All these tensions and

distinctions would not be grasped and analyzed by limiting the observation to the physical work outputs.

I am not an anthropologist or sociologist who possesses respective fields of expertise to observe and understand the rural community. However, as a participant in the construction process, I have a unique advantage in collecting and documenting all kinds of data. The process-event analysis is intended to reveal the nature of the specific social action that I call expert architect-led rural renovation and sheds light on the reconstruction and reshaping process. The event (design/construction) encountered the "local" and applied adaptive strategies based on the "locality" in a minority village. The Banwan project was constituted by a series of interrelated events that were selected as materials for grasping rural construction and its dynamic process. Doing a process evaluation in Banwan was based on different conceptions: Initially, there was no intention to plan for a perfect and final village project. Design and construction in the Banwan project were intended to be a process of self-improvement rather than a one-off, quick fix. Secondly, many actors were involved in the process – it was not the work of a single intellect, and the process was full of competition, consultations, negotiations, and compromises. Thirdly, the process echoes the very contingency of architectural practice. Jone et al. (2005) note that users' and architects' different desires and expectations contribute to the contingency of architecture practice. In Banwan, many aspects of rural construction went far beyond the control of the expert architects. I will further elaborate and describe how the "process-event analysis" is adapted in this study in Chapter 3.

2.2.5. Interpreting the architect-led renovation through "Outcome analysis"

One of the study's primary objectives was to evaluate the project outcomes regarding architecture and physical works. This is where my investigations started. The ambitions of the project in Banwan went far beyond the building, and studies of actual effects and outcomes had to include the social consequences. Hoggarth and Comfort point out that outcome evaluation are "to know if the program, prevention initiative or treatment 'works' or not (2010: 15)" or, simply speaking, whether the outcomes and consequences were worth the effort. In terms of timing, Moseley (2003) notes that evaluation can be conducted before, during, and after the program and project and recommends "assess immediate impacts or outcomes, and to pick up longer-term consequences and to allow the more mature reflection." (2003: 196) Hoggarth and Comfort (2010) note that the evaluation of short-term outcomes should focus on the intended development effects. On the other hand, medium- and long-term evaluation should pay more attention to behavioral effects and effects on others. In the evaluation of the Banwan project, the short-term outcome evaluation

assesses the physical performance of the newly-built environment. Medium-term outcome evaluation deals with how capacity building could help local Bouyei people pursue sustainable development. Long-term outcome evaluation means assessing whether the Banwan experiment could serve as a model with its essential features replicated in other rural development programs.

The expert architect-led Banwan rural renovation sought to solve some societal issues, the architects entering a terrain of knowledge where their knowledge had limitations. According to Jabeen (2017), for example, like in most development projects, both "intended outcomes" and "unintended outcomes" are produced. The "gap" between the intended outcomes and the unintended outcomes is, of course, brought about by "the actual events and process" (Miles and Huberman, 1984: 132). These outcomes usually are non-linear, often independent of plans, and are complexly determined by multiple factors (Jabeen, 2017). The analysis of the gap normally provides interesting information, and it is, therefore, useful regardless of whether the findings are positive (extra benefits) or negative (damage caused). The evaluation of the gap between planning and implementation offers insight into the political, financial, and social constraints to the settlement development in the rural context and helps to illustrate the unique character of the expert architect-led practice.

In this chapter, different challenges are discussed by the use of literature and outlined as the basis for my research design; (1) to interpret and understand the characteristics of an architect-led rural renovation, to analyze the existing built environment, (2) to describe and evaluate the architecture of the Banwan project, (3) to gain information about the renovation process by applying an actor perspective, (4) to apply a process-event analysis to gain profound information about the sequence of events, and finally (5) discussing how to apply an evaluation of the outcomes of the project. Initially, reviewing the "overlooked aspects" in current architect-led rural renovation studies helped me to identify themes, potential theories, and frameworks.

Chapter 3

In this chapter, I am describing and discussing my research design for the empirically based investigation of the Banwan project, also referring to relevant literature. Principal approaches to reading the project were explained in Chapter 2, and here these are adapted to the Banwan context.

3.   RESEARCH DESIGN

3.1.   Analytical Perspectives

My interest in doing this research started with my role as an architect in the countryside construction program in Banwan. My role allowed me access to more detailed data and informal and "hidden" activities. Access to such data would be challenging for an outsider to obtain. Working as an architect and an observer/scientist during the intensive construction period, I found that the project was not merely the execution of an already-specified plan of action with expected outcomes but also a dynamic process influenced and in part determined by the competitions, compromises, improvisations, and negotiations between the actors involved. As an architect, I worked on the project following instructions, and my absolute intention was that this renovation project in a minority ethnic village should be successful, both architecturally and as a socio-economic intervention. As a researcher, I have sought to maintain a critical distance and evaluate positive and negative effects in the light of the significant questions in my research described in the first chapter of the thesis: May an architectural approach to a rural construction process, reshaped by stakeholders, promote minority village culture and lead to improved local living conditions without the ethnic minority losing its historically-based identity, and if so, how?

My main challenge in the research design was to establish a theoretical framework and analytical and working methods to document and conduct field research on a village renovation project with heavy architectural input. I had to provide a systematic conceptual and methodological framework for deconstructing the notion of rural construction. And, being an architect, how can the analytical tools developed be consistent in method yet also be visually inspiring? As stated in the discussion of research questions in Chapter 1.5, my research was motivated by a basic interest. Was the process I participated in of any value for the future of Chinese rural societies? My belief is that considering my unique dual role would enable me to give new insights and shed light on contemporary rural transformation processes in China. To gain significant insights into initiatives, finance, programming, and operation/transformation mechanisms, and also make it possible for me to contextualize the analysis of micro-processes and actions within broader economic and political

conditions.

The analytical approach is, therefore, a combination of *micro-level* and *macro-level* perspectives. The micro-level perspective is intended to interpret an ongoing, socially constructed, and negotiated process. The actors' interlocked strategies, tactics, and actions are analyzed, and I try to find the logic and argumentation behind the events and processes. The macro-level perspective contextualizes the Banwan project into the characteristics of rural China, the rural challenges, and the various strategies for developing rural regions in the light of national and regional policies and strategies. The research of policies and strategies provided a broader context for the in-depth discussion on the Banwan renovation project. Therefore, I developed the operational research design based on these two perspectives.

3.1.1 Engaged in the process

As indicated in Figure 3.1, my architect-researcher role had a clear timeline boundary. During the construction project, I was a resident architect who represented the responsible expertise of an architect's professional interests and his design team as a whole. Besides contributing to an in-depth village investigation of the settlement and proposing design schemes for the planning with other design team members, I was engaged in informal activities such as establishing good personal relationships with other involved actors and expanding social networks to promote the project's progress. In addition, my role as a field supervisor gave me the extra responsibility of reporting to the lead architect Professor Lyu, and this turned out to be a crucial job/role for ensuring correct and professional spatial construction implementations.
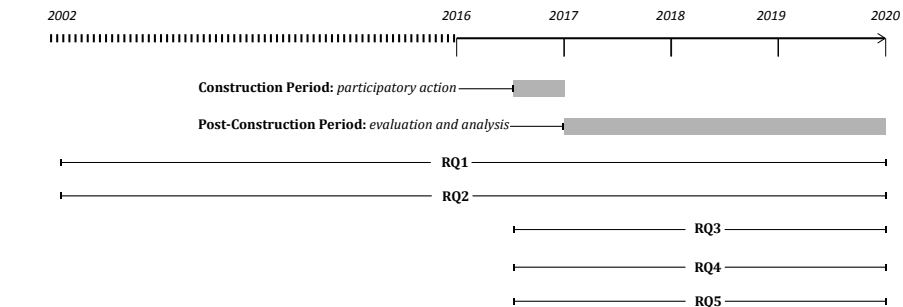
RQ:

1. What are the key strategies and models for village upgrading in contemporary Chinese rural policies, as learned from studies in the Guizhou province?

2. What may be learned from the complex process of transformation in the village environment of Banwan before the project was initiated, especially in the recent periode – from 2002 to 2016 – when many governmental intiatives for rural upgrading were launched?

3. How might the cultural and intangible cultural heritage of a minority be a driving force in the process of improving the conditions in the village and reshaping public space?

4. How may the expert architects perform a unique part in the process of rural renovation, and how does this part affect other roles and relationships?

5. Does the Banwan experience represent a possible new model for village renovation in China, and if so, what might be learned from the case-study in order to refine the model?

Figure 3.1: The diagram shows my role in and after the construction work and situates the chosen research questions within the time-frame. (Source: Author)

In July 2016, I worked in the settlement, mapping, and surveying, together with other team members. This work was further developed and detailed by the whole team, along with the project promotion. From August 2016, I played a vital role in the renovation of the residences and several new public buildings. From September to November 2016, I led the whole design team in Banwan as the chief designer was unable to be present in Banwan on weekdays: From the beginning of the autumn term at CAFA in September, Professor Lyu's presence was required in Beijing from Monday to Friday. Another critical job included collaboration and negotiation with local actors (Bouyei villagers, local-level officials, and construction workers). I also worked with the Dragon TV crew on the process documentation and reported to Professor Lyu via telephone and WeChat in his absence.

I knew the program from my first year in the doctoral school at AHO and decided to select Banwan village and its renovation project as my case study in the *Urbanization of Rural China program* during my period as resident architect following the construction process.

My different roles as an investigating, designing, and evaluating architect have bearing effects on the reflective dimension and direction of the research. During the process, I have held the roles of the resident architect, village transformation observer, outcome evaluator, exploring Ph.D. student, and writer of a Ph.D. thesis. Performing these different identities/roles/tasks more or less simultaneously was somewhat complicated, of course, and inevitably gave rise to various reflections on the scope and methodology of the study. During the evaluation process, I found that the architect role could create specific obstacles in my relationship with other actors. It was not uncommon for interviewees to appear cautious and guarded when answering my questions during interviews. Although I stated that I had left the team to remove this obstacle, I discovered that I was now viewed as an outsider.

3.1.2 Bias and self-interest issues

Evaluation of design activities and design outputs by researchers that are part of the project is a challenge profoundly discussed in the relevant literature. For example, Denscombe (2007) notes that the critical challenge for social research is to avoid bias due to personal values, beliefs, or background. Likewise, Pedgley (2007) points out that one of the issues in the process of capturing and analyzing one's own design activity is to qualify the validity of the data. This challenge is, of course, especially relevant in a situation where the researcher also acts as a resident architect and heartedly wishes the expert architect-led project to succeed.

As already stated, I believe that my closeness to the Banwan project was crucial for

the richness of data gathered, the close reading, and the trust and engagement of the people interviewed. At the same time, I had to retain a critical attitude toward the renovation project to create a relevant review of the Banwan project. I intend to present data and analysis in an unbiased and precise manner. Concerns over subjectivity and/or lack of rigor were dealt with by acknowledging the dual role of the investigator as a rural renovation practitioner and researcher, distinguishing appropriate facts from personal reflections, alternating between inside and outside inquiry, documenting and substantiating statements, and let the facts speak for themselves. Being obligated to the validity and reliability of the research, the data collection in the empirical study followed three principles:

1. To gather as much complete and creditable data as possible. Process and outcomes of the Banwan project are related to the changes or benefits for individuals, families, organizations, or the community. They may be short-term, medium, or long-term. Data have to be collected in a multi-scope and multilevel manner to prevent the misuse of incomplete data.

2. To present my data, the way of collecting data, and my analysis in a transparent manner, to provide possible insight into my evaluation.

3. To avoid presenting a one-sided case, I have sought different perspectives that may be found in alternative views from other external observers and various among the stakeholders involved in the project.

3.1.3 Reading rural society through the lenses of architecture

In the entire process of fieldwork and writing – be it as a thesis writer, a hard-working resident architect, or a surprised evaluator – my professional knowledge embedded in the discipline of architecture – gave me the direction for approach and basic methods for reading the local society. My training as an architect guided my capturing of empirical data, how to perform the investigations, and the way to participate in the process. The analytical perspective of "reading society through architecture" served as a tool to analyze the ethnic society and the formation and evolution of the settlement. My dual role in the village enabled me to record the outcomes of architectural renovation and gain information about underlying processes through the entire renovation process: (1) *investigation* that aimed to grasp the settlement and the buildings/dwellings' internal logic and to understand/read the basis and meaning of these logics. The investigations included the investigation of the impacts of external forces on the built environment and the transformations and changes in the spatial patterns and morphology of the Bouyei village during recent decades; (2) *construction*, trying to address different themes and challenges in the everyday practice of construction from the position of an involved architect,

and (3) *evaluation* of architectural quality – the specific spatial, formal and technical qualities of the intervention – the socio-cultural relevance of the intervention and the effects on people's living conditions (Figure 3.2).
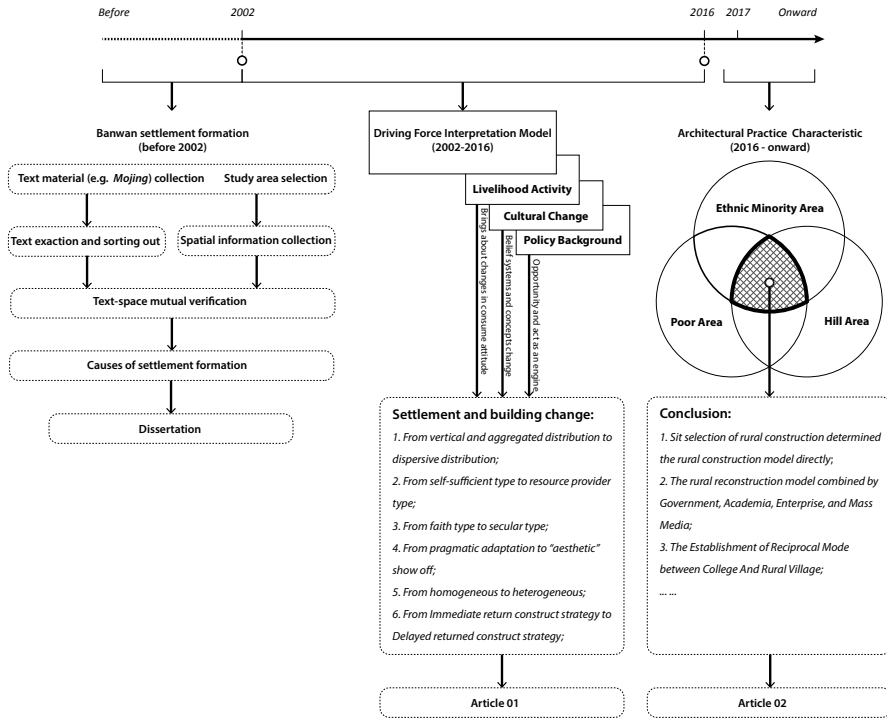
Figure 3.2: The flow of studies of the Banwan settlement and architecture is based on three periods. Findings are presented in publications 1 and 2. (Source: Author)

3.1.4 Guizhou as a laboratory for rural development strategies

A main analytical perspective in the thesis is to understand different strategies for rural development and specifically village reconstruction in the light of governmental and local rural policies. This is needed to understand the framework for and the intentions of different strategies and to contextualize a possibly model Banwan-project in a broader context. In the article collaborated with Professor Karl Otto Ellefsen (Cao and Ellefsen, 2022), we noted that the Guizhou province historically might be looked upon as a "laboratory" for Chinese rural strategies. The different "schools" of strategies take different sets of objectives as their point of departure, from humbly sustaining the countryside by providing basic needs and security to ambitious inventive policies that intend to renew countryside production and eventually make living conditions in villages compatible with the cities. In

Chapter 4, I presented a systematic study of development strategies as they have been launched, formulated, and put into action in Guizhou. I focused on spatial restructuring, social restructuring, and economic reconstructing, which are the key challenges for rural areas, whether at the local, Guizhou regional, or national level. One purpose is to acquire an understanding of the pro and cons and the effects of rural development strategies used in Guizhou.

3.2. Research methods put to use in the project

In the following section, I will describe my choices of methodologies in the various phases and situations of the project.

3.2.1 Case study of a village

The Ph.D. program Urbanization of Rural China (AHO/CAFA) that includes this thesis is comprised of a set of studies of individual villages. The case study method is chosen to illuminate different aspects of the contemporary situation, challenges, and possible strategies for rural China. With more than 2 million villages – the amount of villages declining – the selection is ample.[69] The term "typical" or "generic" Chinese village is – in terms of research – rather nonoperational. In his Guggenheim exhibition in 2020, Rem Koolhaas tests out a definition based on statistics – like that the average distance between two natural villages in China is 579m – but the numbers somehow hide the diversity.[70] Chinese villages are as place and habitat often rather complex, they show unique natural sceneries, contains specific cultural features, and are marked by the industrialization processes from the last seven decades. I discovered this to be operational and to see most Chinese villages as "generic" villages that still need to be defined and understood in terms of culture, production, architecture, and activities. This investigation process is needed if government/institutes/organizations are to make sound contributions to improve the quality of rural areas and the living conditions of villagers. The approach in the program has been to select villages that might illuminate certain specific and, at the same time, general situations. In this thesis, the ethnic village in focus is situated in a more remote and impoverished part of China, but it is at the same time a village where changing rural and ethnic policies have been felt and where a pilot project with an architectural approach took place.

The village study draws on a case study research design to capture the dynamics and details of the selected geographical area. The intention is to yield investigations and conclusions based on local characteristics discussed in relation to general themes and challenges (Teilmann, 2011). Case study research means a contemporary phenomenon is studied in a real-life context (Yin, 2003). And Yin (2003: 13) defines the case study research method "as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries

between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used." To understand the phenomenon, people and events observed in rural practice, and a number of mutually dependent variables or pieces of evidence must be integrated. The case study approach is an accepted and widely used method in Chinese rural studies for the study of local socio-cultural and economic conditions, habitat, architecture, and transformation processes, as well as to put villages and projects into a broader social context.

The Banwan project research is a single and rather unique case design that might be criticized as being unable to provide a conclusion that might be generalized (Zainal, 2007). The "Urbanization of Rural China" program has, however, found it feasible to select one specific village to discuss the effects of rural construction in a remote minority region. Mauss (2014) provides good arguments for this way of working, pointing out that it is wrong to consider the credibility of a scientific proposition depending on the number of cases that can be proven. He states that a relationship (conclusion) established from a single situation and carefully and coherently researched might be more definitive and persuasive than the material drawn randomly from many situations.

I consider the case to be a carefully selected example extracted from a group of phenomena, with the aim to render phenomena understandable, intelligible and practicable (Mills et al., 2009).[71] The Banwan project might be considered unique, but due to the clear conceptual model for the project and the amount of work and considerations put into the project, the case can be revealing for the understanding of rural renovation in China and might be seen as a critical case for evaluating a specific renovation model. For village studies, the case study approach has the potential to provide an in-depth understanding of the situation and the dynamics. The data to be examined and explored are most often sampled in the situation where the activity occurred.

The data collection process utilizes the methods suggested by Yin (2003), including documentation, archival records, interviews, direct observations, participant observation, and documentation of the physical artifacts – the habitat and the architecture. In his book *Case Study Research and Applications: Design and Methods*, Yin (2018) elaborates a method for case studies illustrating four different stages: the first establishes propositions and analyzes the evidence based on these propositions. The second elaborates the data from the ground up, enabling the researcher to go further into the data and reveal hidden relationships. The third develops a case description, which organizes the case study according to a descriptive framework that covers various topics relevant to the research object. The final stage is to examine plausible rival explanations, which is a strategy for enhancing the credibility of the findings.

I have not been able to follow Yin´s method of working in detail, but he has

inspired my work. The Banwan project provides a rich testing ground for rural development in Western China. The study attempts to generate significant knowledge that may reflect correlative relationships and mechanisms in the themes represented during the process of project operation. The study departs from the hypothesis that the Banwan project has effects on different characters and might indicate a new rural construction mode for situations with specific characteristics. This hypothesis stems from my formal working experience and reflections on the literature. The hypothesis gives a direction to collect all the relevant data that may cover the basic facts, events, and outcomes that my case study seeks to explain.

3.2.2 Studies of the many activities and projects

The practice in Banwan contained a diverse range of programs, events, spatial interventions, and building activities. These various phenomena presented and discussed in the project might also be seen as "cases." Each of these phenomena/ projects embodies the essence of the project and thus represents the project as a whole (Figure 3.3). Thus, the investigation of the singular phenomenon/project also reflects the whole investigation. The study of the Banwan village and its renovation consists of many different studies parts; this is reflected in the discussions in Chapter 6. Every case describes the project's operating context, the objects and processes involved, and the factors constraining the development.
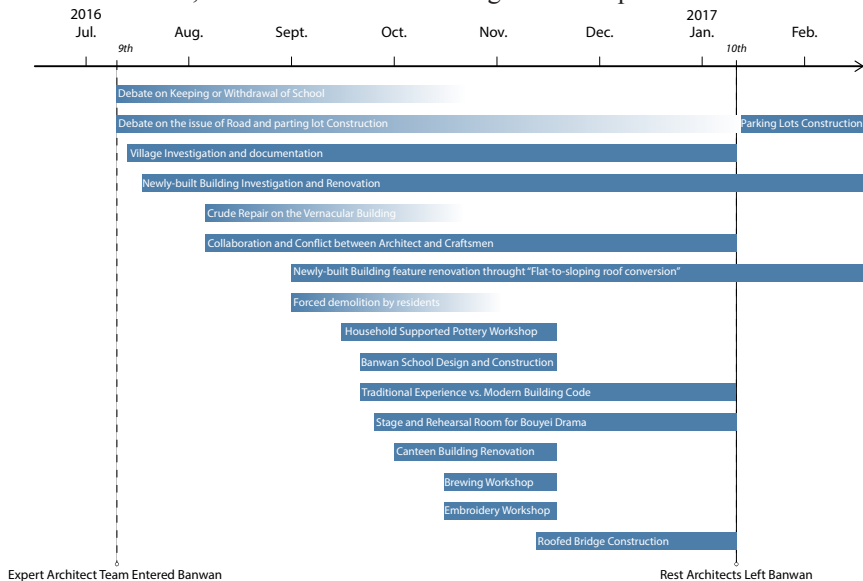
Figure 3.3: Key events in the Banwan construction process. These different micro events illustrated how, on a macro level, the territory was in a state of transition, full of conflicts between different policies and land ownership and development rights, between residents, government officials, architects/urbanists/planners, and construction groups. I will elaborate

on the distinct processes underlying the formation of these events in Chapter 5. (Source: Author)

The selection of the phenomena/projects to be discussed is empirically driven and based on the contents of the project and the unique conditions and problematic issues encountered in the process. Completed projects as well as projects that did not fulfill the anticipated goals are both presented in order to bring to light the complex forces acting on the village. I then employed somewhat different research strategies to study the emergence and performance of representative cases. Each study consists of at least four of the following steps:

1. Analysis of the background – reasons and origins – for the specific activity in the village.

2. Analysis of the political and institutional conditions at national and regional levels, i.e., the top-down references for large-scale infrastructure projects and local school policies.

3. Analysis of the activities and interests of related stakeholders. I carried out a stakeholder analysis for selected events and implementation processes. A stakeholder analysis is a useful tool, also because of its emphasis on explaining and predicting how an involved actor reacts to particular problems.

4. Analysis of the bottlenecks and difficulties encountered during the implementation of design schemes.

5. Analysis of the architectural performance, including the degree to which the layouts and forms of buildings support the functions, community requirements, and capacities of human beings.

6. Analysis of the space performance includes the degree to which the capacity of buildings and public space matches the pattern of behaviors that villagers engage in or want to engage in. Analysis of the effects on social, economic, and cultural conditions at the village level.

3.2.3 The empirical material

Data in this project is collected from many different sources and by using different means. There is written material documenting the process and visual material from the project implementation. I also conducted interviews and surveys supplementing my participant observations.

Documentation and archival materials

Relevant documents from the process are sorted, including design schemes and revisions, design modeling outputs, internal meeting minutes, public posters released

by the local government, and video recordings. Due to the collaboration with TV media, the Banwan project has the advantage of video recordings of critical parts of the process, events, and even negotiation activities. With the consent of Dragon TV, I acquired a copy of the video recordings. Video diaries of this kind proved to be the most valuable of these data sources, as they both documented the physical performance of work and recorded improvised negotiations. For example, negotiations and decision-making to solve the problems encountered at the construction site and – following –the stakeholder's reflections on the actions and decisions. As a research tool, the video recordings work on a micro-level, which has proved to be the main focus of my research. The discussions on rural policies are, on the other hand, dependent on literature studies reflected through my experiences in Banwan.

In order to extract useful information, I started with a structured approach to the documents, categorizing, for example, the design schemes into "proposed version" and "revised version," discussing gaps between original design proposals and modified designs that were put into practice and are objects for evaluation.

Semi-structured interviews[72]

I conducted a series of interviews with stakeholders involved in the Banwan project. The list of interviews and the main findings from them are shown in Appendix A.8. Interviews were taken at different stages of the project, to reveal how the project was looked upon from the start, to illuminate the process and to evaluate the outcomes. Interviews were conducted with people in the village affected by the project, cadres in villages, teachers from the Banwan primary school, builders in the construction team, civil servants at town- and county levels, and other rural construction participants.

My research questions guided the interviews and are as follows: how do local actors understand the intervention development led by an expert architect? What changes have appeared as a result of the project, and – when interviews were conducted late in the process –what happened after the project was completed? And in the post-project phase: Have any opportunities been added or challenges arisen since 2017? In the first phase, interviewees were selected according to the assessments I had made based on firsthand material gathered in the fieldwork. In the second phase, they were based on information provided by earlier interviewees.

The use of interview data in my study does not imply that I focused solely on the reactions of village people. On the contrary, I aimed to summarize latent information distilled from the interviews with government authorities and village cadres. Most interviews were conducted over a glass of wine or a cup of tea, and I believe that individuals would be most prone to express their motives, worries, and decisions about the Banwan renovation in a relaxed situation. Some grassroots administrative staff were interviewed; sometimes, we communicated by telephone

or via We Chat. The interviews were recorded and then transcribed to ensure no information was lost.

However, not all actors involved in the Banwan project chose to participate in an interview; for example, the local government's foremost leaders had no time or were unwilling to be interviewed face-to-face. Generally, a disadvantage of the semi-structured interviews proved to be that they relied on the informant's desire and ability to give accurate and intact answers. Another challenge was that many interviewees might have a selective memory or lack adequate knowledge to answer the questions. Moreover, as mentioned above, my role sometimes made the interviews difficult; some interviewees from the village gave biased answers in the hope of gaining benefits, as being interviewed late in the process, they believed that I was still the resident architect and thus in a position of power. Understandably enough, it was difficult for them to adjust to my new role as a researcher. To reduce the noise from misinterpretation that might influence the validity and reliability of the data, I insisted on asking different actors about the same events and effects.

Surveys

At the start of the study, I conducted an interpretation and exploratory survey about Banwan's vernacular architecture to obtain information about:

• the structure, morphology, and building typology of the settlement,

• the architectural principles, meaning, and cultural denotations in the vernacular architecture,

• the driving force for the settlement change from 2007 to July 2016.[73]

Little information could be found about the formation and evolution of Guizhou's minority settlements. The lack of texts, drawings, and maps greatly limited the retrospective diachronic studies of the historical space of the Banwan settlement.[74] To transcend this barrier, I was inspired by the feasible synchronic approach for a settlement study introduced by scholar Zhou Zhengxu, according to whom unofficial ethnographic texts could provide historical clues and yield a thorough description of the settlement space (Zhou, 2016).[75] The Bouyei literature – myths, legends, songs, folktales, and *Mojing* scriptures – in Banwan depict the origin of built houses, the unique relationship between settlements and the surrounding natural environment, and socio-economic factors that determine the settlement construction. According to Zhou, the study of morphology regarding the symbolic boundaries, ritual territory, land use in the mountain, footpath networks, vernacular architecture, and public space might serve as a physical interpretation of the inherited language of a Bouyei village.

Academic contextualization of Banwan

To interpret information in a macro-context and relate the Banwan case to rural renovation strategies, I had to turn to literature and different academic environments.

In the period 2017-2019, I participated in two CAFA-AHO Ph.D. seminars annually. These seminars were attended by young researchers and scholars who shared their studies about rural China in a broader range of academic contexts. As an instructor, I taught several sessions of the "Personnel Training for the Chinese Rural Construction" organized by CAFA and, as an assistant teacher, assisted fifteen trainees in the two-week fieldwork in Guizhou and Zhejiang. I also attended academic conferences of "Revitalization of Traditional Crafts in Guizhou" organized by the Department of the intangible cultural heritage of the Ministry of Culture and Tourism of PRC and a conference in Banwan organized by CAFA and provincial authorities. Participants included domestic academic peers, government officials, and representatives devoted to Chinese rural development (Figure 3.4). Conference participants provided firsthand findings, as well as inspiration for my analysis. The feedback concerning the Banwan project and discussions of general Chinese rural village situations and challenges, both from Ph.D. seminars and the teaching in CAFA, enabled me to put Banwan into a regional and Chinese context.

Figure 3.4: "Seminar on Poverty Alleviation through Intangible Cultural Heritage and Rural Revitalization of Southwest Prefecture of Guizhou Province" was held in Banwan village in October 2019. Based on the actual needs of the current rural revitalization and status of traditional crafts, more than 40 experts, scholars, and business representatives discussed how traditional craftsmanship might be effectively integrated into the national strategy to

alleviate poverty and promote rural heritage. (Source: Fu Siyu)

3.3.   The analysis of outcome – analytical themes

The works in the Banwan project were indeed diverse. They included repairing stilt dwellings, exterior feature renovations of newly-built residences, updating multifunctional public space, converting an old building into a full-featured school and community center, and transforming several ordinary residences into model buildings based on the Banwan's intangible cultural heritages, etc. The same goes for the "outputs." The challenges that I faced included the difficulty of identifying intended/unintended (Giugni, 2003), short-term/long-term (Hoggarth and Comfort, 2010), and tangible/intangible (Moseley, 2003) impacts and outcomes.

A large part of my research fieldwork draws on assessing whether the objectives set out by the expert architect in the Banwan project were achieved, why some activities were more successful than others, and what kinds of lessons can be drawn from the experiences. Specifically, I define four purposes for the process/outcome evaluation, and they form the base for the choice of analytical themes:

• *Value for investment (money/labor/capacity)* – The Banwan renovation is a unique and costly project. It provided an alternative way of rural renovation for the minority settlement in Guizhou. The process and outcome evaluation would help promoters and those who provide funding to development programs – expert architects and local governments – determine whether the funding has been spent properly.

• *Management* – to help managers (township-level officials, village cadres, and some residents) and users of the programs to find ways to make the implementation of the intervention program more effective and/or efficient post-completion.

• *Learning* – to help the expert architects, government officials, scholars and critics in rural construction to gain insight and understanding that might be useful both for rural practice and academic study. This "learning" relates primarily to the gaps between input (planning) and output (implementation) and between causes and effects.

• *Applicability* – to contribute to summarizing the positive aspects and challenges of this kind of expert architect-led village renovation and assess whether or not to reimplement this rural development model or do something similar in Guizhou or elsewhere in China.

Development program evaluation has to focus on the objectives, what has been attained, and what has been attained in part. The Banwan project is a design intervention that aims to strengthen the protection of local culture, taking the spatial practice in the Bouyei village as a point of departure. The effects of physical devel-

opment and the attempts of social capacity-building should be deeply elaborated. Reading the settlement's *space performance* – its form and functionality – can provide information about the effects of the newly constructed architecture on top of the existing socio-material layers. An examination of the process and issues for *capacity building* at different stages of the project implementation, from design to construction and event planning, brings about a knowledge of the effects on local culture and abilities. An investigation of *social outcomes* from a short-term and long-term perspective is also needed to evaluate the project in the context of general Chinese rural policies.

In my evaluation, I have sought to implement Moseley's (2003) suggestion of distinguishing between "qualitative analysis" and "indicators." My goal is not to achieve a statistically accurate description or explanation of development program outcomes but to better understand the complexities and effects. Banwan village is still in a post-completion and ongoing refinement phase.

Space Performance

The space performance assessment attempts to identify success and good practice domains and domains of failure or bad practice. With that in mind, three aspects are in focus:

• *Buildings*. The Banwan project involved several building interventions: restoration of vernacular dwellings, renovation of newly built dwellings, and the renovation and extension of public buildings. For vernacular architecture and newly built dwellings, specific attention will be given to the physical quality of the building, e.g., its structure, enclosure, lighting, and other physical attributes. Architectural quality is discussed regarding craftsmanship, technical quality, functionality, and morphology/iconography. Furthermore, attention will be given to how the village collective and related households use restored vernacular buildings and newly built buildings. The evaluation also includes how renovated buildings can prompt a meaningful dialogue with the existing situation for public building renovation and extension. Unanticipated changes must be brought to light to understand the complex forces acting on the site.

• *Public space*. Spatial arrangement in a Bouyei settlement has always been arranged and shaped according to cultural and religious ideas and demands. Many scholars have argued that public space is crucial for generating, enhancing, and sustaining a sense of community. The evaluation of renovated public space quality is thus not limited to functionality but also includes the meaning and a variety of activities, how renovated public space contributes to the community's everyday life and the revitalization of Bouyei's cultural life.

• *Physical infrastructure*. A survey about the usage of the large-scale infrastruc-

ture upgrade includes solar panels, biodegradation tanks, fire hydrants, and large reservoirs that were put into use in Banwan village for the first time. Infrastructure usage conditions were considered a proxy measure that facilitated my understanding of local people's perspectives and revealed latent information hidden behind the conflicts within the course of use.

To get a reliable evaluation, the space performance assessment was conducted immediately following the completion of the construction work, but was repeated annually from 2017 to 2021.

Capacity Building

The capacity building evolved during the construction process. Rural renovation projects build up local capacity as people gain experience through educational activities. Three indicators are in focus to appropriately evaluate these less tangible phenomena:

• *Mobilization of local populace*. The number of local people who initiated actions after the Banwan project, provided prerequisite development conditions for the community, and the extent to which they did this.

• *The formation of new groups*. Several new spatial programs aimed to promote social and cultural revitalization, including a new cultural gallery in the school, a new Bouyei Opera training room, and new workshops for embroidery and wine. How many local people undertook specific jobs and obligations in the new programs to create valuable social capital?

• *The extent to which locals initiated projects independent of the actions of external institutions to promote the community's vitality*. Promoting innovative local action was a major intention. However, different practical and socio-cultural obstacles might make actions difficult. If projects were initiated, how? If not, why not? What kinds of the capacity building were achieved, and did we find indications of the obstructions that still exist, blocking or discouraging locals from taking the initiative?

Social Outcomes

Evaluation of spatial performance is part of the discipline of architecture. Capacity building might be discussed as the direct outcome of the different projects and actions in the project. The social outcomes are more intricate, more difficult both to quantify and discuss qualitatively, and generally, in my opinion, need a longer time frame to be evaluated.

The overview of social outcomes takes into account the personal, organizational, and community changes or benefits that follow as a result or consequence of some

activity, intervention, or program. Some outcomes relate to the village/organization and some to the family/person. Outcomes of the Banwan project can be evaluated short-term (right after the project, technically speaking, was completed in 2019), intermediate (when I visited Banwan in 2021 or later this year), or long-term (by following up on the project and initiating a sound evaluation in five or ten years). The short-term evaluation of social outcomes in this thesis is integrated into the presentation of the project (Chapter 5) and summed up specifically in the discussion of a possible model (Chapter 6). What I have called an intermediate evaluation is part of the discussion of the outcomes of the post-construction phase.

A systematic evaluation of social outcomes was not a part of the project setup, but the socio-economic consequences for the village and the families were mapped by the questions and feedback from meetings and individual interviews/conversations: What outcomes are the programs of the Banwan producing for the service recipients? Is the Banwan practice meeting its goals and objectives viewed from the position of the village and the families? These feedbacks were needed to inform the major questions at stake: Does this model work and better than other development initiatives? And how may local feedback be used to improve the program?

In this study, I aim to examine the Banwan project's social outcomes extensively: including living conditions, confidence building, workshop achievements, and employment status. My ambition is to compare these outcomes with data or qualified impressions from the pre-project period. Specific examples of outcome measures for each point previously mentioned are presented in Chapters 5 and 6. In my overview of these outcomes, I consider the following: *Outcomes of the Initiated development program and local organization performance*: service coordination, financial sustainability, program development, peasants' satisfaction, community participation, and support.

The research design chapter creates an overview and explains the selected methods throughout the research. The analytical perspectives I have introduced in this chapter focus on the implementation process, relations to national and regional rural policies, interpretation of the project as architecture, and the outcomes of the renovation. Characteristic of this analytical perspective is the interaction between the behavior and preferences of stakeholders and the possibilities and constraints that are embedded in the institutional and political context. A wide range of empirical material is approached and investigated in different ways. The challenges of my different roles and the need to avoid the possibility of biased interpretations are underlined. My analytical themes are Spatial Performance, Capacity Building, and Social Outcomes.

Chapter 4

A wide range of rural strategies is implemented in the Chinese Countryside to ful-fill objectives formulated in governmental policies. Many of these different devel-opment models are applied, and the effects illustrated in the poor Guizhou prov-ince. Part of my research has been directed towards uncovering the complexity of Chinese rural strategies and characterizing and investigating today's key strategies and practices of rural reconstructions led by different stakeholders. This part of my thesis does establish the background for the discussion and analysis in Chapters 5 and 6. Chapter 4 also serves as a reflection on the effects of widely implemented rural strategies and demonstrates potential analytical perspectives. The text on strategies refers to the attached article "Guizhou – Understanding Strategies for Rural China."

INVESTIGATING STRATEGIES FOR RURAL CHINA

4.1.   Research on Rural China

While there are countless diverse definitions of "rural" or "countryside" based on individual experiences and imagination, there is no standard, generally accepted academic definition of the rural (Woods, 2004; Hoggart et al., 1995). In Chinese traditional history, xiang means countryside and cun means village, community and settlement, all denoting both morphological and social organization below the county level (Ning, 2019). *Xiang cun* is a term used to denote areas outside the urban area. However, this simple territorial interpretation of urban and rural China is inadequate and not exact in the contemporary Chinese context. Scholar Tang Keyang notes that waves of urbanization, initially inspired by western practice, have created "a new image of the city as a powerful human construct, which accordingly altered the conception of 'countryside'" (Tang, 2015:16). This descrip-tion does not share light on the interactive relationship between rural and urban China. Underpinning the idea of the urban and the rural performing different and at times overlapping roles we find different interpretations and assumptions rooted in various academic disciplines. The "urban-rural dual structure"[77] is for example an important concept used to try to describe the complexity of the urban-rural rela-tionships (Ye, 2009; Bai, 2012; Lin and He, 2016).

Scattered initiatives for rural reconstruction appeared in China already from the 1890s. Scholar Wen Tiejun[78] – an inspirator for my work on rural construction – talking about the development of rural China, puts forward Minsheng ltd (the name in Chinese meaning "the people's welfare") in Chongqing and its founder Lu Zuo-fu as an example of a private company engaged in social enterprise in the 1920s.[79] Social scientists Lin and He (2016) described a historical change in the urban-rural

dual system in the decades before the revolution as a move out of what they call an "exploitation type" of urban-rural dual relationship.

As we know, the Chinese revolution in 1949 was a peasant revolution. In the first three decades following the establishment of the PRC, the government defined comprehensive and powerful national strategies like *Overtaking Strategy*[80] (Lin et al., 1994) with consequences for rural China. The central government intended to control modernization through a planned economy and managed and controlled the prices of agricultural products and costs of industrialization through a monopoly of procurement and monopoly of retail. In Chinese political-economic terminology, this was called the *scissors' gap* (*jiandaocha*) (Wu, 2018). The Chinese version of the urban-rural dual system covering both the agricultural and industrial sectors was established through these policies and strategies (Ye, 2009). Pan and Wen (2016) argue that one significant impact of the urban-rural dual structure is that the multi-functional characteristics of rurality have been increasingly obscured and that rural areas in China primarily function as resource providers and crisis carriers[81]. Wen Tiejun (2013) in his book "Eight Crises – Lessons from China, 1949 to 2009", following the same logic, argue that rural China helped to absorb the cost and impact of a set of production and economic crisis. He Xuefeng (2017) still argues that contemporary rural China should serve as a "social stabilizer" for peasants to cope with difficulties caused by urbanization and the market economy.

The urban-rural dual relationship was asymmetrically developed in favor of the urban areas during the decades following the founding of the PRC. Not due to a lack of interest for the rural and the peasant in Chinese politics, but due to the lack of investment in rural areas. When China reformed into a Socialist Marked Economy in the late 1970s, policies shifted towards a new "protection type" of urban-rural dual structure that included the introduction of a market economy in the countryside and an opening of the labor market for migrants.[82] Wen (2018) classified three main socio-economic types of world agriculture. Unlike the "model of capitalized big farms" caused by colonization and industrialization of agriculture and the "model of medium and small farms" describing the situation in Europe, the "model of East Asia," including China, Japan, and Korea, implies small-scale, intensive, family- and village-based farming. This model is also referred to in the diagrams presented in Chapter 1.2.1 in the introductory chapter. The unique socio-economic quality of rural China has been described by Fei (1992) in his book "From the Soil," which is very well known in China. In terms of China's rural settlement patterns and vernacular architecture, "the soil" refers to the definite regional patterns and locally varying folk beliefs and symbols that reflect China's physical and social diversity. Cultural geographers, ethologists, anthropologists, art historians, and architectural historians have studied the diverse physical environments, the varied cultural landscapes, and the different geographical and historical traditions that have established the settlement structure, the morphology, the building typology, and iconography

of Chinese villages. For example, Knapp (2000) classified three cultural realms – northern China, southern China, and western China – as different bases for the discussion of settlement forms and dwelling typologies. He categorized a variety of settlement types and vernacular housing typologies collected from thirty years of fieldwork. The criteria for the classification system for housing were described by the organization of the building spatially and in the plan, external form, building structure, and building materials. According to the book – and relevant for the Banwan study – stilt dwellings are built and used by ethnic minority groups throughout southwestern China.

The dramatic changes that have been witnessed in China's rural areas in recent decades have made scholars turn their research focus to also discussing rural settlement changes, including the profound changes in agriculture and agricultural economy and the new demographic structure, mainly an effect of rural to urban migration. Questions of architectural transformation, cultural values, and eventual conservation are linked to the interconnected processes of economic and social change. Various contemporary definitions of rural China do not limit the categorization of villages to livelihoods, geographical factors, and building types but also include new spatial logic and key features reflecting the process of urban transformation. Bolchover and Lin (2013) defined five different types of villages: *Urban Village*, *Factory Village, Suburban Village*, *Contested Village*, and *Rural Village*.[83] All types are, according to Bolchover and Lin, marked by their different roles and the needs and challenges met in the Chinese urban-rural system.

Following a period of metropolitan growth and physical transformation in the cities, an unprecedented force of urbanization, including both socioeconomic and spatial transformation, is active in most of rural China. This has given rise to the definition and elaboration of new descriptive concepts, such as *left-behind village* (He, 2015), *resettlement village* (Wang and Lo, 2015; Wu, 2015a), *ethnic tourism village* (Oakes, 1998; Cornet, 2015; Wang and Yotsumoto, 2018), and *Taobao village* (Zeng and Guo, 2016). These different typologies are self-describing, referring to a rural social organization formed by adaptions to global and national markets, Chinese policies, and the actions of villages and peasants to adapt to these forces.

The three analytical categories of villages established in Chapter 1 (penetrated modernization villages, off-site modernization villages, and in situ modernization villages) indicate that villages are becoming integrated into an urbanized China in terms of economy, production and culture. China's urban population – according to the country's definition of urban areas – surpassed its rural population in 2011.[84] In 2018, the degree of urbanization reached 59.8% of the total population.[85] If the total number of inhabitants that in terms of economy is integrated into the metropolitan regions were to be included, the rate of urbanization would be higher still. According to government policies, urbanization will be channeled to the smaller

cities and towns (not the metropolises) in the coming years (CPC Central Committee and State Council, 2013). Rosenberg (2014) notes that the "village urbanizing process" may be perceived as a new phase of the urbanization of China. China's radical economic development has restructured the rural population in terms of their livelihood, work patterns, incomes, family relationships, and aspirations. What might be called the gradual development of new societal structures has resulted in new spatial logic "imposing urban-like models of residence on rural residents" (Rosenberg, 2014: 63). Urban patterns overlap the rural systems, but the land is still legally defined as rural.

Larger parts of the Chinese countryside were somehow neglected during the urbanization policies that followed the introduction of the market economy in the 1980s. These areas did not follow the improvement of welfare in urban areas and deteriorated in terms of economy, low-quality living conditions, underdeveloped infrastructure, waste of agricultural land, land not being cultivated, and low capacity for local investment seriously impeded the modernization of China (Rosenberg, 2014). These issues, as a framework for the discussion of urban-rural relationships, were raised at the 18th National Congress of the Communist Party of China (CPC) in 2012. One of the main challenges being identified was modernizing the Chinese countryside. The resulting policy was linked to intentions to improve food production, reduce rural poverty, improve welfare services, and develop a stronger rural consumer market within China.[86] In the actual development process, however, more attention is focused on promoting urbanization (Kang and Xue, 2018) and the changing of the existing settlement structure, moving the village population into newly built settlements or towns. I will return to this by describing specific development strategies later in the chapter.

Rural China is very diverse, both spatially and in terms of wealth. Rosenberg (2014) notes that the differences in location, ecological resources, and socio-economic backgrounds between villages grant them different strengths and weaknesses and, thereby, different potentials to implement new rural community construction. He argues that although the rural urbanization policy is accepted nationwide, it may be more appropriate for more developed rural areas than less developed areas. Research and discussions on the actual effects are therefore needed. How are general governmental policies implemented? How does rural urbanization occur, what are the local effects, for example, of land speculation, and what happens to the historical rights to the land? Which Chinese rural development strategies have been successful, which have not worked, and why? How may experiences learned from development strategy interpretation help inform a better practice?

At the time of writing, most studies have focused on villages adjacent to cities/towns and on successful model villages in eastern China, while the impact of urbanization on ethnic areas in western China is a seriously under-researched topic in

an under-researched area.

4.2.   Strategies for rural development

As China is a country with a strong government and very high ambitions in terms of regional policy, the debate on rural policies is essential in Chinese politics, involving the discussion of the peasants' right to the land. The discussion might be illustrated by the different positions and perspectives of two scholars – He Xuefeng and Li Changping – in a debate held at Fudan University in 2016. The two positions might be termed "guarantee the minimum" and "enterprising" (Xiong and Liu, 2017).[87] He Xuefeng (2013) refers to the production in rural areas as "semi-working and semi-farming" (*ban gong ban geng*).[88] Agriculture combined with income from family members working in the cities has become the main livelihood in many rural areas, also in impoverished rural villages in southwestern China. The contribution to social stability and economic development has been substantial and might be observed in new rural housing (Figure 4.1). He Xuefeng (2015) considers the rural areas as a possible safety net for peasants who might fail in the urban area or want to return to the villages. He maintains that rural production has worked as a "stabilizer" or a "reservoir" for the modernization of China. According to He Xuefeng, today's rural construction strategies can be classified into four categories (He, 2017b): (1) Rural construction in order to guarantee the minimum requirements for working and living conditions for peasants; (2) model villages made by local governments for political propaganda requirements. These are difficult to replicate due to the sizeable financial investment required; (3) rural constructions as gentrified habitats that satisfy the dreams of the middle class, and (4) rural constructions undertaken for the purpose of making money by satisfying marked segments and domestic requirements of the middle class in urban areas (the prototype being rural events and tourism). In his opinion, more effort should be put into the limited ambitions of strategies guaranteeing the minimum, especially in less resourceful parts of the countryside. I find He Xuefeng's arguments to be valid. Large investments – like the Banwan project – cannot be made in any village, and for more villages to survive, smart and targeted investments must be made. I will return to this argument as part of the discussion of the Banwan-project as a possible model.

He Xuefeng's ideas were heavily criticized for limiting the role of rural villages and rural areas to traditional agriculture and tourism (Li and Zhang, 2018). Li Changping – a practitioner who has conducted research and rural construction activities for decades – stated that rural construction requires models that demonstrate innovation, entrepreneurship, and the restructuring of production. The success of Taobao- villages offering online shopping is probably a good illustration of the potential for developing other industries.[89] He Xuefeng considered Li Changping's rural practices problematic assessed from a macro-perspective. The development of

a model village based on innovative tourism might succeed, but seen from a market perspective, specific models can be replicated to a limited degree. Every village established on agritourism and cultural production cannot be transformed into the same kind of market-oriented industries; the villages are too numerous. Taobao's success so far might contradict the general view of He Xuefeng and underline the production potential in rural areas.

Figure 4.1: Rural dwelling built by migrant children money. (Source: Karl Otto Ellefsen)

The findings from Guizhou indicate that most of the strategies in use might be said to intend to guarantee the minimum, examples being the projects for better housing and basic poverty alleviation. The strategies might, however, be discussed in a wider scope than the perspectives established in the Fudan argumentation of 2016: (1) One dimension expresses the difference between the countryside as a location for natural resources and rural areas as habitats. (2) A substantial difference can also be identified between strategies that try to sustain existing settlement structure and a dominating trend to erase villages and move the inhabitants into towns in order to improve economic conditions, the quality of their housing, and their access to social services. Differences between strategies can also be established by (3) defining government-led programs as opposed to private enterprises, (4) distinguishing between top-down and bottom-up strategies, and (5) drawing a line between large-scale strategies and small-scale economic interventions.

Because of the characteristics of its landscape, Guizhou is not a prioritized location

for China's efforts to industrialize agricultural production. Apart from infrastructural projects and the exploitation of natural resources, rural policies deal primarily with employment possibilities and improving living conditions for the rural population. In Guizhou, one might distinguish between *new technology and infrastructure strategies* serving national development, *resettlement strategies* that break up traditional village structures and resettle the population into towns or newly built villages, and different strategies for the *revitalization of villages* that intends to conserve and renew the traditional village structures.

4.2.1. Local strategies, Guizhou as a laboratory

Guizhou could operationally be looked upon as a laboratory for Chinese rural strategies. The region is a remote area of China populated by ethnic minorities and impoverished and underdeveloped. Different policies and strategies have been implemented to respond to these problems and the corresponding requirements of national policies, including top-down planning led by the state and local government and bottom-up revitalization initiatives. As an index province for regional development, environmental improvement, and poverty alleviation, the government selected Guizhou as a pilot province to implement many policies. Already in 2001, the Chinese government decided to implement the pilot program of poverty alleviation resettlement in Guizhou, Yunan, Inner Mongolia, and Ningxia Hui Autonomous Region (QXNGOV, 2018). In 2008, Guizhou was the first province to launch the *Dilapidated Rural Houses Renovation* (Rao, 2014), as discussed in Chapter one. In 2013, the state launched a pilot program of Beautiful Village Construction that included Guizhou (Wang, 2014). In 2016, a national hub for storing big data was established in Guizhou (GZG, 2016); in 2017, Guizhou was selected as one of seven provincial demonstration areas to carry out what was termed holistic tourism. All the above strategies undoubtedly benefit from the infrastructure programs, which also intend to draw outside investments into the province. As a result of these initiatives, Guizhou might, as I have stated, be seen as an experimental pilot zone for testing different approaches and strategies. Investigating the pilot means revealing the difficulties and obstacles to promoting these policies throughout China and documenting the outputs. Guizhou has indeed been a battlefield for implementing policies in order to change rural societies in terms of socio-spatial relationships, local economy, the organization of production, and the living standards in the villages.[90]

4.2.2. New technologies

Programs related to new energy sources, infrastructural development, and modernization of agriculture are mostly government-led, top-down, and very large-scale, and main decisions are often taken independently of local villages. New technologies and the search for clean energy have led to more extensive use of natural

resources, primarily situated in rural areas. The Guizhou government has gradually tried to alter the industrial and economic structure of the province. The plan, In 2014, a plan was launched to speed up the development of Big Data industries (CNN, 2018). The landlocked location and mountainous terrain that was previously considered the landscape's obstacle to economic development turned into an advantage for data infrastructure.[91] The rapid growth of tech industry[92] has contributed to more than 20 percent of the province's GDP from 2014 to 2019 (China Daily, 2019). According to the White Paper on the Development of Digital Economy in China 2020, the growth rate of the digital economy in Guizhou reached 22.1 percent in 2019, ranking first among all provincial-level regions for the fifth year in a row (Ou, 2020). The application of big data technology is by creating employment opportunities, claimed to have helped in solving the poverty issue.[93] In the most recent years, responding to the demand for sustainable energy while also seeking to alleviate poverty, the Guizhou government has installed a number of photovoltaic power generation systems in remote rural areas. Traveling in Guizhou, one might encounter huge hillsides covered with solar panels like those on the hillsides of several Bouyei villages of Yata Town (Figure 4.2).
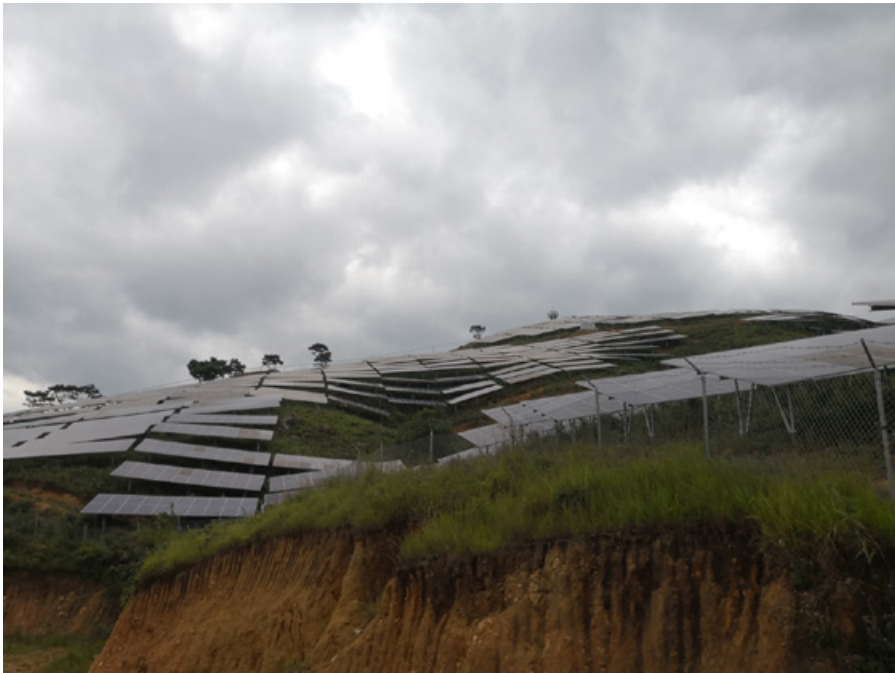
Figure 4.2: On the way from the Yata town to Banwan village are several solar panel matrix sites constructed on the hillsides. (Source: Author)

The introduction of the new technologies is a breakthrough for developing green energy and fighting the climate crisis on the national level. The Big Data industry

and photovoltaic projects are innovative initiatives with the potential to contribute to poverty alleviation in Guizhou. However, to avoid non-planned adverse effects, solid cooperation between governments on different levels, private enterprises, and the targeted impoverished people is needed. Many obstacles, like top-down planning involving few local considerations, lack of financial support and low quality of equipment, and inflexible profit allocation mechanisms, doubt the sustainability of the programs.[94] The experiences from the solar panel project in Banwan illustrate the top-down perspective and eventually few positive local effects.

4.2.3. Agricultural reform

The revision of Chinese agricultural policy is the most crucial and maybe the most controversial of the Communist Party's rural strategies. The main challenges concern the degree of future industrialization and all the issues of rights to and ownership of arable land. Chinese agriculture still, to a large degree, consists of small farming units run by families who inherited rights to plots that are owned by the state, as is the case with all land in China. Many argue that more intensive management of rural land – turning farmers into laborers in the farming industries – is a prerequisite for mechanized production, higher productivity, and better quality of agricultural products. Agriculture reform is closely linked to the question of *rights to the land*. This question might seem unproblematic with the government as the deciding owner, but looking deeply – like Peter Ho did in his book on land ownership in China in 2005 – the question is complicated and linked to the "Hukou" system and fundamental village and family rights, and not at all easy to handle, not to say change (Ho, 2005). Increased production, and not a fundamental transformation of Chinese land ownership, is the politically expressed aim of agricultural policies. A basic measure is, therefore, to provide loans for investment and modernization of single-family-based farms. Villages are encouraged to act collectively to reform production, and there are highly acclaimed villages where this is achieved, like the Shouguang village in the Shandong province, which restructured into an agricultural hub. Here, while the farmers have resettled into high-rise housing, the huge green-house complexes for vegetable production are owned and managed collectively (Peterman, 2020).

Companies, often in collaboration with eager villagers, are stimulated and economically helped out to obtain the rights to cultivate larger areas, and a new concept is established in China – "The Farm Complex." This will be the ultimate industrialization of agriculture; plots are added together in huge estates and production systems, the most modern technology provided by the international market is employed, the peasant becomes a farm worker, and "rights to the land" lies with big corporations. Farm Complexes have been established in China, and different international cooperations specializing in high-tech agriculture, do – like the illustration show (Figure 4.3) –provide plans for modernizing rural China in a funda-

mental way.

Figure 4.3: Proposal for a farm complex planning in Caofeidian new district. (Photo: Sales promotion folder made by DHV, Wageningen University and Research Center, 2019)

In Guizhou, Evergrande – before the company had to be restructured in terms of economy – and some other private enterprises have attempted to combine large-scale greenhouses with relocation programs to integrate supply-production-sale that help increase the incomes of the relocated population (Figure 4.4). While these agricultural strategies attain specific achievements, they often go under certain conditions; the peasants' land rights might be disputed, and private enterprises are integrated with financial and technical support.

Figure 4.4: The greenhouses for producing vegetables have been built on a relocation site in Dafang County, Bijie City, Guizhou. (Source: Evergrand Poverty Alleviation Actions

Guizhou is, as already stated, not a primary Chinese location for putting efforts into the industrialization of agricultural production. The mountain slopes make up 92.5% of the province's land area, and the agriculture is probably more than any other province, characterized by its small-scale peasant economy. Conclusions from fieldwork on the investigation in several minority settlements[95], are that the corps from the land barely supported the livelihood of peasant families and left no surplus value. This is why all the villages had to accept and encourage the young and able to find employment in urban areas. The renewal of agriculture has to follow different paths, for example, by more co-working on the land and the refinement and marketing of traditional handicrafts deeply rooted in agricultural production.

4.2.4. Infrastructure strategies

For centuries, the "Tea Horse Road" (*cha ma gu dao*) wove through the mountainous region of Guizhou and connected China with Southeast Asia and India. Circling the peaks, the trail linked the territories but did not change the relative isolation of the region. Improving constraints to connectivity that hinder economic and cultural exchange between remote mountain areas and the plains has been a national priority. The Chinese infrastructural programs are probably the most influential government policies affecting rural areas in the last two decades. The program includes highways, high-speed railroads, electricity and gas power lines, and digital networks. Whenever traveling in the Chinese countryside, including Guizhou, one encounters elevated, and tunneled roads and railways passing horizontally through the topography (Figure 4.5). Investments in highways and rail during the *12th Five-Year-Plan* (2011-2015) amounted to around 100 billion RMB yearly (CNN, 2018). These networks strengthen connectivity within rural areas and between rural areas and cities. Equally importantly, they link Chinese border areas to the *Belt and Road* initiative (MOFCOM, 2015), the massive Chinese-financed international trade and infrastructure program. Railroads and gas pipelines ("Belt"), harbors and shipping routes ("Road") are aimed to physically and financially link China to dozens of economies across Asia, Europe, Africa, and Oceania. One effect in China is that remote rural regions gradually become more accessible and central.

Twenty years ago, the Chinese government initiated the so-called *Great Development of Western China Strategy*[96] to speed up the development of Midwestern China (SGC, 2000). Some scholars interpreted this strategy as an effort to reconsolidate state power (Coggins and Yeh, 2014). Better governmental control might be an effect, but it is hard to see this as a primary objective for the projects. The possibility of speedy and safe mobility and national integration was targeted. Indisputably, the territorial focus on the investments greatly influenced the quantity and quality

of technical infrastructure in Guizhou. In 2001, 53.3 billion RMB was invested in a series of state-led projects – more than the total investment in the region following the *Five-Year-Plan* from 1995-2000 (Goodman, 2004). The ambitious programs continued over the ten years that followed (Xinhua, 2010). According to Chinese statistics, 644.8 billion was invested in highways and waterways from 2013 to 2017 (JTGZ, 2018). Furthermore, 69 highway projects were initiated, and 5 764 kilometers of new roads were built. Guizhou government plans from 2018 tell us that by 2022, 10 000 kilometers of new highways will link 80% of the villages in the region (GZG, 2018). One illustrative effect to date is that in 2017, Guizhou attracted 744 million tourists, most of whom were domestic.

Figure 4.5: Nanning-Kunming railway in Xingyi section, Guizhou (Source: Karl Otto Ellefsen)

Giant government infrastructure projects have substituted dirt roads and changed path networks. In 2015, Guizhou province initiated the program "Paved Roads Coming to Villages (*cun cun tong*)" to facilitate the connection of isolated villages to regional economic centers. By the end of 2017, tarmac and cement roads had been paved in 100 percent of towns and townships and 100 percent of administrative villages in Guizhou (Guizhou Government, 2018). Improved transport facilities have led to effective development and utilization of natural resources, energy-producing projects, and tourist facilities in remote rural areas. The infrastructure strategies have been considered to be an effective way to improve local working

and living conditions. However, every coin has two sides; highway and paved road construction follow an infrastructural logic, not the local landscape logic. Bolchover and Lin (2013) note that although highway networks reduce travel times and bring the urbanization process to the doors of remote villages, such networks may contradictorily establish spatial, social, and economic barriers. In the case of overhead bridge construction, Bolchover and Lin demonstrate that the new highway cut through the center of a river valley and destroyed local historical bridges. Again, in my view, the problem is related to the scope of top-down planning, where national interests are more or less given priority over local interests and needs. The challenge is to make micro-scale investigations and activities interact with large-scale projects.

4.2.5. Resettlement strategies

Government investments in China, and the poor province of Guizhou in particular, focus continually on poverty alleviation.[97] In China, absolute poverty is measured according to the national poverty line, and this standard is to the level of national socio-economic development. The poverty line in 2016 was RMB 2 952 yuan per year per person. According to data shown in the Guizhou Statistic Yearbook[98], Guizhou in 2016 (the year the implementation of the Banwan project started) was the province with the largest percentage of poor people in China. The registered poverty population was 4.93 million in 2016.[99] From 1953 to 2010, Guizhou's population increased from 15 million to 34.74 million.[100] The basis for livelihood in this period did not change; the dependence on the local soil was nearly total. The population growth and modernized modes of production inevitably led to overuse of the vulnerable environment, deforestation, and soil erosion, making the karst and rocky ground subject to desertification. The arguments based on the evaluation of ecological consequences were explicitly combined with societal and administrative considerations. Adding to the argumentation for resettlement, the villages in the hilly parts of Guizhou are very dispersed, and the settlements are isolated and difficult to reach. For example, during the fieldwork, a deputy head of Yata town told us: "these villages are too far away from each other; we can only go to two remote villages a day at most."[101]

Resettlement programs aim to improve living conditions and welfare and are intended to address production based on ecological considerations. Normally, resettlement is a top-down planned migration process within an administrative area. Regional and local governments initiate a series of resettlement programs, breaking up village structures, moving people, and turning their farmlands into forests and grasslands in the interest of both agricultural production and ecological conservation (Tashi and Foggin, 2012). Old villages are abandoned, and villagers are transplanted to new settlements or towns. Land rights are a sensitive question, and there are examples where families are retaining their rights to the land and the land

being cultivated from the new settlements. In other areas, agricultural production is reorganized, and the resettled population is offered the opportunity for new types of work (Zhou and Mao, 2017).[102]

Guizhou was already in 2001 selected as one of four pilot provinces for implementing resettlement (Qu et al., 2019). In 2012, the provincial government added plans for the resettlement of 2 million people between 2012-2020.[103] From the government's perspective, poverty alleviation resettlement and ecological resettlement are both highly effective programs for achieving a diverse set of development and environmental objectives; however, the "voluntary" nature of these resettlements and their quality as environments, habitats and place/architecture is questionable (Wu, 2015).

Resettlement is frequently organized as a public/private partnership strategy. Poverty alleviation projects are no longer seen as the sole responsibility of the government and province but are managed and financed in close collaboration between government, state-owned enterprises, private enterprises, and social organizations on all levels. The huge corporation Alibaba, for example, has recently become involved in poverty alleviation projects. The Hengda Group – the English name of Evergrande Group – has been (before restructuring) involved in a large number of village relocation projects in Guizhou and other provinces.[104] Old villages are torn down, and people are resettled together in a new town/village. New housing was provided, and Evergrande did invest in greenhouses, irrigation systems, and live-stock farming. There are some unclarities concerning whether the peasant should still be considered a peasant or a farm worker, and questions of long-term family rights to the land seem to be unclear.[105]

The resettlement strategies might be considered to be a means to achieve the gradual urbanization of rural China. In the mid-1990s, the Chinese government introduced the policy of developing medium- and small-scale cities (Peng, 2018). The policy resulted in new development models. These *New Towns* reflect generic models for large-scale urban development and mega-city urban typology in terms of urban structure and architecture. The spatial patterns of new settlements have little to do with the organization of traditional settlements. Although some residential buildings might pick some elements of the vernacular architecture of ethnic minorities, most residential buildings are reiterations of the "simple, repetitive logic" of urban development projects preferred by administrators and politicians (Scott, 1999: 55).

By 2016, the Chinese government had initiated a new series of resettlement programs for the population living under the poverty line. The *National Plan of Relocation for Poverty Alleviation in the 13th Five-Year-Plan Period* established four relocation categories: (1) Villages in remote mountainous areas, areas suffering from seriously desertification and erosion, and areas with no good water resources,

few agricultural resources, and heat conditions that can hardly satisfy the basic living and production needs; (2) Villages in prohibited development zones and restricted development zones defined by *The Main Function-Oriented Zone Planning*;[106] (3) Areas with weak transportation infrastructure, lack of water conservancy, power supply, and communications as well as lack in basic public services in respect to education and medical services that contribute to high construction, management and operation costs. (4) Areas with serious endemic diseases that are vulnerable to geological disasters.[107]

The national plan defines and argues for a centralized resettlement model but opens up for combining "centralized resettlement" and "scattered resettlement." Ceheng County planned to relocate 87 540 people from 977 natural villages from 2016 to 2018. Gaoluo New District, a new planned and urban-style settlement accepted 31 491 displaced people: nearly one-third of the total number of people relocated to standard blocks of flats along straight roads (Figure 4.6). In addition, the main argument for resettlement, the town was equipped with a hospital, a mother-and-child health clinic, two middle schools, two elementary schools, an industrial park, tourist facilities, and modern agriculture. The inhabitants enjoy modern conveniences such as running water, electricity, paved roads, and urbanity. According to Scott in his *How Certain Schemes to Improve the Human Condition Have Failed*, it represents "an ideal pattern of settlement and a promising development way for ethnic minorities," which "fit[s] snugly into a high-modernist view and also answered their political interests as state officials" (Ibid. 1999: 5).

Figure 4.6: Housing allocation scene from the Gaoluo New District in Ceheng County, Guizhou. This new residential district consists of almost three hundred multistory apartments along straight roads, which divide these residential buildings into several residential clusters. According to the Ceheng governmental plan, around 32 000 people from nine towns will be relocated to Gaoluo new district. (Source: Zhou Changyong)

Local and central governments are confronted with the critical question of how to qualify the good intentions of modernization and poverty alleviation. For example, resettlement programs would include populations from different villages with various value systems, lifestyles, and ethnicity, generating great social challenges. In "whole village resettlement programs" – which refers to relocating villages as integrated units – the local government tries to preserve and protect the social network. However, the livelihood, local knowledge, and experience based on the territory and place people live will not be transferred and relocated. Practically speaking, the older members of the resettled population gained the facilities for welfare and modern living but, in most cases, lost their links to place and history. Usually, displaced people would not be allocated farmland in their new habitat. Work opportunities in resettlement towns and villages gave priority to well-educated people who were in demand in the competitive market. For the older peasants, the experiences and abilities gained from self-sufficient agricultural production are hardly competitive in this unfamiliar labor market. There are many more or less unverified stories about resettlement in Guizhou. One county official told the author about a group in the new resettlement site of Ceheng County. After having spent the government's economic support and loans for resettlement, they appealed to the county government for help. The county government provided extra money, but the funding was spent – and not used for developing their planned new business. Some reports even show that many settlers are returning to their ancestral places of origin due to the lack of work and the high cost of living in the towns (Lo, Wang, 2018). In my opinion, as very often is the case in China, effects are measured in terms of quantity with no discussions of quality attached. To fulfill intentions and plans, local governments might report how many households have been relocated to newly built resettlement sites. However, there is little publicly accessible information concerning short and long-term effects.

Contradictory to projects for in-situ rural renovation, the resettlement strategy is part of a large-scale national program. Therefore, the program targets are transparent, governmental and even private funding of the program is substantial, the amount of affected villages and relocated populations are enormous, and the project implementation cycle is extended. Little research is conducted on the effects of relocation and the new situation for populations shifting from agriculture to other industries. Improving existing villages and spatial patterns might be seen as an alternative to resettlement, currently sparsely put into action, but with the potential of keeping a larger part of the Chinese villages as livable habitats.

4.3. Strategies for improving existing villages and spatial patterns

Although the population in the villages has been "diluted" as the young and able have migrated to the cities, most of the migrants are still linked to the villages by their hukou and their rights to local land. As underlined earlier in this thesis, historically speaking and compared to other continents, China has demonstrated relative stability in rural habitats in terms of numbers, localization, spatial patterns, and village morphology. In recent decades, however, these habitats have been heavily influenced by modernization policies and other forces of transformation. In academia, the question is raised about how many villages will survive – as physical structures, as social and legal systems, and as production units. Optimistic estimates by experts Li Changping expect as many as 30% of the villages to become so-called "central villages" that can draw people back and achieve sustainable development, 10% of the villages will be integrated into urban development, and 60% of the villages will be gradually hollowed further, with most of them being abandoned and the villagers resettled (Li, 2017). This prediction was proposed by Li Changping, one of the influential voices on agricultural and rural issues in China. According to Li's partner at China's New Rural Planning and Design Institute, Sun Jiuqiang, Li Changping based this prediction on observation and experience. The figures have been used in many of Li Changping's academic publications and conference papers. A modest estimate puts the number of functioning villages in China at around 2.7 million (based on Feng Jicai's data, mentioned in an earlier footnote). This would thus mean that 810 000 villages in China will "survive," that is, be renewed and achieve a revised economic foundation. I discuss the different approaches for improving existing villages according to empirical data, describing strategies for tourism, housing improvement strategies, and more comprehensive strategies for strengthening existing villages.

4.3.1. Domestic tourism

Tourism is booming in Guizhou, and planning for domestic tourism is one of the main strategies for developing new industries and workplaces. Historically, domestic mass tourism in China is a new phenomenon, linked to a wealthy middle-class with regulated holidays, leisure time, and sufficient economic resources. The fast-moving infrastructure facilitates travel, and many picturesque and historical landscapes, sites, and villages can be easily reached from densely populated urban areas. While Chinese international travel and international tourism to China is growing slowly (before the pandemic started in 2020), domestic tourism has increased steadily in recent years.[109] Of the 5 billion trips made by domestic tourists in 2017, half of them were to rural China.[110] Investment in domestic tourism has been the easiest, most accessible way to promote Chinese rural development. Tour-

ism works as a top-down strategy following up on central and provincial policies and as a result of local bottom-up processes. Both include large-scale projects for whole villages and small-scale, family-based investments. One frequently encounters actors who have returned to rural areas after having worked and also often obtained an education in the metropolitan areas of China and are now investing the money they saved in a small hostel, a café, or a restaurant in or near an attractive rural tourist destination. Such projects include high-end initiatives. Chinese prestigious architecture from recent years includes many rural projects for tourism. Typical spots for rural tourism – an illustration in figure 4.7 – are scenic landscape areas, historical villages, locations presenting intangible cultural heritage – often linked to ethnic minorities – and different kinds of agricultural theme parks such as tea farms, fish farms, wineries, and sites for high-tech farming or advanced organic farming.[111]

Figure 4.7: A sizeable scenic landscape in Yubulu village is known under the name of "flower ocean" and is popular with domestic tourists. However, the original paddy field replaced by a large area of Lavender was disputed, referring to the limited agricultural resources of the village. (Source: Author)

Comprehensive government policies for rural tourism in China were established first from around 2010 onwards. Embryos for ethnic tourism could be observed in Guizhou from the 1980s, and according to Steven Harrell (2002) ethnic tourism had already become a dominating way of selling ethnicity in south-west China

already at the turn of the millennium, but not as a defined important means for developing local and regional economies. Guizhou first proposed the concept of poverty alleviation by tourism (*lvyou fupin*) in 1991 (Xu et al., 2019). Tourism became a very effective means for modernizing areas with villages and scenes that were attractive for visitors for their authenticity, but where the socio-economic situation was underdeveloped. According to Oakes' book on tourism and modernization in China from the late 1990s: "Tourism's role is the state's modernization and development of peripheral regions is particularly important because it costs the state much less to "open" a region to tourism than it does to implement other modernization schemes." (Oakes, 1998: 132)

Both national and local governments now view ethnic tourism as a way to generate revenues (Oakes, 1998; Yang, 2011; Chio, 2014) and as a tool for poverty alleviation (Rao et al., 2015). By 2010, over 3 000 villages in Guizhou had invested in facilities for tourism (Yin and Xu, 2011). In 2017, Guizhou attracted 744 million tourists, contributing more than 711 billion RMB to the local economy, all according to national statistics.

Many scholars, however, argue that ethnic tourism is a double-edged sword where the urge for revenue and places for work compromise local culture. Ethnic tourism in the multiethnic regions of Guizhou most often takes on the character of theme-park-style village renovations. Scholars describe the outcome as "stereotypical" and "over commercial" in projects where the most visual features of ethnic culture are simplified, presented out of their context, and sold (Gauché, 2017). Similarly, Luo et al. (2019: 275) argue that the remote multiethnic regions in Guizhou experience "a post-alteric shift in which the *exotic other* is gradually being displaced by a generic and visually consumable 'countryside.'" Furthermore, Luo (2018) finds a paradox in the cultural representation; some ethnic groups are still considered "backward," as documented by public statistics, and at the same time, the villagers are required to retain that distinctive cultural identity in order to reap benefits in the economic market. However, she further admits that selling this *otherness* and cultural commodification might be the only viable avenue for local minority populations.

Here my discussion arrives at a crucial topic that was decisive for the Banwan project, tourism also being a viable avenue. Against the overwhelming destruction of heritage in China, especially in remote rural areas, the issue of preservation and how to eventually preserve it is critical. As many minority villages in Guizhou undergo rapid and profound change due to tourism development, is it possible to balance history and cultural identity with forward-looking development projects? May an architectural approach establish alternatives to the "successful" touristification models by opening up for more "experimental preservation" (Otero-Pailos et al., 2016)?[113]

4.3.2. Housing strategies

Limited initiatives for new housing and specific initiatives for new social and technical infrastructure are the most common investment programs for upscaling villages. Guizhou has, during the last decades, seen a number of government programs for improving housing. Vernacular housing in Guizhou shows a diverse typology due to regional climate differences and cultural complexity. The villages built and inhabited by ethnic minorities are mainly made of wood, mud, and ceramic tiles, and they are vulnerable to various environmental forces. The craft of organizing a village and the typology of buildings and public spaces were ruled by historical traditions and handled by craftsmen possessing the necessary expertise and skills to rebuild and repair the vernacular buildings. According to an essential work on anthropology by Tuan, "Primitive shelters combine persistence of form with the ephemerality of substance. Construction and repair are almost a constant activity." (2001: 104) Vernacular architecture implied repairing, rebuilding, and sometimes transforming (Feilden, 2003). In 2008, heavy snow and sleet in Guizhou resulted in large-scale damage to buildings in the provincial villages, prompting a government program to renew village housing. As mentioned in Chapter 4.2.1, Guizhou also launched the national *Rural Dilapidated Building Renovation* pilot program. The policy's mission was to give poor people both in rural areas and cities the opportunity to own a decent home by investing in building activity, creating job opportunities, raising income, and increasing domestic demand. The program started in 2008, and by late 2018, a total of 26.82 billion RMB had been allocated across Guizhou to support 3.3 million poor rural households – 12% of the program's investments nationwide (GZZFCXJST, 2019). The villagers' deductibles were supplemented by government subsidies (Rao, 2014). In 2016, central subsidies had risen to 7 500 RMB per household and 8500 RMB for families in impoverished areas that were experiencing the most severe financial difficulties (SCIO, 2016).

The housing initiatives may be considered to belong to *the guarantee of the minimum strategies* proposed by He Xuefeng. There is no denying that renovating dilapidated rural housing is necessary to secure the basic needs of rural families. However, the policy turned out to be a threat to traditional village structure and the established vernacular housing typologies. The general mood, both locally and with the cadres, was – not unlike at the beginning of the rapid urbanizing of Chinese cities where historical environments were destructed – that both the morphology and the vernacular houses were "backward," impractical, and unsuitable for modern society. Policy executors and beneficiaries pushed to construct new buildings rather than renovate them (Figure 4.8). Secondly, the system for economic subsidies encouraged people to reconstruct their houses, even in situations where this was not their first plan and priority. My investigation in Banwan village shows that the cost of building a two-floor concrete-masonry house/residence was 120 000 to 150 000

RMB in 2017. This was sometimes beyond the families' financial capacity, which in turn made the poverty in the household more severe. Many villages and houses with high heritage value were damaged and often replaced with buildings following national and regional standards with little grounding in local building culture.

The imperfections of housing strategies were one of the backgrounds for choosing an architectural approach to the renovation of Banwan. The strategy should organize the spatial programs at the village level and consider the village as a totality, which means housing renovation and community programs. In addition, intangible cultural heritage preservation, tourism, and the overall development strategy should be incorporated into the design scheme. This reflection also provides an evaluation perspective on the Banwan project.

Figure 4.8: This photo taken in June 2016, shows a bird's-eye view of Naxiang village in Yata town, Ceheng County. Traditional architecgture are substituted by standard housing. (Source: Author)

4.3.3. Comprehensive strategies for developing traditional villages

Policies to preserve the cultures of ethnic minorities made their mark in Guizhou from the 1980s through what was called "the ethnic identification project" (Oakes, 1997). In 1982, pilot projects were initiated to maintain the traditional character

of two Bouyei ethnic villages – Huashishao and Shitouzhai near Huangguoshu Falls. Three other villages – Langde (Miao), Gaozeng (Dong), and Jitang (Dong) – were designated as "preserved cultural relic villages" to attract foreign tourists visiting China to experience the authentic ethnic culture. The success of these projects made local officials recognize the economic potential of ethnic tourism and the possibility of directing interest to specific sites and villages. As a result, four eco-museums were built in Guizhou in 1996 as a means to show the essence of ways of life in ethnic villages and thus keep local habitat alive.[115] These projects deliberately sought to find the balance between cultural heritage preservation, village development, and protection of the natural environment (Huang, 2018). However, the outcome was disputable. In the field inspection conducted in 2000, Pan Yingnian (2002) discovered that local people and official cadres were unfamiliar with the work modes introduced for village preservation, principles for cultural heritage protection, community participation ideas, and ecological consciousness. In the research on the same ecological museum four years later, Pan (2006) found that the problems identified earlier had not been solved. Villagers did not participate in the operation of the eco-museum, which was managed by the local government, and – in the opinion of Pan –the project was limited to the pursuit of commercialization and had lost its development direction.

In 2003, the Ministry of Housing and Urban-Rural Development and the State Administration of Cultural Heritage launched the first list of *National Historic Towns and Villages*. At the beginning of 2014, there were 252 towns and 276 villages on the approved list (Yan et al., 2017). In 2012, the Ministry of Housing and Urban-Rural Development and other departments launched a new list of *China's Traditional Villages*; in late 2019, there were 6 819 villages on this list. Since 2012, 724 villages in the Guizhou province have been included in the List of China's Traditional Villages, each receiving a grant of 3 million RMB from central finance to protect the village and improve the living environment.

Looking at China, however, thousands of villages are marked out with tangible and intangible heritage values and intended for protection.[116] The amount of physical structures worth protecting in the Chinese countryside is vast and far beyond the reach of policies and finance for protection. Therefore, the category of traditional villages is very important in discussing the effects of the actual effects of rural policy in China, denoting villages that are intended to be kept and rehabilitated and not be part of resettlement strategies. Applying the arithmetics of Li Changping, most of the 810 000 villages predicted to survive the continuing process of Chinese rural modernization offer substantial heritage value.

According to the state-issued guiding lines for traditional village protection and development, each identified and registered village in the list should not be relocated to other districts or merged with other villages without explicit approval (MOHU-

RD, 2012). Therefore, responsible government departments have to outline suitable and specific in-situ development schemes for achieving the goals of guiding opinions issued by the state.[117] Returning to the discussion between the two scholars, He Xuefeng and Li Changping, He, on the one-hand side, preferring policies that sustain the countryside by providing basic needs and security. On the other hand, Li underlines the need for inventive policies that renew countryside production and make living conditions in the villages compatible with the cities.

In my opinion, putting into practice an in-situ strategy should bridge the two positions. Comprehensive village strategies should both sustain basic needs and challenge inventions, and facilitate the village to perform as a living environment and tourist attraction. A possible desired scenario is emerging: the village is preserved and even "beautified"[118] and made to function also for contemporary living; agriculture is kept and modernized according to market values; tourism is added to the economic basis; the situation opening up both for villagers "going back to the land" and for those thriving in a wider labor market.

Summing up the strategies for rural China discussed in this chapter: Apart from strategies for industrialization, more efficiency, and larger production in agriculture, most strategies are illustrated in the "Guizhou laboratory." The intentions for developing the Chinese countryside have been the same for the last two decades. Governmental investment and activities have been directed towards the concept of "poverty alleviation" and the rather impressing positive and measurable effects of this policy. I find a lack of comprehensive evaluation of policies, strategies, and outputs, especially discussing processes and effects on a local village level. Somehow the logic of rural renovation leads to trying out comprehensive in-situ strategies, like the Banwan experiment, taking local systems as their point of departure.

Chapter 5

This chapter discusses expert architect-led renovation's physical and social impacts through specific empirical material. Firstly, I outline the architect's conceptual ideas and describe and analyze the Yubulu project that can be seen as a "pioneer" of the Banwan initiative. Then, in the description of the construction phase, I intend to investigate the specific transformation process in the settlement, revealing both positive outputs and conflicts as a series of new – planned or unforeseen – spatial conditions were established, with different actors experiencing the rapid transformation. In the discussion of the post-construction phase, I observe, document, and try to understand how the new spatial configurations have impacted the village's economy and social capacity. Both completed projects and planned but not completed are discussed in this chapter, as expected/unexpected physical consequences and social impacts might bring to light and clarify our understanding of the complex forces acting on the village.

5. ANALYSIS AND DISCUSSION OF THE BANWAN PROJECT

The Banwan renovation project officially started in July 2016, and most of the spatial development programs were completed by late January 2017.[119] The design intervention encountered challenges throughout the construction process. These were issues that needed to be discussed, often with all involved actors: how to balance creativity and cost; how to involve people and make them accept planning schemes and specific ideas, and how, as part of the process, to strengthen the endogenous development capacities of the community. And – as always is the case also, in rural investment – how to finish the project within the timeframe given by the project financing and local authorities.[120]

In this sudden process of rapid spatial construction in the remote Bouyei village, the community encountered new and unforeseen conditions that affected not only physical structures but also ways of life and people's attitudes. Misunderstandings appeared inevitable. Negotiations between villagers, government officials, architects, and the construction company concerned questions of economy and compensation and different ideas for future development. The outcomes did not only relate to what was attained based on the objectives set out in the design scheme but also to deviations due to other factors influencing the post-construction phase. This chapter also illustrates the complexity of the construction process and the further development of Banwan in the post-project stage, when the architects and the other teams had left. Outcomes were recorded and discussed during my five return visits in 2017, 2018, 2019, and 2021.[121] This chapter follows the timeline of the project.

5.1.   Pre-Design Phase Preparations

5.1.1. Village Selection

Starting in 2015, Professor Lyu led CAFA students and teachers in the completion of a rural renovation in Yubulu village, not far from Xingyi, the expanding capital of Qianxinan Autonomous Prefecture.[122] Unlike Banwan, Yubulu is built in stone. The inhabitants are of Han Chinese origin, and the village is due to urban growth, now part of a metropolitan area with different industries and potential for income outside the village. In Yubulu, the design team was dedicated to working with the villagers and using the local geographical and architectural context as the point of departure for the project. In addition, Yubulu's local culture would be embodied in future socio-economic development. The project was considered unique, both architecturally and regarding socio-economic development (Lyu, 2016). The project also led to development opportunities for the community and, considered the most positive output, attracted those who had migrated from the village to return. In 2015, Yubulu village was added to the list of *Model Villages of Beautiful Countryside* in Qianxinan Autonomous Prefecture, which meant that the village would receive additional financial support from the government.[123]

The Yubulu village renovation gave CAFA and Professor Lyu an excellent reputation in the field of Countryside Construction in China. In 2016, Dragon TV, a major Shanghai channel, invited Professor Lyu to participate in a reality show where architects and designers accepted a design commission to renovate a building or an interior space. At the same time, several township governments in Qianxinan Autonomous Prefecture were eager to invite Professor Lyu to renovate their villages. Presented with such opportunities, Professor Lyu decided to select a rural village and allow Dragon TV to record the village renovation process. Thus, a unique rural construction mode emerged involving expert architects, local government, mass media, construction teams, and local villagers.

In early July of 2016, Professor Lyu and a team of graduate students from several universities visited the Qianxinan Autonomous Prefecture for the first time.[124] The design team spent weeks investigating possible renovation objects in the search for an appropriate village, including Kaga village and Bingga village in Xingren County, Chelang village and Nimaigu village in Xingyi, and finally, Banwan village in Ceheng County.[125] According to professor Lyu, crucial factors for selection were development potential, intangible cultural heritage preservation, the quality of the local architecture, government management efficiency, local construction capacity, and support and eagerness in the local community. The selection did not follow mathematical principles or weights and numbers but was based on impressions gathered in visits, observations, and interviews.

The villages visited faced the challenges of village hollowing and rural decline. Banwan – the village most difficult to access of all the potential sites chosen – had gained favor from expert architects and Dragon TV due to its many Bouyei-style stilt dwellings and the spectacular natural and cultural landscape that enabled the attributes of Bouyei culture to be fully recognized. The typical Bouyei-style stilt dwellings, composed of wooden structures and rammed earth walls, set Banwan apart from other villages, although parts of the village had been renewed by introducing relatively, both technically and architecturally speaking, low-quality contemporary cement and brick buildings. "Good-looking houses," "indigenous and authentic," and "the visual experience of a local way of living" are expressions I remember from conversations with the team. However, strong external institutional support, substantial financial assistance, support from the organization on the county and town level, and documented implementation mechanisms, as will be documented in my discussion, were probably equally important for choosing the site. To promote poverty alleviation and ecological protection, Ceheng County had chosen the principle of population relocation (and thereby village destruction and resettlement) as the primary means of improving the living quality of poor villagers. Thus, the design team worried about whether the local government was willing to provide sufficient financial support and allocate funds for an ambitious and untypical single village renovation.

Ceheng County's party secretary had expressed a strong desire to collaborate with Professor Lyu and Dragon TV and promised support for the project. The county pledged to establish a working group involving substantial political and management staff. Cadres from the cultural bureau, the bureau for housing and construction, the finance bureau, and other relevant departments were included to support and collaborate with the design team and Dragon TV. Moreover, the township officials were asked to take responsibility for specific implementation tasks. A deputy head of town was assigned to assist in various parts of the design and construction process and to take responsibility for securing the full participation of the local community. For financial support, the county party secretary promised to invite a reputable construction company to take on the construction contract without advance payment from the government, which meant that the village renovation would not be stopped and shelved due to lack of capital.[126] Professor Lyu made the final choice and initiated a design intervention in Banwan village.

The county party secretary invited Professor Lyu and his team to visit several demonstration village construction projects to convey his personal preferences of spatial aesthetics and programs.[127] Architecturally speaking, the sights were rather depressing to the professor. The renovated villages were equipped with new infrastructures, especially paved roads and sewage systems. New cement houses were decorated with wood panels and stone plank facades. The village lanes and the new plazas were usually paved with different textures and designed as modernity

markers. Attractive objects for domestic tourism, such as red lanterns, millstones, and stone railings with superfluous decorations, were placed conspicuously to give an impression of cultural continuity. However, for those with knowledge of Bouyei culture, the decorative elements were decontextualized representations of Bouyei culture. As the design team saw it, these "ethnic-branding projects" aimed at lifting economic and cultural values only superficially touched on the core challenges of village vitalization.

5.1.2. Demarcation of the planning area boundaries

As described in Chapter 1 of this thesis, Banwan as a whole is a large settlement composed of six separate villages. Because of the limited time and budget, the design team had to determine where in the settlement to intervene. The site survey indicated that most stilt buildings and important public buildings were located in the scope of the No.3 and No.4 villager groups, also considered the ancient Banwan location.[128] Figure 5.1 shows the site selected for design intervention.
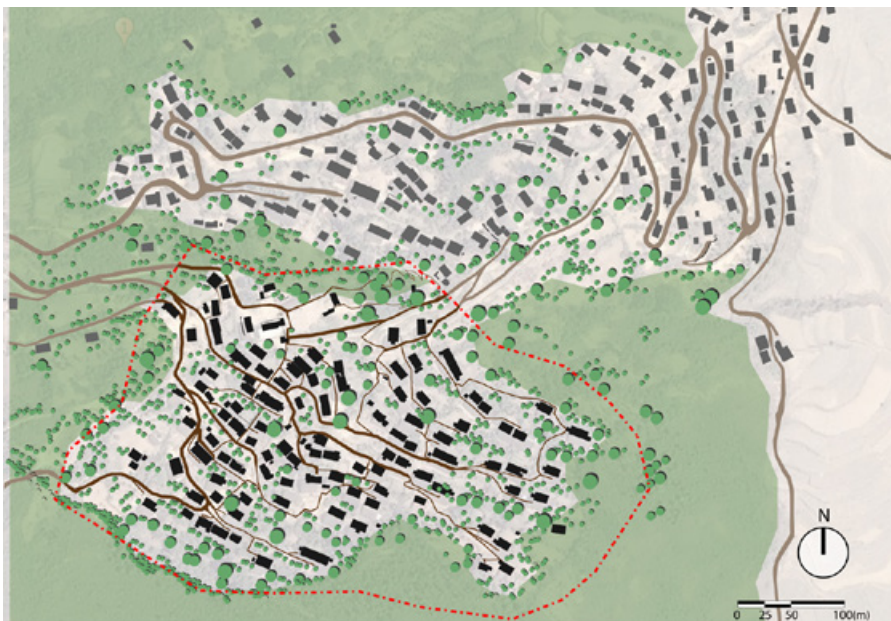
Figure 5.1: The area within the red line is No. 3 and No.4 villager groups, which were chosen as the site of the Banwan renovation project. (Source: Author)

A large beech tree in Banwan is considered sacred, believed to protect the settlement and the crops. The paddy fields in the valley provided necessary grain for residents and served as a place to carry out ceremonies in honor of an important deity and the god of cropland. On the sixth day of lunar June, all heads of household offer sacrifices to the god of cropland under the leadership of the village chief.

The Bouyei people worshipped the god of water to prevent flooding and to secure sufficient irrigation water. Sacrificial activities throughout the whole year were performed on the mountaintop, by a stream, and under the divine trees. The natural environmental elements are integrated into Bouyei's agricultural activities, their folk customs, god and ancestor worship, and Bouyei aesthetic philosophy.[129] It was necessary to analyze and, in some parts of the project, including the settlement as a whole and not just to focus on the entities within the delimited boundary. However, the paddy field, mountain stream, and mountaintop were not included in the scope of the design site. Therefore, the design team chose to designate a buffer zone that included some adjacent parts of Banwan, hill paths, forest, water resources, cultivated land, a temple, and irrigation systems that supported the routine operation of the community.[130]

5.1.3. The objectives of involved actors

In the article "Interpretation and Negotiation—Reproducing Vernacular Space in Yubulu and Banwan Village," done in collaboration with Chen Yiyang (Cao and Chen, 2019), we classified several main stakeholders in architecture interventions in Guizhou villages and discussed their chosen tactics and attitudes in Yubulu and Banwan's renovation. Here, I will put the discussion of the objectives and practice of the involved actors into Banwan's context. Rural vitalization projects initiated in the historical and political context of China over the last decade have resulted in a body of works that embody somewhat conflicting objectives. Given the varying agendas of government authorities, external interveners, and local stakeholders, it is inevitable that explicit objectives for the specific project are only part of the story. There is another level of objectives below the surface of the project schemes, another agenda being promoted by organizations with vastly different missions. I describe the different objectives and ways of practice: To understand the interface and the tensions, to offer a base for understanding the characteristics of the process, and to provide a background for the gaps between intended outcomes and actual results. The expert architects' objectives in the Banwan project will be described in detail in Chapter 5.1.6.

Officials' objectives

In the formal documentation, the objectives of "Building New Countryside" or the "Construction of Beautiful Village" have all been described as instrumental. That is to say, the primary goal of the government also embodying the architectural practice is the achievement of another end. At the higher levels of government, the way of formulating the objectives has developed significantly over the last decade, but it is incontrovertible that "higher-level authorities" and officials in the central government are looking to another end – to improve the efficiency of investment in rural development and the rate of progress in poverty alleviation. As Plummer

(2004) notes, one of the most obvious characteristics of the governing system in China is the significant distance between the policy formulated and delivered by the central government and how this policy is implemented in an actual village situation. My impression is that Central government officials acknowledge that the economic reforms have not reached all the settlements and also, in principle, accept that alternative approaches are necessary to tackle the plight of those marginalized from the benefits of economic growth. The government is also gradually becoming aware of the possible benefits of the architect-led renovation as an instrument to achieve this objective.

The objectives of officials at lower government levels deviate from those of policy-makers in central government and at the provincial level, notwithstanding the few officials at this level that have been exposed to alternative development approaches. The lack of capacity and vision of most local-level agencies and incumbent officials means that their objectives are inextricably tied to how they see external resource-supported projects when they embark upon pilot projects like expert architect-led renovation. Such was the case in Banwan, for example, in the discussion on how to renovate the school building shown in the later section of this chapter. Objectives reflected an interest in the political achievements and access to the mass media that such a project facilitates. Besides, the government usually judges work achievement according to the quantifiable items that suit public statistics. It affects the work of the officials. The cost-benefit consideration was incorporated into the large-scale planning and spatial renovation inevitably. These may be divided into two categories for the discussion in Chapter 6: those relating to non-quantifiable items and those to quantifiables. The former was required to make the programs operational and sustainable, but the latter have been incorporated as an achievement of aims that bring government tangible economic or social benefits.

External actor objectives

External investments and investors have become an integrated part of rural construction in China. In Banwan, the most influential external actor was Dragon TV. External actors, in most cases, bring a pre-defined set of objectives. The Dragon TV's objectives were project-specific and ends-related, reflecting a concern with schedule and events that might improve the presentation effect of the shoot. The construction team strived for more construction work to increase benefits in the construction phase.[131] Compared to the explicit intentions of the architects, however, neither Dragon TV nor the constructor was not comprehensively concerned with the efficiency of the use of and the long term benefits brought about by that funding.

Such objectives are strongly linked to the organization´s self-interest and often are linked to well-defined methodologies. For example, *dian zi* is a prevalent phenom-

enon in government-led projects in remote and rural areas in Guizhou. The concept refers to situations where the client's/local government's construction funds are insufficient. This often happens in the initial phase of governmentally financed projects due to temporary fiscal constraints. In order to carry forward the project, the contractors/construction companies use their funds in the construction process, repaid by the client/local government later, depending on the contract. In the case of the Banwan project, the Ceheng government invited a powerful construction company to undertake construction work through the explicit use of *dian zi*.

Villagers' objectives

Referring to the writing of Norwegian anthropologists like Fredrik Barth and researchers on rural situations like Ottar Brox, that I came to be introduced to during my studies in Norway, most people behave logically according to their interests and needs and try to make the most of their resources and capacities.[132] Ideologically, this was also the approach to the cooperation with affected villagers in Banwan. However, the extent to which villagers shared the objectives of participatory, capacity building, and safeguarding the intangible cultural heritage in the expert architect-led renovation was questionable. Somehow, there also were positive experiences from participation in Banwan. In events that will be discussed later in the thesis, the settlement in 2002 raised money to contribute to the building of the road that connected Banwan village and Banqi village and, mobilizing the strength of the whole village, in 2008, constructed a hilly road that connected the settlement with the farmland. Events like these suggested that the farmers could be mobilized for the implementation of programs that brought them benefit or meaningful engagement.

In my article (Cao and Chen, 2019), where farmers have become involved in participatory approaches to Chinese village renovation, their objectives have evolved, often starting with little interest, but the commitment developing as the process proceeded. In such circumstances, farmers show that their objectives are closely related to their livelihoods: improving efficiency or increasing productivity, addressing problems such as food insecurity, improving access to resources, providing employment, or promoting adequate welfare provision. An event which is mentioned in Chapter One, the gift of twenty black goats to each family, suggests that the locals are not averse to change. Although the residents seemed to have limited experience with goat husbandry, they made that gift an economic success because they could understand the benefits involved.

The situation by now, according to my own observations, is that many peasant households are wary of renovation programs that may not bring them tangible economic or social benefits and use tactics and resistance behaviors to protect the rights granted to them by higher authorities against the policies and action of local governments.[133] Obviously, reactions to the architectural practice will vary from

one community to another, depending on the suggestions and ways of working by the architect, but also on features such as the experience of involvement in other renovation programs, the character and attitudes of the village leadership, and the inherited socio-cultural features of the village. In the case of Banwan village, for example, the previous bad experiences gained from a private company-led architectural practice, described in the next section, caused the villagers to hesitate to involve themselves in the architectural intervention.

5.1.4. Investigating place

The design team considered investigation, design, and development practice as parallel processes that informed each other. The starting point was the investigation of the existing situation and the needs expressed by the community. The design team conducted a relatively wide-ranging, in-depth investigation in order to synchronically examine the settlement layout and building morphology and, where possible, to diachronically study the driving forces and effects of historical settlement change, documenting historical vestiges and traces and local folklore, as well as the intangible cultural heritage both in literature and on-site. The research activity started, as I recall, with few stated preconceptions on choices and images of future spatial patterns and buildings.

The design team was welcomed in Banwan for the first time on July 12th, 2016, by local cadres and villagers who expressed great interest in developing ethnic tourism and improving the quality of life of the community. The local authorities and the village committee held different cultural performances to showcase Bouyei's cultural traditions and images. The subsequent fieldwork uncovered myths regulating Bouyei life, rooted in the history, the landscape, and lived experience of the specific rural area. The *Mojing* mentioned in Chapter 1 is a village encyclopedia that describes Banwan traditions, customs, and myths, such as the origin of the settlement, how to manage important life events such as Bouyei funerals, and how to build a house properly. Bouyei opera is often performed before an audience in the school playground or the vacant area in front of a house. The performances held for the design team told the stories of Han Chinese heroes and interpreted classical narratives such as the three gods' descent into the world, Xue Dingshan's expedition to the West, and stories of the famous and uncommonly honest Song Dynasty politician Bao Zheng.[134] In the performances, the Bouyei language was used in the songs, monologue, and dialogue, but Mandarin was used for the overarching narrative.

The Banwan Bouyei are skilled in arts and crafts. Embroidery, wax-dyeing, brocade, and winemaking are still living traditions in every household. Like in other pre-industrial civilizations, the production of handicrafts has been a part of the routine life of the Bouyei community. In Banwan, every household can be seen as

a production unit. The Bouyei people's winemaking skills enrich their daily lives, and batik and embroidery skills enable men, women, and their children to adapt their clothing seasonally. However, handicraft knowledge and skills had been significantly challenged by the rural exodus.

The site investigation indicated that acculturation – the process of changing so that one becomes more like people from a different culture – in the Banwan village is complicated and shows cultural mixture as an effect of urbanization and strong rural policies being put into action in different ways, from the Chinese revolution in 1949. Acculturation is apparent in the housing decoration, in the pursuit of consumption goods disseminated by mass media, and in the observance of all the important festivals of Han-majority origin.[135] However, the Bouyei people express their culture locally and seem to eagerly perform cultural activities at almost all available opportunities, both at tourist events outside the villages and at events that are important for the local society, such as welcoming the expert architects. A change in cultural values and beliefs caused by acculturation may lead to changes in shaping people's daily customs, lifestyles, and habits, or socio-economic changes might affect cultural expressions. The younger generation, which seeks employment in better-off urban areas, places less value on traditional rituals, the reverence of divinities and traditional social networks, and more value on "outside success" of power, wealth, and comfortable life in order to gain a good reputation at home (Bolchover and Lin, 2013). Younger people had understandably, gradually been losing touch with local knowledge, cultural values, and beliefs that constitute central systems for the settlement operation. For example, as we came to understand, many young Bouyei people in Banwan village did not know the story of Cen Guan, an important myth illustrating the intimate relationship between settlement, people, mountain, and water. Thus, when external investment became an opportunity for the remote settlement, younger villagers – without indigenous knowledge or the urge to protect the local identity of the place – tended to accept the redefinition of landscape and village according to externally interpreted needs for economic development.

5.1.5. Investigating the architecture

The vernacular architecture

In studying the vernacular architecture of Banwan, the team followed Ronald G. Knapp's notion that dwellings "are indeed humanized space, structured to express and shape the family organization and guide the web of social and ethical norms, beliefs and values" (2000: 3). Over time, the mountainous landscape, agricultural production, and the Bouyei culture promoted and refined the architectural composition of distinct building types. This vernacular architecture is built with a *chuandou* framing system, typically called stilt dwellings.[137] Most stilt dwellings in Banwan

are two stories high with a partly open loft. Like the building section in Figure 5.2, five or seven pillars run from the ground to the roof purlins. Six or more short posts do not reach the ground but are tied to main load-bearing pillars by a mortised and tenoned tie beam. The systems and the spatial pattern of the stilt building are suited to the topography and adapted to farming. The Banwan stilt houses are divided into three levels: production space, living space, and storage space. As shown in the section and plans (Figure 5.3, 5.4, 5.5), the lower part (ground floor) is less than two meters high and shaded from the sun by the wooden panels above. This area was used to store farming tools and as a stable for domestic animals such as pigs, chickens, and ducks. The middle level (first floor) is the living space with a hall in the center, flanked by two bedrooms and a kitchen area adjacent to the door along the back wall. Because of the excellent ventilation, the upper level (second level) is generally used as a storage area for grain. Families usually do not live on the upper floor, but unmarried children might stay there. Usually, the middle and upper levels are linked by a moveable wooden ladder.
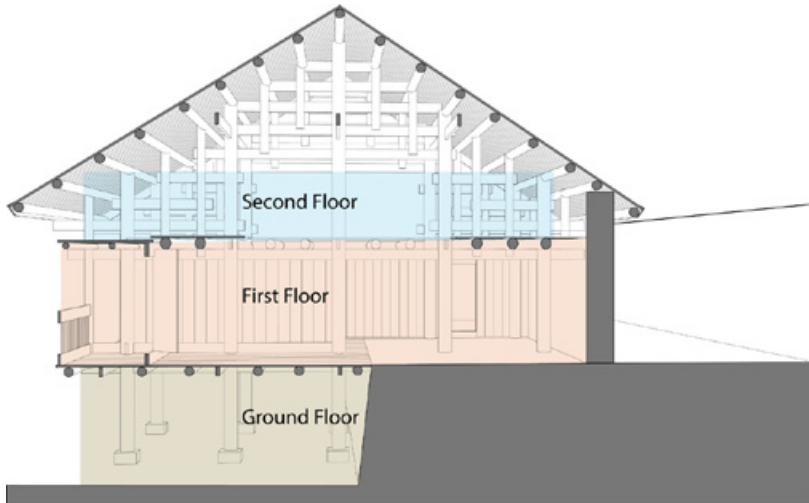
Figure 5.2: Vertical space pattern in a typical stilt dwelling in Banwan. (Source: Author)
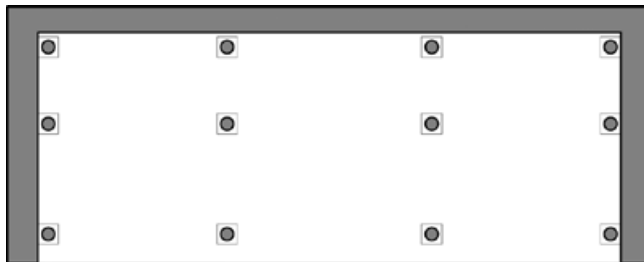
Figure 5.3: The semi-enclosed ground floor is used for storage and to stable livestock. (Source: Author)
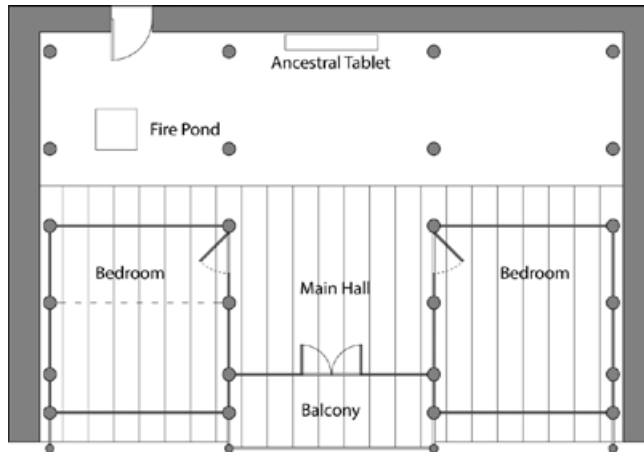
Figure 5.4: This plan of a common stilt dwelling reveals the shaded second floor, living area with a fire pit, kitchen area, ancestral tablet, sleeping spaces, and an open balcony. (Source: Author)
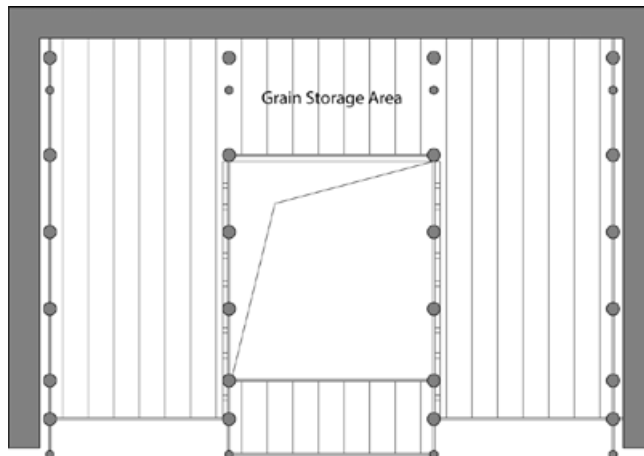
Figure 5.5: Upper floor is covered by a roof. This floor is well shaded and has good ventilation. Dwellers store grains on the wooden floor. (Source: Author)

A total of 76 stilt buildings were included in the design site; most were indeed unoccupied when the project started (Figure 5.6). All of the stilt buildings had suffered varying degrees of deterioration. For example, in the damaged buildings shown in Figure 5.7, the physical and mechanical performance of the wooden components had been reduced due to humidity, fire, and a lack of good raw materials for repair and regular maintenance.

Figure 5.6: The diagram shows the situation before the renovation project started. The yellow-marked buildings refer to stilted architecture, the red-marked buildings refer to newly-constructed buildings built in the last decade, and the grey-marked buildings refer to collapsed buildings. (Source: Author)

Figure 5.7: Many stilt dwellings were empty and in decline. The photo was taken on July 14, 2016. (Source: Author)

In 2014, the Ceheng County government made agreements with a private company (name of the company: *jin gu zi*) to initiate and manage ethnic tourism in Banwan. This company signed a lease contract with the local government and was granted the right to operate the stilt dwellings in Banwan for thirty years. Based on the contract, each household that owned a stilt dwelling could receive 30 000 RMB from the company. The effect was that the residents had to move out and build a new house or live with relatives.

The developer did not take sufficient action and left the construction work unfinished. The elevated footpaths and alleys that had been built had damaged the good drainage ability that protected the stilt dwellings from rain-wash, and newly built small rooms were attached to the solid wall of the stilt buildings. These rather unprofessional interventions were not in line with the logic of the original building typology and increased hidden structural dangers by opening connections between the rammed earth wall and the small room that had been added. It was clear from the buildings' conditions that the construction activities had been quite crude, contributing to shortening the building's lifespan and worsening the negative effects of climate changes. The local government, therefore, began to doubt the competence and purpose of the firm. One local cadre told the design team that the firm wanted only to occupy the whole village and earn money by "buying cheap and selling expensive." One consequence of the crude repair and incomplete reconstruction was the villagers' increased mistrust of government authority and developers, which led to specific difficulties when promoting a second intervention led by architects.[138]

From the expert architects' perspective, the concern of vernacular architecture's physical protection and strengthening required a detailed survey, including structural and building material measurement, damage investigation and classification, and information from the householders. Architectural drawings, detailed recordings by photographers, and detailed written documentation were used to create a vernacular architecture archive for the community (Figure 5.8). Figure 5.9 shows part of this archive, the existing conditions, building structure, and annotations of all defects found in the building investigation. This survey was crucial for the project. Each house was roughly classified according to its conditions: well preserved, normal, poorly preserved, or ruined. The archive served as a reference for the design and construction teams to formulate a diverse restoration strategy.

Building NO.	Building plan	Building section	Photograph
C23		5 columns and 13 posts	
C30		5 columns and 15 posts	
C35		7 columns and 19 posts	
C64		5 columns and 13 posts	
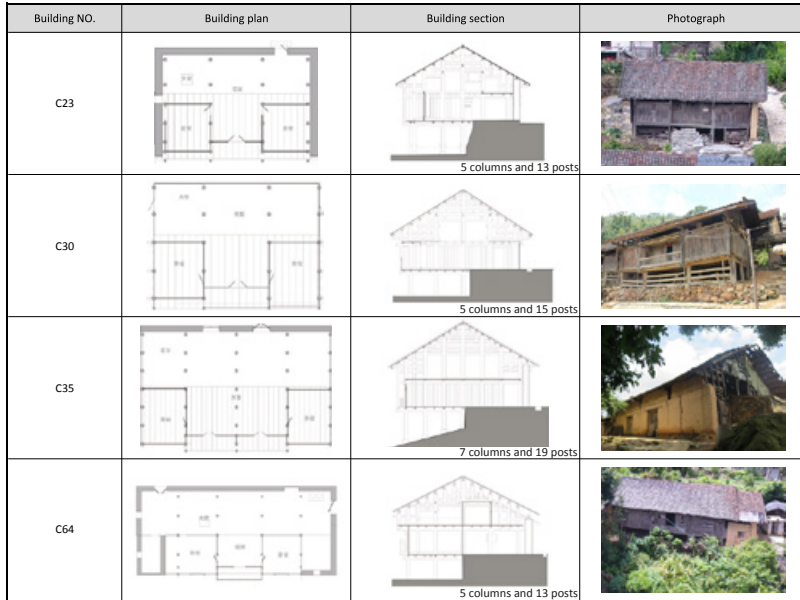
Figure 5.8: A variety of buildings follow the same prototype of stilted dwelling in the Ban-wan village. (Source: Author)

编号	所有权人	使用人	建造年代	规模	层数	结构形式	功能用途	保存状况	屋顶形式	墙体	阅合
c01	何文坤	无		3开间	3	木结构	居住建筑	较差	坡屋顶	木板墙	家居有四口人(已搬走)
c02	何青庄	4		4开间	3	木结构	居住建筑	一般	坡屋顶	木板墙	何青庄家4口人，老伴和两个儿子
c03	何文学	4		4开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	四口人，老伴何太珊，两个儿子，大儿子何光忠，二儿子何光泽。大姐已出嫁
c04	李荣开	无		3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	
c05	李应芳	无		3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	
c06	李应龙	无		3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	
c07	黄廷凤	无		3开间	3	木结构	居住建筑	较好	坡屋顶	夯土墙 木板墙	总共5口人，已搬走。(黄加权等爷爷的弟弟)
c08	陆兴之			3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	陆兴之(四组组长)夫妻俩和3个孩子
c09				4开间	3	木结构	居住建筑	较差	平屋顶 坡屋顶	夯土墙 木板墙	黄家权等爷爷的大哥
c10	李荣兵			4开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	无人居住 右加建石耳房 部分庆旗顶
c11		黄廷华	3	1997	4开间	2	木结构石墙	居住建筑	一般	坡屋顶	石墙	家庭人数7人。孩子户籍最至贵阳，学习成绩优异。贵州大学大二学生。家庭成员有爷爷奶奶爸爸妈妈姊妹和老房现居住爷爷奶奶叔叔
c12	何文华	2	1950s	4开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	无人居住 加建有耳房
c13				3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	左加右耳房 无人
c14				5开间	3	木结构		较差	坡屋顶	夯土墙 木板墙	无人居住 搬入口 前左砖石房
c15				3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	左加右耳房 无人居住
c16				3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	
c17	何阿元	2	1940s	4开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	
c18	何阿元		1940s	3开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	
c19				3开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	
c20				3开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	
c21	黄廷交	4		3开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	
c22	黄锦行	4		3开间	3	木结构	居住建筑	较好	坡屋顶	夯土墙 木板墙	
c23				3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	烧掉
c24		1		3开间	3	木结构	居住建筑	较好	坡屋顶	夯土墙 木板墙	一个老太太住
c25	李国红	3		4开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙	3口人 一个烧布机 儿子三十岁未娶
c26	黄正盈	4		3开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	家里有制瓦工具、全木锅盒。两个老人，两个儿子、二儿子离婚零一个女儿
c27				3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	
c28	陆兴标		1969	3开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	
c29	罗永吉	4	1960s	4开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	
c30	何元辉	5	1920s	3开间	3	木结构	居住建筑	较好	坡屋顶	木板墙	
c31	何尚华	6	1960s	3开间	3	木结构	居住建筑	一般	坡屋顶	夯土墙 木板墙	
c32	李阿仪			3开间	3	木结构	居住建筑	一般	坡屋顶	木板墙	老太太一人后中入
c33		1		3开间	3	木结构	居住建筑	较差	坡屋顶	木板墙	左后入 后加建右耳房
c34				2开间	1	砖混结构	居住建筑	较差	坡屋顶	砖	
c35	陆振贵			4开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	前中入 无人 左加建右耳房
c36	何文兄	2	1910s	2开间	3	木结构	居住建筑	较差	坡屋顶	夯土墙 木板墙	右后入 加建右耳房

Figure 5.9: This image is part of the vernacular housing investigation document, which includes information about housing ownership, construction period, the dimension of architectural space, material composition, preserved state, and other simple introductions (in Chinese). (Source: Banwan project design team)

The newly constructed buildings

Changes in government policies, market influence, and the gradual urbanization of culture led to changes in the Banwan settlement. According to the financial programs and new regional management, new building typologies were considered necessary. In 2002, in order to build a new primary school, the Banwan villagers raised funds to construct a 7.5-kilometer-long road between Banwan village and Banqi village.[139] In 2007, supported by the Ceheng County Land and Resources Bureau, a new cement road was built through the village to connect to the fields in the valley. Then in 2008, a major change affected the village: implementing a governmental project for renovating neglected and dangerous buildings in rural areas of Guizhou, some families started to erect new dwellings at the edges of the traditional village.[140]

The need for convenient transportation, better access to tap water, proper sanitation, and other facilities encouraged villagers to build new houses along the cement road. The settlement transformed structurally and visually from being a tight, discernible cluster to appearing as dispersed dwelling groups, expanding from the core area to the gentle slope and the flat area near the irrigation field (Figure 5.10). Money sent back home from migrants provided resources for investing in new individual house construction. This created a paradox as more and more people left, the population decreased, and the number of available buildings went up. People built new dwellings on the gentle slope along the hillside and left their empty, decaying stilt dwellings in the old village. These unoccupied dwellings presented the opportunities for the failed development attempt by the irresponsible developer described earlier in this chapter.

When the design team arrived in 2016, thirty-one prefabricated houses appeared as blocks linearly organized along the new concrete road. They were built with a more or less rectangular floor plan, a central hall in the middle, and two bedrooms on each side. Stairs connect to the upper floor, which has roughly the same layout. A semi-detached house with a kitchen, fire pit, and brewing equipment, and an outhouse with a restroom for personal hygiene served the main building.

The reasons behind this major activity and change in building culture are complicated and have not been adequately investigated in this project. The growing urban-rural development gap and the Chinese modernization paradigm promoted by regional policies gave Bouyei families the notion that "modern" forms were more practical and culturally more suitable for matching both Chinese progress and

everyday needs. The increasing environmental consciousness and forest protection measures taken by the government also made traditional building materials expensive and hard to obtain.[141] Relatively cheap substitute building materials were bricks, concrete, and other accessible contemporary architectural materials with a robust load-bearing ability, weatherability, and anti-corrosion ability.

Figure 5.10: The settlement layout has transformed from a tight cluster group to dispersive distribution. The photo was taken on August 29, 2016. (Source: Author)

Moreover, as we architects observed, when building their new residences, villagers tended to pay considerable attention to the size and the decoration, often not giving priority to practical considerations. "Global" architectural elements combined with prevailing Chinese iconography, including oversized windows, Roman columns, handrails decorated with stone statues, and animal-figured ornamentation, added to a range of new housing features (Figure 5.11). Outer facades were generally more sophisticated than interior decorations. If financially possible, large room size and many bedrooms were included, and these often, if funding was sufficient, exceeded the actual living and workspace needs. Arguably, what happened represented a general Chinese and even global tendency brought to the families in Banwan through mass media and the flourishing migrant economy. As is generally the case, the Bouyei people sought a higher living standard in their housing and, at the same time, adopted contemporary ornamental elements to put their family's financial status on the show. Available building techniques, materials, and typologies, together

with China's fast-developing consumer culture, brought superfluous decorative elements. However, the effects were rather significant in the small Banwan village and broke relatively fundamentally with the local ethnic traditions that had dominated for centuries.

Building a house was a challenging task for a family in Banwan in pre-modern times. Construction took time, although families mastered building techniques and handicrafts. Difficulties could, however, be easily resolved through the labor exchange mechanism. The mechanism was based on stabilizing social ties and local contexts of trust that evolved from a stable, immobile, and familiar local community. Compared with the voluntary or involuntary forms of mobility prompted by modern societal forces, Banwan was immobile and isolated in pre-modern times. Migration, which picked up speed around 2007, challenged cooperative relations based on the labor exchange. For instance, Lao Lu had helped Xiao Huang with his building construction, but Xiao Huang might not be able to help Lao Lu because he was working in the city at the time when Lao Lu needed a hand. Increased population mobility destabilized the labor exchange system. New building construction activities were based on cash-labor transactions, which allowed more flexibility in collaboration but required more money.[142]

The transformation of the building had a significant impact on the economic life of the families. Data obtained from the field investigation conducted in October 2017 showed that it would cost 120 000-150 000 RMB to build a two-story masonry-concrete building in Banwan –a substantial amount of money for an impoverished household.[143] Thus, most households in Banwan conduct building activities in steps and phases based on their financial situation. Every year, a family purchases certain materials and stores them according to their plan and income. As an example, He Wenbin's family constructed a new building based on long-term cash accumulation. He started to build a new dwelling in 2009; his primary fear was the high building costs, so he was advised to build the house gradually over several years.[144] That way, when the house was done, the family's economic situation would be the same as before. In 2009 he made the foundations, leveled the site, and built the first floor. In 2012, he finished the second floor and rooftop, but there was no interior decoration in the building. A semi-detached room for the kitchen was built in 2016. A target set in 2016 of finishing the decoration work for the whole building by 2017 had yet to be achieved. In 2019 the house was still considered a building site.

Like He Wenbin, most villagers in Banwan conducted building activities in steps and phases based on the money available. As in many countries that do not provide good bank loans for housing, materials were bought and stored, and construction commenced according to income. Many "unfinished" dwellings like those shown in Figures 5.11 and 5.12 had been erected in Banwan. When the team arrived, the buildings had been under construction but also inhabited for almost ten years.

Nonetheless, the residents were proud of their new housing and showed a negative attitude toward the stilt buildings.

Figure 5.11: There are 31 newly built prefabricated concrete and brick buildings, 21 of which are two-story dwellings. (Source: Author)

Figure 5.12: The unfinished and inconsistent facade composition is a typical architectural characteristic of newly built residences in Banwan. The photo was taken on July 21, 2016. (Source: Author)

5.1.6. The conceptual ideas behind the work

My experience was that when carrying out the Banwan reconstruction, Professor Lyu and his team expressed concern about the social aspects of reconstruction, intending to enable the villagers to acquire a safe and comfortable living environment. With the World and Chinese history of top-down planning of ethnic minorities' habitats in mind, the question of how to intervene was raised and fundamentally discussed. The intention was to tailor a transparent process and to ensure that the villagers accepted outside' help with dignity. The strategies were gradually formulated through the long-term observation of Chinese architects' contemporary practices in rural villages, the critical thought emerging in academic environments, and personal experience accumulated from practice.

A lack of positive development and even economic and social decline in many rural areas in China made new policies and strategies necessary. Scientists, urbanists, planners, and architects also linked the processes in rural society to global phenomena. The 2020 exhibition "Countryside – The Future" at the Guggenheim in New York – the Chinese part of which was developed at CAFA – attests to this tendency. [145] In the past two decades, the national-level rural revitalization strategy had provided both political and financial support to the rural areas. These new policies and funds paved the road for architects to devote themselves to rural construc-

tion.[146] Different design approaches – referring to the *culture school*, the *technology school*, and the *society school* mentioned in Chapter 2 – were on display. Some architects focused on heritage values, rediscovering traditional techniques and building materials, such as the rammed earth wall, bamboo and timber joints, and patterns of brick construction.[147] Others explored design ideas that embodied the traditions of the past. They tried to evoke and interpret rural cultural roots and peasants' way of life, experimenting with contemporary architectural patterns and languages that at the same time referred to local context and tradition. An example is the new, courtyard-shaped, relocated residential area added to Dongziguan village. Designed by the architect Meng Fandong, the project is mentioned frequently in the Chinese architectural press. The traditional settlement morphology is taken as a point of departure, and the area is organized in a pattern of clusters intended to refer to local social organization. In terms of materials, detailing, and even the white color, the architecture refers to a modern tradition. The intentions of other architects were explicitly to offer alternative strategies for rural villages that suffered from agricultural production decline, and rural exodus.[148] For example, the architectural collective *Rural Urban Framework* (RUF) attempted to readdress the issues caused by the overwhelming process of urbanization through a series of locally-based projects.[149]

Although Professor Lyu knew these projects and was part of the discussion in the architectural community, the source of his ideas is probably to be found elsewhere. Nowadays, many Chinese and even international universities are involved in Chinese rural construction using different disciplinary approaches. As part of the curriculum, Chinese students still regularly go to the countryside to learn. Unlike in the Mao era, when intellectuals were strongly encouraged and even forced to learn from the villages, the new movement features intellectuals and experts in academic institutes volunteering to contribute their knowledge. Working in the rural represents a continuing pedagogical tradition at CAFA. Design studios – and in more recent years also research programs – were conducted to offer academic studies and even practical design/art interventions, industrial revitalization, and the care of intangible cultural heritage. The diversified interpretations and concepts proposed and made as experiments by the academic institutes provided knowledge for the rural construction project in Banwan. The intention is ambitious, involving not only the transformation of buildings and facilities but also the adaptation and updating of rural spatial systems, in fact, a repair of human relationships, and the regeneration of rural culture.[150]

An in situ participatory strategy

Changing the site from urban to rural and establishing a temporary practice in a relatively unprepared village entails social and cultural complexity. Ideas somehow had to be contextualized. The Banwan settlement is an ingrained part of Bouyei's

cultural understanding: a place from which one originates as "home." Real and tangible events, strongly linked to local culture, could be observed daily in the village. The challenge was to fulfill the objectives of a spatial renovation program, and at the same time, take care of local authenticity and character in a setting where spatial organization and physical expression were derived from the relationship to its natural environment, and that was at the same time largely affected by national/regional political and economic contexts. An idealized design model was established, setting the stage for participation between the expert architects (Professor Lyu and his team), the executor (government officials and construction teams), and the users (villagers). Villagers were encouraged to become actively involved in the rural renewal rather than passively waiting for the results and doing what they were told. The reconstruction of Banwan village should illustrate and serve as an example of a new way of working, a model of participatory construction resulting from the collaboration between makers and users.

The chosen architectural strategy

Like many other declining villages, Banwan village was on the brink of rapid and dynamic changes. Was it possible to balance a sense of history with the need for modernization? After getting to know the settlement's history, the current changes in relation to the past, and future challenges, Professor Lyu determined that the architectural interventions – anticipating future transformation – could act to establish continuity between past and present. Defending and, at the same time, adapting ethnic culture was a point of departure. The potential of tourism, small-scale industrial potential, agricultural renewal, and other community programs were incorporated into the design. Some main strategies and guidelines were chosen[151]:

• Great effort should be made to preserve physical space and existing constructions, including protection, repair, and restoration of traditional settlement structures and morphology. More effort should be made to use conventional materials, technology, and crafts while opening up (where feasible) for inserting new materials and applying new techniques that stay in line with the vernacular dwelling's original character.

• For many public buildings, the design strategy was not to return to the vernacular but was instead driven more by a desire for difference: to offer an alternative and modernized version to the generic buildings. The new architecture had to offer practical solutions, including better insulation, good natural light, and ventilation. At the same time, more respect should be paid to the Fa'shi[152], regional materials, and construction customs.

• To improve the villagers' living standards and help the village become a tourist destination, the design team put significant effort into reconstructing the village's physical infrastructure. Simultaneously, the design team had to be very aware of

what was necessary infrastructure and which infrastructural interventions could create spatial, social, and economic barriers.

• A productive dialogue was established between all the stakeholders to create architecture that the community would accept and actively contribute to the future development of the village. Local people were welcomed to participate in the construction work both because they would receive wages and skills but also perhaps to generate a precious sense of identity in the village and to strengthen their social belonging.

• During the historical and cultural heritage investigation, the architect team was impressed by Bouyei's rich traditional crafts and cultural forms. Accordingly, the architect team proposed developing and strengthening local handicraft production and establishing a sustainable development fulcrum for the long-term village renovation. Public space was systematically organized to provide suitable places for villagers' folk activities, ceremonial activities, and festivals to promote relationships and enhance collective awareness. The architect team felt that the more villagers mastered the traditional skills and engaged in manual labor, the more self-confidence would be enhanced. Thus, establishing a series of teaching and learning institutes that aim to cultivate more craftsmen has become one of the most critical planning points.[153]

The experience gained from the Yubulu project had already shown that in situ participatory design and architectural strategy were both effective:

• facilitating the detailed direction of using funds and available materials

• clarifying the community's actual needs

• helping grassroots leaders to seek focus points of construction work and establishing channels for villagers to express their ideas

As the predecessor of the Banwan practice, the Yubulu practice shared most of the Banwan practice's strategy. Therefore, it is helpful to discuss the similarities and differences, including the pre-project work in the two village.

Yubulu is a village as opposed to Banwan with Han cultural origin, located only thirty kilometers north of Xingyi city. Unlike Banwan village's remote geographical location, Yubulu village has a better connection to Qingshuihe town, an industrial park, and a well-known and attractive canyon scenic spot (Figure 5.13). However, like most villages in the area, Yubulu did suffer deterioration. Traditional dwellings fell into decay and were replaced by standard buildings. Sanitation facilities were weak, and public space was not maintained. The localization, in reach of domestic tourists and part of an urban labor-marked, made Yubulu a good choice for trying out new strategies. In 2015, Professor Lyu was invited to redevelop

this 600-year-old village surrounded by a massive highway network with towering overpasses. Professor Lyu conducted a detailed survey of the village history, settlement layout, and building morphology, investigating every household and discussing heritage values. The survey was used as a reference for discussing with local villagers and for design intervention.

Figure 5.13: A map of Yubulu village reveals the village has a better connection with town area. (Source: Author)

In the article, "The new practice of traditional village protection and renewal in Guizhou's ethnic, mountainous, and poverty-stricken areas"[154], I have summarized several shared strategies used in Banwan and Yubulu villages. The two villages' renovation both put much effort into the physical reform, adding harmonious elements to the settlement, referring to the historical context. Due to Yubulu village having a more convenient geographical location, the development scheme deliberately put efforts into transforming the economy of the village from century-old farming to new a new Airbnb-like hosting. The selling points are authentic and traditional village life, answering a growing need for new forms of domestic tourism (Figure 5.14). A series of art projects inspired by local history and ecology were added to raise the curiosity of visitors (Figure 5.15).

The effects were obvious. It was reported that the Yubulu village had attracted more than 400 thousand tourists from 2017 to 2020.[155] Based on information from an interview conducted in 2019, the local people opened up five rural restaurants, ten homestays, and more than twenty grocery stores. Dozens of mobile shops along the village road sold more than 30 local agricultural products. Villagers' income also grew, with per capita disposable income increasing from 6 000 RMB in 2014 to 12 000 RMB in 2018. Yubulu village was evaluated as the provincial demonstration site of beautiful countryside construction and a national 3A scenic spot.[156]
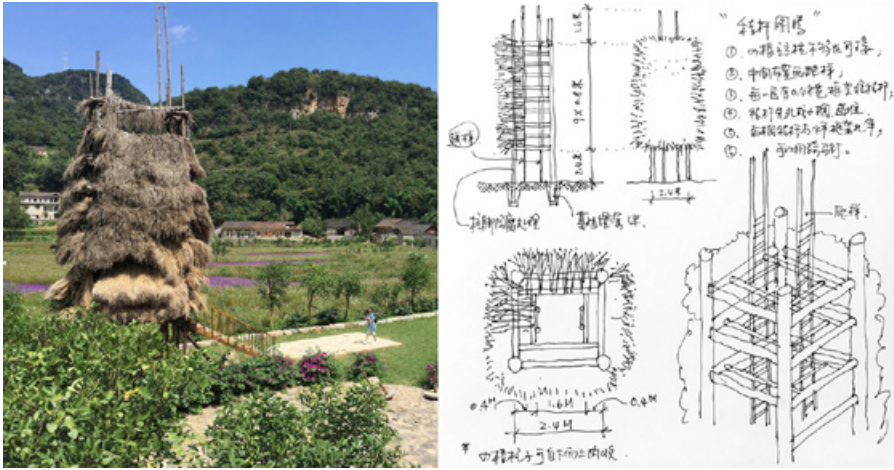
Figure 5.14: Professor Lyu designed an installation that drew inspiration from the traditional treatment of crops straw stalks in Yubulu village. (Source: photo on the left was shot by the author, the hand drawing on the right was sketched by Lyu Pinjing)

Figure 5.15: "Sinkhole Floor Drain"- an earthscape artwork that collaborated between the CAFA's students and local craftsmen. The photo was taken on October 1, 2017. (Source: Author)

Banwan and Yubulu villages can be identified as the combination of the traditional village, impoverished area, and mountainous regions by multi-disciplinary definitions. Rural renovations, which developed here, are unique and arduous. It is helpful to compare the two villages and show that expert architects-led renovation

should suit local conditions. Firstly, Banwan village's remote location made it impossible for tourism to become the primary engine of economic development. Secondly, unlike Yubulu's dwellers, who still lived in their traditional stone houses, most of Banwan's habitants had moved out of their traditional stilt architecture, which was vacant and without apparent use. It was a big challenge for the design team to devise a strategy for adapting and reusing vernacular architecture. Evidence shown below suggests that, compared with Yubulu's forms of renovation, the Bawan project displays a very different picture of how and to what extent renovation activities occur.[157]

5.2. The Design and Construction Process

Conceptual ideas were formulated for the village planning and building design. Data describing the architectural, social, and cultural situation had been collected; the users' needs were discussed. The design ideas, together with the data, were used for making decisions about the future development program and initiated the in situ design intervention.

Engaging with Bouyei society meant that the team members should experience and interpret as many aspects of the settlement and community life as possible. Starting in August 2016, the design team lived and worked in the village, trying to become as immersed in the community as possible (Figure 5.16). The intention was to become accepted by the Bouyei community and adapt to local ways of life with integrity during the stay in the village.

Figure 5.16: The design team set up their studio in He Biao's home when the project started. The photo was taken on July 26, 2016. (Source: Jia Chenxi)

The design process began with invitations to various participants to express their views in different meetings and encounters. Then, the planning scheme and design concepts were introduced to all stakeholders to test the costs, financial possibilities, and social responses and discuss technical aspects. These shared, guiding attitudes established a relative mutual trust between the design team and the local inhabitants and led to the acceptance of the architects' approach in the community.[158] Figure 5.17 shows one of the organized village meetings where all the "left behind" villagers were invited and informed about the spatial construction. The local government organized the village meetings to get permission from every household to go from the design phase to the construction phase.

Figure 5.17: The planning scheme was introduced to the local residents at a village meeting. The photo was taken on August 4, 2016. (Source: Author)

The distinction between the design process and the construction process became increasingly blurred. Many new and unpredictable factors emerged during the process, such as the lack of certain building materials, clients' opinions, and changing ideas and new inspiration to better facilitate social engagement and bring more activities back into the old settlement. The in situ participatory approaches freed the design team from the restraints of conventional design procedurals and made it possible to adapt to the ever-changing situation.

The following text is organized as a narrative journey through case study data, elaborating on the various scale of projects achieved within the Banwan project. Each architectural/spatial project responded to the unique conditions encountered in the community, as well as different themes and problematic issues engendered

by the rapid transformation process.

5.2.1. Keeping the village as a place for living and not only as an open-air museum

Banwan's primary school was financed by Ceheng County Compulsory Education Program and opened in 2002. Like other sponsored rural schools in Yata town, the project was built according to a simple design as a three-story balconied building supported by a masonry-concrete structure. The school's gross area was 450 m2, with an additional 800 m2 playground that included a basketball court, an opera platform (that was in decline by the time we arrived), and a flag-raising stage. Until 2016, the Banwan primary school had a total of over 100 students, organized in six grades. It is a rare fortune for a small and remote settlement to have a local primary school of its own; this is not the case in many rural settings in China.[159]

During the fieldwork, however, the design team found that the limited school space could not accommodate certain important activities. It is not uncommon for a village school in China to lack teaching capacity and stable teaching resources.[160] Although many volunteers taught lessons during the summer vacation, the situation remained subpar because of lacking resources, competence, and teaching space. Therefore, the Banwan primary school was considered an "unsupportable" school, and officials were pressing for its closure.

In the first meeting with the expert architects, the county party secretary proposed moving the school and making the children commute on a weekly basis to the primary school located in the town center of Yata. One idea was to transform the school building into a museum for Bouyei culture, as suggested in a previous planning scheme put forward by the county government (Figure 5.18).

The design team saw the proposal as a serious threat to the fundamental ideas of the project. The primary school and its neighboring grocery, the sacred tree, the mountain god temple, and the village committee building constituted the vital core of the Banwan village, served as social gathering space for the entire community, and provided space for Bouyei opera and other events. Retaining the school as the community hub had become an important part of the project strategy, the argument being that the school and its surrounding area constituted the cultural and functional heart of rural community life. In a village with limited facilities, the school building, playground, and surrounding space should have potential beyond the teaching and gathering capacity. It might be further converted into a multi-purpose social space for the settlement, a place for cultural presentations and visitors, the stage for all kinds of Bouyei opera, and the organizational site for sports competitions and village assembly. The team felt that the issue of closing the Banwan primary school or keeping it open had to be resolved before the renovation work

commenced. Questions related to the school were considered sensitive, and local authorities did not inform the villagers; for this reason, local villagers did not participate in the consultation process on this issue.

Figure 5.18: A local design institute proposed a planning scheme based on the county leader's idea in 2015. This proposal transformed the Banwan primary school into a Bouyei cultural museum (number 4 in the legend). In addition, the ethnic-style food street (number 1), folk handicraft showrooms (number 2), and parking lots (number 3) replaced the original villagers' houses and transformed the living space into a space that suited commercial needs. (Source: Yata town government)

The government officials had somehow already accepted the idea of changing the living space into a performance space as means of branding the village and increasing tourism. Therefore, the government officials tried to persuade Professor Lyu to adopt their proposal, as he was responsible for funding and formally for the renovation project management. However, the design team considered Banwan primary school an indispensable spatial element for cultural activation and rural life. Professor Lyu underlined that they would not sign the design contract if the county government insisted on closing the Banwan primary school. Simultaneously, both the design team and Dragon TV used different tactics to convince county leaders to change their idea, including the idea of starting alternative processes in other villages. Finally, the county party secretary abandoned the plan to close the school because he did not want to lose the opportunity to collaborate with expert architects

and influential mass media.

The issue of closing the Banwan primary school or keeping it open might be seen as to whether or not to implement the government policy of *Merging Rural Schools into Town Schools*[161] (Figure 5.19). In Banwan, however, the question also illustrated a cognitive difference in the questions of rural development between the policies of local government and the conceptual ideas of the expert architects. Therefore, the discussions ended with the preservation of the school.

The difficulties of keeping primary school in the settlement	
In those investigations conducted in the fieldwork, school administrator and teachers detailed difficulties and challenges they had encountered.	
Problem	*Specific difficulty*
Government official' attitudes toward school	School's management was restricted by officials' conception and understanding
School administrator	Large workload, numerous tasks, more difficult to operate, and large expenditure
School teachers	Personal career planning
Organization and policy	China's general treatment toward remote primary school
Government officials and village collective has not proposed a clear idea of how to manage the school.	

Figure 5. 19: The difficulties in keeping the primary school in the settlement. (Source: Author)

5.2.2. The school design

Working with the school head and government officials, the design team plans to expand the existing school by adding a structure containing a "learning and social hub" for rural students. However, He Fei's two-story residential house adjacent to the school building limited the possibility for subsequent spatial renovation work. Initially, the design team expressed the idea of converting He Fei's house into teachers' lodging and checked whether they might get approval from He Fei's family. At the same time, government officials and village cadres also negotiated with He Fei and persuaded him to relocate his home to facilitate the school renovation work. The main argument was that He Fei's two young girls might receive a better education in the new school. And his family would be compensated for losing their house and other assets. He Fei quickly realized how much they could benefit from the project and agreed to the architect's proposal. Besides, he invited the design team to use their living room as a daytime workshop. It is crucial to gain support from the community.

The square to the north of the school building and the playground were located on two different levels with a height difference of around four meters. The pupils had to use the existing concrete staircase and ramp to reach the basketball court. Figure 5.20 shows the layout before construction started, with the canteen and a school lavatory in very poor condition located on the playground's west side. As we were informed, the dispersed layout of the school building, canteen, and toilet greatly influenced the students' school life.

Figure 5.20: The spatial arrangement of the school before the design intervention. The photo was taken on July 12, 2016. (Source: Author)

The idea was to expand the existing primary school into a single teaching building by adding space containing a new computer classroom, a library, the canteen, the toilet, and the administration office. The aim was to improve the teaching quality and secure the school's preservation. A better and larger school would attract more local children and ensure a sufficient number of pupils for the primary school.[162] The project aimed to produce a building that could create good spatial experiences for learning and social interaction. Some spatial features were extracted from the vernacular tradition, but the design was more driven by a desire to treat the school and its playground as the community's social hub. The first action was to build the three interlinked buildings and connect them with a new bridging floor construction and a continuous wall. A series of steps rising from the ground and several small-scale outdoor platforms were constructed to connect the original building and the new structures. In the original school building, classrooms were re-organized to receive better natural light. An office room on the ground floor of the original building was rebuilt into two lavatories. The canteen and kitchen were constructed in the vacant space in the L-shaped corner formed by the existing school building and He Fei's house. He Fei's house was converted into a dormitory for teachers and equipped with toilets and shower facilities. The project significantly improved the living conditions for Banwan's teachers and visiting volunteers who taught

summer courses. The design team proposed investments for providing a new electric network, solar power panels, and wastewater treatment. The black water would be pumped into a newly built septic tank and sent to a biological degradation tank before the filtered water flowed into the nearby drain.

The new school building provided space for the social life of pupils and served as a learning hub for the whole village. The larger room on the ground floor, separated by a curved wall, served as a gallery of Bouyei culture (Figure 5.21). Many objects of heritage value were collected throughout the settlement, preserved, and exhibited (Figure 5.22). The idea was to present Bouyei culture to visitors, to set a stage for education, and to remind adults and youth of traditional Bouyei livelihood and culture. An assembly hall adjacent to the gallery served as a multifunctional space, even as an indoor playground on a rainy day (Figure 5.23). The biggest room is situated on the second floor of the new building and serves as a multifunctional space (Figure 5.24). The room is supported by chuandou structures and covered by a folded roof that is intended to echo the peaks and valleys of the mountainous landscape[163] (Figure 5.25). A curtain wall and Velux windows installed in the roof allowed both natural light and ventilation. The team allowed for and designed a room adjacent to the multifunctional space as the "home of left-behind children," in which ten computers were equipped for students and allowed them to search the net and to keep regular contact with parents working far from home.
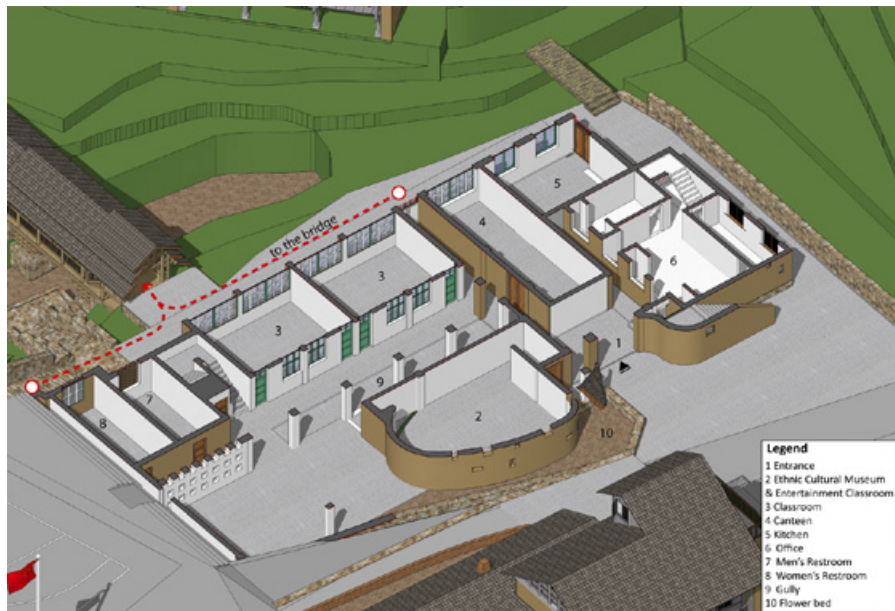
Figure 5.21: The ground floor created a connection from the interior space to the roads and to the new pedestrian bridge beyond the school building. (Source: Author)

Figure 5.22: Various objects with cultural heritage value were collected in the school gallery. The photo was taken on November 15, 2016. (Source: Author)

Figure 5.23: The assembly hall is a safe space for children to play on rainy days. The photo was taken on November 15, 2016. (Source: Author)

Figure 5.24: Spatial connection of the second floor with the adjacent playground. (Source: Author)

Figure 5.25: The largest room in the school serves as a multifunctional space. Feedback has been positive: the children in particular really enjoy the space. The photo was taken on November 15, 2016. (Source: Author)

The design strategy included adding space and organizing the site through a series of interconnected public spaces and structures. The first move was to strengthen the connection between the school building and the playground. From there, a side

entrance on the second floor was opened to allow pupils safe and direct access to the playground. Wooden steps were built along the east side of the building gable to form a new platform for school assemblies, lectures, and basketball matches. The new and redesigned physical structures shown in Figure 5.26 have empowered the school and its adjacent spaces to undertake a wide range of different activities.

Figure 5.26: A series of buildings created the main cultural and public space in the village. The photo was taken on November 18, 2016. (Source: Author)

5.2.3. The covered bridge

Despite the many large-scale and expensive transportation projects in Guizhou, the actual infrastructure of the remote village remains inadequate. In Banwan, a narrow and shallow stream that flows along the south side of the school building cuts off the connection between the school and parts of the settlement. Before the design intervention, a simple masonry bridge connected the two sides of the stream. The naturally sloped site was terraced in two levels with a height difference of around four meters. The topography had been manipulated to create a series of outdoor steps from the school's backyard to the masonry bridge (Figure 5.27).

The design team was concerned that the heavy rains and the unsafe bridge might lead to problems and accidents. At the same time, this precarious situation could be transformed into a potential if a new pedestrian bridge gave passage and connected the land on both sides of the stream. The idea was to design a new covered bridge to negotiate the steep slope of the landform and provide an additional small-scale public space in the village. The new wooden bridge rests on the two stone piers above the stream bed, overhanging the narrow gap by about 5 meters. A symmetrical facade is supported by complex horizontal and vertical timber components

and covered by a double-tiered and partly triple-tiered roof. This produces a wide, direct path that allows pedestrians and even bicycles to pass through (Figure 5.28). In addition, with the straight-backed benches along the sides of the covered bridge, the design provides ample space for sitting and a cool spot to rest or chat. This particular intervention was subject to many discussions. The local government and the construction company preferred a conventional and simpler bridge construction, but they agreed to this small-scale covered bridge as a vehicle for improving social life in the community.

Figure 5.27: The site for a pedestrian bridge. The photo was taken on September 2, 2016. (Source: Author)
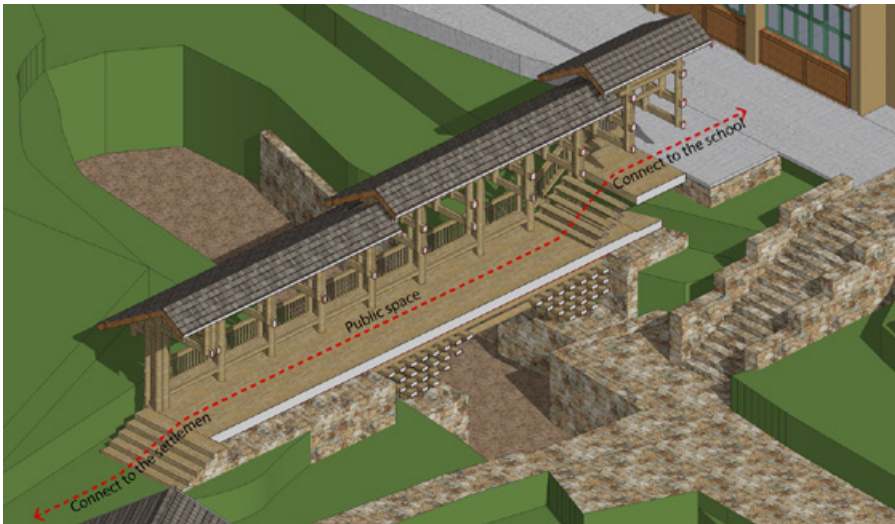
Figure 5.28: The new pedestrian bridge which provided an additional social function and created a small-scale public space in the village. (Source: Author)

Rather than adopting a modern form, the pedestrian bridge was made traditionally, related to the vernacular architecture in Banwan. Professor Lyu invited a

group of experienced carpenters from Guangxi province to undertake the bridge construction work.[164] He encouraged the craftsmen to use techniques and ways of construction that were familiar to their craft (Figure 5.29). Therefore the covered bridge construction may be seen as the result of an intimate collaboration between expert architects and skilled craftsmen. The design team consulted the craftsmen about design modification using the available materials on site, and the craftsmen responded by proposing alternative solutions to adapt to the architects' design. Effective communication was more dependent on in situ discussions than on detailed drawing presentations. Schoolchildren frequently use the bridge before and after their classes, and the area has become an integrated part of the common grounds of the village (Figure 5.30).

Figure 5.29: A group of skilled carpenters from Guangxi undertook the construction work of the roofed bridge. The photo was taken on December 12, 2016. (Source: Yang Wei)

Figure 5.30: The new covered bridge improved the connection between the primary school and the settlement. The photo was taken on October 13, 2017. (Source: Author)

5.2.4. Stage and rehearsal room for Bouyei drama

Under the leadership of Lu Zhenguang, the former head of the Bouyei drama troupe, the Banwan community has maintained the integrity of Bouyei opera performance.[165] Lu Xingzhi, who represents the troupe's younger generation, witnessed that local authorities had recognized the Banwan's Bouyei opera as a valuable cultural resource for many years, frequently recruiting the troupe to perform at ethnic theme parks and in chamber theaters in Ceheng County. However, the performing groups are all composed of amateurs, farmers who sometimes find jobs outside the village. Without more professional actors and actresses, the chances to perform are limited.

Despite its reputation, the Bouyei drama troupe received limited government support. In 2014, a massive flood damaged the village stage, leaving it dilapidated, and there were no funds for repairing it. As part of their initial research, the architects interviewed the key members of the Bouyei drama troupe and asked them to design in words or draw their ideal performance stage. Maybe not surprisingly, most of the members imagined a stage resembling the old one, but a bigger stage with space enabling them to change their costumes. This most probably demonstrated that these members simply had not witnessed other possibilities for opera performance and that their imagination for other ideas was limited by knowledge, insight, and what they see in their everyday environment. This is not a critique, more a realization that in order to offer an alternative and not be faced with resistance and incomprehension against something alien and unfamiliar, the project had to be convincing in offering practical solutions – a stronger stage, better shelter against the rain, better performance experience, and spaces that could be advantageous to both the performance and the training. After several on-site meetings and dinners with the head of the opera troupe and several key drama troupe members who knew the performance's specific requirements, the design scheme was gradually formed. The architect team suggested renovating the stage and building a specific rehearsal room where the drama troupe could rehearse and store instruments.

The work began with the reconstruction of the dilapidated stage, which was removed and replaced by a larger stage, built on a cast-in-place concrete foundation inserted 1.5 meters into the ground. The rehearsal room was built adjacent to the stage as a traditional style building supported by a wooden structure and a rammed earth wall (Figure 5.31). The room serves as a training space and can easily be converted into a dressing room and backstage area during performances. The space includes lockers and separate dressing rooms for males and females (Figure 5.32). The building composition is derived from the materiality and form of the stilt

dwellings, allowing them to blend into the settlement.

Figure 5.31: The completed rehearsal room and performance stage. The photo was taken on August 5, 2021. (Source: China Central Television, Yu Lin, and Zhuang Nan)

Figure 5.32: The spatial composition of rehearsal room and the stage. (Source: Author)

5.2.5. The renovation of the stilt houses

The field investigation had revealed varying degrees of decay in all of the stilt dwellings, some of which even led to the building's collapse. Structural stabilization and strengthening were therefore undertaken as the first activity to prevent

further deterioration. The initial idea sought to fix the vernacular architecture using traditional techniques. Interviews with the villagers, however, revealed that very few villagers mastered the craft well enough to repair the wooden structure and the rammed earth wall.

Generally, two main preservation principles guided the conservation work. The desire for authenticity required the conservation of all the architectural elements that bore evidence of the local culture, daily activities, and site value. Pragmatic concerns required needed physical protection and made it necessary to adapt the buildings to both modern life and traditional cultural patterns. All interventions were to conform to the following principles set by the expert architects and accepted in the settlement and by the constructor:

1. Restoration involves returning the wooden structures to a stable condition, rectifying structures, and building components that were leaning, deformed, or collapsed (Figure 5.33). New wooden structures should replace damaged components that had rotted or been damaged by insects. 60*60*25 cm concrete pads were added under the bottom of wooden columns and buried underground.

2. The roof repair entails taking down the existing rafters and purlins and repairing them rather than replacing them (Figure 5.34). The original tiles should be retained as far as possible. Transparent roof tiles will be added in order to increase the natural light.

3. The collapsed rammed earth wall will be removed and rebuilt in the traditional fashion (Figure 5.35). The most complicated part of this process is repairing the cracked area of the wall. Since the wetter mud would shrink, it would be difficult to bond the original and newly added mud. For this reason, the repaired area should be cleaned and treated with mud mixed with a specific plaster coat and lime wash.

4. Wooden screen-walls and the facade must be securely attached to the wooden columns and main walls. The damaged components should be strengthened and stabilized, or when necessary, a new wooden facade should be made in accordance with traditional techniques.

5. The wooden floorboards should be carefully inspected. The worn out and broken slate should be repaired. The earth ground floors should be tamped, leveled, and covered with clay bricks to improve the indoor hygiene environment.

6. A layer of fire-retardant paint and tung oil should be applied to architectural components.

7. A modernized drainage system should be constructed for each family unit. In order to prevent moisture from penetrating into the indoor space, the bottom of drainage should be 10 cm lower than the interior ground floor.

Figure 5.33: Two workers using a simple but effective method to straighten the inclined structures of a stilt dwelling. The photo was taken on September 2, 2016. (Source: Author)

Figure 5.34: The construction workers replaced the decayed rafters and purlins with new ones. The photo was taken on August 29, 2016. (Source: Author)

Figure 5.35: Traditional rammed earth wall techniques represented experimental operations undertaken by craftsmen who made effective use of local materials, available tools, and microclimate. The photo was taken on October 17, 2016. (Source: Author)

The expert architects encouraged local villagers to participate in the heavy work with the 76 stilt houses. The idea was that local villagers would learn and evolve into more active stakeholders, eventually taking ownership and responsibility for operating and sustaining the building. In addition, the project intended to draw on the wealth of knowledge and experience of the villagers. Their work was needed for the project. For example, transportation of the building materials, making of rammed earth walls, and replacement of broken components involved the collective participation of villagers. At this time of the year, however, many young villagers were working at well-paid jobs in urban regions, and elders were granted access to the project because they were able to and eager to take part in the repair work (Figure 5.36). From start to finish, the renovation project dealt with organizing a network of collaboration. This collective participation of villagers allowed the expert architects and the skilled workers to put their energy into work that required their professional skills.

 As the majority of the stilt buildings were uninhabited, the design team's challenges did not include individual adaptions made for the different families.[166] The architects, trained mostly in modern architectural skills, were challenged to expand their competence and knowledge base in order to restore the traditional buildings.

Close collaboration between the architects, builders, and craftsmen was essential in preventing work from becoming lengthy and costly. Frequent inspections and timely adjustments were needed to ensure quality. Regular renovation quality assessments corrected problems that had emerged due to mistakes, lack of knowledge, or carelessness.

A comprehensive arrangement of the village construction site was essential. The existing school playground was temporarily requisitioned for storage and the processing of the building materials safely and securely on-site. Figure 5.37 shows a group of skilled craftsmen verifying and processing logs and making them into wooden columns, beams, and other building elements before moving the materials to specific sites.

Figure 5.36: Local villagers contributed their labor to their own community. The photo was taken on September 5, 2016. (Source: Author)

Figure 5.37: Skilled craftsmen perform rough processing on the imported wood materials. The photo was taken on August 16, 2016. (Source: Author)

5.2.6. "Flat-to-sloping roof conversion" – a renovation of figures and features

As mentioned before, the implementation of the *Rural Dilapidated Building Renovation* (RDBR) policy had previously prompted a construction boom. However, compared with its specific auditing and subsided standards, there were no detailed rules or regulations about room size, housing layout, and technical solutions according to specific local conditions. In 2009, Huang Quanchang, the president of the Literary Federation in Ceheng County, visited Banwan and found that the indigenous Bouyei housings had been subjected to severe demolition. Huang helped the village committee to set up strict rules for traditional housing conservation, stating that households that dismantled their stilt houses would not be permitted to acquire land for new rural houses from the village collective. The trend of tearing down the stilt dwellings had been stopped in time, but villagers showed great interest in "modern style" buildings, and the possibility had arisen from government funding and money sent from migrant family members.

These new building blocks appeared as a collage of distinct elements, very different from the typical Bouyei village typology recorded by Huang Quanchang in

2008 (Figure 5.38). The buildings seemed to have been constructed with almost no references to local origins. The design team felt that overall renovation work on the settlement was required to restore an image of consistency in the village; the chosen approach was not to demolish the newly built houses but to convert them, adapting them to the vernacular architecture. We offered an alternative treatment to these generic buildings by adding traditional attributes of the vernacular architecture. Furthermore, the design team used the renovation as an opportunity to improve the state of the buildings.

Figure 5.38: As a typical Bouyei mountainous settlement, the whole village is integrated in the natural landscape, as in this image from 2008. (Source: Huang Quanchang)

The renovation work had to be flexible while also maintaining principles. The architects thus designed two prototypes corresponding to buildings with different floor numbers. The design team spent one week surveying the detailed dimension of all newly built dwellings and converted the information into 3D models and drawings. The detailed data enabled us to propose various modifications based on the two initial prototypes. Throughout the design process, we initiated presentations to the local villagers. However, the idealized participation and discussions between architects and villagers simply did not occur. The act of surveying and mapping the site and the commencing design was met with a certain skepticism but also interest from the villagers. As explained earlier in the thesis, these houses had been built incrementally over the years. Families who lived in a single-story house would construct the second floor when children married and the family "divided." The newly added rooftop proposed by the design team implied difficulties for the future expansion of the floor area. Those were living in the two-story buildings worried about their modern houses being renovated to revert to the vernacular

style associated with primitiveness. Villagers had signed the contract with the government voluntarily and did not want to miss the opportunity to renovate their houses. The design team asked the government officials whether they should try and engage the villagers to accept the design scheme for housing renovation. One official wisely reflected that the villagers would only realize how much they benefit from the project once it is there and they start to use it, and a top-down process was initiated.

To dispel villagers' misgivings, the design team selected a household willing to offer their building as a pilot demonstration (Figure 5.39). An older resident told us he was interested and agreed that his house was a pilot project. This demonstration house provided a visible and assessable example and was also used for testing the technical measurements and the need for materials, thus helping to control the budget for the renovation work. At the same time, the design was introduced to the residents, household by household. 3D renderings, technical drawings, and simple illustrations showed how the new rooftop and other technical treatments would fit into the existing buildings (Figure 5.40). The pilot project played an important role in promoting the housing renovation and made the skeptical villagers reflect on their doubts about the design scheme.

Figure 5.39: One idea of the Banwan project was to coordinate consistency in the villagescape. The aim of the first demonstration house was to show villagers the real effect of the proposed design, making it easier for them to accept it. The photo was taken on November 15, 2016. (Source: Lyu Pinjing)

Figure 5.40: Professor Lyu introducing the design scheme to a houseowner. Such presentations and informal design introductions to the local villagers occurred frequently throughout the design and construction process. The photo was taken on August 18, 2016. (Source: Author)

The pilot project provided a clear renovation template. The front facade was elaborately covered with wooden panels and wooden pillars (Figure 5.41). The other three building facades were covered by an outer layer of mud, creating an insulating layer that trapped radiant heat in the interior space in the winter months. Steel mesh, mud, gravel, and cement were used to fasten this 8cm-reinforcing layer to the existing exterior wall (Figure 5.42). The newly constructed buildings were flat-roofed: the architects designed a new rooftop adapted to the vernacular architecture that provided a functional canopy, sheltering the structure and the interior living space. The roof construction significantly improved the original building's thermal performance and provided a new sheltered space for the house owners. Most villagers accepted the design after having experienced the pilot.

 However, it was more difficult to persuade the households who lived in the single-story newly-built residence buildings (Figure 5.43). They depended on the possibilities offered by the circumstances to raise protests, and the tactic they used did not follow the contract. This was also probably partly due to the limited construction time, significant pressure from the government officials, mass media, and the design team. The villagers used delaying tactics to force the team to modify

the design scheme. Based on their demands, the expert architects updated the prototype design for the single-story buildings according to the feedback from the households. A circle of the low brick wall and the internal beam-column frame raised the roof by a total of 60cm. The heightened roof space could be converted into accommodation for guests or storage space. Windows could be installed for light, fresh air, and views of the village and the natural landscape (Figure 5.44). As for the two-story building prototype, the architects insisted on keeping the original design to eliminate the disparate within the communities. However, the space under the roof normally, as I have observed, still functions as a space for drying food (Figure 5.45). Unsurprisingly, the team's proposals for the site-specific architecture encountered difficulty; meeting regional development goals while striving to accommodate individuals' specific social and economic requirements is also a challenge in rural development.
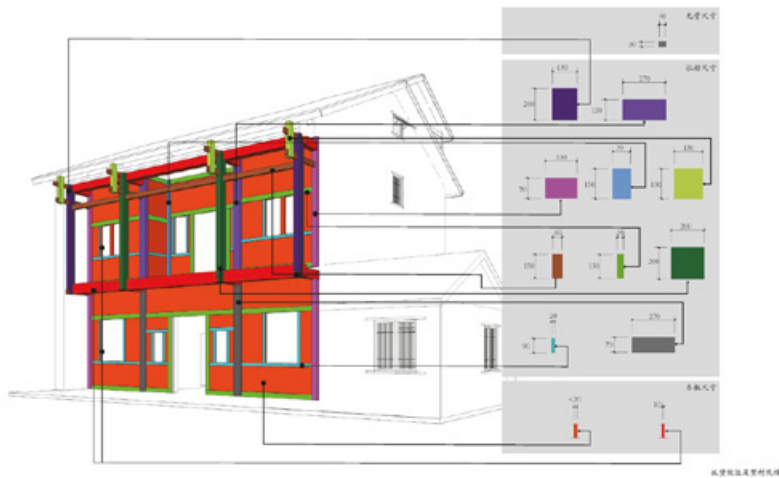
Figure 5.41: Wooden panels and columns with a wide range of dimensions covered the front facade of newly built building. It is an architectural treatment after the fully interpretation of the stilt dwelling's architectural elements and proportional relationship. (Source: Author)

The importance of giving villagers the assistance and respect required to establish and maintain a basis for household involvement in village decision-making. The housing renovation illustrates the mechanisms through which the participation of the local community developed during the project, from simple information sharing to cooperation, giving suggestions for modifications of the design concepts. The process also highlighted the critical link between local requests and professional knowledge. The project, in this way, provided an example of how the in-situ approaches may solve conflicts that generally happen in projects that are operated by top-down government-controlled methods.

Figure 5.42: The expert architects devised a new facade treatment that mixed mud, wire meshes, cement mortar, and gravel. The photo was taken on September 5, 2016. (Source: Author)

Figure 5.43: Eight single-story family homes needed to be renovated. The photo was taken in July 2016. (Source: Author)

Figure 5.44: A typical one-story building renovation. The heightened roof space can fulfill the household's practical requirements whilst maintaining the aesthetic quality and ideal proportion of the design. The photo was taken on November 18, 2016. (Source: Author)

Figure 5.45: Due to the good ventilation, villagers could store maize in the rooftop space. The photo was taken on November 18, 2017. (Source: Author)

5.2.7. Discussions on roads and connectivity

As mentioned in the introduction to this thesis, the most costly, influential, and visible government policies in Guizhou rural areas come from the national and regional large-scale infrastructural programs. In 2014 and 2016, Banwan received resources from these programs. The investment in better road connections between Yata town and Banwan made travel safer and faster. The road network system is highly influential on the settlement structure in remote rural areas and is decisive for the character of future rural development, affecting, for example, accessibility for tourists.[167]

Even today, Banwan is still regarded as a remote and difficult to access minority community after the investments in the road. The roads to the south are cut by the Nanpan River, which marks a natural boundary between Guizhou and Guangxi. Only one paved road connects Banwan and Yata town (Figure 5.46). It takes 40 minutes by motorcycle to cross the hillside roads, despite the linear distance of only 10 kilometers. Road construction in Guizhou is exceptionally challenging due to the topography, weak foundation, floods, and need for substantially routine maintenance. Connectivity is costly and may only be obtained with government investments.

Figure 5.46: The paved road cut right through the site of the irrigated land. The photo was taken on August 29, 2016. (Source: Author)

At the beginning of the renovation project, Professor Lyu and the government officials had agreed to improve the connectivity between the township and village by repairing the paved road further. However, county-level authorities were interested in the development of ethnic tourism and turning Banwan into a demonstration village for tourism. For promotional purposes, Banwan village was called "the last Bouyei home," a village including many preserved indigenous Bouyei stilt dwellings and cultural manifestations.[168] Referring to well-known ethnic tourism theme parks, they proposed development templates that might strengthen "ethnic minority-ness" in the traditional landscapes of Guizhou. Therefore, the county-level officials wanted to build parking lots and souvenir shops, which they considered the basic components of a successful theme park. The county-level officials proposed this to Professor Lyu, suggesting that a parking lot could be constructed in the irrigated agricultural land – following infrastructure logic, not the logic of local landscape and culture and the need to protect valuable resources. Professor Lyu firmly opposed the proposal because the construction of the parking lot might take up a large amount of the agriculturally productive land and permanently change the settlement pattern, the irrigation system, and the livelihood of families. The design team instead proposed that the money saved by not building the parking lot should be used for micro-scale interventions grounded in the local knowledge of place and community. The parking lot construction proposal was postponed.

5.2.8. Modern building codes meet traditional building techniques

The architects approached the project with the opinion that vernacular architecture and building techniques still had practical values to pass on and develop further and that the techniques could play an essential role in village protection. Thus – as mentioned earlier, as part of the discussion on the Bouyei stage – Professor Lyu invited a group of skilled craftsmen from Guangxi to undertake carpentry work in the renovation project, seeking a balance between tradition, budget, and modern techniques needed.

The design team tried to provide the full set of architectural drawings to be used by the head of the craftsmen, who could read technical drawings. As we got to know the craftsmen better, we found that their work had all been done based on experience: they did their construction work with only a rough understanding of the drawings and did not implement everything described in the drawings. The craftsmen converted these rational and accurate computer-made drawings into more suitable material, usually better schemes, methods, and procedures based on their experience, construction traditions, and tricks of the trade.[169] Starting with

traditional building techniques, we achieved a dynamic experiential operation that depended on the collective knowledge of the craftsmen group. The construction work involved many personal perspectives and judgments, and the physical structure was the outcome of both our drawings and adjustments due to a flexible operation (Figure 5.47).

Figure 5.47: The image on the left shows the architect's digital drawing provided to the craftsmen, and the photo on the right shows the actual construction. The craftsmen would revise or propose a more stable and efficient structural system if their experience told them this was necessary. (Source: Author)

When replacing the school's original cement balustrades, an engineering supervisor found that the new wooden handrails were only 1 080 mm – 20 mm shorter than the dimension shown in the drawings. Citing the building code, the construction supervisor did not approve the construction work – the height of the exterior handrail should not be less than 1 100 mm. According to the craftsmen, the dimension of 1 100 mm as a unit corresponded unfavorably and inauspiciously to the Lu Ban *chi* (Lu Ban rule). However, 1 080 mm corresponded with favorable units in Lu Ban chi and would bring luck to the place (Figure 5.48).[170] They emphasized that special care had to be taken in confirming the dimensions of structural wooden components as well as doors, windows, and tables. The dimensions should fall within auspicious intervals according to the Lu Ban *chi*. The architects were not used to this system but understood that the meanings and symbols carried by the traditional village's physical structure always went beyond mere functionality, and they adapted to the system.

The design team and the construction supervisor sought advice from Li Xianrong, a respected village sage who had been the schoolmaster for over twenty years. He told us that building construction in Banwan had always followed the standards of Lu Ban chi and the specific requirements found in the Bouyei *Mojing*. Fur-

thermore, he said, Bouyei people were shorter than the average Chinese, and the handrails made by craftsmen were certainly sufficient from a safety point of view. Given the concordance between the village sage and craftsmen, the construction supervisor ultimately did not insist on changing the handrail height due to time constraints and the scarcity of building materials.

Figure 5.48: This Lu Ban chi (Lu Ban rule) used by craftsmen shows metric and British measurements and good and bad luck units. (Source: Author)

The traditional building process in Banwan is highly ritualized, following cosmo-logical ideas that are believed to reduce the probability of misfortune. The actions of carpenters and masons have to be based on local craftsmen's experience and the consultation of the *Mogong* (the local ruler). Thus, construction actions take place in a world of taboos. In Banwan, the Bouyei *Mojing* contains a specific manual for construction regulations, which include the auspicious days to start a project for a house and erect the columns and beams, the ideal direction for doors and windows to face, the ideal position of the kitchen, and setting a date for moving in, etc. (Figure 5.49) Nowadays, however, there is no official building code in China for renewing vernacular architecture in rural areas. The existing building code has evolved from urban projects and led to many conflicts with local building crafts-manship. Although the vernacular building craftsmanship was deeply embedded in the context of the rural society's daily life, the outcomes had to face verifications and examinations based on the standards of contemporary Chinese civilization.

During the renovation process, the design team tried to adapt to the familiar techniques of the craftsmen and kept the use of industrialized building parts and modern construction methods to a minimum; this also made it possible for local villagers to repair and maintain the buildings by themselves. Many traditional rites and ceremonies were encouraged during the construction process to fulfill auspi-cious meaning and time requirements. For example, Figure 5.50 shows a formal

and grand *Shang Liang* (raising the ridge pole) ceremony held at a critical moment during the primary school construction. The *Shang Liang* ceremony had a specific meaning among the construction rituals. The excellent *luck amulets* were attached to the buildings. After this ceremony was performed, the new buildings had become "family members" in the settlement.
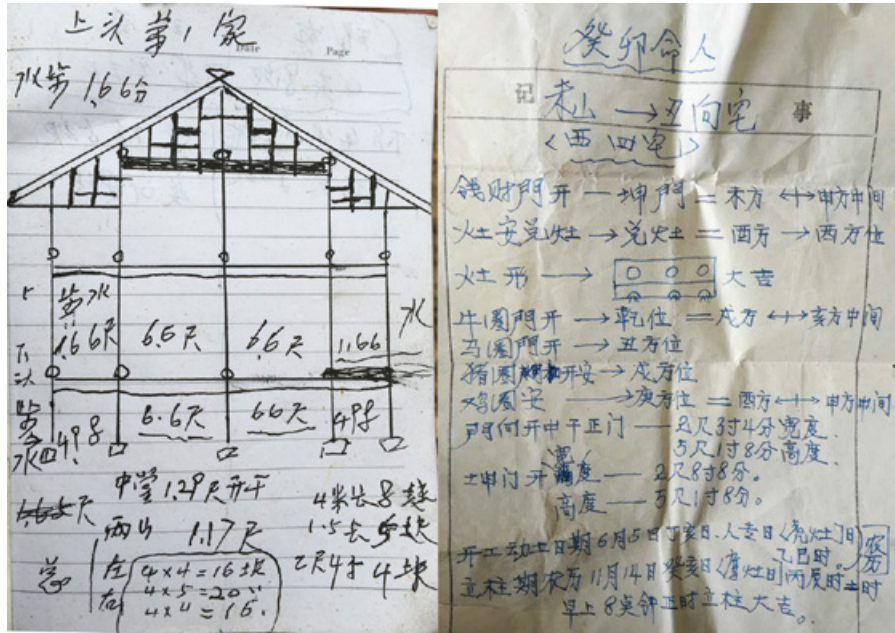
Figure 5.49: Local craftsmen made the hand drawings based on the Mojing. The drawing on the left demonstrates the dimension of building components. The drawing on the right shows the orientation and width of the dwelling and barn gates, the stove's shape, and the groundbreaking date. Mojing continues to be a deeply rooted belief system that guides house construction throughout Banwan village. The photo was taken on September 25, 2016. (Source: Local craftsmen)

Some modern technological solutions and new materials were successfully integrated into the traditional building techniques. For example, as wooden structures are vulnerable to fire, the craftsmen applied fireproof and waterproof treatment to the wooden structure around the roof, see Figure 5.51. These novelties were accepted because these techniques addressed the weakness of vernacular architecture, like perishability, inflammability, and unsoundness, which are of particular importance in the mountainous environment in which the buildings are situated.

Figure 5.50: The builder puts emotions, hope, and wishes in the physical structures. This photo shows the Shang Liang ritual for the school construction. The photo was taken on November 2, 2016. (Source: Author)

Figure 5.51: Traditional building craft combined with modern building techiques meet modern requirement and improve traditional building methods. The photo was taken on November 9, 2016. (Source: Author)

5.2.9. Architects and the construction team: Conflict and collaboration

Two different construction teams collaborated with the architects and contributed

to their capacity and knowledge: the group of carpenters from Guangxi invited by Professor Lyu and a team of builders hired by the construction company responsible for the main body of construction. From the architects' perspective, however, compared with the skilled carpenters who were accustomed to cooperation with architects, the group of builders was difficult to collaborate with. The head of the construction team considered the expert architects to fill a mostly a role that was not needed; from their experience and point of view, design and construction were inseparable and should be undertaken by the craftsmen themselves. The head of the construction team frequently showed his displeasure to the expert architects: "These drawings are useless; you have to be able to build the physical structures with your hands! I cannot read these complex drawings; I'd better do what I have planned."[171] They did not accept Professor Lyu's leadership role in this Countryside Construction project.

To explain this: Craftsmen follow the respected traditional forms and methods; for them, the ideal building was a copy. According to their way of building, "design" activity was limited to the adjustments or a variation of widely accepted building prototypes based on the economic limitations and the families' requirements in the specific site. This approach, limited to adjustments and modifications, appeared quite different from design activities managed by architects whose objectives were creative, visionary, and development-oriented. The conflicts and misunderstandings between architects and craftsmen that arose from these different approaches to the challenges could only be resolved by frequent communication and regular on-site meetings.

The craftsmen hired by the construction company brought another potential conflict. Due to the many projects and the amount of work, the construction companies employed more and more craftsmen to undertake preservation projects and build new physical structures in rural areas. Strict contracts based on rudimentary descriptions of the projects forced craftsmen to prioritize the economic benefits of the company rather than the quality of the work. The urgent timeframe and pay based on quantity output – not quality – had forced craftsmen to simplify the construction procedures and adopt construction methods that compromised building quality. For example, to shorten building times, craftsmen in the construction company selected metal nails to join timber trusses rather than using more durable mortise and tenon joinery. The design team questioned this construction method and pointed out that the metal nails might lose their hold, and moisture would penetrate the hole made by nails; as time went by, the nails and wood fibers would corrode. There is no room for poor workmanship and mistakes, as comprehensive rural renovation projects must be durable.

Another example could be found in the construction of the rooftop for the newly built dwellings. The proposed deeper overhang of the eaves aimed to help protect

the rammed earth walls from heavy rainfall. The reduced dimension of the eaves deliberately made by the craftsmen would contribute to reducing the durable performance of the building. Many house-owners complained that the insufficient depth of eaves could accelerate the decay of the rammed wall (Figure 5.52). Professor Lyu and the government officials emphasized that the construction company's craftsmen must set aside time to consult with the supervising architects if they were not able to read the architectural drawings or if they had alternative opinions about the construction. Furthermore, the design team decided to increase the frequency of visits to the construction site in order to examine the work and guarantee good communication and coordinated actions in the construction phase.

Figure 5.52: Professor Lyu organized an on-site meeting with the government officials, craftsmen, and the construction supervisors. The expert architects had set up several mechanisms for cooperation mechanisms to ensure good workmanship. The photo was taken on October 15, 2016. (Source: Yang Wei)

5.2.10. Four pilots

Responding to the residents' changing attitudes to the stilt buildings, the architects proposed a series of possible interventions that radically reconsidered the stilt buildings and the newly built houses through programmatic, structural, and spatial transformations. We sought to find common ground to attract people back to the stilt buildings, introducing programs that could stimulate production and communi-

ty feeling and thus make the buildings relevant and meet the expectations of daily life. The expert architects designed four demonstration projects to stimulate new production and community feeling: a brewing workshop, an embroidery workshop, a pottery workshop, and a canteen for the community. These were key innovation projects to test ideas of how a new organization of local handicrafts could contribute to the community.

The brewing workshop

With permission from the stilt building owner Li Jincun, Professor Lyu tested the program for a brewing workshop. The brewing workshop renovation exemplified the adaptability of the stilt house. The building, a five-bay-wide stilt house with a relatively large footprint, stood independently and opened to a courtyard. As a typical stilt building in Banwan, the ground floor stored farm tools, five people were living on the lower level, and the upper level was used for drying food. The wooden structure and exterior walls were relatively decayed due to the lack of routine maintenance.

Although Li Jincun and his family members could not propose any specific requirements for the housing renovation, the design team still asked them to participate in the construction process. We believed any idea that originated from the occupants' habits could be extracted and implemented to offer creative renovation solutions for the building. Wine plays an essential role in the daily life of the Banwan people. After the autumn harvest, families make rice wine and store enough for the next year. One of the architects had spent time observing and documenting the winemaking process and found that the wine production took place in the main living space, and that there were few possibilities to expand the production for marketing and sales.

In this project, the exterior was left virtually untouched; the damaged rammed earth was repaired, and a new entrance to the wine production was established. The ground floor was dug out and lowered half a meter, and concrete foundation blocks were inserted to support the *chuandou* frames above (Figures 5.53 & 5.54). The architect reorganized the spatial layout by connecting each floor through two stairways. The ground level allowed for storage space and a wine tasting area, and open spaces on the first level allowed for family-owned workshops. The production space was designed and rearranged to support the brewing process. The main production space was located in the southern part of the first level, in which the double-height corridor was equipped with wooden shelves for wine storage (Figures 5.55 and 5.56). A fire pit was kept as a focal point around which family members and their relatives could gather and give atmosphere to the space as a place for trading with tourists. A series of inserted wooden partitions created the spatial segmentation between production/public space and living/private space. Living space was arranged according to traditional layout and habits. The central hall in

the middle bay was retained; two rooms flanking the central hall are for sleeping. The upper level contains another bedroom connected to the new staircase. The barn on the upper floor was kept and served as an additional space for storage. Transparent roof tiles were installed on the rooftop to supply light and give character to the space (Figure 5.57).
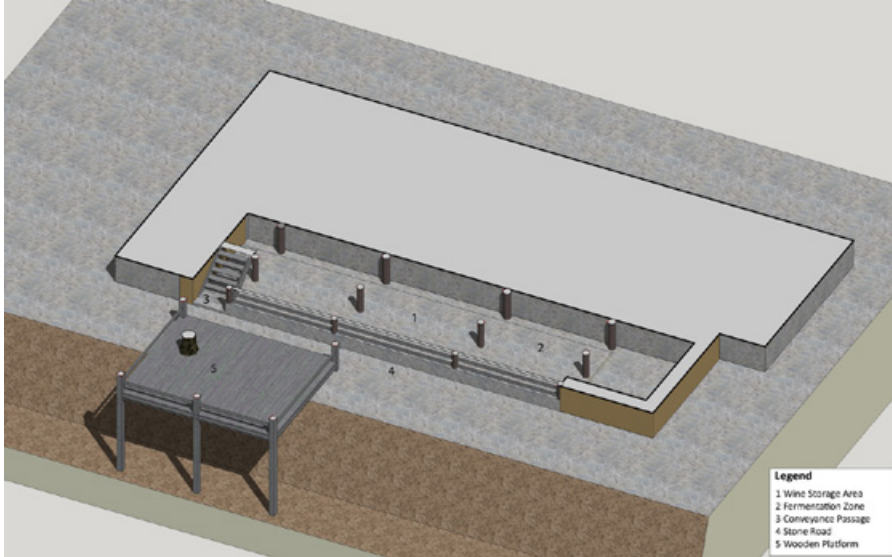
Figure 5.53: Ground floor of the brewing workshop. (Source: Author)

Figure 5.54: The increased height of the ground floor allowed for storage of some winemaking tools and pits filled with fermenting grain. The photo was taken on November 12, 2016. (Source: Author)

Figure 5.55: Lower floor of the brewing workshop. (Source: Author)

Figure 5.56: The production zone was deliberately separated from the living space. This

demonstrates a new use of the stilt house that better integrates winemaking into everyday life. The photo was taken on November 12, 2016. (Source: Author)
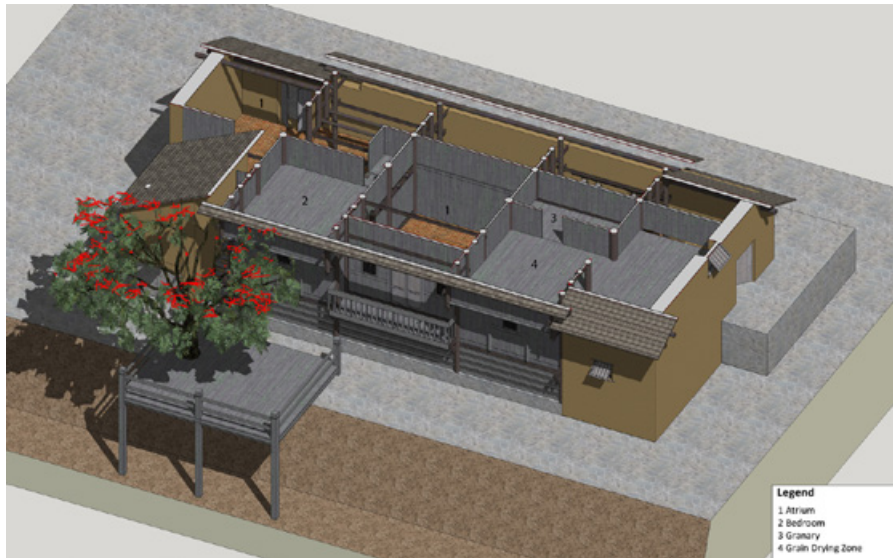
Figure 5.57: Upper floor of the brewing workshop. (Source: Author)

Figure 5.58: Visitors drink rice wine and enjoy the scenery on the viewing deck of the brewing workshop. The photo was taken on November 15, 2016. (Source: Tang Lumei)

A wooden platform stretching from the first floor and raised over the landscape

allowed visitors to taste the wine and enjoy the scenery (Figure 5.58). The kitchen and restrooms were designed and constructed according to modern standards. Domestic sewage was treated by means of a special filtration system, and the water was reused for irrigation. After the renovation, the function of the house gradually became more explicit: to effectively integrate living space and production space into one stilt housing unit and at the same time reduce the negative influence between the two functional spaces. More importantly, as an investigation and trial into the new rural livelihood, this renovation demonstrated a both socially and economically possible and sustainable model for rural revitalization.

The Embroidery Workshop renovation: A prototype for developing production in the community

Although the Banwan village had become a part of the consumer economy, the handmade Bouyei clothing embroidery had not lost function or meaning. Bouyei clothes are used more by women than men and more for celebration and representation than everyday life. Unlike, for example, Miao and Dong ethnic cloth, where silver ornaments reflect beauty, the Bouyei are famous for their blue homespun fabric and wax-dyed cloth. Women's clothing, in particular, relates to age and marital status: young girls dress in light green and light blue cloth with more intricate and vibrant embroidery, and married women dress in dark clothes with colorful trim and wear a special headdress. Traditional dress is a prerequisite at festivals and religious ceremonies. Bouyei people thus have clothes for everyday wear and festivals and celebrations.

The wax-dyed cloth is made in most households and used for making scarves, shawls, dresses, bed covers, and curtains. Some Bouyei women embroider traditional figures and intricate patterns on the wax-dyed cloth for weddings and married life. Bouyei embroidery is a collaborative community activity; for example, a woman seeks help from neighbors and clans when planning to prepare the woolen thread and dye the cloths (Figure 5.59). Embroidery activity could be considered both domestic and communal, an activity that bridges the individual and the village collective.

The main intentions of the prototype house were to offer a suitable common space for the cooperative business – production and sale – surrounding traditional Bouyei embroidery and to establish a social hub where young women could learn the craft from the older generations. The design team selected an unoccupied stilt building as the site for a workshop. This six-bay-wide building could accommodate a series of embroidery activities. Like other stilt buildings in decline, the prototype was restored structurally and architecturally. Our idea was not to add architectural elements, but instead to rearrange the internal space into a series of interlinked areas. The original house had living space on two floors that covered nearly all spans, though no staircase was set for the vertical connection. To bring more sunlight to

the upper floor and create a visual connection between the upper and lower levels, the design team removed a section of slabs to form an interior double-height "street" (Figure 5.60). This transformed the former interior living space into a public space, enlarging the interface between the two floors and enabling people to overview the space on the lower level.

Figure 5.59: A group of women disentangling thread. The photo was taken on October 22, 2016. (Source: Author)
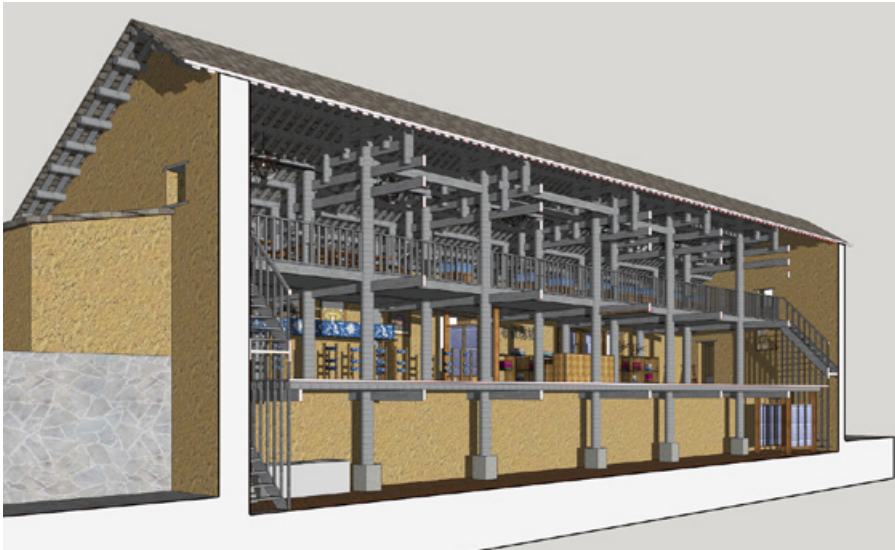
Figure 5.60: The double-height "street" to enlarge the interface between the upper exhibition space and lower production space. (Source: Author)

The updated space is adapted to the requirements of cloth and embroidery production: the dyeing and drying area on the ground floor (Figure 5.61), the embroidery area on the first/lower level (Figure 5.62), and the display area on the second/upper level (Figure 5.63). The building also provided a storage room and a restroom with shower facilities. The vertical connection was improved with two new staircases set along the retained walls – several moveable display wooden shelves were put in the necessary position to adapt to the flexible spatial organization. Upon completion, the building would become a resource for the community, allowing villagers to use the spaces for production, training, sales, education, play, and meetings (Figure 5.64). By demonstrating an alternative utilization of a traditional stilt building, the expert architects hoped to help preserve the knowledge of local materials and techniques. And the embroidery workshop was an innovation to strengthen the local economy through what we called the "productive protection of craftsmanship."[172]
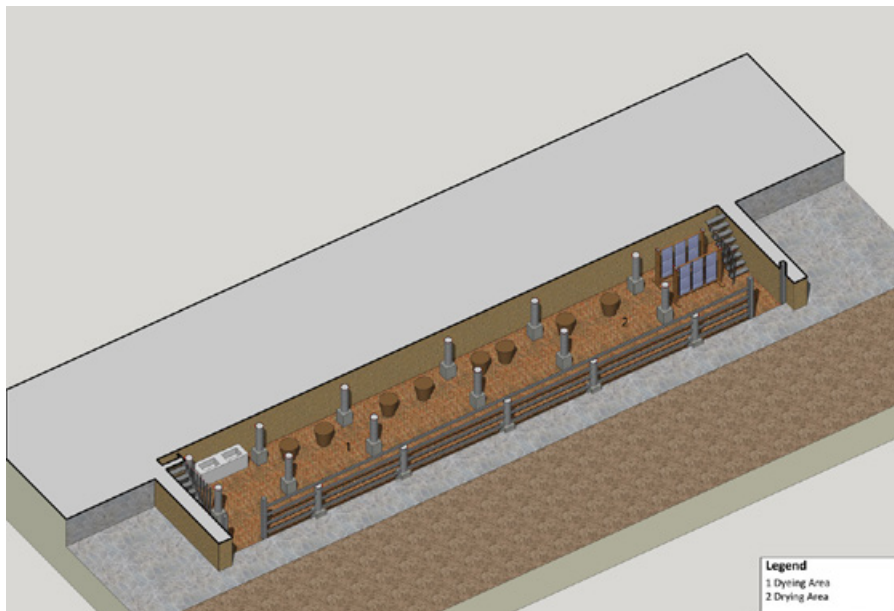
Figure 5.61: Ground floor of the embroidery workshop. (Source: Author)

Figure 5.62: Lower floor plan of the embroidery workshop. (Source: Author)
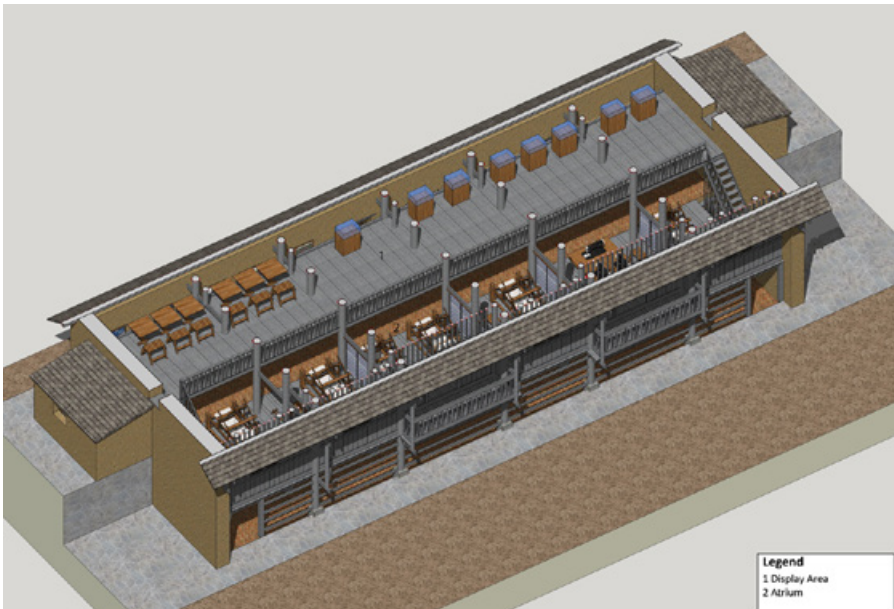
Figure 5.63: Upper floor plan of the embroidery workshop. (Source: Author)

Figure 5.64: Local women weaving cloth in the embroidery workshop. The photo was taken on November 15, 2016. (Source: Author)

The pottery workshop

During the site survey conducted by the design team, the school was open for summer lessons taught by volunteers from Guizhou Normal University. In the breaks between classes, we observed students flocked to the three small grocery stores around the school buildings. All three store stores in the village were roughly the same size, sold the same goods, and offered snacks and the stationery students needed. He Biao's parents built their grocery store in 2011 near the ramp leading to the school playground. This small retail space was slightly detached from their residence, pragmatically built with little reference to the local architectural tradition and without any decoration. The shop worked as commercial space to meet basic commodities needs and as a sheltered gathering place for casual meetings, play, or where students could relax.

Interviewing He Biao's family, the design team found that He Biao had graduated from Jingdezhen Ceramic Institute two years earlier and was planning to set up his own business locally. One of the primary purposes of village renovation is to attract the younger generation to resettle. Professor Lyu recognized He Biao's potential to become a community activist and understood that he might inspire industrial development processes with support. The idea was to add activities to the existing grocery store. Taking advantage of the site's location, He Biao's educational

background, and the local traditional craftsmanship, the planners explored ways to improve the material basis for the household. At the same time, we saw the project as a prototype – a possible model – for household-based workshop development.

The existing house was a two-story masonry-concrete building with a storage room added on the rooftop. A semi-detached kitchen with a fire pit and stove was added to the building. A small courtyard was fenced in and linked to the kitchen, used for a garden with leafy vegetables and fruits for daily use (Figure 5.65). He Biao was encouraged to use his ceramic-making expertise to start production and to market his work via the Internet. The ceramist was to start his own business locally and, at the same time, set up and exhibit an entrepreneurial model in the village. The team proposed a design strategy that converted his house into a multifunctional space that included a traditional pottery kiln for production and additional rooms for receiving tourists.

Figure 5.65: He Biao's family's house before the renovation, photographed before July 2016. (Source: Author)

He Biao's parents and other villagers met the career development path proposed for He Biao with skepticism. Their opinion was that He Biao should find a proper job in a city and pay back his student loan as soon as possible. I must admit that launching this project required some pressure. To convince He Biao's parents, government officials promised to strengthen institutional and financial support to Banwan in the post-construction phase, and even offered He Biao a job in the town

government working from the village, if he agreed to operate the pottery workshop there.

Illustrative computer models and perspective renderings were used persuasively. After many discussions, He Biao's parents accepted the design scheme and their son's career plans. The building renovation followed the redeveloped language of local vernacular architecture. An idea was devised to build the kiln inexpensively: an abandoned semi-underground biogas tank adjacent to the southern wall of the residence was reused. No skilled local craftspeople could take on a specialized project like this one, and the design team invited a professional kiln craftsman from Xingyi who could convert the biogas tank into a dome-shaped pottery kiln (Figure 5.66). The tank bottom was dug further down to increase its capacity. The body of the kiln was constructed using high-quality refractory brick. A 14m x 5m pavilion provided a wall-free space above the kiln to meet weather protection needs and provide an open space separated into a storage space and a production space (Figure 5.67). The leftover bricks and wooden panels were used to make display stands for pottery. He Biao wanted the workshop to be mutually beneficial for local villagers and planned to provide a gathering space open to students for educational purposes (Figure 5.68). Allowing students to use the workshop could make it into an active space, encourage broader community support, and inspire similar projects.

Figure 5.66: Architects took advantage of the abandoned biogas tank and transformed it into a new kiln. The photo was taken on September 26, 2016. (Source: Author)
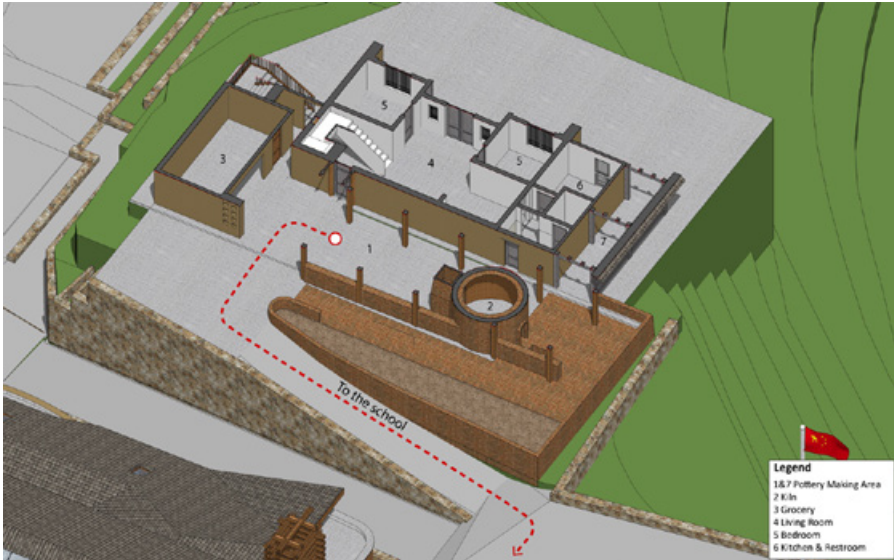
Figure 5.67: Strategically, the kiln was positioned along the building's front facade to create a public open space between the private residence and the school building. (Source: Author)

Figure 5.68: The pottery workshop has the potential to become an outdoor classroom for students. The photo was taken on November 18, 2016. (Source: Author)

Canteen renovation

The new programs and prototypes were closely linked to the need for future tourism development. A canteen might facilitate villagers gathering and attract tourists, making it possible for them to stay for more than just a few hours.

For this program, we chose to renovate a stilt building and open up the traditionally organized living space to accommodate commercial activities rather than building a new high-profile physical structure. The design team primarily wanted to reuse a stilt building adjacent to an open area. Taking advantage of the open space, the canteen can accommodate more people and strengthen the area as a public space for community life. As seen in Figure 5.69, buildings and paths created the triangular-shaped open area. However, the damaged paved surface and the unoccupied building made the area unattractive and lacking vitality. The house's occupants, who had moved out in 2014, had built a small masonry building located to the east of the open space for storage purposes.

Figure 5.69: The open area is located in the heart of the settlement. The design team intended to enable the revitalization by adding different spatial elements, and planned to renovate and use the two buildings on the right as a canteen. The photo was taken on August 9, 2016. (Source: Author)

Based on the contract signed between the local government and the villagers, the local government had the right to develop the stilt building. The small masonry

building was made of hollow brick, and the structure was thus too weak to be transformed. The design team decided to demolish it and replace it with a pavilion for the community. In return for their lost house, the household would receive two forms of compensation: a one-time compensation sum of 1 000 RMB, and the priority rights to develop commercial activities in the public plaza. The owner agreed to remove the brick building but claimed 8 000 RMB in compensation. The government officials were confused and somewhat angered by what they considered selfish behavior on the household's behalf. As they saw it, the government was being required to pay the cost for the stilt building renovation, and the owner had also claimed compensation for a shed not worth the sum of money. Officials refused to pay more compensation to the owner and temporarily stopped the canteen and plaza construction. Having grown more convinced of his rights, the owner played a waiting game to get more benefits. Limitations to the construction time put pressure on the government officials and the design team, and the design team proposed increasing the compensation sum to 2 000 RMB, with the owner still holding the priority rights to develop commercial activity in the public plaza. Negotiations continued: "I cannot predict how many visitors will come to Banwan in the future, and opening a store here is a high risk for me."[173] The pressure continued; if the owner disagreed with the proposed terms, the design team would modify the plans and collaborate with other families. Finally, the owner accepted, understanding that he would be left empty-handed if he insisted on a more lucrative deal.

The structural renovation of the stilt-house followed principles that were already established at that time. Programmatic requirements for the canteen space meant redesigning the plan. A new spacious staircase was set in a span in the middle position so that people could reach the loft without bumping their heads. Alterations to the structure were necessary: the net height of the upper floor was influenced by the wooden structure of the existing roof, which made the space unserviceable. We cut off a section of the lowest level of the transverse tie beam to form an interior "corridor." In collaboration with the architects and craftsmen, some necessary structural reinforcement work was done to keep the building stable (Figure 5.70). The lower level serves as a dining area (Figure 5.71). Two bedrooms were transformed into private dining rooms, and a big dining table was set in the area of a double-height atrium. A newly built external wooden staircase was installed along the exterior wall of the building. It enabled people to access the upper level directly without passing through the dining space on the lower level (Figure 5.72).

The most critical design intervention was increasing the height of the ground floor by 600 mm. New concrete bases were inserted underneath the original wooden pillars to make space for a new kitchen with a series of windows (Figure 5.73). Integrated pipelines were pre-set, and kitchen equipment was assembled on-site to ensure adaptation to the construction. The design team wrapped the northern side of the building with a series of wooden door panels to allow sunlight to enter

the dining rooms for ventilation and at the same time to create additional privacy (Figure 5.74). All the wooden screens were produced locally and used traditional patterns. Also, traditionally, these wooden screens were used for lighting and ventilation. The design team adapted the traditional method of inserting the wooden panels and screens in the wooden frame structures to improve stability.

The objective of the design was to renovate a canteen and organize the open area by creating certain interlinked spatial elements (Figure 5.75). The new wooden pavilion, which can be used for outdoor dining and village meetings, is situated on a repaired micro-waterscape. The dilapidated square surface and street are paved with hand-cut stone blocks. The square was elevated higher than the surrounding street and the form adapted by a series of stairs.

Figure 5.70: The unpainted wooden structures were added to resolve the structural instability caused by creating a corridor in the upper level of the building to enable people to pass through. The photo was taken on November 18, 2016. (Source: Author)
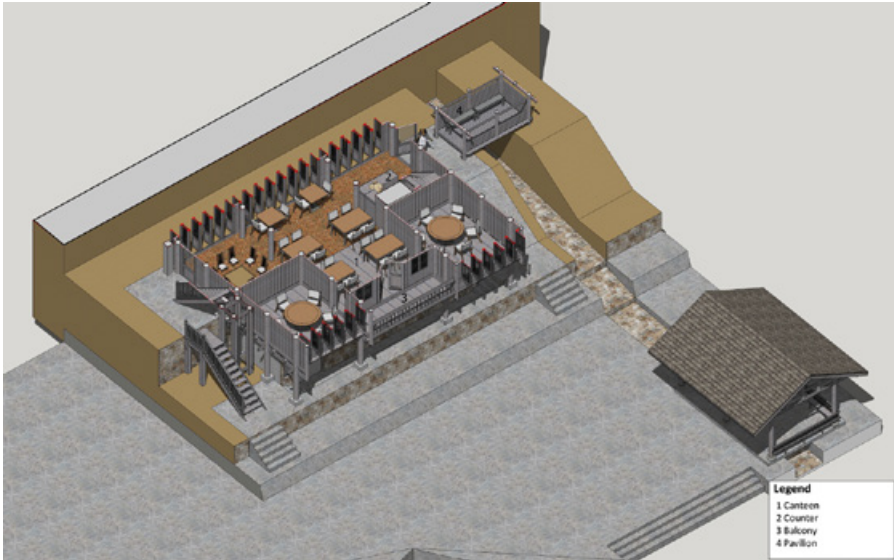
Figure 5.71: Lower floor plan of the canteen. (Source: Author)
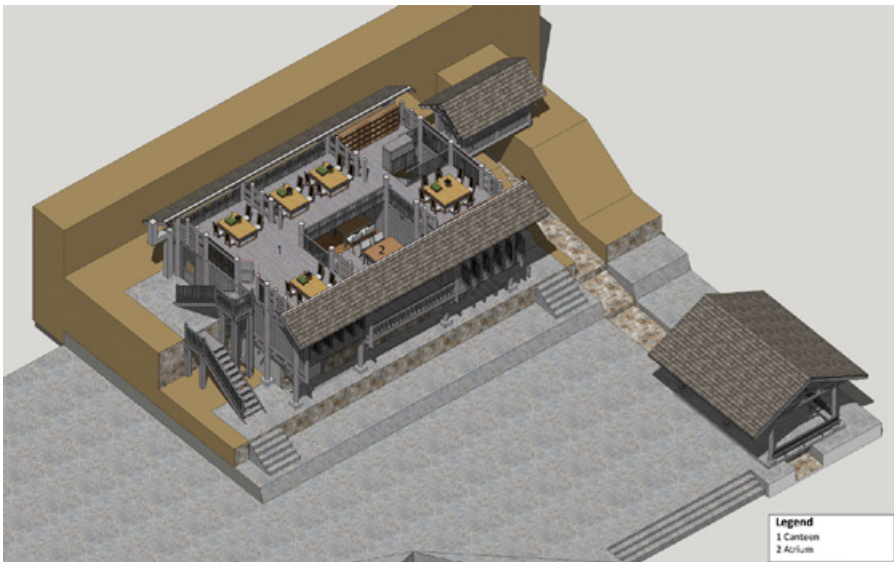
Figure 5.72: Upper floor plan of the canteen. (Source: Author)

Figure 5.73: The lower semi-outdoor space for livestock was transformed into a kitchen. The photo was taken on November 10, 2016. (Source: Author)

Figure 5.74: The wooden facade elements were fabricated locally; in this way, some minor adjustments could be made for the specific site conditions. The photo was taken on November 10, 2016. (Source: Author)

Figure 5.75: The new wooded pavilion in the plaza, with new seating and an area for local villagers to chat. The photo was taken on November 15, 2016. (Source: Author)

5.2.11. Competition for the water resources: A reflection on poor infrastructure

As mentioned earlier, the livelihood and traditions of a Bouyei community depend heavily on water. In Banwan, the stream flowing from Panlong Mountain ensures a constant water supply and provides sufficient irrigation water for the cultivated land. Before the project began, there was no modern water supply system in the upper part of the settlement. The village renovation project required large quantities of water, which caused problems with the water supply and created tension between the construction team and local villagers. In addition, the lack of a running water supply made construction especially costly. The construction company complained that the cost of construction work was higher than in Guizhou urban areas, partly because clean water had to be drawn from the foot of the mountain and transported: the poor infrastructure thus led to additional project costs.

A piped running water supply system was built several years ago. However, due to insufficient water pressure, the running water did not reach the settlement's upper areas. Many villagers built their new dwellings along the road close to the mountain foot, not only because the location was easily accessible, but also and equally importantly, to access running water 24 hours a day. In 2014, as part of the program to promote the construction of beautiful villages in Guizhou, the local

government earmarked a special fund to carry out Three Changes to improve the sanitary conditions in impoverished villages. Biogas tanks and toilets detached from the living space were constructed for each household in Banwan. Because of the scarcity of water and the incomplete infrastructure, many households did not really benefit from this improvement project. During the renovation construction process, the affected households could only access the water supply in the evening, and they did not get compensation for the water supply limitations.[175] In essence, the imperfect infrastructure was a major source of villagers' complaints and had to be taken seriously in the project.

At the beginning of the project, the design team had met with relevant government sectors and planned infrastructure construction based on the specific mountain topography. Local development agencies had promised to correct infrastructure deficiencies, such as the piped running water system, roads, sewage, fire protection facilities, electricity, and waste treatment. Some of the upgradings of "hard infrastructure" had been undertaken by the local government itself, such as pipelines for water and electricity, a reservoir, and trash bins.

Figure 5.76: Solar panels were installed on the rooftop of the school building. The photo was taken on November 18, 2016. (Source: Author)

The design team realized that the process of physical transformation pushed the shift from a self-sustained economy into a modern system of dependency. For example, the pottery workshop, embroidery workshop, canteen, and even the expanded school would lead to the need for more resources than before. Therefore, in the course of infrastructure upgrading, a series of facilities were introduced to reduce the dependency on outside resources. For example, the domestic sewage treatment tanks installed could collect and store domestic sewage and convert the spill into irrigation water and flushing water through biological degradation. Although the

annual electric bill might amount to 60-100 RMB, the invention could cover the majority of water use throughout the year and support an idea of familiar rural livelihood. The school building was covered with a new slope roof that provides additional thermal mass, cooling the building in summer and helping the classroom to retain heat during the winter. The 32 newly installed solar panels provide nearly all of the electric power needed during the term and allow the school to provide surplus electricity to the community or other parts of the region (Figure 5.76).

5.3. Post-construction- the architectural performance and social impacts

It may be said with a fair degree of confidence that the project itself – the investments, the process, and the material effects – gave Banwan a unique foundation for further development. The design team left Banwan village on January 10th, 2017. Although the design team could no longer supervise directly after this, the construction groups finished all the architect team's schemes until March 2017. The "post-construction period" refers to the period after March 2017.[176] I visited Banwan once annually from 2017 to 2021 to document the facts, changes, and effects.[177] The post-construction period is mainly framed by two different situations, the first years when the village tried on its own, and the later phase headed by an external organization that was brought in (Figure 5.77). Therefore, my post-construction investigation is deliberately divided into two parts: self-management by the community (from 2017 to 2019) and the period that an external operation organization was involved in the village (from 2019 to 2021).
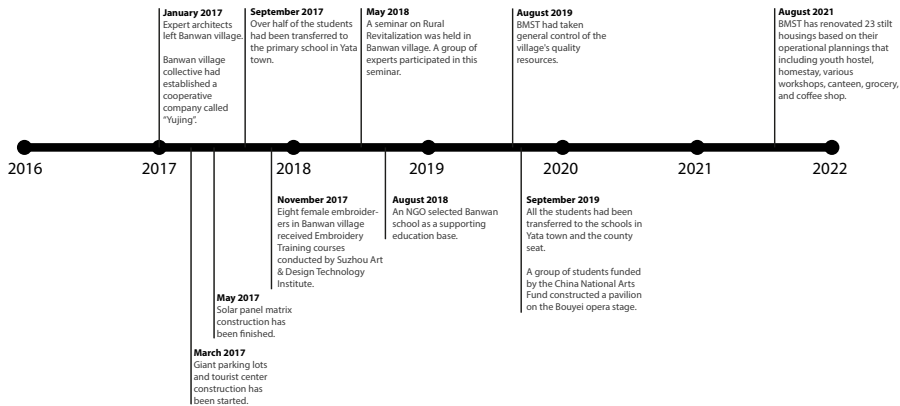
Figure 5.77: Timeline of post-construction. (Source: Author)

One of the thesis's purposes is to measure the architectural and social impact of the Banwan practice on the community in order to discuss the project as a model adaptable in certain situations. However, the relationship between architectural performance and social consequences is complex, and there are limited means for

measuring the project's contributions directly. Therefore, I adapted a time-consuming but practicable approach: observing and interpreting each representative example or phenomenon and analyzing effects based on how the community and local government viewed the deliverances of the Banwan project. The findings will be used in Chapter 6 to evaluate the Banwan project and establish a set of suggestions for the design and construction of future architectural village renovation.

5.3.1. Architecture performance and its social consequences

When I returned to Banwan for two weeks during the harvest season in October 2017, many middle-aged migrants had returned for the harvest and the National Day holiday. Upon arrival at the village, I met a group of visitors. "We are Bouyei from Xingren County, Qianxinan Prefecture. We saw the project on TV, and we are fascinated by the settlement and spatial renovation work designed by a professor," they said.[178] They told me that the lack of signs leading to the village had meant that it took them hours to find the right place, and because they had been unable to find an available hotel or other accommodations in the village, they would return home the same day.

They questioned why some of the facilities were not in operation, even though they had been physically constructed and seemed ready to use. The conversation was my first post-construction interview. Their feedback on the spatial renovation work was positive, but they were disappointed by the further development and spatial management by residents and the village committee. Surprised at these findings and urged by the tourists' questions, I conducted my fieldwork as a researcher in the post-completion phase of the Banwan project.

The dilemmas of Banwan Primary School

The Banwan Primary School, as a local educational facility and a cultural classroom, re-emerged as a problem. Keeping the school in the village and converting the existing school into a learning hub was a primary objective for the expert architects and a strategy for the renovation work. Sufficient funding, the architects' professional work, and mutual understanding of building techniques, building codes, and the design scheme between stakeholders had transformed the run-down school building into a well-equipped, popular, and well-functioning school. However, when I returned to Banwan as a researcher for the first time in October 2017, I found that over half of the students had been transferred to the primary school in Yata town. Only students up to the third grade and preschool children were allowed to stay in the Banwan school. A young teacher told me that the summer school taught by volunteers had been canceled because lower-grade pupils could not communicate in Mandarin with the volunteer teachers. In previous years, such

communication obstacles had been resolved easily with the help of senior students who had mastered Mandarin and spoke it fluently.

There were more indications that moving the school to the town weakened the village. The issues in Banwan arguably reflect discussions in struggling rural areas worldwide. It takes 40 minutes from Banwan to Yata town by motorcycle on bad and sometimes dangerous roads. Students must live on campus from Monday to Friday, and family members must be available to transport the children. The unfamiliar environments put psychological pressure on young children. One parent who sent his son to the town center primary school complained to me that his son was subjected to violence at school, and some students had dropped out of school due to bullying.[179]

During the site visit in October 2019, the school headmaster, Li Xianrong, told me that the school had become completely "hollowed." The remaining students had by then been transferred to the schools in Yata town and the county seat. Several classrooms had been taken over as village committee offices, and the rest were locked or being used as storage rooms. Initially, the school headmaster took responsibility for running routine maintenance tasks of the rural cultural classroom. As an unfamiliar functional space that had never existed in the village, the responsibility was unclear, and the buildings and spaces were not regularly maintained. The school headmaster told me: "We have neither the time nor the experience to operate this exhibition room, and the village committee has hired no professional manager to manage the exhibition; the village committee had no budget to follow up."[180] In the interview, the school headmaster also complained that the design team had overestimated the attractiveness of the exhibition on the ground floor; it was hard to arouse the interest and curiosity of local villagers and even domestic visitors from the surrounding areas. The rural cultural classroom had already been in disuse since the autumn of 2017, and the space was not operated correctly; for example, doors and windows were not opened for ventilation, and the exhibits were being damaged by the dampness (Figure 5.78). At present, the rural cultural classroom is deemed a "propaganda poster," only opened for government officials' inspection.

The renovated building had created a new spatial experience for learning and social interaction. However, its architectural success so far did not keep the threat of the school being closed down at the bay. Several findings can explain what contributed to unexpected outcomes for the team. The political decision to move the children to the school in Yata was consequential, and the insufficient use of the rural cultural classroom might also point to a lack of local competence. Moreover, well-educated young teachers seldom choose to remain in a remote village. During the interview, the head of the school told me that young teachers prioritized working in the schools in the town center and the county seat if opportunities were available. Even though the school had been equipped with all the necessary physical facilities, the

lack of teachers negatively affected the resources utilization and the quality of education. In a nutshell, there seemed to be a lack of interest amongst almost all key operators of the primary school. And there was no mechanism to change management and choose people who were dedicated to the school operation.

Figure 5.78: The articles on exhibit were stacked randomly in the cultural classroom and were in 2017 in a state of degradation. The photo was taken on October 10, 2017. (Source: Lyu Pinjing)

In addition, as mentioned before, farmers' objectives and actions are understandably closely related to their livelihoods and what they see as their responsibilities. The villagers choose their participation in the project/community based on their short- and long-term perceptions of possible positive effects. A closed school was no longer a place closely related to the residents' life. The rural school and its cultural classroom lost their social connection with the community because of the unprofessional management and the stagnated condition. The school's situation has changed after 2019, which will be discussed in the latter part of the chapter.

Temporarily suspended workshops

The design team had converted three dwellings into a pottery workshop, an embroidery workshop, and a brewing workshop. These projects were thought to be essential to the project, bridging intangible heritage and living habits with capacity building, establishing new industrial development through workshops, and creating new work and income possibilities. The projects were hailed in the media and shown to government officials visiting Banwan. However, in the fieldwork

conducted between 2017 and 2019, I found that the workshops were vacant and apparently disused. A challenge in the fieldwork was to find out why this was so.

Family-based pottery workshop

The pottery workshop aimed to revive the lost traditional pottery skills in the community, create various levels of engagement through the participation of local pupils, and create events for visitors. A more direct intention was to create a possibility for He Biao – considered a central local resource person – to stay in the village. The idea was that he could develop his own small pottery business that he also put online, using Taobao.com or another platform like thousands of other stores in China.[181] Our hope was a successful demonstration project that showed the potential of an inventive and independent economic strategy to the younger generation.

When I made a brief visit back to Banwan in 2017, I found that He Biao had left the village and found a job in a hospital in Xingyi. In an interview, He Biao said that he was under a great deal of pressure, both economic and social, due to neighborhood gossip, and he had determined that finding a decent job in the city was the right thing to do.[182] When he started his business, He Biao did not receive further economic support. His family was charged for the electric kiln and other devices in advance, which was an unaffordable expense for a poor household that had not yet started to earn money on its investment. The limited budget and support from his family and the village committee might have forced He Biao to find a job out of the village to earn enough money to run his pottery workshop. I cannot fully explain what had happened, the personal priorities, and the eventual contradictions in the community.

Figure 5.79: A summery-sheet for counting responses about young people's opinions on entrepreneurship in Banwan village. The investigation was conducted in October 2019. (Source: Author)

For this reason, I surveyed the Banwan's College Youth League in 2019. In this focus group, the young people were asked about their attitudes toward starting a business in the village (Figure 5.79). By far, the greatest level of responses was they wanted to return to the village to develop their career, but they think their opportunities are limited. A significant number of reasons were given: economic pressure, the lack of support, personal unpreparedness, and incomprehension from people around. The study's findings suggest that conservative local thinking kept the villagers from understanding and accepting a young man developing a new type of business and perhaps also prompted young people to engage in agriculture or work outside of the village. The story of the kiln, as well as the survey, is that economic benefits from an investment like this might need time to bring direct economic benefits to the households and that the establishment of financial sustainability for the program would take more years.

Brewing workshop

Seen both as a practical project and a demonstration project, the brewing workshop sought to creatively combine living space, production space, and consumption space in a traditional stilt dwelling. The project was set to underline an alternative and contemporary development paradigm that a stilt house could efficiently accommodate production- and living activities. During the construction phase, the act of design and the final spatial layout sparked renewed interest from the villagers. They began to see the stilt buildings they had shunned in a different light as a typology to combine modern and traditional ways of life.

The house owner had signed a two-year lease contract with the local government, which had exercised the right to utilize the building during the contract period. Li Jincun and his family members were allowed to live in the building, and the converted stilt house simultaneously promoted tourism and attracted investments. The local government also had planned and promised that this building would be important in tourism development. Visiting the site again in October 2017, I interviewed Li Jincun, who complained.[183] The tourism development in the village had come to a standstill, and the limited turnover brought uncertainty to the workshop's further development. Ultimately, the household did not want to become more involved in the process without being certain that the project would bring more benefits. The low level of engagement had caused the household to become less active. Like the embroidery workshop, the brewing workshop was also rented to an external organization in 2019.[184]

Embroidery Workshop

The workshop could provide space for showing Bouyei clothes and wax-dyeing to visitors and serve as a place where older women could teach young generations, sharing their experience and skills. After receiving a training course in Suzhou in

2017, eight female embroiderers would be responsible for organizing the workshop and educating others who had not gotten training opportunities.

In 2017, The training workshop did not work as anticipated. Village cadres shut down the embroidery workshop, and most women returned to conduct their embroidery activities privately in their homes (Figure 5.80). In October 2018, I evaluated this workshop and investigated many aspects of the scheme's impact, including to which extent the initiative had created new opportunities for Banwan women and what benefits the young women had experienced. The evaluation also examined the barriers experienced by the people engaged and whether these barriers were overcome (Figure 5.81). The situation has not changed much since 2017. Seven women accepted face-to-face interviews as part of the evaluation.[185] Their feedback showed a contradiction between a strong willingness to involve and little active participation. As several women stated in interviews, weaving in their homes was flexible; they usually spun and wove cloth in their spare time after farming and homework. They were not full-time professional weavers but held many other roles and occupations. Take He Biao's mother as an example of a Bouyei woman; she carried the heavy agricultural workloads and housework all day in the busy farming season. For the rest of the year, she needed to undertake household work and take responsibility for the livestock feeding and other light agricultural maintenance. The expected embroidery workshop operation did not adapt to the Banwan women's daily life to fragmented time, heavy workloads, and the burden of family care. Therefore, Bouyei women stated that they could hardly be involved in the well-planned programs, even though they indeed needed a designated space to produce, train, exhibit, and sell.

Another reason for shutting the embroidery workshop is that the community had little experience developing specific and targeted events. As discussed in the previous paragraph, all the stilt housings have been transferred to the local government (Figure 5.82). Yet there are few proofs that the government on different levels has shown responsibility or initiative to manage and develop the buildings as a resource. One of the village cadres has the key to open the workshop. There is the problem of imbalance, as the necessary rights are acquired by the administrators and not the regular villagers. The village committee did not operate the space as the idealized social space where women took part. Instead, they intended to manage the workshop into a place for leaders' inspection and show-off, distanced from the residents. My lesson is: if a development program is politicized or seen as something introduced from outside the village – as something to be adopted and followed at the behest of officials, cadres, or external enterprises – under the present conditions, it is unlikely to gain much favor from the community. In interviews, some women complained that they could not use the workshop, but other women didn't even know the existence of the workshop. As is the case with school, the situation has changed after 2019 and will be discussed in the following section.

Figure 5.80: The unoccupied embroidery workshop equipped with devices and facilities for the locals to produce and educate. The photo was shot in 2019. (Source: Author)
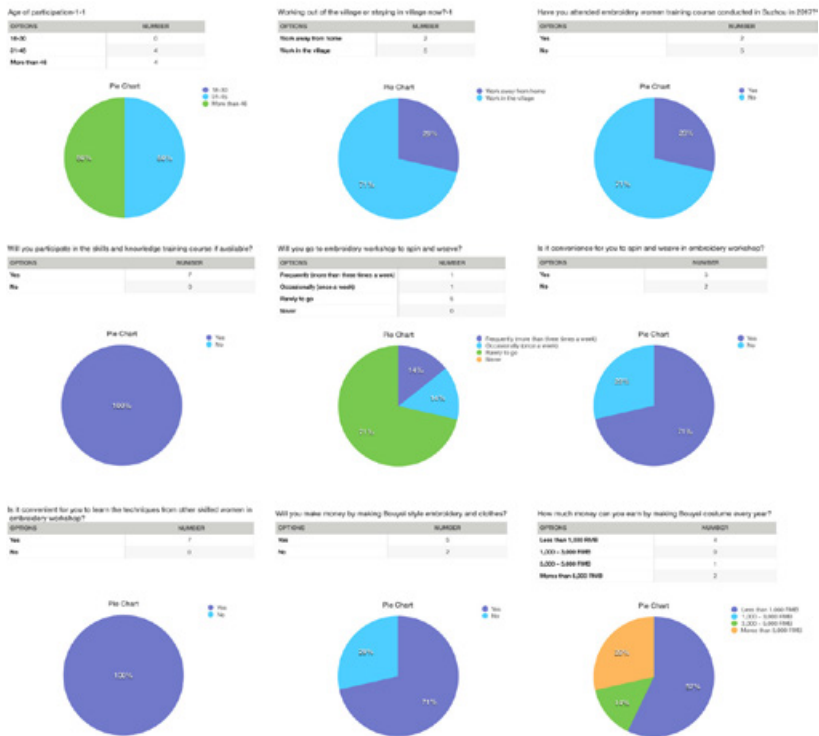
Figure 5.81: A summary sheet for counting responses about Bouyei women's opinions to the embroidery workshop. The investigation was conducted in September, 2018. (Source: Author)

Figure 5.82: Ownerships to buildings in the settlement. The local government dis obtain the right of use of the stilt housings. (Source: Author)

5.3.2. Public space and facilities performance

Reactivating community by establishing public space

The expert architect team designed, upgraded, and revitalized a series of public spaces with different scales and programs. We focused on multi-use and diversity of events that enabled Bouyei people to participate in many forms of social activities. Strategically, the school playground was designed as the core area of the community. The Bouyei drama-training classroom, the performance stage, the school building, the village committee building, and the pottery workshop acted as spaces with content that framed the open space of the playground. The place can accommodate various activities and events in which the residents can participate, eventually bringing a sense of pride and ownership. During holidays and at special times of the year, the residents use the school playground as a large outdoor theater and a center of village activity (Figure 5.83). In 2019, to further improve the physical condition of the opera stage, Professor Lyu led a group of students from the post-master program at CAFA – the *Rural China Construction Research Talent Training Program*[186] – and built a stage. The steel structure was used in large-span

roofs. It took only one week to weld, assemble, and complete the whole steel structure on the site. On the morning of the opening, the quiet village was bustling. A Bouyei opera was performed and attracted almost everyone. The stage became another gathering place for public activities. The older people enjoyed the sun, chatting on the stage, where the roof provided shelter for activities even in rainy weather.

Figure 5.83: A Bouyei drama is performed on the stage in 2018. (Source: Tang Lumei)

The newly built wooden structure and covered bridge heightened the awareness of a different sense of place and redefined function. For example, people liked to sit on the steps that extended in front of the school building, serving as bleachers for the basketball court and used for local village meetings or events (Figure 5.84). On the second day of the first fieldwork study in 2017, I was fascinated by a group of women who were preparing the thread for weaving on the roofed bridge. Taking advantage of the wooden structure, women stretched a cluster of threads on the beams and arranged them into different parts that would be used in the future (Figure 5.85). Cloth weaving is an inherently collaborative activity, involving intimate cooperation and participative arrangements within the community. At that moment, the roofed bridge became the production space in the community.

Figure 5.84: The wooden seating area is wide and there is room to sit and chat, allowing community members to relax during village events. The photo was taken on October 3, 2017. (Source: Author)

Figure 5.85: A group of Bouyei women collaborate to prepare thread for cloth production.

The photo was taken on October 2, 2017. (Source: Author)

Contested territory emerged

Parking lots and a tourist center in the farmland

In 2017, to offer a supposed convenience to the tourist, the local government decided to construct a large-scale parking lot and a tourist service center in the middle of the flat agricultural fields at the bottom of the valley. To do this, the local government leased 30mu of cultivated land from the village collective. Thirty affected households received monetary compensation according to the standard: 26 416 RMB (around 3 710 USD) per mu. The new asphalt road and the concrete foundation of the parking lot cut off the original irrigation channels that had provided sufficient water into the cultivated land. An anthropologist I met by chance in the village also told me that the parking lot construction had demolished the ritual site for the god of farmland. "The divine symbol was not a temple but a small plot under a tree," she said.[187] The crude new infrastructure construction was built without a careful survey and reduced the capacity of the cultivated land, and damaged what was considered a repository of culture; the site was linked to a myth but was also considered relevant for the future (Figure 5.86).

Figure 5.86: The construction of the parking lot severely damaged the irrigation channel. The channel had still not been repaired in late 2019. The photo was taken on November 9, 2019. (Source: Author)

The encroachment on the arable land affected the spatial codes of the agricultural fields: production activities, ritual and sacrifice, collective memory, and livelihood (Figure 5.87). Moreover, the tarmacked road and the parking area reduced the quality of the experience of the cultural landscape at the bottom of the valley (Figure 5.88). Without a full discussion of the options, this construction revealed a blind pursuit of modernization. Upon seeing pictures of the parking lot construction for the first time, Professor Lyu exclaimed:

> Banwan village relies predominately on its unique sense of place. The changes of the four seasons contribute to the scenic beauty of farmland, which attracts people to come to visit. Banwan village does not need to construct large parking lots far beyond its current and future needs. It destroys the nostalgia and fascination, feelings that unique, meaningful, and authentic farmland has endowed.

> Noted by author, 2019.

Figure 5.87: The new asphalt road and parking lot occupied a considerable area in the cultivated land and had drastically changed the pattern of the agricultural land. The photo was taken on November 9, 2019. (Source: Author)

Figure 5.88: The ten-meter-wide asphalt road cut through the landscape. The photo was taken on November 9, 2019. (Source: Author)

I visited at home a member of the village committee who had supported the road infrastructure and interviewed him. He explained:

> It all has to do with transportation. Back when there were no roads, no investors visited the village. The parking lot and service center can be seen as attractive hardware for potential investors who do not need to spend money on such infrastructure. What is more, we wanted to grasp this infrastructure construction opportunity; we can hardly expect another chance for a significant capital investment from the government again.

> Noted by author, 2019.

The local village committee saw the lack of tourist infrastructure as a disadvantage that had to be overcome to develop, eventually, a successful theme-park-style model village. Their opinion seems to be in line with public policies. The government invests heavily in infrastructure to develop tourism in the ethnic territories of Guizhou. Thriving tourism examples in minority regions throughout Guizhou provide templates and models that have been emulated and adopted in other regions. The "correct-looking and well-functioning tourist center" has enough parking to accommodate mass domestic tourism. Moreover, this model was deeply embedded in the development guidelines followed by local leaders, who saw it as an opportunity to strengthen Banwan's position within the regional market.

Solar panel matrix on the mountain

A new government concept concerning targeted poverty alleviation called *Photovoltaic Poverty Alleviation* (PVPA) was implemented in many poverty-stricken

regions in 2016 (Li et al., 2018). Impoverished households were encouraged to use their assets and labor to achieve income by installing solar panels (PV) on the barren hills, in the courtyards, and on the rooftops of houses. Banwan has more than 1 500 sunlight hours annually, which is higher than the standard set in the policy for constructing PV panels. A large part of the south-facing slope is considered available, and the good solar conditions provide physical feasibility and potential benefits for a PVPA project in Banwan. Thus, in 2016, coinciding with the Banwan renovation project, Ceheng County initiated another large-scale investment project, developing photovoltaic panels and constructions to combat poverty. The village committee leased approximately 2 000 mu (1.33 km2) of collective land on Bugong Mountain to a power company for 25 years. The power company planned to install 289 040 solar panels, all orientated south (Figure 5.89). In exchange for the land lease, the villagers would receive cash compensation: every resident would receive roughly 2 000 RMB in rental fees every fifth year.

Figure 5.89: The power company constructed the solar panel matrix on the south-facing slope of Bugong Mountain. The photo was taken on October 4, 2017. (Source: Author)

The PVPA project in Banwan generated some extra income for the households. The official advance promotion also claimed that the PVPA project would provide 200 jobs for residents during construction and maintenance. This was disputed both from the start and afterward. According to many villagers, the photovoltaic company did not hire any locals after the construction was completed. The deputy village director complained, albeit privately, that as a high-technology industry, the photovoltaic industry would not provide employment opportunities for less-educated villagers.[188] Furthermore, historically, the land that was rented out was pastures for raising goats and a necessary part of the local agricultural resources. Black goats provided a large part of the cash income for many households and had become one

of the critical assets in the village.[189] The radical transformation affected the village directly in terms of daily work and income. The solar panel matrix occupied the pasture for the goats, and the affected households had to either sell their goats or transfer them to pastures further away.[190]

Unused infrastructure

The Banwan project included the provision of well-constructed rural paths and drainage ditches and the construction of tap water pipelines to bring water to households and public institutes (Figure 5.90). The amenities constructed aimed to improve health and safety and increase the attractiveness of the village to visitors. In an interview conducted in 2017, however, two young teachers complained that the school still suffered from a water shortage, which made the toilets and showers useless.[191] Many households also told me that although their houses were equipped with the necessary devices, there was no water available. They blamed the village cadres who had turned off the water pipe connected to the reservoir but who at the same time provided water to the photovoltaic company for personal gain. However, according to the village cadres, the running water supply was stopped because the villagers wanted to use the running water free of charge and refused to pay the water fee. Historically, residents pumped up the water from the two wells located in the settlement. One decade ago, the village constructed a small reservoir that stored a quantity of water from Panlong Mountain. However, due to its location, the reservoir can only provide tap water to the households on the mountain's lower level. The residents never paid water charges, regardless of whether they used water from the wells or the reservoir.

Figure 5.90: Pathways covered by stone blocks and gutters replaced the original dirt paths. The photo was taken on October 5, 2017. (Source: Author)

Thus, households deemed it unfair to be asked to pay the water for the tap water stored in the new reservoir, although they knew the charge was for the devices that conducted water uphill to the reservoir (Figure 5.91). The unresolved conflict between affected households and village cadres had resulted in a standstill on the tap water issue. Public buildings such as the school, canteen, and workshops had to endure the inconvenience caused by the water shortage because they shared their water supply pipelines with the dwellings.

Figure 5.91: The newly built reservoir can accommodate daily use of residences and public buildings in the upper part of Bugong Mountain. The photo was taken on October 8, 2017. (Source: Author)

According to the 20-day field investigation in 2017, one may find that many newly built infrastructural amenities had never been used.[192] For example, the photovoltaic system constructed on the south-facing rooftop of the school building had never worked. The donated biological degradation tanks aimed to provide a sustainable treatment of domestic sewage did not function. The school headmaster and related households explained that they could not manage these facilities even though detailed manuals were available.

Facts show that when designed to meet specific contextual needs, each of the com-

ponents of the capacity-building strategy should be accompanied by activities and tasks. Typically and perhaps ironically, the project effects are measured by inputs (number of donated goods, etc.) or outputs (number of installed facilities, number of assisted households). Yet, in order to evaluate the impact of capacity building on poor villagers, other outcomes have to be included: for example, the impact of the newly installed facilities, staff policies, financial mechanisms, and organizational changes that take place to facilitate the capacity of local people. Planning and conducting training sessions for learning and adapting to new changes – for example, learning how to manipulate the solar panels to earn revenues and dealing with the black water from the biological degradation tanks – are largely missing from the construction process. The Bouyei people had lived in harmony with their mountainous surroundings for many generations, developing various methods for managing natural resources based on their distinctive perceptions and sophisticated local knowledge. For example, Bouyei people knew how much water to draw from the well for a whole day and how to manage the black water from the kitchen and toilet. Therefore, when Bouyei people considered that they could not benefit from the new "hardware," most of the families went back to collecting and managing the resources by using traditional skills, which in turn led to the abandonment of the amenities brought with the renovation work.

5.3.3. Capacity building

Being trusted and influencing or even altering the attitudes and behavior of the community as well as the government official had been proven to be the most difficult aspect of establishing sustainable development in the settlement. A major challenge was to secure that the community accepted, was able to use, and to further develop the new socio-material layer and the spatial elements after construction was completed and the project organization dismantled. The Youth League, which has been mentioned in passing, a self-initiated organization that aims to plan and host community events, indicates that young people in Banwan have the ability to grasp new opportunities and the spirit of participation. During the Spring Festival of 2017 and 2018, this league organized a series of activities, including a basketball match, a Bouyei opera performance, and a festival gala (see Appendix A.7). The league raised funds to organize the activities, introduced the idea of the planned events and got community buy-in.[193] During an interview, He Biao, the initiator of the College Youth League, conveyed that the organization perceived their role as giving service to the community and took a pride in making a positive contribution. Just like He Biao said, "We just want to achieve things we wouldn't be able to achieve before by making use of new facilities and public space",[194] "I'm proud because it is the first time that important community's events were organized by young people other than village committee in Banwan's history," and "I'm more confident and knowledgable. Out of this I gained more confidence with our action, and I feel I am being respected and does my actions in the world does

mean something."

The capacity building in the first post-construction period was always considered a challenge. Many villagers did explicitly value their cultural heritage but did not know in what way this heritage had been kept alive, for example, in the Bouyei opera. In the conducted interview with the Banwan's opera troupe, all the interviewees stated that the art of Bouyei opera should be protected and also developed. But they were not able to mark out any development strategies even though they knew the main reasons why Bouyei Opera is not as popular as before.[195] This was one reason why external training programs were organized, and academic resources were invited to the village. The intention was to bring new activities and events into the village to forge a close relationship between the remote village and high-quality external resources and thus strengthen capacity building in the community.

From November 2016-November 2019, Professor Lyu and the local community staged several activities and events (see Appendix A.2 - A.7) of an academic and political character, discussing heritage protection and the principles of *Countryside Construction in China*. The Banwan project in these sessions was discussed as a possible general model. Academic interest and elevation of the discussion proved easier to gain than further grounding the projects and their potential in the village community and with the local authorities. One challenging aspect was the local understanding of *Intangible Cultural Heritage Protection*. Consciousness and inventive ideas were conveyed through seminars. Another type of activity dealt with *practical education*, providing local villagers with opportunities to gain experience, improve their skills, and make a profit through handicrafts. Thirdly, there were activities aimed at *capacity building*, strengthening local organizational skills in dealing with activities and events and using the investments.

The operational conditions of buildings, public spaces, and facilities demonstrated that the capacity building of the community is a process of institutional development. It needs time and human resources development. However, the design team in the construction phase is not a multidisciplinary team consisting of many professionals, which means the project group is disciplinary narrow. It only includes professional architects who provide professional responsibilities and ideas in rural spatial transformation. Many programs and workshops have temporarily failed because the officials and village cadres did not respect the stakeholders' participation as a promising mode of working, as well as the single disciplinary domain represented by the design team who were difficulty proposing all-around specialist expertise in the rural economy, policy, and marketing. Moreover, the risks associated with new programs and events are definitely higher than those of the existing condition. Due to the ambiguous policy and higher-level officials' attitudes, a few village cadres and government officials were unwilling to take the extra risk that

might affect their career prosperity and status. Therefore, we might understand that village cadres were unwilling to take development initiatives and were more likely to opt for the risk-free route. Figure 5.92 below illustrates an overview of the key stakeholders involved and their respective difficulties in capacity building and community participation during the first phase of the post-construction stage (2017-2019).

The difficulties of developing participation	
In those investigations conducted in the fieldwork, local population (including regular villagers and village cadres) detailed difficulties and challenges they had encountered.	
Key stakeholders	*Specific difficulty*
Farmers	Not willing to participate; Economic costs and risks discourage them; Lack of a routine channel of information about development program
Village cadres	Not able to mobilize the interest of county/village; Poor capacity for organization, management and leadership; Be afraid of risk taking for new programs
Township government officials	Lack of professional skills; Be afraid of risk taking for new programs; Insufficient financial resources; Lack of a training programme for villagers/cadres
School administrator	Large workload, low efficiency and large expenditure; Numerous tasks, more difficult to operate
Government officials are often suspicious of capacity of farmers by giving them a central role in community development and believe that effective economic management needs a external professional actors.	

Figure 5.92: The key stakeholders and their respective difficulties in community engagement. (Source: Author)

5.3.4. Rural buildings captured by "external interests"[196]

Ethnic tourism development in Banwan is still a primary goal both for the local government and the community collective. One problem confronted in the post-construction first years was how to market Banwan as a domestic and even international additional destination and how to manage and service people visiting the village. The programs made by Dragon TV made Banwan somewhat known throughout China. And the project was also known in the national and international architectural community due to lectures, exhibitions, and reviews. However, the village had no tradition of hosting domestic or international tourists and did not know how to manage the new situation. Somehow, the management discussion

ended with the stilt buildings being captured by an actor representing external economic interests. Participation in post-construction was typically very weak. Farmers who may have participated meaningfully in all stages of project planning and implementation were post-construction excluded from the decision-making and management of project activities. Observations from my fieldwork suggest different reasons for this lack of grass-roots involvement. First, officials follow specific goals and are interested in reporting particular outcomes. The local government wanted to hire an external travel company to manage the overall development and operation of tourism in the village and had already invited two tour companies during my fieldwork study in 2017. The two companies considered that the improved infrastructure could enable them to organize programs satisfying their economic needs. However, their interest was ultimately hampered by geographical remoteness. Second, the "safety first principle" (Bai and Cai, 2014) adapted to rural development means that local villagers should pursue a stable subsistence income and choose risk-averse behavior rather than seeking short-sighted maximum benefits. The households that had signed contracts with the local government had followed this safety-first maxim.[197] They claimed that "we are not as good as urban people in doing business, collecting rent is much safer than doing business by ourselves."[198] As I was told, owners of stilt buildings could receive 1 000 RMB in annual rent – in low-cost and low-pay Banwan, which was acceptable for the farmers. Third, in the post-construction stage, external expert architects had withdrawn and handed management over to the community. However, the village committee lacked the capacity and vision needed to mobilize the local population and promote sustainable endogenous development.[199] In the construction stage, for example, the primary function of the village cadres was to cooperate with the county and town government. Research undertaken in the village has demonstrated that a strong tradition of top-down decision-making is still very much alive and influencing the thinking and actions of the local community.[200] In early 2017, aiming to develop Banwan as a tourist destination, the Banwan village collective had established a cooperative company called *Yujing*.[201] The company did not work effectively and did not put into action or even propose any valuable practical development ideas.[202] The village committee's lack of consistent professionalism showed in weak organizational management, low market competitiveness in local enterprises, and perhaps most importantly the lack of enthusiasm leading to a shortage of initiative and inactivity in the village.

This allowed external actors with specific economic interests to intervene in the Banwan community. When I visited to conduct my research in October 2019, an external organization had taken general control of the village's quality resources. The town government had signed a contract with the company Big Mountain Small Traveler (BMST).[203] The founders of BMST stated that they noticed the Banwan renovation through the TV show and were fascinated by the distinctive school building, the traditional architecture, and the comparative complete infrastruc-

ture.[204] BMST came to rent the stilt houses at a relatively low price. A new bene-
ficiary had emerged rather unexpectedly and showed specific features of "market
monopoly" and professionalism. For example, BMST has the necessary skills and
knowledge to effectively advocate for and negotiate with the village elites, which
in turn used the benefits produced by renovation to serve their interests legally.[205]
The company had rented more than thirty unoccupied stilt houses for nineteen
years, through negotiations with the local government in Yata town; the annual
lease for each house was agreed to be 1 000 RMB only. BMST planned to build
homestays, a canteen, training camps, a gift shop, and a sugar-making workshop.
The company also gained operation rights for the brewing and embroidery work-
shops, including all facilities and equipment (Figure 5.93). By the end of Novem-
ber 2019, BMST had only hired three local villagers.[206] The company, according to
my investigations, seemed to be not too interested in contacting and doing business
with the local villagers directly. Apparently, their network appeared limited to the
village committee, the local government, and some village elites.

Figure 5.93: A map made by the company Big Mountain Small Traveler (BMST) shows
the ongoing and upcoming programs and schemes operated by BMST in Banwan village.
(Source: BMST)

Some facts might verify this: to keep a distance from ordinary residents, BMST se-
lected stilt buildings located on the fringe of the core area (Figure 5.94). It enabled
the visitors to live in a relatively independent tourist camp. BMST deliberately
collaborated with people with superior social and political status in the village.
Regarding the canteen operation, BMST's contact was the village population di-

rector, who had an official title, allowing him to exert local pressure and solve civil disputes. This brought on severe contradictions in the community. Powerful local elites were put in a situation where they protected BMST's interests and profits and avoided and eliminated trouble that might arise from direct contact between BMST and the rural society, which is full of complex relationships and perhaps represents other interests.
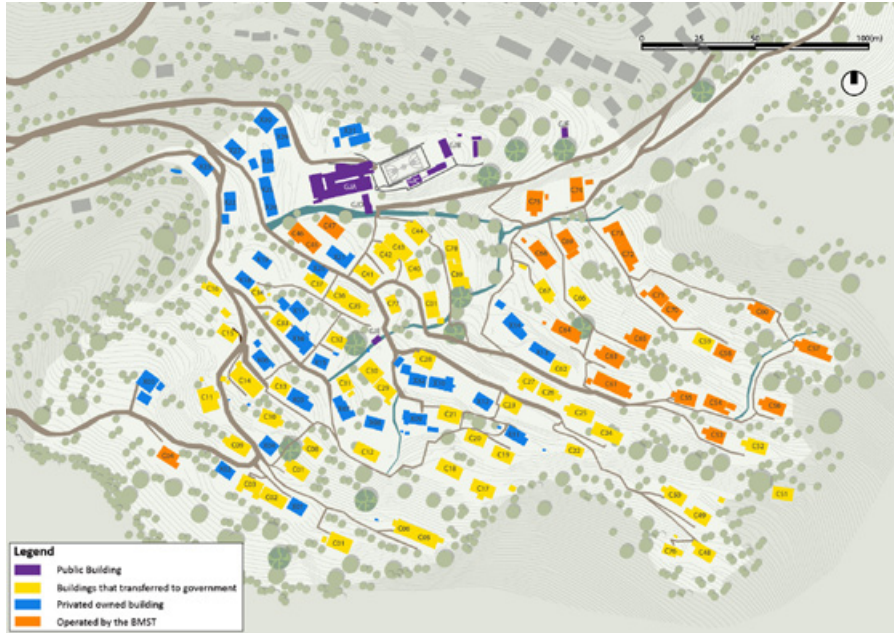
Figure 5.94: This diagram shows the localization of the buildings operated by BMST until August 2021. Most of the local people live in the renovated masonry houses marked in blue color. BMST hired and operated stilted dwellings marked in orange color. The marked yellow buildings were transferred to the local government as discussed in Chapter one. (Source: Author)

At this stage, it would be irresponsible to draw hasty conclusions regarding the actual local effects of the nineteen-year "hand-over" to BMST. External economic interests more or less capture the stilt dwellings and many facilities. In the initial period of the development process, the lack of ample financial capital and professional experience caused the local community to experience a period of hardship, as they could not handle commercial development. The external organization possessed ample knowledge and experience to utilize the available resources. The "vacuum period" of development allowed the external organization to enter and take control over the most valuable physical resources. This, in turn, discouraged the villagers from becoming involved in development processes.

On the other hand, BMST might improve and stimulate the development of

consciousness and the economic sense of local populaces by contributing their operational expertise and professional skills. Moreover, the BMST implemented a series of maintenance activities to care for stilt buildings and housekeeping, which opened up local employment. In an informal meeting with an expert architect in November 2019, the founder of BMST claimed that the brewing workshop, embroidery workshop, rural gallery, and the library of the school were unused during the time after the expert architects left and that the buildings were not "operated" in an appropriate manner. For example, he pointed out that the doors were not opened for ventilation when they became wet, and people who did not intend to use the workshop kept the keys.

From "external interests" to potential collaborators?

In August 2021, professor Lyu and I conducted another survey in Banwan village.[207] The research set out to investigate the processes of buildings transformation after 2019. As a result, several public facilities and workshops have been opened/reopened and turned into places that allow activities to occur (Figure 5.95). Specifically, BMST aimed to host events and workshops focusing on three main aspects:

• *The Livelihood*- which refers to programs relate to daily life (Figure 5.96), health, and business would benefit many residents who did not know how to think about long-term benefits by utilizing local resources.

• *Education*- which would provide valuable opportunities to left-behind children who would want to learn and acquire new skills. This would also offer a valuable and meaningful experience to interested volunteers.

• *Cultural preservation*- BMST would run events and programs on heritage preservation.

The school library was reopened and provided a quiet space for children to read and write. Feedback on the initiative has been positive. The children and their parents enjoyed this space (Figure 5.97). As He Fei said: "a group of volunteers now operates a school library. I want to bring my two little kids here to learn new knowledge during the holiday, not just stay home." The workshops offered handicraft production and rehearsal space for leisure and vocational training (Figure 5.98). BMST hired a group of local skilled staff members to decorate the building for maintenance and to guide the tourists (Figure 5.99). Furthermore, BMST organized the Bouyei opera show as part of their summer and winter camp program. The performing team would get a fund of 1 500 yuan each time. BMST also recruited volunteers from other places to run the gift shop, Cafe shop, bar, and canteen.

Number	Building type (s)	Ownership of housing	Synopsis
GLA	Village library	Owned by village collective and operated by BMST	The village library provides a place for villagers, especially children, to study quietly.
GLB	Office	Owned by village collective	Serve as the office building of the village committee.
GLC	Rehearsal room and stage	Owned by village collective	Serve as the space of rehearsal and performance of Bouyei opera
GLD	Bridge	Owned by village collective	Offer a place of public leisure and production
GLE	Pavilion	Owned by village collective	Offer a place of public leisure
GLF	Religious shrine	Owned by village collective	Offer a place of sacrifice
CT01	Residence	Transferred to local government	
CT02	Residence	Transferred to local government	
CT03	Residence	Transferred to local government	
CT04	Sugar making workshop	Operated by BMST	Offer a place of making brown sugar for tourists
CT05	Residence	Transferred to local government	
CT06	Residence	Transferred to local government	
CT07	Residence	Transferred to local government	
CT08	Residence	Transferred to local government	
CT09	Residence	Transferred to local government	
CT10	Residence	Transferred to local government	
CT11	Residence	Transferred to local government	
CT12	Residence	Transferred to local government	
CT13	Residence	Transferred to local government	
CT14	Residence	Transferred to local government	
CT15	Residence	Transferred to local government	
CT16	Residence	Transferred to local government	
CT17	Residence	Transferred to local government	
CT18	Residence	Transferred to local government	
CT19	Residence	Transferred to local government	
CT20	Residence	Transferred to local government	
CT21	Residence	Transferred to local government	
CT22	Residence	Transferred to local government	
CT23	Residence	Transferred to local government	
CT24	Residence	Transferred to local government	
CT25	Residence	Transferred to local government	
CT26	Residence	Transferred to local government	
CT27	Residence	Transferred to local government	
CT28	Residence	Transferred to local government	
CT29	Residence	Transferred to local government	
CT30	Canteen	Transferred to local government	
CT31	Residence	Transferred to local government	
CT32	Residence	Transferred to local government	
CT33	Residence	Transferred to local government	
CT34	Residence	Transferred to local government	
CT35	Residence	Transferred to local government	
CT36	Residence	Transferred to local government	
CT37	Residence	Transferred to local government	
CT38	Residence	Transferred to local government	
CT39	Residence	Transferred to local government	
CT40	Residence	Transferred to local government	
CT41	Residence	Transferred to local government	
CT42	Residence	Transferred to local government	
CT43	Residence	Transferred to local government	
CT44	Residence	Transferred to local government	
CT45	Youth Hostel	Operated by BMST	
CT46	Youth Hostel	Operated by BMST	
CT47	Youth Hostel	Operated by BMST	
CT48	Residence	Transferred to local government	
CT49	Residence	Transferred to local government	
CT50	Residence	Transferred to local government	
CT51	Residence	Transferred to local government	
CT52	Residence	Transferred to local government	
CT53	Home stay	Operated by BMST	
CT54	Home stay	Operated by BMST	
CT55	Carpentry workshop	Operated by BMST	Offer a place of woodwork for tourists
CT56	Home stay	Operated by BMST	
CT57	Coffee bar	Operated by BMST	
CT58	Home stay	Operated by BMST	
CT59	Residence	Transferred to local government	
CT60	Youth Hostel	Operated by BMST	
CT61	Embroidery workshop	Operated by BMST	Offer a place of embroidery for village women
CT62	Residence	Transferred to local government	
CT63	Brewing workshop	Operated by BMST	A show room about Bouyei's Brewing activities
CT64	Canteen	Operated by BMST	Change the brewing workshop into BMST's staff restaurant
CT65	Home stay	Operated by BMST	
CT66	Residence	Transferred to local government	
CT67	Residence	Transferred to local government	
CT68	Home stay	Operated by BMST	
CT69	Home stay	Operated by BMST	
CT70	Bouyei food court	Operated by BMST	
CT71	Village pub	Operated by BMST	
CT72	Volunteer dormitory	Operated by BMST	
CT73	Volunteer dormitory	Operated by BMST	
CT74	Reception/grocery	Operated by BMST	
CT75	Home stay	Operated by BMST	
CT76	Residence	Transferred to local government	
CT77	Residence	Transferred to local government	
CT78	Residence	Transferred to local government	

Legend	
Public building	
Transferred to local government	
Operated by BMST	

Figure 5.95: This table shows the current building types, programs, and ownership of the public building and vernacular architecture. It is noted that many BMST-operated facilities are opened to both the local villagers and tourists. (Source: Author)

Figure 5.96: BMST created a series of playgrounds that took advantage of the terrain, focusing on low cost and simple technology. The design strategy is an outcome of holistic considerations such as meeting and combining the needs of both tourists and rural children's activities. The photo was taken on August 1, 2021. (Source: Author)

Figure 5.97: BMST recruited a group of volunteers to teach rural pupils during the summer vacation. Moreover, volunteer teachers organized group activities for children to explore their hobbies and interests. The photo was taken on August 2, 2021. (Source: Author)

Figure 5.98: A local young woman is preparing the material for embroidery in the workshop. The photo was taken on August 1, 2021. (Source: Author)

Figure 5.99: BMST recruited a group of community-spirited villagers to assist in the program's operations. (Source: BMST)

Our recent investigations might indicate that BMST operates differently from the previous developer (*jin gu zi*) that turned the land into a profitable commodity and did little to solve the community's difficulties.[208] The members of BMST are professional in the way they understand the qualities of the product they want to sell. However, like all private market orientated businesses, they are preoccupied with their profit, their "bottom line." The success and well-being of the people of Banwan are in their interest to the degree that this serves their profit. This is basic Marxism.

In the end, Professor Lyu and his team had to realize that the performance of BMST would be crucial for the success of the longevity of Banwan's rural transformation. Therefore, from 2019 onwards, Professor Lyu invited BMST staff to participate in a series of interviews, academic exchanges, and meetings with relevant parties of the Banwan community (Figure 5.100). This activity became an important platform for the expert architects and BMST to exchange and share their development philosophies and challenges.

Establishing an operational team is crucial for the successful use of the new architecture of Banwan. In a village setting, this requires an operator with good connections in the community.[209] When BMST was invited as a key stakeholder, the responsibility lies on them and the local government. This new management

initially did very little to involve the residents and did not share the profit back with the village. However, while their organization and responsibilities have become more prominent, business was established in the village according to a long-term investment plan and welcomed by many residents. For instance, Huang Tinghua, the former village head, said: "I like BMST because the company enables more tourists to visit Banwan village with increasing exposure as an effect. Also, it makes the settlement more beautiful and clean".[210]

A critical question is what percentage of the profit is turned back into the village, and to what extent the villagers are brought into management and future development discussions. These questions remained uncertain. As to the link between the project development and the management, a possible collaboration between expert architects and BMST might be regarded as a kind of pilot.[211] The architects are not directly involved in the management but would provide necessary support from outside. For instance, Professor Lyu helped local women to access embroidery training in Suzhou and led a group of students to build the new opera stage, establishing a resource for the community. However, as the principal operator, BMST had a clear idea of how the resources would be managed, how buildings and events would be programmed, and how Banwan – as an investment – could be financially sustainable.

Figure 5.100: One of the design team members (the author) and BMST staff are meeting in Banwan and sharing their thoughts and ideas about development strategies. The photo was taken on September 9, 2021. (Source: Author)

Chapter 6

6.   FROM EXPERIMENT TO MODEL?

The Banwan renovation project emphasized the analysis and arrangement of the public space system. Firstly, it preserved the sacrificial space that centered on the mountain god temple; secondly, it intended to enrich the rural living space through the pavilion and canteen construction; and thirdly, it built the rural cultural activity center through the improvement of primary school function, reconstruction of the village committee building, construction of new Bouyei cultural education center, drama stage, wind-rain bridge, and the household-based pottery studio.

The Banwan practice also emphasized typological – construction-wise, material-wise, and in terms of iconography – coordination between newly built buildings and the traditional stilt buildings. With residents' consent and support, the design team integrated the new projects into the groups of traditional buildings but adopted traditional building materials, architectural construction, and craftsmanship. Aiming to reduce the economic impact on the households, the original structures were straightened and reinforced, the exterior rammed walls were rebuilt and patched using traditional methods, and the vertical wooden panels in the front facade were repaired in line with the original style.

The Banwan development intervention practice particularly emphasized the integration of traditional crafts and the revitalization of intangible cultural heritage. One vacant stilt building was transformed into an embroidery workshop for training and production that also serves as a commercial space for local populations. The Bouyei cultural education center, wind-rain bridge, and the drama stage served Bouyei drama, Bouyei seated singing, Bouyei mime shows, and other activities. A new Bouyei culture- and heritage classroom was set up adjacent to the primary school and provided a space for local youth and tourists to explore Bouyei culture. The household-based pottery workshop can revitalize not only the traditional pottery craft but also create an opportunity for a college student returning home to establish a business. The brewery workshop construction was intended to provide an example of combining the productive preservation of traditional and everyday life.

The above text is quoted from the introduction to the Banwan project shown as part of the Rural-China exhibition at the *2018 Venice Architecture Biennale*. The text underlines that the overall intentions of the projects and nearly all the pre-planned programs had been successfully achieved.

However, a series of project implementation processes described and discussed in this research reveal that this descriptive text does not fully capture the complex,

constantly changing, vivid local practice. After witnessing and studying the whole process, I found that some of the development intervention programs were far from being implemented according to the plans and intended outputs: some programs produced different effects than what was expected, some programs were adjusted after encountering local context, and some programs were still ongoing after the expert architects team left Banwan, and these programs often faced an uncertain future. I also found that some follow-up programs were gradually transformed and dominated by the directives and top-down implementation mechanisms put in place by local government officials, in opposition to the project's overall preset policy. The explicit ideology of participation flagged by the Beijing expert architects emphasized that the local population should be considered clients rather than passive beneficiaries.

Experiences gained from processes and outcomes were intended to set a new standard for village preservation as a strategy for countryside construction and eventually establish a new model for rural action, pointing out the uniqueness of a participatory process involving deeply engaged expert architects. The project as a possible model is the point of departure for the discussion in this chapter. What may knowledge be learned from the Banwan processes? In what kind of village situations are the Banwan model applicable? And what adjustments are needed for the model to work in a better way?

I have organized this chapter to answer my initial research questions, which, although formulated differently during the process, have guided the investigation from its inception.

1. What are the key strategies and models for village upgrading in contemporary Chinese rural policies, as learned from studies in the Guizhou province?

2. What may be learned from the complex process of transformation in the village environment of Banwan before the project was initiated, especially in the recent period – from 2002 to 2016 – when many governmental initiatives for rural upgrading were launched?

3. How might the cultural and intangible cultural heritage of a minority be a driving force in the process of improving the conditions in the village and reshaping public space?

4. How may the expert architects perform a unique part in the process of rural renovation, and how does this part affect other roles and relationships?

5. Does the Banwan experience represent a possible new model for village renovation in China, and if so, what might be learned from the case study in order to refine the model?

To answer these questions, I have, in Chapter 4, elaborated on the driving forces, policies, and practices for settlement transformation from 2002 to 2020. In Chapter 5, I have presented my empirical material from the Banwan process. In Chapter 6, I evaluated the architectural quality achieved during the construction phase (Chapter 6.1) and discussed the expert architects' working methods during and after the construction (Chapter 6.2). I outlined the social-economic consequences of the project (Chapter 6.3), analyzed findings from the gaps between predictive and actual performance (Chapter 6.4), and discussed possible sustainable social measures (Chapter 6.5). Based on the empirical discussion, I conclude on the characteristics of the model compared to other village and poverty-alleviation strategies discussed in Chapter 4 (Chapter 6.6). I am considering the model from the perspective of relative costs (Chapter 6.7), the relevance of the model (Chapter 6.8), and necessary adaptions in order to make this pilot into a possibly well-functioning model for village reconstruction (Chapter 6.9).

6.1.   Evaluation of the Project's Architectural Quality

Much attention was given to the architectural quality. The main question in terms of discussing the strategy as a possible model is to evaluate this priority and the outcome of this priority. Banwan was one of the two villages in Ceheng County that still contained a substantial number of Bouyei-style stilt dwellings set within a unique landscape, a situation that reflected the Bouyei culture. One might arguably state that the village's most important resource was its authentic architectural structure and character. Investment in architecture was chosen as a strategy to further develop these unique resources and strengthen local culture and make it possible to initiate locally sustainable tourism. There are many values inherent to the vernacular buildings, such as the symbolic and cultural values of Bouyei architecture and art, as well as the cultural/emotional values that maintain the sense of place and identity. Even from an economic point of view, the stilt buildings may be worth conserving for their use value, considering that the cost of renovating a stilt building proved to be less than the cost of constructing a new house with modern materials as I would further discuss in Chapter 6.6.

The architects' priorities and design decisions during the planning and construction process made the project characteristic and even iconic in a Chinese architectural context. The architectural qualities were the outcomes of a holistic approach and a specific "architectural strategy" adapted to the site and situation. Different architectural strategies have been used in rural Chinese villages, both for particular projects built in a village context and for an entire village renovation. These strategies have been well presented in Chinese and international architectural press.[212]

• Theme park strategies, mentioned in Chapters 1.1 and 5.27, adapt to mass tourism by repeating "Chineseness" and "minority exoticism" in typology and iconog-

raphy, highlighting popular architectural elements. Examples are the very well-known and commercially successful Wuzhen Town[213] in Zhejiang province, some ethnic villages in Guizhou province, including Xijiang Miao village, Zhaoxing Dong village, and Basha Miao village, as well as specific areas inside the different Chinese metropolises like the districts of Yuyuan Garden& City Temple in Shanghai and Wangfujing Street in Beijing. The theme park architecture is mostly brand new, inspired by elements in the tradition, and eventually combined with repaired and protected buildings. The buildings of the theme parks are commercial entities where historical values and often the ethnic diversity of a region are represented to the visitors.

• Modernization strategies refer to architects taking traditional craftsmanship, site-specific materials, and specific vernacular architectural style as their inspiration and as a basis for their creative vocabulary. Chapters 2.2.3 and 5.1.6 have elaborated Wang Shu, Meng Fanhao, and Rural Urban Framework's practices which are all examples of modernization strategies. Adaptations of the village structure, the morphology, the building types, and the usage of contemporary materials required experimentation with tradition in search of both modern and unique architectural expressions.

• In project/acupuncture strategies, architecture is used as a means to develop villages by adding singular high-quality projects. In China, this is the most common architectural strategy in village renovation. The projects might be locally initiated, often by migrants returning to their village, or instigated from outside, sometimes by architects. A specific project with a defined program is developed. An often used program has been small libraries and book-shops and services for domestic tourism. Examples are Sun Tiantian's small-scaled rural projects, including a farming museum, a tea room, and a bamboo pavilion in Songyang village. "Project/acupuncture strategies" have positively worked as a way to introduce public programs in rural villages. The strategy to add public programs framed in what in the discipline is considered high-quality contemporary architecture runs the risk of creating iconic buildings with little or no connection to the community.[214]

• Conservation/preservation strategies have been used extensively also in China, protecting historical monuments and heritage sites. Conservation means, in this context, to protect against harm and destruction. Preservation denotes the activity and process of keeping and maintaining. These strategies are by now – although late compared to the practice in western culture – also in China extended to preserving the vernacular architecture of important value both in cities and in rural areas. An ethnic village called Dali village in Guizhou province is an illustrative example[215]: the preservation of the drum tower and the covered bridge in the village gave meaning beyond the preservation of the physical structure and linked to social, economic, and cultural issues concerning the village itself.[216]

• The architectural strategy applied in Banwan might be described as distinctly different from the other four defined approaches; however, the work in Banwan also borrows elements from all of them. The characteristics of architectural strategy will be elaborated in Chapter 6.5.2.

As an involved resident architect, I had arrived at the limits of my self-evaluation capacity when I tried to judge the quality of the architecture and thus refer to assessments from external experts. Generally, evaluation of architectural quality refers to disciplinary criteria but also depends on the cultural setting and changing modes over time. The chosen design is also more or less explicitly evaluated by the users. My humble opinion on the subject of architectural critique is that quality should be judged by the appropriateness of the architectural solutions as a response to the challenges confronted, as well as how the project situates itself within the design tradition.

In the context of Chinese rural renovation, Banwan is considered a hegemonic project, meaning a project that is highly acclaimed and represents contemporary values in village restoration. This is evident by how well the project was received by the Chinese public and how it was chosen for international publication and reviewed in the Chinese architectural press. The same goes for the quality of construction, handicraft, and detailing. Here, I am a witness of sorts, knowing the amount of work put into the cooperation with traditional craftsmen.

As a notable rural renovation project, the Banwan project received positive and negative criticism from end-users (villagers, schoolteachers, members of BMST), scholars, and observers. Some examples of positive feedback from the users are: "the new school building greatly improved the educational environment for the students," "the newly built building renovation provided larger storage space with good ventilation," and "Banwan village looks cleaner and more beautiful."[217] Some negative feedback refers to technical standards and functionality: "the cornices are not long enough, the heavy rain can enter rooms and make the wall very wet," and "some facilities in teacher's dormitory cannot be used."[218]

One of the most frequent professional critiques from the architectural community was that the "Banwan project was well-intended and a good try, but it seems to have done nothing."[219] Several skilled architects and knowledgeable observers criticized that, unlike in the case of Wang Shu's Wencun renovation, the architects of Banwan had not paid enough attention to architectural aesthetic exploration. However, Professor Lyu had deliberately chosen not to pursue innovative aesthetics. Instead, the design team tried to follow the idea of the renovation project as an expression of traditional rural lives and not as a project imposed from the outside as an artificial image of gentrification.

6.2.   Learning from the expert architect's working methods

The Banwan project has been called "expert architect-led" and "community-centered," being organized in a way that allowed architects to contribute with their expertise differently. There was an intention to make significant efforts to involve the community and households in the process of identifying the needs and in the implementation of plans and projects. A central lesson of the in-situ expert architect-led practice was that the expert architects and the external collaborators needed to review and modify their conventional roles and relationships with other actors in the renovation process. The local government commissioned the expert architect, and a precondition for following the intentions of the project was that the architects involved themselves, abandoning the images of remoteness and inaccessibility that made villagers feel distant. In the context of the Banwan project, the expert architect acted as a professional, competent and efficient advisor and filled the role of a facilitator, educator, negotiator, and author of design programs to fit the needs of the village and the singular inhabitants. Expert architects in rural contexts must adapt their ways of working to accommodate the capacity of endogenous development of the settlement and the specific cultural, historical, and social context in the rural community.

6.2.1. The architects' self-cognition

I use "self-cognition" to denote the architect's mental action or process of acquiring knowledge and understanding through senses, experiences, and analytical thinking. In architectural production, this mental action is a creative process that involves all kinds of knowledge but is always directed towards formulating and evaluating concepts and design ideas that are used for developing the project. This tends to be a very personal process; although it involves many people, architecture normally has authors. "Authorship" and architects' pursuit of their aesthetical languages is also evident in most large projects over the last decade in rural China.

The Banwan project definitely shows the mark of an architect and, thereby, authorship. The school, in particular, might also – in terms of design – be seen as signature architecture.[220] However, some characteristics of the Banwan project are distinctively different from the typical new rural architecture in China. In Professor Lyu's words: "I do not pursue the architectural morphology as much as other architects do; what I considered more was about systematic problem solving (2018: 83)." In my interpretation, this means that the architect, to a certain degree, suppresses the creative impulse that aims to pursue personal aesthetics and work as a medium to stimulate the new narrative of rural settlement and thereby tries to develop social space sustainably. "Contextual" is a relevant concept here; "contextual architecture" most often refers to architecture inspired by the historical and/or

vernacular context to which it is added. This might be expressed superficially by copying historical forms – as is the case with most renovation projects for touristic purposes in Chinese villages – or the adaptation to the context might be far more reflective. In the Banwan project, the term context was interpreted broadly and inclusively, involving the village as a habitat, a socio-cultural system, and morphology and building tradition. I maintain that Banwan appropriately should be termed contextual architecture, albeit framed within broader political ambitions, aims, and means. The project should also correctly be considered and described as an "urbanistic" project in terms of scale; in terms of the intention to conduct a comprehensive analysis, pointing to the focus on strategy; in terms of time constraints where the project has to be followed up and completed in order to work, and in terms of process and involvement.

6.2.2. A mutual learning process

A closer observation reveals that the rural renovation program's design team, government officials, villagers, and construction teams represented different ways of understanding or different "ideologies" in response to their intentions and positions. The continuous processes of extensive communication, dialogue, negotiation, and interest exchange did build an environment for embedded cognition, a platform of knowledge, and more common attitudes. An opportunity for mutual learning was established – when the tradition and the modern, the old and new, the academic experts and the locals and the Chinese majority and the Bouyei came together in this project to make a joint contribution to rural development.

For example, the findings suggest that authentic Bouyei culture was an ambiguous concept for the government officials. It appeared that for the political leadership, the objective of the village renovation was to commercialize elements of minority culture, putting into action the modification and reconstruction needed for marketing Banwan as a tourist destination. However, the architects' design schemes and activities continuously reminded them that local cultural elements could act as the foundation for achieving sustainable local village improvements. Moreover, mutual learning enabled the architects to continuously amend and improve their rural renovation ideas and strategies.

6.2.3. Limitations to the expert architect's competence

Perhaps the most critical issue raised in this chapter is whether an expert architect's competence is sufficient in a renovation project like the one in Banwan. Of course, this is dependent on personal characteristics, knowledge, and attitudes, and Professor Lyu, in my opinion, filled the role optimally, but the question might also be discussed generally and related to the limitation of disciplinary knowledge. Two questions spring to mind when discussing the competence in the discipline of

architecture, confronted with the challenges of village development in a poor area inhabited by an ethnic minority—the first deals with understanding society, the second deals with establishing and running long-term development processes.

Architects have the capacity to analyze the physical structure and to see these structures as a social and cultural phenomenon with wide-ranging implications for local society. Disciplinary knowledge includes the ability to program and negotiate programs concerning needs and costs. Above all, architects master the ability to design and build. The relationships with clients and users are challenging in all building processes but are particularly demanding in practicing within an ethnic culture.

In Banwan, the architects understood that much-needed capacities belonged outside their core professional competencies. The character of the process also implied that they had to expand their role to being facilitators so the programs could run smoothly. They had to teach local actors how to develop their capacity to work with the new facilities. They had to reprogram and provide proposals for new requirements for the renovated buildings and facilities to meet unexpected situations. Most importantly, the architects acted as consultants for the community's interests, helping locals negotiate with external investors and institutions. By being part of the current comprehensive discussion on rural/village development in Chinese politics, practice, and academia, the role of the architects – the way I see it – was somehow "ahead of the game."

With all these taken into account, we still had a major problem to face - that was to understand the needs, priorities, and actions of the villagers and translate this knowledge into the project. In order to make the project work, the villagers had to feel responsible for the project and have ownership. Might be skilled and experienced people with backgrounds in such disciplines as anthropology or sociology and with knowledge of ethnic cultures in Guizhou have contributed to making this process more successful? Based on experiences from the project, my conclusions and recommendations are summarized in these points:

• The problems addressed in the rural community are typically complex, involving social, political, spatial, economic, cultural, and environmental aspects. Experiences from the Banwan project point to the need for a more multidisciplinary approach. Knowledge and capacity from the social sciences might have added to the understanding of Bouyi culture, helped out in developing community participation, and set out a framework for capacity building of local organizations and staff.

• The process of working together with the local community should have been planned in a better way. The team and the government officials should together have developed processes to seriously engage regular villagers and village cadres to make them able to influence by participating.

• Incentives and engagement mechanisms for cultivating the human resources taking part in the project should have been stated from the initiation of the project.

In the post-construction phase, when the team of the expert architect did not take part daily, the village was somehow left on its own, running on its traditional institutions. No specific organization for management and further development was established. This made room for different departments and interests to initiate their agendas and actions, developing and sub-optimizing projects without taking into account the project's initial purpose and evaluating the effects of new initiatives on the outcome of other parts of the program. Although the team provided several kinds of support, the limitation of the contract and maybe the disciplinary capacity made it difficult for the expert architects to build a sustainable operation system, including a long-term system for capacity building, including residents, village cadres, and administrative agencies. My investigations tell us that these systems should have been an obligatory part of the project that would require competence from other disciplines:

• In the post-construction phase, different kinds of expertice are needed to manage and develop the project. The transition from the project phase and the temporary uses of renovated space into long-term rural development proved far more difficult and elaborate than initially expected.

• Particularly, government officers should be trained in participation processes, community development and project management in the post-construction phase. Better cooperation and transparent communication would have improved the process of implementation, enabled the residents to participate in the programs and probably brought about a stronger sense of ownership.

6.3.　The socio-economic consequences of the project

Evaluating the social-economic consequence of the Banwan project is a vital task and more difficult to achieve because of the complexity of the social and economic processes upon which development programs act. There is also a lack of local government statistics, and little priority was given to systematically investigating the socio-economic results in the post-construction years. For my evaluation, this creates, if not a "blind field," what might be termed a "blurred field," and limits some possibilities for justification of the project, for learning from Banwan, and for improvement of the Banwan model. My opinion is also that the effects have to mature and that some historical distance has to be achieved before relevant socio-economic data will come out of a systematic set of interviews with the villagers. Likely, the autumn of 2022, when I am visiting Banwan again, will be the right time.

There are also some limits to the knowledge gained from a deeper investigation of local socio-economic consequences using interviews and surveys. The architectural

intervention and the program initiatives were intended to promote the situation in the settlement. However, other government-led programs, which also operate simultaneously, make the project's specific effects difficult to assess. The short-term effects of the different programs are also difficult to measure, and my way of handling this in the thesis has been the use of qualitative descriptions, for example, my analysis of the social effects of the new bridge.[221]

Referring to the text in the thesis, I identified some key points in the post-construction phase in line with the main social and cultural aims of the Banwan project. A few of them might be termed confidence building:

• At the end of the project, the stilt dwellings and other handicrafts were locally perceived as important community heritages (facts indicated in Appendix A.8, parts 1-3).

• To return to the village – "back to the land" – was established as a potential choice for young people (facts indicated in Appendix A.8, part 4).

• Young farmers are by now able to organize events and apply for external support from the government (facts indicated in Appendix A.7)

Appendix A.8 summarizes the different reactions and concerns of three main local organizations in the village. The surveys[222] demonstrate that the constant engagement throughout the process has brought awareness to the community and created a new level of consciousness, responsibility, and ability, for example, in terms of managing cultural heritage. The level of engagement may vary, but social impacts are generated by people becoming more proactive in considering what is happening, what they want, and what they can offer. The local organizations seem by now aware of their potential and their power.

However, during the process at the general level, in the cases elaborated in Chapter 5, there was a little local-level incentive to promote the main aims established in the Banwan project. In the surveys[223], few elaborated on or even mentioned collaborative development. Self-employment based on the newly-added programs and resources did not appear as intended or only maintained within a short period. The critical question in this regard is what factors contributed to such consequences. The model itself? How was the model managed? The design strategies for the village renovation? To come nearer to answers to these questions, Chapter 6.4 will analyze the "gaps" between the predicted and actual performance.

As to the economic consequences: A governmental report shows that poverty alleviation has worked in Banwan and that village was lifted out of poverty by the end of 2020.[224] The statistics show that the number of rural poor had fallen to 20 people, (there are 587 registered poor people in 2014) by 2020, and the incidence of poverty from 34.33 percent in 2014 dropped to 1.17 percent by the end of 2019.

There is, however, difficult to draw sound causal links between Banwan project and the increase in household income. Not only because other government-led projects were implemented simultaneously, but also because the Banwan project pursued a strategy for long-term and self-reliance financial sustainability, and not increased income generated through compensation and by migrant labor.

6.4. Finding from the Gaps: a comparative analysis of predicted and actual performance

Judging by the outcomes as perceived, right after the construction work was finished, most design intentions were achieved. However, the consequences of any intervention are determined by the interaction of multiple factors. In Chapter 5, the "gaps" are documented as predicted and actual outcomes, indicating that the outcomes of the planned activities were not always as simple and linear as anticipated by the architects.

The expert architects had raised the expectation of the effects of community-based renovation. Given the market appeal of the ethnic village and labor mobilization in the course of the renovation, the expert architects expected that the farmers would involve themselves, manually and financially, in subsequent activities. From the perspective of the architects, regular villagers' direct involvement in decision-making and operations also in the post-construction phase was necessary to create sustainable community-based development. However, the anticipated effects as continuous operation of the workshops, development of the primary school, and most importantly, the return of young people back to the village and to start a new business, did happen to a very little extent. The occurrence of this – from the architect's point of view – unanticipated low community participation might to some extent be linked to the short time frame of the construction, the lack of adequate management, and the lack of good local/village/town/county leadership in the post-construction phase.

6.4.1. Time constraints of renovation practice

Rural renovation takes time. Programming and project design in the Banwan project failed to take into account the time-consuming nature of the local engagement process. Detailed project planning (term of reference consultancy contracts) over fixed periods (six months) is required to specify inputs and expected outcomes. Although the whole idea of the spatial renovation included the idea of local engagement, the time constrain of architectural practice gave little room for its operationalization. This may be considered a major factor that was problematic and provoked difficult effects.

Chapter 5 discussed the difficulties in implementing physical construction during

the limited time frame of the Banwan project, and this problem is already mentioned in Chapter 3, where figure 3.2 describes the key events in Banwan. Designing and constructing the school in two months and building the three workshops within three months required new skills and consciousness and brought on challenges for local participation. In Banwan, it would take time for villagers to accept and grow into the renovated village and adapt to the emerging lifestyle symbolized by the new architecture. During the construction phase, the Bouyei perceived themselves as producers anchored to the land in a familiar market situation and not as creative businessmen who had to risk wasting considerable time and possibly put their reputation and social standing at stake. While the three handicraft workshops, the new school programs, and newly installed facilities are regarded as beneficial to the community, they are relatively new concepts that require ample time for villagers and the community to adapt. The architects and the project team should have recognized that the villagers, in a relatively short period, could hardly adapt to the emerging lifestyle due to the project and the new configuration of the renovated houses.

The role of the 'time' in rural renovation was probably underestimated. One has to admit that community capacity building and facilitation of community organizational innovation are time-consuming tasks. In the long run, however, as the skills and capacity of villagers improve, the mechanism of the project's operation changes, and villagers, local government, and donors are better able to take on responsibility for the project. Therefore, this ambitious rural village renovation should have been put into action over a long period and deliberately included a pre-project discussion of objectives/aims, actions, possible outcomes, and effects.

6.4.2. Lack of systematic planning and management in the post-construction period

The unintended results were also related to the lack of post-construction organization. The essential question is, who will and in what manner operate and implement the development program when the leading architects withdraw from the project?

The point in time when the curating architect and his team left the village was a turning point. The remaining project supervisors and government officials showed little will to develop the project further and were far from capable of managing detailed planning and practical implementation. Therefore, a support and supervision mechanism from the local government and other forms of intervention was needed. This issue also reflects the limitation in the capacity of the architects that have been discussed in Chapter 6.2.3.

The experience from the three workshops indicated that the village lacked operators who knew how to manage the workshops, make the workshops financially

sustainable, and – just as important – encourage more locals to be engaged in the new programs. The empirical facts also indicate that community-organized workshops can hardly be expected to succeed without professional operation and long-term external technical and marketing support. The "failure" of the educational workshops is, on the other hand, a more common phenomenon that could happen in many rural villages and should not be prematurely criticized. It seems that this Bouyei settlement's existing capacity and organization were inadequate to manage and carry out the project further, and the empirical material proved evident that additional resources were required.

The BMST's involvement and achievement demonstrated that a proper organization could effectively operate and maintain the development programs. At the stage where the architect's involvement had terminated, a long-term management strategy was needed. A professional and business-based management organization could be a potential collaborator in shaping a long-term sustainable rural transformation. The main intention was to develop the village into local ethnic society, improving the locals' quality of life and economy. The Banwan Bouyei have inherited rights to the land that are just as strong as the western tradition of private ownership. The local community represents significant resources – as rural society is developing in China – that will rise in value. Therefore the villagers should not be subject to long-term contracts based on low estimation of land value, buildings, and other resources. The question of long-term value is a challenge when rights to the land, locally built environment, and ethnic culture are subject to market evaluation.

6.4.3. Lack of good leadership

Facts from the project indicate that community engagement in the development processes depends on competent leadership and decision-makers from the county, town, and village levels. In the right environment, skilled and strong leaders can see the whole picture, direct organizational changes, influence key stakeholders, promote human resource development and overcome practical blockages. They should stand with the villagers at the center of the rural renovation process. During the construction process in Banwan, however, the village leaders were noticeably absent in the process of interacting with expert architects, villagers, and workers. In Chapter 5, I described how the village cadres in the post-construction phase made little effort to facilitate program management, except for establishing a local tour company. Several of the cases described in Chapter 5 demonstrate the importance of county and township leadership in developing support for rural renovation at the village level. For example, in the grounding of an expert architect team into the village or offering assistance during the process. When the physical work was finished, government officers withdrew from the project, and their roles changed from direct interaction with the villagers to conventional top-down planning and decision making. Chapter 5 also describes their decisions and actions in the post-con-

struction phase, bringing in external tour companies and organizations to take over the whole operation of village tourism rather than generating local management, developing skills in the village, and encouraging more community members to take part. My impression is that the authorities did not respect local Bouyei's participation as a fundamental factor in establishing a new model of working. Some important lessons have been learned from this "performance gap":

• In the prevailing top-down system, government officials had the power to make all final decisions. This revealed the stubborn mindset of some officials. Government officials tended to regard the villagers as benefit recipients, which led to a lack of enthusiasm and trust and made the villagers reluctant to participate in the post-construction phase. In order to maximize and guarantee investment return and to realize the anticipated financial results as soon as possible, the government officials introduced an external professional company to intervene in the village development. This, rather than encouraging local participation, ended up in low local income, prolonged financial support a non-intence practice for capacity training.

• Promoting community participation requires that local institutions become community-oriented and accountable, and trustable to the local villagers, rather than solely functioning as agencies that implement government policy. However, after over four years of operation (before the end of 2021), community participation in rural development in Banwan is still driven not by the internal power of the local government but by the expert architect through training and technical support programs. As a result, there are still significant institutional barriers.

• The local government must be fully aware that the success of a rural renovation depends more on *how* the funding was used and not just *how much* funding was allocated. The misdirected usage of investment money would cause dire mistakes. For example, the giant parking lot and the tourist service center occupied a large amount of fertile farmland and damaged the irrigation system. Facts indicate that these facilities have little to contribute to helping villagers improve their capacity.

• Prevailing government management regulations and the hesitation of ordinary farmers to express problems obstructed the development of the program. My finding was that the town-level officials and village cadres grasped the power to manage land adjustment, assess the qualification for dilapidated housing renovation, and allocate funds and other subsistence allowance, all of which concerned the vital interests of local peasants. The ordinary Bouyei people had to maintain a good relationship with the local-level officials to obtain the needed resources and funding. Thus, local villages' discontent and complaints were not articulated and did not lead to open protests because the villagers had to rely on the local officials in their daily lives.

• The village cadres are accustomed to top-down decision-making. There are also

severe deficiencies in staff and organizational capacity at the township and village levels. Thus, project implementation and program selection in the post-construction phase were restricted by government priorities and government policies.

6.5.   The question of sustainable social effects

Design programs did not always prove sustainable in the Banwan project, especially when supporting mechanisms were removed or not established. Frequently we see the community returning to being passive recipients of development aid after they may have tasted some influence within the boundaries of a project. For Professor Lyu and his team, the intention of Banwan renovation was not only to renovate and construct physical entities but also to establish "containers" available for activities and events, such as informal meetings, educational activities, children's play, and performances. These containers were new elements, the intention being that they should be easily adapted and developed further by the settlement to accommodate unpredictable programs and events. Unlike the parking lots and tourist service center introduced later, which came along with very strict functional attributes, the programs proposed by the expert architects still had great opportunities to transform. For example, when the Banwan school was closed down, as described in Chapter 5, all pupils were transferred to the town primary school due to the local-level school policy, and the fate of the school became a concerning issue. The flexibility of the building then came to use. The NGO *Big Mountain Small Love* transformed the unoccupied school and workshops into a center for left-behind students to study and volunteers from the city to receive teaching training. Even though the school and workshops' new programs differed from the original design scheme, they still operate according to the initial intentions and allow the villagers to participate and use the space. This example and the framework established in the project somehow document that, given the right circumstances, local Bouyei people can evolve into more active stakeholders, taking ownership and responsibility for operating the new facilities.

The expert architects created some sustainable mechanisms to follow up on the Banwan project. Firstly, a mutually beneficial relationship between academic institutions and the community was established. Secondly, the intangible cultural heritage was underlined as a critical element for development. These two points will be discussed in Chapters 6.4.1 and 6.4.2.

6.5.1. The mutually beneficial relationship established between academic institutions and rural settlements[225]

As part of the poverty alleviation initiatives and countryside reconstruction programs, cooperation has been established between Chinese academic institutions

and local communities. Academic institutes were able to use their capabilities – knowledge, and skills –in a reflective and grounded way to serve rural development, improve the rural construction quality, strengthen the settlement's profiles, and possibly encourage the development of tourism and other industries. In the case of CAFA, a national academy for fine art, skills, and knowledge, the interests are not limited to arts, architecture, and design but also include the social relevance and possible implications of art practice. The rural settlement offers teaching resources for academic institutes and a creation and display platform for future artists. Academic institutions and the village alike can benefit from cooperation. Villages might find rural development opportunities, and if used well, the cooperation might contribute to sustainable rejuvenation. Poor ethnic villages, where history is still accessible in morphology and building typology, were in need of outside initiatives and represented interesting resources for an academy.

This mutually beneficial cooperation model had already been tested and implemented in Yubulu, where a group of teachers and students from CAFA's sculpture department stayed a month doing artistic practice in the spring of 2017.[226] As mentioned in Chapter 5.1.6, the whole village was used as a stage for artistic creation. The village culture worked as the script and source of inspiration for artistic productions linking people, nature, and rural culture. A series of land artworks strengthened the geographical characteristics and narratives of the landscape.[227] Together with the village renovation, these projects helped to create elements of a renewed cultural identity and confidence in Yubulu, as well as make a tourist attraction.

The case of Yubulu indicated that a mutually beneficial cooperative relationship might succeed, and the same model was tested again and manifested in various ways in Banwan. The Bouyei training program for female embroiderers, the large-span roof construction for the Bouyei opera stage, and seminars on rural revitalization described in Chapter 5 were all inspired by the Yubulu model. The cooperation led to a reciprocal relationship between skilled Bouyei women, experts interested in authentic Bouyei embroidery, and specialized business enterprises with sales channels in the developed eastern regions. Simultaneously, the training course broadened Bouyei women's perspectives and helped them fully understand the value of their craft, which was a way to generate revenue. The practice did not depend on rough natural resource extraction by an external agency; instead, it created a local platform to facilitate social engagement and knowledge exchange and to do a profitable business.

6.5.2. Intangible cultural heritage utilized for sustainable development

The prevailing strategies implemented in Guizhou (discussed in Chapter 4)

illustrate that the major driving forces for large-scale rural construction in rural China were political and economic objectives to reduce poverty. Means to achieve remarkable progress were often initiatives for new "industries" like "the big data valley of China" (GZG, 2016) and "eco-tourism." In the past ten years, the government of Guizhou has invested in infrastructure reconstruction in remote villages and made "remote cultural gems" more accessible to tourists.

One of the reasons why ethnic minorities in China have managed to preserve their long-established and distinctive lifestyle and culture is due to the remoteness of their homes. Living deep in the mountains meant their lives were tough and they had limited contact with modern and urbanizing China. While implementing top-down development initiatives, exotic cultural representation became inherent images of many ethnic minority groups and rural communities. One of the effects was that local people, voluntarily or involuntarily, participated in commercializing their intangible cultural heritage as "performances" for propaganda and profit. This process might be seen as an essential ingredient in developing "eco-tourism" or "cultural tourism," but there is a line here between serious cultivation and vulgar exploitation that has to be observed.

For Professor Lyu and his team, preserving the indigeneity and identity of Bouyei culture did not imply fully replicating rituals, gestures, and activities that belonged to older generations and, according to the Bouyei, did not fit the current social and economic environment. Alternatively, the team tried to bridge the cultural heritage with Bouyei's contemporary everyday life, cultivate the local space and buildings in the settlement, and promote the ability to communicate with and attract the external market. Minority cultural heritage was an important driving force for lifting the villager's living standards throughout the renovation project. More importantly, it is a way for the Bouyei settlement to adapt to the new urban situation without losing itself culturally, architecturally, or economically.

The Banwan renovation provides specific ways of integrating the rural renovation with cultural heritage preservation, inheritance, and activation:

• ***Protecting cultural heritage by introducing workshops***. Many remote settlements lack non-agricultural enterprises or rural organizations based on traditional crafts. With the embroidery workshop, the Banwan model introduced a collaborative platform with community participation that integrated learning, production, exhibition, and sales. The workshop was intended to be a community-oriented production activity, and it highlighted that rural renovation should concentrate more efforts on repairing, developing, and reconditioning the cultural heritage deeply rooted in real community life.

• ***Advocating an alternative lifestyle and production model***. The stilt dwellings are highly integrated with traditional livelihoods and life, including raising

livestock, wine production, grain storage, etc. The Banwan project emphasizes integration between revitalizing traditional crafts and improving living conditions. The home-based pottery and brewing workshops mentioned in Chapter 5 represent such attempts. The intention was to let cultural heritage and traditional crafts be a part of everyday life that relies on the continuous circulation of products and activities. The design team tried to maintain and reinforce this ecological system instead of isolating and commercializing cultural heritage as something separated from daily life.

• **Improving the legacy of cultural heritage**. Traditionally, crafts were passed on within families in Banwan village, from masters (parents) to apprentices (younger generations). Aiming to develop this legacy into a village concern, the design team established two-community centers – the Bouyei opera and the embroidery-learning hub – for the purpose of training. The two learning hubs provided the required facilities for opera performance and embroidery production and offered performance/exhibition space and educational workshops. These arenas serve as innovative public spaces to enhance community involvement and create a new model for passing on cultural heritage.

6.6.   Characteristics of the Model

The Banwan model is, to a certain extent, different from the rural development strategies discussed in Chapter 4. As the purpose of this thesis is to gain a broader and deeper understanding of the characteristics of the expert architect-led rural renovation implemented in Banwan village, I will reflect on why and how the project differs from other strategies for village renovation.

The following four sections intend to discuss and answer my research question: *Does the Banwan experience represent a new model for village renovation in China?* If so, what are the characteristics of the model? What is the relative cost of the model? What is the relevance of the model in rural China today? Under which circumstances is the model usable? Are any adaptations necessary to make the model work better?

Over the last decade, the reconstruction projects resulting from the ambitious Chinese rural policies have frequently been financed with governmental money and, in later years, also by private funds from major Chinese industries. They are often also promoted by social activists, institutions like the *China New Rural Planning and Design Institute*, *the Chinese Foundation for Poverty Alleviation*[228], and even artists and architects. China is characterized by huge regional differences, a complex history and culture, and a rising dissimilarity between the genuine urban – like my hometown Jinan – and the genuine rural, like Banwan. Accordingly, rural reconstruction projects have different characteristics and follow different models. There are vast differences between the developed, wealthy eastern countryside and

the less developed regions in the west, between the hinterland of what historically might be termed the Han Chinese nation and minority nationality settlements, and between areas on the plains and those in the mountains. These differences are probably also evident in the capacity of local-level officials, the resource supply, the experience of the construction teams, and eventually in culture, like eventually in the degree of internal support from the community.

In academia – for example, in the postgraduate program at CAFA on Countryside Construction and the AHO/CAFA Ph.D. cooperation on rural China – debates and summaries about the history, development origins, and models of rural reconstruction have been launched. One of the main lessons is that the discussions of rural reconstruction models have to elaborate on the village diachronically and synchronically – historically and today – on the specific history, geographical features, economic conditions, and cultural characteristics.

6.6.1. Architectural approach

The model has an "architectural characteristic," valuing the vernacular architecture and using the architecture as a means for development. The local context is seriously taken as a point of departure for the new architecture. However, the buildings do not refer to the local context only but adapt to modern needs. The Banwan practice refers mainly to a re-use and restoration strategy and a relatively modest investment. In the village, the new school building was the only project driven by a desire for difference: to offer an alternative to general Chinese institutional buildings and prioritize local specificity. The intention behind the model is to act in order to strengthen links between past and present while developing a foreseeable future transformation.

6.6.2. The role of the architect

One of the most characteristic features of the Banwan model is that expert architects were in charge of the planning and the architectural design processes and took on tasks and initiatives that went far beyond a traditional architects commission. As a result, in Banwan, the architects were uniquely positioned to influence other stakeholders' attitudes, encourage the participatory process, and build social understanding.

Initiating the thesis, I formulated the following question: How can the expert architects for the rural renovations perform a unique role in the process? And how does this affect other roles and relationships? When academia discusses rural reconstruction in China as a hot topic, public intellectuals refer particularly to a group of scholars who rely on their independent status and show a strong sense of public concern and participation consciousness in society with the power of knowledge

and technology. In 1987, the American scholar Russell Jacoby proposed the concept of "public intellectual" in his book *The Last Intellectuals: American Culture in the Age of Academe*. In his view, institutionalization and professionalization have caused the public role of modern intellectual elites to fade away. Gradually, the public intellectuals have "withdrawn from a larger public universe" (2000: 118). Jacoby advised reconstructing the "public character" of intellectuals. The public character not only requires intellectuals to pay attention to public affairs and raise public debates. The concept contains multiple connotations such as public interest, critical consciousness, public conscience, and human rights and values.

In the 1920s, scholar James Yen selected Ding County in Hebei Province (Dingzhou) as an experimental site. He led a group of professors, scholars, and medical staff to help rural people understand modern civilization. Yen and his colleagues organized mass education for the impoverished people of the rural area. Due to their efforts, Ding County became a well-known "rural construction experiment area" of the time. In the view of Yen, rural construction was neither about "relieving the village" nor "creating a model village;" instead, it was an arduous and long-term mission contributing to the "rebuilding of the nation."

Academic institutions, especially those prestigious universities/academies, served to gather intellectuals who could contribute their knowledge and capacities, in this case, to rural renovation in western China. In order to promote revitalization in ethnic regions, the idea of rebuilding a nation might have new connotations and practical significance. Operationally, this also includes intervening in rural areas using design and arts as a means to apply architectural design and protection of cultural inheritance as a vehicle to restore a minority group's self-confidence.

During the Banwan project process, the expert architects' role was nearly unlimited in terms of taking on responsibilities. This deep engagement of the architects brought substantial change to rural construction, including establishing mechanisms for effective levels of communication, guiding the government to determine the focus of the work, confirming the direction of capital usage for initiating the spatial program, and creating new employment opportunities for the community. The team of architects played a substantial role in setting the stage (programming), promoting specific forms of practice (process), and determining the content and quality of practice (outcomes). For local politicians and administration, the "expert" status was labeled and colored by the explicit link to a famous academy in Beijing. The high-quality education offered at CAFA, the institute's sound reputation, the competition to enter the school, and CAFA's previous achievements, gave Professor Lyu and his team a high professional status in the project. The expert architects received respect and trust throughout the design and construction phase. This was greatly reinforced by the process in which the design team helped the officials and the construction companies negotiate with the residents, solving con-

flicts and helping them understand the various effects of top-down initiatives.

The relationships between the actors in the construction process were complicated due to the range of participants, their different interests, and the formal and informal power relationship that influence community engagement and negotiation methods. The differences proved substantial between the administrative city and the village, the ethnic minority and the government officials, and academically trained architects, local developers, and traditionally trained workers with few experiences from working outside their inherited tradition. The power relationship was formalized in a contract signed by all involved actors. Within this framework, the government officials were more inclined to ask the expert architects, the construction team, and even local villagers to follow the officials' values and interests in the development process. Based on my observations, however, there are various ways of information sharing, communication, and decision-making, inherited in and emerging from an informal power relationship, which indeed dominated the decisions taken as part of the daily construction work. For example, the expert architects held a professional position and received more respect from the villagers, thus greatly influencing government officials.

Similarly, the villagers' vague attitudes and "waiting game" tactics forced the government officials and design team to give more consideration to the residents' requirements rather than forcing them to follow the administrative command. The relationships were continuously negotiated and renegotiated. The form of participation based on political, social, and cultural factors continued during the whole process (and continues) and affected the project's outcome.

6.6.3. "Airborne type" in situ model

Unlike common in situ rural renovation, such as specific projects led by a local government for ethnic tourism and the repair of dilapidated buildings, the Banwan practice may be regarded as an "airborne type" model. This means that the sophisticated architectural design strategies, aesthetic philosophy, and sustainable development methods from the academy/university were directly connected to the remote ethnic village. The design team stayed in the village and sought to accommodate specific social, economic, and environmental conditions more individually. This model can effectively circumvent bureaucratic blockages and keep local authorities or elites from shaping development processes to align with their interests and priorities. Expert architects in this position might choose a role allowing villagers to express their problems, complaints, and requirements. Furthermore, expert architects' possible personality traits such as responsibility, initiative, willingness to contribute, and altruism are features that help the design team build up trust among the villagers.

6.6.4. Strong cooperation with the local population

The Banwan model underlined the importance of implementing community-centered projects. This means the detailed design schemes had to be developed through close cooperation with the local population from the design phase onwards. Members of the design team were in a position to revise and improve their thinking and work through direct, face-to-face communication with the local population. Upholding the idea that good cooperation and communication could facilitate implementation and help a project run smoothly, the design team invited farmers to specify their needs. Rather than, during the construction phase, hiring more experienced staff from outside, the design team worked with local villagers to undertake tasks that did not require expertise, which was considered a better way to encourage the local population's sense of responsibility. To ensure the sustainable operation of the programs in the post-construction phase, the Banwan model developed the idea of providing training opportunities for a team of specialists working at the grassroots level (e.g., the owner of the pottery workshop and the women who received training in embroidery in the Banwan project). The intention was to strengthen farmers' self-management capacity by giving them a central role in the designed programs and community development. From the beginning to the end, the Banwan model was fundamentally all about organizing a network of collaborations.

6.7.   The Relative Costs of the Model

In terms of cost, is it possible to use the Banwan model in other areas and villages, or are the activities described in this thesis costly and impossible to replicate? A lack of information about expenditures in the different parts of the project makes it difficult to report the exact costs. Some expenses might also be seen as external, e.g., the TV production. Activities like the CAFA student involvement are low-cost, as the travel is financed, but the students are unpaid. The use of internal resources in the village, like the time-consuming local processes in which the villagers took part, is not reflected in the expenditures.

A local official informed me that the total cost of the Banwan project at the regional and local political level totaled 35 million yuan.[229] This excludes post-construction projects like the giant parking lot, the tourist service center, and a newly paved road through the cultivated land. Most of the total expenditure refers to physical construction costs.

Several other development programs were being implemented simultaneously in the Banwan area and neighboring regions. For example, central/local governments invested large amounts of money in renovation projects of dilapidated buildings, infrastructure projects, ecological relocation, photovoltaic industry development,

and other government-led initiatives for poverty alleviation and regional economic development.

To evaluate the costs of the Banwan project, we need to compare it with projects with similar agendas and aims. Large-scale relocations are the most common top-down initiative for poverty alleviation in China. Permanently moving a large number of households to a new planned site and managing a long implementation cycle requires a great deal of funds. In the specific case of Ceheng County, relocation projects were only implemented for natural villages with fewer than 50 households – those located too far away to link with costly tarmac and cement roads, and for families who lost their homes due to the effects of climate change like floods, landslides, mudslides, and other natural disasters. The government invested 2.3 billion yuan in the Gaoluo New District resettlement programs, developing the biggest relocation site in the Guizhou province and relocating 33 000 people. In Chapter 5, I noted that the government invested 726 million yuan in the solar photovoltaic project located in Banwan village. Based on the information released to the public, this project would support local employment and bring extra income to the households.

We cannot verify the notion that the Banwan project can generate more economic and societal benefits than resettlement projects and solar photovoltaic programs; the purpose, scale, and ways of operation are extremely different. However, these two projects illustrate the scale of funding in current rural reconstruction programs in China. In this context, 35 million yuan, or around €5 million, seems a reasonable and even small investment for preserving a local village, developing ethnic culture, and improving local living standards. Due to the in situ work, the Banwan model also emphasizes the possibility of flexibility in the use of funding.

As stated many times in this thesis, during the design and construction process, the expert architect team had to take on many additional coordination tasks necessary for the successful implementation of the project. In order to strengthen the mutually beneficial relationship between academic institutes and rural settlements in the post-construction phase, scholars and students work without pay. The expert teams also assisted with funding applications and program management and helped raise capital for small local businesses. These jobs were referred to as responsible supervision tasks and additional assistance and were derived from moral obligations. They were "extras" but needed revision and further input into local development. All of this entails a significant investment of time and effort not included in the project cost. Therefore, in my opinion, there is probably a very favorable cost/benefit ratio in the model as it was performed in the case of Banwan.

6.8.   Relevance of the Model

The large-scale implementation of *Targeted Poverty Alleviation and 10 000 Enter-*

prises Assisting 10 000 Villages,[230] where regional and local governments implemented central Chinese policies, constituted the main body of Guizhou's poverty alleviation activities. In the implementation processes, the local governments relied on the capacity of the hierarchically administrative structure and the grassroots cadres' fast response. The enterprises also depended on abundant capital, manpower, and material resources. Both these programs were vital in the positive outcome of Guizhou's poverty alleviation and rural revitalization.

The findings in Chapter 4 indicate that the success of the development strategies and models depends on being applied in the right situations in terms of the geographical environment, social organization, kept cultural elements, economic conditions, and so on. For example, in Chapter 6.6, I argued that villages like Banwan are not suited for large-scale resettlement strategies due to the size of the village and specific social and cultural characteristics. The process and outcomes of the project indicate the Banwan model as a possible alternative way of investing in a historic rural village.

The Banwan model combined investment and tourism, further professionalization of local agriculture, and local industrialization – downscaled and adapted to local resources – the products being marketed through digital platforms. The architecture has become the village's new calling card and has aroused the young generation's cultural consciousness, generated their interest in Bouyei history, and perhaps started to restore community confidence. The charming buildings and landscape, the reorganized public space, the overall village protection, and the renovation work constitute a new cultural label and a possible new model for tourism based on local resources.

One must admit that it is difficult to define an ideal condition for implementing this development model. There will always be unforeseeable factors that affect the programs and the way the programs are carried out – even when all circumstances seem optimal. Nevertheless, the points mentioned below represent conditions that are relevant in choosing, practicing, and fulfilling the Banwan model's utmost value.

The model used by CAFA in Yubulu village inspired the model that Professor Lyu adapted in Banwan. I underline that minority culture and extremely remote location are not prerequisites for using the model. The relevance is more profoundly linked to the village size, the capacity of the village community and local organizations, the organization of external input, the local government's support, and the cultural heritage visible in the settlement.

• The selection and implementation of the Banwan model implement require a deliberate consideration of the selection of the site. One of the most significant considerations is probably the issue of village size. The project in Yubulu involved

571 people in 2015 and renovated 120 buildings, and the project in Banwan village (in the renovated area) involved about 500 people in 2016 and renovated 108 buildings. The model has a comprehensive approach, but the way of working and the ambitious aims will be difficult to implement in a larger and more complex village context. A larger village/project may influence the control capability of external specialists and reduce the possibility of adapting general renovation strategies to the specific needs of the different families.

• Yubulu and Banwan also have in common that they are relatively egalitarian societies in terms of class, economy, and ethnicity. In my opinion, the egalitarian character is also a prerequisite to choosing the model. This makes it possible to develop generally adaptable principles and to point out aims and futures that might be relevant for the whole village.

• With the emphasis on architecture, authenticity, and culture, the relevance of the model is probably limited to rural areas with a strong village identity, historical interest, and high architectural/spatial quality.

• Within the context of a historical village, one should investigate if there is or might be developed a genuine interest in applying cultural strategies and architectural restoration projects. Indigenous knowledge and skills should also be present. The appliance of indigenous knowledge will be needed in the participatory projects and processes. It can be argued that the process in which farmers impart indigenous knowledge to development projects is a cornerstone for community participation, an entry point, and an important determining factor affecting the success of the rural renovation. In the case of Banwan practice, most farmers possessed extensive skills concerning their work and way of life – in agricultural production, food and drink making, religious ceremonies, and so on. Their cultural customs and ways of life are somehow critical to the way program planning and renovation activities are carried out. Indigenous knowledge and modern techniques are equivalent crucial resources in the successful use of the model.

• A central intention in using the model is to manage existing physical and cultural resources effectively. In order to achieve this, a prerequisite for adapting the model is a strong village community. "Strong" refers to villagers fully aware of their rights, responsibilities, and obligations during the village renovation process and a village committee and villagers that can communicate in public and articulate problems and issues. Challenges in program development in the post-project period and "gaps" between expected outcomes and actual outcomes highlight the need for a stronger capacity in the community to achieve sustainable objectives.

• The Banwan model is particularly suited to villages with strong local organizations that are in favor of the project, i.e., organizations and people devoted to realizing the planning and design schemes. As the most important local organiza-

tion, the village committee in Banwan was responsible for managing the village's public affairs and public welfare services, mediating disputes among the villagers, supporting and organizing villagers in cooperative economic undertakings, and administering affairs concerning property owned collectively by the villagers. In addition to the village committee, decision-making in China's villages is also influenced by other groups, such as the Women's Federation, leading village entrepreneurs, families with a traditional village power base, and groups based on kinship networks. The findings indicated in the thesis demonstrate that the development project changed and adapted as it progressed. It became more concerned with the integrated development of communities and focused on local community capacity. In the later stages, the project relied more heavily on the local organization to implement and come up with new project designs.

• The Banwan model applies to a situation where the ambition of the county and township government officials is to create an enabling environment for the village's development and where a local government is willing to provide substantial financial and political support to the external specialists' work. Therefore, to obtain the required political support and receive funding, the project and the characteristics of the village selected must be in-line with the principles of Chinese and regional rural policies. Support from county and township governments is essential in every stage of the process.

6.9.   From Experiment to Model – Adaptations

What adaptions are needed for the Banwan model to work better? There are several lessons from the project that might improve the model. The intention of evaluating innovative processes and approaches lies in improving the unsuccessful attempts and eventually replicating successful initiatives. So far, the Banwan (and Yubulu) projects remain seemingly isolated efforts that governments at different levels have neither taken up nor developed with any sense of ownership. The Banwan approach is relatively unique, but it is still uncertain whether it will be replicated at the scale currently envisaged. The need for adaptations in the model is particularly pertinent in light of the long-term cycles associated with program management. Moreover, replicability will depend on the many external and internal factors mentioned throughout this chapter. Knowledge of these factors and their experiences are crucial to the potential replicability of the Banwan model.

6.9.1. Strengthening capacity in the local community in order to participate in the project

Priority must be given to preparing the village community for an ambitious renovation. In Banwan, the villagers received little information about the aims and

methods of rural renovation, and there were few attempts at systematic teaching. Several misunderstandings of the renovation strategy and misinterpretations of the design team's implementation occurred during the implementation stage. External actors (local government and the expert team) in using a model like this should strengthen their roles of facilitating and teaching. The formal and informal training workshops and meetings for villagers and village committees are essential due to the fact that fundamental changes take time to achieve. Training or workshops bring together different stakeholders and provide intensive training for farmers in terms of project policy and aims. Significant efforts are needed to strengthen the community and prepare the local population for what is coming. Villagers must be fully aware of their rights, responsibilities, and obligations during the project process.

In addition, the "gap" between the anticipated and actual outcomes demonstrate that external expert/organization should modify their ways of working to accommodate the capacity development of villagers in the community. In the initial stages of the development project, the expert/organization should formulate and provide step-by-step training courses to make the village capable of managing and operating new community facilities. In the effort to achieve active participation and sustainable operations of the designed programs, villages need to be presented with opportunities to develop skills, knowledge, and training to understand how the planned programs operate at the local level, how to navigate the bureaucratic process, how to acquire technical information on options, costs, and management, and how to negotiate with other stakeholders. This might ensure maximum participation and build a sense of ownership in the community. Some of these programs may focus on youth, women, and cultural heritage.

6.9.2. Evaluation of social outcomes

Social outcomes deal with how the project's different parts affect the families' economy and daily life. A framework for analyzing social outcomes is provided in Chapter 3.3. I highlight two points here in order to improve the model. Firstly, the design team of the Banwan project did not conduct a systematic evaluation of the social impacts of the project during and after the physical construction. Therefore, there is little information about the specific social effects of the different interventions and the short-term comprehensive social effects related to each family and the village as a whole. Secondly, I consider the six years of my thesis survey insufficient for providing a basis for the needed long-term evaluation described in Chapter 3. However, my evaluation indicates directions for a future long-term investigation.

A systematic and step-by-step evaluation of social effects during the construction phase is essential to qualify the different actions of the project concerning formu-

lated goals and to reveal eventual negative effects. The evaluation during the project could help to identify ways of improving performance and management, and the evaluation conducted at the end of the project could assess immediate impacts or outcomes. In addition, the long-term social effects analysis allows for a more mature reflection from a "non-participant" perspective.

6.9.3. Strengthening project management in the construction phase

Before the construction phase, the expert team should provide technical and supervision training courses for representatives of the construction teams, village cadres, and villagers, covering basic construction techniques, standards, and construction procedures. Chapter 5 documents that many craftsmen, village cadres, and villagers have solid but narrow technical skills but limited knowledge of project management and are not trained in discussing the social and economic implications of projects. The training intends to enable actors to fill a more knowledgeable, effective, and responsible role in construction activities. In Banwan, the importance of the training course was highlighted by limited manpower and expertise and the fact that construction activities in the villages are normally dispersed over a large area. The training courses will enable village cadres and representatives of the local population to possess the necessary knowledge to monitor the work in their respective areas. As a result, many issues related to the quality of construction might be identified and rectified in time.

6.9.4. A multidisciplinary team is needed

The experience of the Banwan project underlines the importance of adopting a multidisciplinary collaboration[231], in the pre-project investigations of the local community, in the pre-project investigations of the local community, in the development of the program, in the program implementation, and the post-construction phase. A characteristic of the model is that the architect takes the lead, but the projects have to allocate resources to bring in expertise, adding to the architect's disciplinary knowledge and expertise. It is difficult to be specific about the kinds of expertise needed. However, anthropology might be needed to understand the local ethnic culture and other social science to discuss the project's socio-economic effects and management knowledge to be involved in the post-construction village challenges.

Multidisciplinarity and interdisciplinary work are highly useful since the problems addressed in the rural community most often are complex, involving social, political, spatial, economic, cultural, and environmental aspects. Every discipline is good at its own normative sets of practices, theories, and values. For example,

sociologists might have more experience than architects in how to develop capacity for community participation and be able to set out a framework for capacity building of local organizations and staff. Experiences from Banwan, in my opinion, indicated that a more interdisciplinary way of working, using mixed methodologies might have rooted the project better in the village.

6.9.5. Establishing formal mechanisms for solving potential conflicts and reaching agreements

A formal mechanism needs to be established to achieve effective interfaces between the parties involved. Many conflicts and disagreements in the Banwan project were sorted out and resolved during informal conversations with officials, villagers, and construction workers. However, formal procedures were needed when serious disagreements or conflicts of interest occurred. The mechanism of addressing conflict of interest rooted in an expert architect-led renovation involved taking into account all the stakeholders. While the expert architects' participation in solving the conflicts may be time-consuming and, in effect, increase the stakeholders' burdens, this form of intervention is essential. Controlling and solving potential conflicts through constant field surveys and conscious timing of meetings, and in this way allowing all the stakeholders to articulate their ideas, provoking contextualized and contextualized decisions by the expert architects – are all important mechanisms to solve a conflict.

6.9.6. Choice and initiation of development programs need further deliberation

More substantial investigations and discussions regarding the development programs are needed before they are selected and initiated. Most important is to ensure that the local population is involved and willing. They must be heard in the planning stage and must be included in the discussion of potential problems. Their perceived opportunities are at stake, and their indigenous knowledge and skills will often be the most important resource. The considerations of eventually initiating a program should involve a growing recognition of the roles to be played by the village community and the eventual limitations in their capacity to fulfill that role. In Banwan – although the challenges were underplayed – the initiation of the program was not the result of a top-down superficial administrative intervention. The decision was made after careful consideration and deliberately by the village community, the local organizations, the local government, and the external specialists.

6.9.7. The timespan of the projects needs to been longer

The intense seven months of rural renovation made systematic participation diffi-

cult. Within this short period, all stakeholders, including government officials, ordinary villagers, and expert architects, were allowed to learn, interact, debate, and think. However, the construction period was insufficient for local actors to adapt to the changes and become capable of facing the challenges. Therefore, the design and construction phase should be strategically extended: the expert team – eventually composed of new capacities – should be represented longer in the village and continue to serve as supporting mechanisms and a communication channel to achieve a practical interface between the local government, the village committees, and the villagers. In most cases, it is difficult to extend the time span of a large-scale renovation project as the local government has a precise schedule. Perhaps a practical way is to select representatives from the design team to remain in the village to ensure good follow-up that supports the community's development and the capacity of all stakeholders after the completion of the physical construction.

6.9.8. Preparation of post-construction management should be a vital part of the project.

Rural construction needs a comprehensive service provider and requires a long-term accompaniment process that begins when the physical construction is completed. However, the post-construction management was not prioritized in the renovation work. When the expert architects had withdrawn and handed over the management to the community, the community seemed unable to initiate and control the ongoing development process. The facts discussed in Chapter 5 and summarized in Chapter 6 demonstrated the problem of incapacity and could not be solved by the architects staying longer in the village after the construction work finished. The ability for post-construction management should have been taken care of during the planning and construction process. For example, the expert team and government officials could strengthen the cooperation and capacity of farmers for self-management by giving them an important role in the renovation process. These issues are all critical for capacity building for effective implementation at the local level. The set-up and financing of a new supervision team are needed for the post-construction phase to help the villagers and eventually provide timely feedback on problems and challenges to the expert architects who might help them out.

In concluding this chapter, I have presented what I consider the main characteristics of what I have named the Banwan model. Next, I have discussed the lessons learned during and after the construction phase to summarize the strength and weaknesses of the project evaluated as a possible model for specific rural situations. Finally, I elaborate on constraints to rural community development, especially in the fields of competence, local policies, local culture, and local organization.

In Chapters 6.1, 6.2, 6.5, 6.6, and 6.7, I outlined that the Banwan project has demonstrated methodologies and implementation strategies that can deliver various impacts by the use of the specific skills, attitudes, and working methods of architects. The impacts are not limited to the effects of implementing a final product (physical environment improvement) but can also be achieved in the process itself. In Chapters 6.3 and 6.4, I present social-economic consequences and discuss the "gaps" in order to give explanations for the limitation and shortcomings of the Banwan project. Chapter 6.8 presents conditions that are relevant for implementing the Banwan model. Based on the experience and empirical material from the Banwan project, in Chapter 6.9, I point out that the skills of the external team, the time span of the renovation, the quality of local organization, and the attitude and policies of community governance issues all are issues to be addressed if the Banwan model is to become meaningful, replicable and sustainable.

Chapter 7

7. THE ARTICLES

My research includes four publications, which here are presented according to the logical argumentation of this thesis.

7.1. Publication 1

Citation: Cao, Q. (2018). "Policy-Livelihood-Culture" Driving Force Interpretation Model for Settlement Change – A Case of Banwan Village, Guizhou Province. *Journal of Human Settlements in West China*, *4*, 100–106.

Type of publication: Journal article

Summary

The fieldwork shows that the existing settlement change models alone cannot explain the changes in Guizhou's ethnic settlement over the past ten years. Therefore, in this article, I propose a "Policy-Livelihood-Culture" interpretation model for the settlement of ethnic minorities in southwestern Guizhou. The policy is an opportunity and acts as an engine; the livelihood pattern provides financial support and brings about changes in consumer attitude; cultural intrusion leads to the transformation of belief systems and concepts. These three points are essential motivational forces for the settlement changes in ethnic minority areas in Guizhou and are reflected and demonstrated in Banwan village. I outlined five specific changing characteristics of settlement transformation: *from vertical and aggregated distribution to dispersive distribution; from self-sufficient type to resource provider type; from pragmatic adaptation to aesthetic conspicuousness; from homogeneous to heterogeneous; and from immediate return construction strategy to delayed returned construction strategy*.

Relation to this thesis

Understanding the driving force of settlement change in contemporary Guizhou is essential for interpreting how state power, markets, and culture have become intertwined and led to change in the Banwan Bouyei settlement, dwellings, and construction patterns. This settlement morphology studies helps me gain a holistic understanding of the physical situation for which the design team designed and inform a background on how local Bouyei might react to the expert architect-led renovation.

7.2. Publication 2

Citation: Cao, Q., & Chen, Y. (2019). "Interpretation and Negotiation – Reproducing Vernacular Space in Yubulu and Banwan Village." *Journal of Human Settlements in West China, 34*(3), 82–88.

Type of publication: Journal article

Summary

This article describes how expert architects work in the rural reconstruction involved by actors with different backgrounds and expectations. Drawing on our comprehensive observation and experiences gained in rural renovation conducted in Banwan village and Yubulu village, we discuss various agents' characteristics in general and analyze the action logic and related factors behind the selected events. We conclude that negotiation may serve as an appropriate primary mechanism to organize social and spatial development efforts and provide a better solution for dealing with the conflicts that emerge within the participatory projects.

Relation to this thesis

This article presents two concrete examples of the negotiation- and dispute resolution skills accepted and used by expert architects that enable groups with conflicting interests to work towards a consensus. It is an example of architects' unique way of working in a rural area and is therefore related to sub-research questions 4 and 5.

7.3. Publication 3

Citation: Cao, Q., & Ellefsen, K. O. (2022). *The Guizhou Province as a Laboratory for Understanding Strategies for Rural China*. In Chinese Village Artistic Construction (Second Series) (pp. 105–123). People's Fine Arts Publishing House.

Type of publication: Journal article

Summary

This article notes that the Guizhou province might be looked upon as a "laboratory" for Chinese rural strategies, being in a remote and rather poor area of China and populated by ethnic minorities. Rural questions are essential in Chinese policies, and how the strong government becomes involved in different ways to shape the rural future. The strategies have different primary intentions, from sustaining the countryside by providing basic needs and security to innovative policies that renew countryside production and eventually make villages compatible with the cities.

Relation to the thesis

This article is an overview of rural strategies used in Guizhou. It has enabled me to gain insight into the specific challenges in rural areas, especially in remote and impoverished areas populated by ethnic minorities. It also helped me understand the settlement change in terms of rural policies and therefore related to research question 1. The prevailing implemented strategies presented in this article can be considered different versions than the Banwan model I try to explore. Hence, it helps to argue for the aims, strategies, and organization of the Banwan model and is thus related to research question 5 of the thesis: Does the Banwan experience indicate a new model for village renovation in China?

7.4.   Publication 4

Qing Cao "The new practice of traditional village protection and renewal in Guizhou's ethnic, mountainous, and poverty-stricken areas". The article is submitted to the *2nd Doctor of Arts Forum undertook by Shandong University of Arts & Design* (2021). The paper has been accepted and will be published by Shandong Fine Arts Publishing House.

Type of publication: Conference paper

Summary

In this article, we present a number of experiences and working methods from the Banwan and Yubulu reconstruction projects in the Guizhou province: better management of the relationship between nationality and modernity in the rural reconstruction; understanding the difference between mountainous settlement protection and plain settlement protection; balancing the contradiction between creativity and low cost; how art intervention in rural reconstruction is a good way to improve the aesthetic standard of living environment in the underdeveloped region. Based on such experiences from the Banwan and Yubulu project, we explore an alternative rural reconstruction model (Banwan model) by reflecting on the difference between an in situ repair mode and a relocation mode and considering the role of academic experts in stimulating local people's cultural consciousness.

Relation to this thesis

With this article, I specifically aim to show that local cultural heritage can be considered the foundation of rural renovation, and the article is thus related to sub-research question 3. The article also discusses how the Banwan model could establish a long-term and mutually beneficial relationship between academic institutions and the remote settlements after the physical construction is completed. It

is a unique and sustainable supportive mechanism composed of local government experts in educational institutions/enterprises/mass media, and thus addresses sub-research questions 4 and 5.

Appendix A

Appendix A.1: Some of the key activities and events involving the community and stakeholders (Figure A.1).

Activity Log

Date	Activity/Event	Organizer	Participants/Beneficiaries	Aim
15/11/16	New Banwan school opening event	Ceheng County,Yata town Dragon TV, expert architects	All Local residents, representatives from donor agencies, the design team, Dragon TV	Celebrate the opening of the Banwan school, the handicraft workshops, and other programs new to the residents
31/01/17	Spring Festival Party Bouyei opera performance	Ceheng County,Yata town Village Committee	All Local residents, government officials	To celebrate the Chinese New Year. Increase social cohesion.
Nov-17	Female embroiderer training	Suzhou Art&Design Technology Institute, Professor Lyu	Eight female embroiderers in Banwan	To pass on knowledge and skills to a number of female embroiderers and to inform them about making at-home handicraft profitable.
19/02/18	Spring Festival Party and friendly basketball match Bouyei opera performance	Village Committee and College Youth League in Banwan	All Local residents, government officials	To celebrate the Chinese New Year. Increase social cohesion. To encourage young people to organize an important event.
05/05/18	Seminar on Rural Revitalization	CAFA, and Protection Center of Intangible Cultural Heritage of Guizhou Province	Representatives for Local residents, county leaders, inheritors of intangible cultural heritage, and scholars	Introduce the new ideas and methods for intangible cultural heritages development to achieve the *Targeted Poverty Alleviation* and *Rural Revitalisation*.
Oct-19	Bouyei opera stage pavilion construction	China National Arts Fund, and CAFA	8 local villagers, 15 students from the *Rural China Construction Research Talent Training* program and tutors from CAFA	To construct a pavilion on the Bouyei Opera stage to improve the performance and public space in the core area of the village and enhance community engagement.
28/10/19	Seminar on Rural Revitalization and Poverty Alleviation Through Intangible Cultural Heritage	Guizhou Provincial Department of Culture and Tourism, and CAFA	15 students from the *Rural China Construction Research Talent Training* program, tutors from CAFA, government leaders, representatives for local residents inheritors of intangible heritage, and scholars	Discuss how the traditional handicrafts effectively integrate into the top-down poverty alleviation strategy. Introduce the issues facing the impoverished areas, the solutions and projects that other districts had initiated, and explanations of why the successful traditional handicrafts development is so important for the rural revitalisation.

Figure A.1: Documented activities. (Source: Author)

Appendix A.2: New Banwan School Opening Event

Date: 15th November 2016

Organizer: Ceheng County government, Yata town government, Dragon TV, and the expert architects.

Aim: Celebrate the opening of the new school, handicraft workshops, and other

new programs that were new to the local residents.

Participants: Local residents, the donor agencies, government officials, construction teams, and the design team.

Activities (Figure A.2):

• Professor Lyu conducted a school tour for the children to acquaint them with the new school space.

• Many facilities gave the residents in the community something that had not existed before; the expert architects thus conducted a tour for the villagers and introduced amenities and infrastructure that could improve residents' quality of life.

• All of the newly established workshops had been put into use for the first time.

Figure A.2: Scenes from the opening ceremony. (Source: Author)

Appendix A.3: Bouyei Embroidery Training for Women

Date: 15th November 2017

Organizer: Suzhou Art & Design Technology Institute, Professor Lyu, village committee

Aim: To train some female embroiderers, supplying them with new knowledge and embroidery skills, and to introduce ways of making a profit at home through their

handicrafts.

Participants: Eight female embroiderers in Banwan village

Activities: The training to be organized at national level in China was conducted by Suzhou Art & Design Technology Institute and funded by National Intangible Cultural Heritage research and training program. A public welfare fund supported the travelling expenses for the female embroiderers. Eight female embroiderers took a one-month training course in Suzhou (Figure A.3).

Figure A.3: Eight Bouyei women received one-month training in Suzhou. (Source: Suzhou Art & Design Technology Institute)

Impact: The site visit in 2019 revealed that only Li Maolan had set up a workshop. Five of the Bouyei women who received training program had become migrant workers outside of the village. Another two participants did not develop specific plan with their skills. The actually challenges that confronted by Bouyei women did hampered the achievement of participation. However, the result suggested that trainees' self-reliance, enthusiasm, and endeavor are crucial to the success and sustainability of the program.

Appendix A.4: Seminar on Rural Revitalization

Date: 5th May 2018

Organizer: CAFA and the Protection Center of Intangible Cultural Heritage of Guizhou Province

Aim: To introduce the new ideas and methods for intangible cultural heritage development to achieve the Targeted Poverty Alleviation and Rural Revitalization.

Participants: Local residents' representatives, county leaders, scholars, and inheritors of intangible cultural heritage.

Activities (Figure A.4):

• Presentation of the Banwan project by Professor Lyu.

• Scholars introduced and shared working experiences and knowledge about rural revitalization projects in other places.

• Household visits to observe the changing of the designed programs of the community.

• Interactive activities with local residents and the external experts.

Figure A.4: The conference was held in the school library. (Source: Nan Fang)

Appendix A.5: Bouyei Opera Stage Pavilion Construction

Date: 22nd – 28th October 2019

Organizer: China National Arts Fund, CAFA

Aim: To construct a pavilion on the Bouyei opera stage to improve performance quality

Participants: 8 local villagers, 15 students from the *Rural China Construction Research Talent Training program* and tutors from CAFA (Figure A.5):

Funded by: China National Arts Fund covered most of the construction expenses; the rest were covered by donations by a private company.

Professor Lyu led a group of students and professional workers to construct a new pavilion for the new Bouyei opera stage. Only a few villagers would like to volunteer to help construction team.

Figure A.5: The newly built pavilion could improve the performance quality. (Source: Author)

Appendix A.6: Seminar on Rural Revitalization and Poverty Alleviation Through Intangible Cultural Heritage

Date: 28th October 2019

Organizer: Guizhou Provincial Department of Culture and Tourism and CAFA

Participants: Experts, government officials, inheritors of intangible cultural heritage

Aim: To discuss how traditional handicrafts effectively integrate into the top-down poverty alleviation strategy; to introduce the issues faced by the impoverished areas, the solutions and projects that other districts had initiated, and to explain why successful traditional handicraft developments are so important for rural revitalization.

Activities: Conference participants discussed how intangible cultural heritage

could be developed and discussed methods to encourage community participation (Figure A.6). However, during the seminar, official leaders and experts occupied important positions and controlling proceedings. Moreover, the regular villagers had no willingness to participate in the meeting. The invited experts seemed to make it difficult for them to talk face-to-face with regular farmers, communicating and negotiating how to manage the development programs.

Figure A.6: The conference participants visited the village and attended two academic meetings. (Source: Author)

Appendix A.7: Banwan Spring Festival Party in 2017 and 2018

Date: 31st January 2017 and 19th February 2018

Organizer: College Youth League in Banwan, village committee, county and town government

Participants: Banwan residents, local government representatives

Aim: To celebrate the Chinese New Year and increase a strong sense of community.

Activities (Figure A.7):

• Traditional Bouyei opera performance

• During the spring festival of 2018, the Banwan College Youth League organized a basketball match with other villages.

This was the first time that college youth developed, directed, and organized an important community event in Banwan. The county government provided some necessary electronic equipment and funding. The Banwan Spring Festival was ultimately a very successful event, bringing a strong sense of pride and ownership.

Figure A.7: Scenes from the Spring Festival party. (Source: Li Dingping, Li Jinmei and Wei Zhengli)

Appendix A.8: Sample Questionnaire and selected semi-structured Interviews

Part 1: Banwan embroidery women survey (7 samples: He Xiulan, Li Guofen, Li Maolan, Li Maoxiang, Li Yingfen, Huang Linlian, Lu Haiban), interview by author, Banwan village, September, 2018.

Aim: The questionnaire survey aims to study how embroidery women can promote their handicrafts production and training.

The summary sheet of the questionnaire of the embroidery women

Questions	Answer 01	Answer 02	Answer 03	Answer 04
Are you working out of the village or staying in the village now?	Working outside the village 2 people	Stay in the village 5 people		
What is your age group?	18-30 0 people	31-45 4 people	more than 46 4 people	
Have you used the embroidery workshop?	Yes 5 people	No 2 people		
Have you attended embroidery women training conducted in Suzhou in 2017?	Yes 2 people	No 5 people		
Will you participate in the skills and knowledge training course if available?	Yes 7 people	No 0 people		
Will you go to the embroidery workshop to spin and weave?	Frequently (more than three times a week) 1 people	Occasionally (once a week) 1 people	Rarely to go 5 people	Never 0 people
Do you get convenience from embroidery workshop in terms of spinning and weaving?	Yes 7 people	No 0 people		
Is it convenient for you to learn the techniques from other skilled women in the embroidery workshop?	Yes 5 people	No 2 people		
Do you think there is enough public space in Banwan village to facilitate the lives of the inhabitants?	Enough 4 people	Not enough 3 people		
Will you make money by making Bouyei-style embroidery and clothes?	Yes 5 people	No 2 people		
How much money can you earn by making a Bouyei costumes every year?	Less than 1,000 RMB 4 people	1,000 – 3,000 RMB 0 people	3,000 – 5,000 RMB 1 people	Mores than 5,000 RMB 2 people

Figure A.8: The summary sheet of the questionnaire of the embroidery women. (Source: Author)

Part 2: Banwan opera troupe survey (8 samples: He Fei, Li Guosheng, Li Maoyong, Li Rongchao, Li Xianhui, Li Yulong, Lu Xiongzhi, Luo Guoyou), interview by author, Banwan village, September, 2021

Aim: The questionnaire survey aims to study what influence the renovated rehearsal room and the stage had on enhancing troupe members' skills, attitudes, and organization.

The summary sheet of the questionnaire of the Banwan opera troupe

Questions	Answer 01	Answer 02	Answer 03	Answer 04
Are you working out of the village or staying in the village now?	Working outside the village 1 people	Stay in the village 7 people		
What is your age group?	18-30 0 people	31-45 4 people	more than 46 4 people	
How much do you know about Bouyei opera?	Very familiar 3 people	Have some knowledge 5 people	Not very 0 people	
Do you participate in the Bouyei show and training in the village?	Frequently (more than three times a week) 6 people	Occasionally (once a week) 1 people	Rarely to go 1 people	Never 0 people
Are there more opportunities for performing Bouyei opera than before 2017?	More than before 7 people	Less than before 1 people	More or less the same 0 people	
Will the drama troupe rehearse in the training room next to the stage in the school playground or elsewhere?	Rehearse in the training room 3 people	Rehearse in the other place 0 people	The rehearsal space is not fixed 5 people	
What are the main reasons of Bouyei opera is not as popular as before?	It is difficult and will take a long time to learn 3 people	The rhythm is too slow and the story is boring 1 people	The content is too old and there is no freshness 4 people	I think it's still very popular in Banwan village 3 people
What do you think of the development of Bouyei opera?	Traditional art that should be protected and inherited 8 people	There is no development value 0 people	It has nothing to do with me 0 people	
Which of the following suggestions for the development of Bouyei opera do you think are effective?	Strengthen talent training 6 people	Strengthen propaganda 3 people	Cultivate teenagers' interest 6 people	Integrate new elements 4 people
Will you let your children learn Bouyei opera, dumb face opera, and eight-tone sitting singing?	Yes 5 people	No 0 people	Depend on the willingness of children 3 people	

Figure A.9: The summary sheet of the questionnaire of the Banwan opera troupe. (Source: Author)

Part 3: Banwan's College Youth League survey (32 samples: He Biao, He Jing, He Yan, He Yong, Huang Chengli, Huang Jiaquan, Huang Rulian, Li Dingan, Li Dingping, Li Jinfang, Li Jinmei, Li Jinzhu, Li Maoxian, Li Qian, Li Tao, Li Xiande, Li Xianli, Li Xianxian, Li Xue, Luo Guomei, Luo Guocheng, Luo Guohui, Luo Guojie, Luo Guorou, Luo Guoxia, Luo Jiamei, Wang Haide, Wei Tianguan, Wei Tianzhi, Wei Yongjiao, Wei Zhengli, Xu Xiangmei), interview by author, Banwan village, October-November, 2019

Aim: The questionnaire survey aims to study what influence the rural renovation had on enhancing the skills, attitudes, and organizations of the young people for participating in the village development.

The summary sheet of the questionnaire of the Banwan college youth league

Questions	Answer 01	Answer 02	Answer 03	Answer 04	Answer 05
What is your age group?	18-25 15 people	26-35 13 people	36-45 4 people		
Are you working out of the village or staying in the village now?	Working outside the village 23 people	Stay in the village 9 people			
Do you like the architectural features of the Banwan village after the village renovation conducted in 2016?	Yes 28 people	No 4 people			
Do you master the traditional handicrafts of the village (including winemaking, Bouyei embroidery, pottery making, and Bouyei opera performance)?	Yes 14 people	No 18 people			
If you do not master the traditional handicraft of Banwan village, are you interested in learning in the future?	Yes 29 people	No 3 people			
Would you like to participate in various activities in the village (including traditional sacrificial activities, festival celebrations, and other public activities)?	Yes 29 people	No 3 people			
Do you think there is enough public space in Banwan village to facilitate the lives of the inhabitants?	Enough 12 people	Not enough 20 people			
Are the facilities built during the rural renovation convenient for villagers to organize (and participate in) public activities?	Yes 28 people	No 4 people			
Do you think the further development of Banwan needs more external support or to enhance the capacity of the community? (Multiple-choice question)	External support (If you choose this option, please answer question 10) 20 people	Internal capacity (If you choose this option, please answer question 11) 18 people			
What do you think external support involves?	External fund 21 people	Clear development schemes proposed by government or professional institutes 22 people	Tourism facilities construction has to meet the ecological and environmental protection 23 people	Provide skills and knowledge training for the villagers 20 people	Restore Banwan primary school 16 people
What do you think are internal capacities that needed to be strengthened in the settlement?	Clear development schemes proposed by the community itself according to its needs and conditions 24 people	Village should have "capable people" with strong organization and executive experience and ability 24 people	Villagers actively participate in the community activities 20 people		
Are you willing to put forward some development ideas and initiatives for the development of Banwan village?	Yes 20 people	No, it has nothing to do with me 0 people	I have no idea for the time being, but if others have good ideas, I will support them or even participate in the development initiatives 7 people		
Do you think Banwan village has the foundation to provide conditions for returning college students to start a business?	Yes 8 people	No 19 people			
Are you willing to return to Banwan to develop your career?	Yes 9 people	No 0 people	I want to return but the opportunity is premature 18 people		
If you have started your business in Banwan village, what do you do?	Revitalization and production of traditional handicrafts 12 people	Agricultural production 14 people	Internet entrepreneurship 11 people	Others 12 people	
If you once started a business in Banwan village but failed temporarily, what do you think are the main causes?	I am not ready 14 people	Incomprehension from the family members 7 people	Economic pressure 18 people	Lack of support 17 people	

Figure A.10: The summary sheet of the questionnaire of the Banwan college youth league.

(Source: Author)

Part 4: Example of transcribed interview by author: He Yong (villager and one member of Banwan's College Youth League), Banwan village, August 7, 2021

Q: *When did you return to Banwan village and start your business?*

A: I went back to the village and decided to become a producer of live streaming and short videos in 2020.

Q: *What causes prompted you to return to Banwan village?*

A: The concept of "we-media" has become a popular symbol nowadays. I also like shooting. I came up with the idea of going back to my hometown and making short videos to start my business. At that time, the village was developing rural tourism, which may become an opportunity for me. So I chose to go back to the village and set up my business.

Q: *Did your family support your decision to promote entrepreneurship? How did you convince your family members that your plan would work?*

A: In the beginning, I didn't get support from my family. However, it is believed one of the reasons for getting support from my family members is because of the Covid pandemic. My family members think it is safer to make money at home.

Q: *What do you think about the advantages of starting a business in Banwan?*

A: The advantage of starting a business in Banwan is that our village retains rich cultural heritages. Many cultural resources can be developed into commodities, such as hand-made clothing, planting, and raising agricultural products. Besides, I think the village renovation led by professor Lyu is a kind of Internet sensation that can attract more potential visitors and customers. And the more number of visitors grows, the more local businesses profit. So rural renovation and rural tourism can bring financial rewards. And also, the better the development of the village, the more beneficial it will be to my business.

Q: *What do you think about the disadvantages and weaknesses of starting a business in Banwan?*

A: The inferior strength of starting a business is that the village is remote, and the delivery of the package is slow and inconvenient. Besides, I think the villagers are still not united enough. This phenomenon and facts can be found in the land division and cooperative development. Another constraining factor is that many villagers have old-fashioned thoughts. For example, I want to help them sell agricultural products online. However, they do not believe it is a practical way to make money. And also, there is no leader from a primary-level and entrepreneurial individual

who can take the lead in rural development.

Q: *What impact has Banwan's rural renovation had on the local village development?*

A: Although I studied out of the village for many years, I have always been concerned about the village's development. Before the renovation, many stilted buildings in the village were crumbling, and there was no fire-fighting system. After the renovation, the dilapidated buildings were repaired, and the fire-fighting and power grip systems were installed throughout the settlement. In addition, the Banwan primary school was also renovated to provide children with a better learning environment and a safe village.

My auntie got the embroidery training opportunity in Suzhou. She told me that they had learned some skills and now dared to set up a stall in the street in Yata town. Sometimes my auntie could receive orders from customers from other places. So now my auntie doesn't have to go out to work, and more local women are willing to develop their businesses and earn additional income at home.

After the Banwan renovation was broadcasted and introduced through Dragon TV, more people throughout China knew about the existence of the Bouyei village in remote Guizhou. Banwan renovation's popularity has attracted the BMST to invest and operate the programs in the village. Many people who worked outside had backed to the village and found some employment. In this way, the impoverished have gained income while staying with their parents and children. I think I will have more opportunities in the background that Banwan village is developing rural tourism. This is one of the reasons why I came back to the village.

Q: *What do you think about Banwan's culture, livelihood, and landscape? Have you used them as the creative themes in your short video making?*

A: The culture of our village is still very unique and rich, but few young people have time and chance to inherit it. We like the current settlement appearance. The scenic spots and facilities in the village enable us to feel that we can also experience urban life in rural areas. Everything I saw and heard in the village will be the shooting subject matter. At present, the delicious rural foods, peasant lives, agricultural production, and national customs have become a key part of my video production.

Q: *Do you have a team now?*

A: I do not have a team, but my younger brother and some friends will help me out sometimes.

Q: *Whether your short video-making begins to make some profits?*

A: Short video making is profitable. The profit comes from web traffic and agricultural products bought by fans.

Q: *Will you cooperate with other organizations? For example, the BMST?*

A: I do not cooperate with any organization at present.

Q: *Have you considered how your business could contribute to local village development or impact this community?*

A: My current idea is to increase the viewership data of my short video and then play a leading role in promoting the sales of agricultural products online.

Appendix B

Appendix B.1: Publication 1

"政策—生计模式—文化" 聚落变迁动力解释模式
——以贵州省黔西南册亨县布依族板万村为例

"Policy-Livlihood-Culture" Driving Force Interpretation Model for Settlement Change
—A Case of Banwan Village, Guizhou Province

曹 卿 CAO Qing

摘 要 改革开放三十年以来，尤其是近十几年，贵州作为西部地区、少数民族地区和贫困地区的三重叠加区反映了时代发展带来的复杂性，而册亨板万村则是这种复杂性的集中体现。国家力量、市场和文化在这里交织，导致了传统聚落、民居形式和建造模式的变迁。已有的聚落变迁模式无法完全解释贵州少数民族聚落的变迁，本文针对贵州黔西南少数民族聚落，提出"政策—生计模式—文化"解释模式。政策是契机，起发动机作用；生计模式为聚落的变迁提供资金支持，同时也带来消费观念的转变；文化侵入则促使信仰系统和观念的转变。这三点是贵州少数民族地区聚落变迁的重要动力，在板万村的聚落变迁中得到了体现和证明。希望将来在其他贵州少数民族聚落的调查和研究中，能够验证这个解释模型是否适用和有解释力。

关键词 政策；贵州模式；市场经济；生计模式；文化涵化；板万村

Abstract: After thirty years of reform and open policy, especially in recent ten years, Guizhou, as a triple overlapping area that are western area, ethnic minority area and depressed area, reflected the complexity of the development of times, and Banwan Village is concentrated expression of this complexity. The intertwining of state power, markets and culture has led to change in traditional settlements, dwellings and construction patterns. The existing settlement change models cannot completely explain the change of ethnic settlement in Guizhou. This article proposes a "Policy-Livelihood-Culture" interpretation model for the settlement of ethnic monorities in southwestern Guizhou. Policy is opportunity and act as an engine; livlihood pattern provides financial support and brings about changes in consumption attitude; cultural intrusion leads to the transformation of belief systems and concepts. These three points are important motive forces for the changes of settlement in ethnic minority areas in Guizhou and are reflected and proved in Banwan Village. It's expected that the ethnic minority settlement investigations and researches in the future can test whether this interpretation model is applicable and can offer convincing explanation.

Keywords: Policy; Guizhou Model; Market Economy; Livelihood Model; Cultural Acculturation; Banwan Village

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0 引 言

中国的布依族源于古代"百越"，有人口287万，现主要分布在贵州、云南、四川等地，在贵州主要聚居在黔南、黔西南和黔中一带。

册亨县位于黔西南布依族自治州南端，地处珠江上游两大支流南北盘江的夹角地带。这一带为喀斯特地貌，沟谷纵横、峰峦迭伏、交通不便。境内最高海拔1 634 m，平均海拔830 m。

传统的布依族是稻作民族，也进行狩猎和放牧。在传统布依族聚居区，或沿江水河流、或卧山山间平底、或依山地丘陵，分布着极具特色的布依村落。村落旁则是不同面积的山间平地或者田坝。这些田地不仅是布依族先民世代耕作的生产地带，也是传统布依族自给自足社会的重要保证。但是，随着政府政策模式的调整，生计模式的变迁和汉族文化的侵入使布依族的聚落和民居发生了剧烈变化。

1 板万布依族聚落的内容与边界

村落是以"家"为单位构成的社会。但聚落却不只是家的集合。它包括了人类的物质生活和精神生活，福田亚细男在他的村落领域论中指出，聚落可理解为由居住领域、生产地带的领域和采集地的领域所构成的三重同心圆结构[1]。聚落应该是人类物质生产、精神生活、社交活动等所有场合的集合。具体来说，聚落包括民居、道路、山林、水源、耕地、庙宇等一切与人的生产生活相关的空间（图1）。

板万村是典型的布依族山地聚落，于2014年入选第三批中国传统村落名录[2]，位于黔西南州册亨县西南部，与广西隔江相望。板万古寨村落选址于地址条件较好的"卜山公"半山腰处，整个村寨坐西南朝东北，背山面水。建筑群布局沿与高线自由布置，但建筑正面都能看见"盘龙山"。板万村的农田位于周山环抱的平坝上，是理想的水稻耕作之地，本地人称之为"海坝"。通过"盘龙山"山顶流出的水引入灌溉水渠进入"海坝"，里面主要种植苞谷、水稻、甘蔗、油菜花等作物。环抱"海坝"的七座大山是布依族世代采集材料和能源的地方。整个空间呈现出"村落—坝田—山林"的基本结构。板万村的建寨时间不可考，在村民的口述中，板万是由小寨子与散户逐渐组成的大寨。板万古寨坚守住垭口进入寨子的道路，易守难攻。随着人口的不断增加和硬质盘山道路的修建，居民不断沿着道路向坝田拓展。接近山顶的传统吊脚楼和靠近田坝的新式民居高差接近190 m，直线距离为1.2 km。现保留传统吊脚楼111栋，新式民居203栋，农户大部分已经搬离吊脚楼，只有少数老人和贫穷的农户继续住在吊脚楼里面。

笔者在2016年跟随设计团队对板万村布依族聚落和民居进行了测绘，着重探析聚落和民居的变迁。由于板万村的文字和图片资料较少，本研究采取人类学研究和聚落空间形态研究相结合的方法。研究材料主要来自两方面：一是访谈材料，其中最重要的来源是对寨老、布依戏传承人、村两委成员、村民的采访；二是聚落相关资料，主要为在地调研结果、公开地图和地形数据。两种研究方法相互结合、互补有无，试图在"政策—生计模式—文化"的框架下来解释聚落与民居变迁的形式与原因。从对村民和村两委成员的访谈中得知，2002之前村寨的变化不大，所以聚落变迁分析的时间段限定在2002—2016年。

2 影响当代布依族聚落变迁动因

2.1 聚落变迁理论背景

生态人类学是一种用生态环境因素来分析解释解释文化现象的学科。美国人类学家斯图尔德（Julai H Steward）通过考察环境对人的影响和对文化的选择，以及人类文化对环境的适应与影响，提出了生态的文化适应理论与文化生态学的理论[3]。周政旭在他的文章中总结的生态人类学"环境—生计模式—文化"理论[4]，对于理解历史聚落空间的形成和演变过程有重要意义。

然而，该理论还是不能完全解释近二十年来贵州布依族聚落的剧烈变化。贵州作为全国唯一一没有平原支撑的省份，由于地形产生了变化，山川阻隔较大、交通不便，边远地区的少数民族聚落对自然环境的改造不大。不利的自然环境是经济发展和吸引投资的障碍。自然环境的阻隔、交通设施陈旧落后、居民居住分散，给招商引资设置了重重障碍，严重制约了产业化、集约化进程、商品化进程。资本都是逐利的，只会向价值洼地汇聚。在不利的自然环境的制约下，特别是在自然环境很难在短时间内被改变的情况之下，只依靠市场的力量很难改变经济发展速度慢的事实，需要发挥国家和政府的力量。在此背景下，那些地势封闭、位置孤立、发展缓慢、自然环境不利的布依族聚落受到国家和政府力量的支配和影响，无法通过过大规模的环境改造来促进聚落的变迁，环境只是制约聚落变迁的要素而不是推动聚落变迁的重要因素。因此，对贵州近十几年来聚落剧烈变化动力的解释模式是"政策—生计模式—文化"。

2.2 政策背景

由于历史原因、地理环境、区位条件、基础设施等诸多因素的限制，贵州是西南地区乃至中国贫困面最大、贫困程度最深、扶贫开发任务最重的省份。贵州省为了消除贫困，加快推进城乡一体化，结合自身条件出台了一系列具体措施。

2.2.1 四在农家，美丽乡村

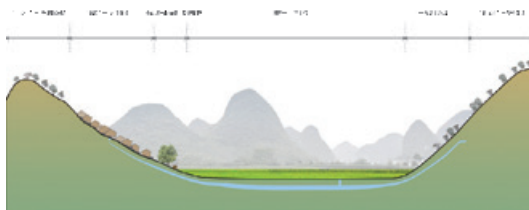为改变贵州农村贫困面貌，结合贵州的实际情况，完善了农村硬件设施，建立

图1 贵州少数民族山地聚落的"山—村落—祭祀空间—耕地"的空间格局
Fig.1 "mountain-village-sacrificial realm-farmland" the spatial
pattern of Guizhou mountainous minority settlements

乡村道路体系。在推动基础设施向边远地区延伸时，做到"村村通油路，村寨路面硬化"，改善农民居住条件，改造村容村貌，为农村经济发展打下基础。然而，便利的村落道路在打破聚落闭塞的同时也开始改变聚落的空间形态。

2.2.2 危房改造

针对危房评定标准进行拆除和加固，房屋改造按照农房风貌图集和危房改造技术导则实施。然而，部分农户拿到补助后并没有修补老房子，而是作为建新房子的启动资金，导致老房不去修、新房建不起的结果，原本的聚落形式开始异化。

2.2.3 贵州农业产业调整

扩大新能源技术的引进、推广光伏扶贫工程与生物燃料是保护生态环境、发展生产力的突破口。但是，新能源企业会与聚落原住民在土地、水资源的争夺上产生矛盾，使聚落的生产生活空间发生变化。总之，在自然环境制约经济投资和基础设施不完善的背景下，在少数民族聚居的边陲区，政策是社会和经济发展的主导力量，政策也是贵州少数民族聚落剧烈变化的主要外因。

2.3 生计模式

对生计模式的探讨一直是生态人类学的重点。它是指特定族群与周围自然环境长期互动的过程中，逐步构建和完善的各种谋生手段和谋生方式的总和[5]。居住于西南喀斯特地区以稻作为主的布依族的生产生活很大程度上依赖传统的生态知识，资产对农民的约束较强，生计风险高，遇到青黄不接的时候，家庭生活会陷入困难。传统布依族以家庭和家族为单位，共同生产、相互协作，这是在巨大的生存压力下找到的适应当地环境的生计模式。

板万村布依族聚落传统生计模式是适应当地自然环境、充分利用自然资源的一种文化机制。它是以稻作农业为中心的传统生计模式。面对市场经济的侵入，村民以积极主动的态度接受了这种变化。在调查中发现，原本以稻作农业为根本的布依族，现在转变为以种植甘蔗、油菜花等经济作物为主，以黑山羊畜牧养殖业为重要补充的多元生计模式，水稻和玉米的种植

只是满足家庭的饮食和酿酒需求。但是，由于不利的自然环境和不便的交通，商品经济侵入板万村的程度有限，传统经济并没有淹没在市场经济的发展中。

随着经济和社会的发展，商品经济世界吸引着年轻村民，在农耕收入无法提高的情况下，出去打工是为数不多的提高剩余收入的手段，而这些收入则是新建民居所需钱财的主要来源。在商品经济中，打工经济对板万村的侵入和影响最大。综上所述，生计模式是研究聚落变迁的形成原因和动力机制的重要视角。

2.4 文化变迁

文化变迁指的是一个族群在与其他族群的接触过程中，引进新的观念与做事的新方式，造成传统价值观念与传统行为方式的改变[6]。涵化是文化变迁理论中的一个重要概念，指因不同的文化群体因持久而集中地接触，两者相互适应、借用。其结果是一方或双方原有的文化模式发生文化变迁或部分渗透。董恩正先生对"涵化"的解释是："当一个社会与另一个经济文化上都比较强大的社会接触时，这个较弱小的社会经常要被迫接受较强大社会的很多文化要素，这种由于两个社会的强弱关系而产生的广泛的文化假借过程即为涵化。"[7]文化涵化的过程包括两方面的内容：一是文化的接受过程。通过文化特质的传递将一种文化的新元素加入另一种先前存在的文化内容中，或以新元素取代原先的内容元素。二是适应，将接受过来的各种文化成分同自己的文化传统体系部分或全部协调融合起来的过程[8]。

在所研究地区，布依族、苗族、侗族、汉族等民族在很早之前就已经开始了实质的文化接触和渗透，或完全融合、或部分接受、或完全排斥。这个过程中，各种文化此消彼长，但各民族的文化核心并没有发生很大变化。然而，近几十年来，汉族文化在布依族的核心区域成为强势文化，随着汉民族文化在大众媒体和政治宣传中的不断传播，布依族文化作为核心文化身份的角色渐渐远去，变成以华夏族为主体的族群的生存空间的弱势文化。因此在研究中，需要分析文化变迁的过程和形式，甄别

出对聚落空间产生影响的涵化作用。

聚落形态的变迁势必为内外因互动的结果。生态人类学中"环境—生计模式—文化"理论模型可用于阐述传统贵州布依族聚落的演变过程，然而，却对近年来贵州布依族聚落的剧烈变化缺乏解释力。尤其是不利的自然因素使该地缺少投资吸引力，国家力量和政策是区域变化的主要力量。当代贵州布依族聚落正是在国家政策、生计模式变化、民族接触的三重影响下发生剧烈变化的。

3 变迁形式和原因

板万村于2002年为建小学，修建了连通板其村的7.5 km的乡村公路，2007年在册亨县国土的帮助下修建了村寨至田坝的硬化路面。至此，板万村才打破封闭的状态，开始了与外界的交流。2007年板万村村民大规模离开乡村去城市打工，2008年危房改造政策开始在板万村推动实施，2014年村寨内78栋吊脚楼租给开发公司。在这个阶段，板万村在政策介入、生计模式变化和文化涵化的作用下发生剧烈变化。然而，板万村的自然环境却变化得非常缓慢。

3.1 聚落的变迁

3.1.1 垂直聚集型—平面分散型

传统布依族板万村聚落依"卜公山"而建，在高差40 m的山坡上聚集着100多栋结合坡地的传统木质吊脚楼。民居沿等高线呈条状和团状布局，聚落顺应山地起伏，建筑背靠山坡、面朝坝田，沿等高线一级一级向上排列，体现了对山地的适应性。近十几年来，板万村不断扩展，新式民居沿盘山路由老寨向离田坝附近的缓坡和平地蔓延（图2–3）。建筑群布局由原来依山势而建的紧密的带状变成沿公路与平缓地带而建的分散的带状，建筑群逐渐平面化。由此，板万村逐渐分成老寨"上板万"和新寨"下板万"两部分（图4）。

聚落布局的变化始于2002年和2007年的公路工程。农村公路的建设使板万村不再是封闭的山地村落，村城内居住区到生产地带之间通达便利，村落与外界的物资交流更加顺畅。另外，现在建房不再考虑防

图2　板万村区域平面图（2002年之前）
Fig.2　Banwan Village area plan (before 2002)

图3　板万村区域平面图（2016年之后）
Fig.3　Banwan Village area plan (after 2016)

图4　"上板万"及"下板万"
Fig.4　Old Village and New Village

卫需要，择屋的位置更加追求交通的便捷性。自然环境对平地上的房屋的威胁远小于依山而建的吊脚楼，现代的布依族建房子不再需要组团聚居，更多考虑家庭的需求。因此，布依族由山地向平地的转移是他们追求便捷交通和物资获取等生计利益的结果。

从垂直聚集型村落向平面分散型村落的变化对布依族居民的生活产生了一定影响。山上老寨居民的生活用水只能依靠位于寨中不同高度的两口井水，水资源相对匮乏。而新寨地势平缓，海拔相对低一些，居民从"盘龙山"引来自来水，还安装了网状的现代供水系统，解决了24 h随时用水的问题。另外，在靠近田坝的公路旁建新房可以在平时的生活和农业生产中节约时间和劳动力成本。因此，饮水、交通、垃圾处理等优越的条件会促使更多的村民搬离老寨而在沿公路处自家耕地上建新房。

3.1.2　自给自足型—外部汲取型

传统板万村是"日出而作，日落而息"的以自给自足为生活逻辑的社会。在日常生活中，传统板万村依赖村域内部资源实现自治，并因此维持稳定。然而，现在板万村的资源却成为村域外资本汲取的对象。2016年底，板万村的传统牧场被征地133 ha（2 000亩）并与某光伏电厂签订25年租用土地合同。征地意味着分离，村民必须离开熟悉的土地与熟悉的生计模式。除此之外，政府计划征收部分田坝作为停车场，板万小学也因旅游开发搬离原址，传统的景观和生计被新的物质形态和产业所取代。

如今的板万村已被纳入国家政权体系，开始承担为国家发展提供资源的角色。乡村作为多种资源的载体，是开放市场体系中资本抢占的洼地。之前不利的自然环境使村落保持了与外界相对隔绝的状态。2007年以后逐步完善的通村公路和贵州"村村通"政策的实施，在帮助农产品走出深山的同时，也为资本汲取资源提供必要条件。在此过程中，板万村的自然资源转化成为外部所需要的社会资源。此外，受到市场经济的冲击，且缺乏先进生产要素的投入，板万村布依族单一农业的生计模式使农户更加贫困。

新的资本运作模式在取代传统牧业的同时，也消灭了农民基于山地资源的生产方式，其结果不仅降低了农民农业生产的能力，还难以逆转地瓦解了人与自然和谐共生的关系。不同的外部力量攫取不同的资源，带来的不仅是生态灾难，更是对聚落形态的破坏。资本不断地重新定义着板万村的内部边界，聚落中的山林和耕地从一种承载生活方式的空间蜕变为攫取资源的场所。农民自用、自建的土地事实上被转化为外部资本的经营性建设用地。传统的"村落—坝田—山林"的基本空间结构已被打破。

3.2　民居的变迁
3.2.1　板万村布依族传统吊脚楼基本形制

板万村布依族吊脚楼主体结构为穿斗式木结构，多为枫香木和杉木。正面为木板壁，其余三面多为厚度为40~50 cm的夯土墙，墙上会留洞作为窗户和门洞。板万村的吊脚楼大部分为三开间，少数为4开间或5

开间。开间在3.5~4 m之间。中堂开间大于两侧或边间开间。根据房屋进深和高度的不同，分为5柱13头或7柱19头，中柱子一般在5.5~6 m之间。

传统吊脚楼为三层，架空层关养牲畜、家禽，储物；首层为部分架离地面的居住空间，前半部木结构吊起悬空，后半部坐落在升起的平整土坡上，前部木板地和后部分泥土地相平。二层由于通风条件好，一般用作储藏粮食的空间，部分家庭也用作子女卧室。二层不设固定楼梯，通过楼梯架联系上下空间（图5）。

建筑的平面布局在架空层的居住区表现得较为明显，平面布置分三段，中间为堂屋；左侧一分为二，靠山面为厨房和火塘区，悬空区为卧室；右侧也分两部分，靠山面为酿酒区，悬空区为卧室，堂屋外侧设坎檐和阳台。通常情况下，中堂上方不再设楼梯，可以直接看到瓦顶。堂屋是整个空间的核心空间和供奉祖宗牌位的地方，而火塘则是家庭生活的中心，是取暖、吃饭和聚
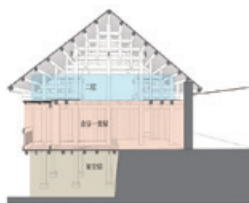

图5　吊脚楼的竖向空间结构
Fig.5　vertical space pattern in stilted building
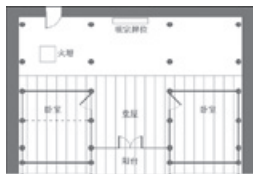
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图6　吊脚楼架空层
Fig.6　the floor layout of stilt

图7　吊脚楼首层
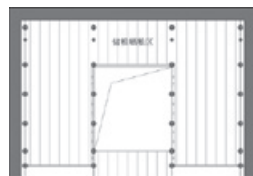Fig.7　the first floor layout of stilt

图8　吊脚楼二层
Fig.8　the second floor layout of stilt

会议事的场所（图6~8）。

3.2.2　信仰型—世俗型

涂尔干（Durkheim）认为，生存的需要迫使所有人，无论是信仰者还是非信仰者，都需要通过某种方式把我们周围的宗教事物表现出来，不断对它们做出判断，并且在我们的一举一动中必须考虑它们[9]。传统板万村吊脚楼不仅体现了稻作农耕的生产模式，更反映了布依族对自然的礼敬和对祖先的崇拜[10]。布依族在选择房屋朝向的时候，房屋的正面一定要"开门见山"。另外，古寨中有一棵巨大的金丝榔，它是布依族山寨的风水所在，保佑村寨家族源远流长、六畜兴旺。无论是神山还是神树，都是传统吊脚楼建房时重要的参照物。房屋室内堂屋正上方板壁上有供奉祖先的牌位，堂屋是接待客

人地方，严禁妇女在堂屋睡觉。

近十几年来，方便的交通和自来水是新建民居择地考虑的主要因素。房屋不再面朝"盘龙山"，而是沿盘山路而建，以获取交通便捷性。新式民居室内布局为了功能模糊了很多信仰禁忌，原有的空间禁忌无法维持。厨房、酿酒区、火塘等功能性强的服务空间则被划分出去，设置为单独的伙房。火塘由一个家庭的象征变成纯粹的工具。但是，堂屋家神的牌位被保留下来继续守护家宅、庇佑子孙，即便任何人都可以在堂屋里供奉的祖先牌位面前随意经过。

2007年，在县土地局的帮助下，村里修建了老寨通往田坝的硬化盘山路，以促进村寨的现代化发展。新建民居因顺应盘山路的方向而放弃了原来必须朝向"盘龙山"的原则。政府的生态保护计划使就地取材的建造方式成为不可能，布依族只能选择其他替代材料。现代建筑材料的受力特性、耐候性和易获取性是部分传统材料无法比拟的。此外，汉族城镇建筑形式对他们的自建房有极大影响。现代房屋的功能性、世俗性势必与传统吊脚楼的布局产生矛盾，但在市场经济和汉族文化的双重入侵下，布依族选择了更强调功能的现代民居。

综上所述，中心地带的汉族文化的传播和涵化使布依族的传统住宅从信仰型改变为世俗型，这样的作用并不是单向的，布依族建筑对当地汉族的建筑形式也有一定的影响。但是，汉族的文化在市场经济和大众传媒的影响下会变得更加强势。布依族传统民居文化的保持会变得越来越困难，如果没有外部力量的介入和保护，布依族传统民居和文化会随着时间的推移而逐渐消失。

3.2.3　功能实用型—审美炫耀型

传统布依族没有贵族和祭祀阶层，和侗族与苗族相比，没有需要彰显权利和财富的阶级，且缺少繁复的礼节和隆重不菲的仪式性消费。传统布依族建筑是简朴实用的，跟仪式和礼节的关系不明显，相较周边民族，布依族没有礼制建筑和宗教建筑，和汉族相比，也没有中轴对称式建筑，布依族聚落呈无中心的散居形式。

吊脚楼三段式的空间划分是基于稻

作农耕的最实用的空间格局。在农耕时代，牲畜和家禽是一个家庭的重要资产，在底层圈养牲畜，可以在实现人畜分离的同时，方便农户照看家畜；日常居住空间离地有1.8 m的架空，不仅可以防止昆虫毒蛇的侵扰，还能在雨季雨水冲刷山地时保室内干燥；顶层储存粮食，由于良好的通风条件，在潮热的条件下粮食也不易发霉。

2007年后，大量新建民居外观采用了非布依族文化装饰元素：室外立面或用瓷砖饰面，或用油漆粉刷，窗户上增加凸出的拱券结构，阳台和平台的栏杆多被镜面不锈钢或水泥柱替代，阳台的支撑结构多为罗马柱式。各色琉璃瓦的使用可以在屋顶装饰上显示这个建筑的与众不同。在调查中发现，房屋面积超出实际使用面积，每个新房有几间空置的房间是普遍现象，如一个五口之家的家庭有八个卧室。

随着大众媒体的普及和打工经济的兴盛，商品经济和炫耀性消费进入到每一个家庭。消费主义认为："消费的目的主要并不是享受消费品的使用价值所带来的对需要的满足，而在于消费品的符号象征意义。"[11]从实地的调研中可以看到，农民新建的民居通常采用汉族的装饰来表现家庭的财力。这种现象也牵扯出了萨林斯所言的一种对于"他者性（alterity）"的文化政治学的思考，即通过整合外部存在和权利，社会如何获得自身秩序与认同[12]。新建民居的外貌所具有的"他者性"表明了新建民居是通过对他者的部分吸纳而实现的一种涵化过程。

这种以炫耀为目的充满盲目审美的新民居对实际生活产生了很大影响。在9月水稻和玉米收获的季节，村民把粮食储藏在铺满瓷砖的室内，既不透水又不通风，粮食容易发霉。另外，这种目的炫耀式的建房让许多家庭背负过多的经济压力，影响生活的其他方面。

3.2.4　匀质型—分化型

拉普卜特（Rapoport）认为，原始性和风土性的建筑形式很少能体现个性的欲求，而是整个群落对于理想环境的追求[13]。板万村传统吊脚楼的样式统一，有相

同的竖向空间布局、平面基本布局、立面基本形式、结构形式和材料构成。进入21世纪后,伴随市场经济的成长和政策的实施,城乡二元结构出现了松动,劳动力、资金等生产要素跨越了城乡和地区的藩篱。在生产要素跨越城乡的同时,消费主义和新生计模式也使社会关系被重组,推动了民居形态和聚落功能的分化。

首先是民居的"去传统化"。作为中国改革开放的滞后地带,板万村村民的经济和文化不自信使他们认为只要是城市的建筑就是好的。2007年的危房改造在经济上解除了村民对传统民居的依赖,开始了向现代民居过渡的过程。村民抛弃了原有适合山地的吊脚楼,转而改造适合平地的砖房,整个板万村村寨民居体现出"传统—现代"的分化现象(图9)。其次是民居的"去统一化"。市场经济的导入与交通条件的改善把以血缘为核心的传统乡村社会从有限的地方场景中剥离出来。村民建房屋的时候不再参照传统的吊脚楼,而是把外部世界的建筑形式作为参考对象。富裕与贫困家庭拥有不同的室内外装修、门窗系统和庭院布置。房屋体现了明显的贫富分化。最后是聚落的"去乡村化"。按照列斐伏尔(Henri Lefevre)和哈维(David Harvey)等人的分析,资本是塑造空间形式、推动空间转换的根本力量[14]。在政策和市场经济的双重加持下,资本开始进入并侵占村落空间。最突出的例子是2014年县政府与开发公司签订房屋流转协议,并试图将小学搬离,修建停车场,改变原有空间功能,将生活空间变成展演空间。

3.2.5 延时回报营造—即时回报营造

民居营造模式是适合当地气候与生产力条件的民居建造策略,它同样也是利用资源和生活方式的体现。以前布依族家庭劳动力有限,到了建房时便通过换工以获得家庭之外的劳动力的帮助。然而,2007年后板万村的劳动力大量流入城市。原本稳定的协作关系受到挑战。例如:老陆帮小黄拉来建房子的红砖,到了老陆建房需要小黄帮忙时,小黄却去城里打工,无法获得还工。所以,现在板万村在建房时的工匠都是基于货币结算的雇佣行为,瓦工、木工和石匠都要请专门的师傅,村民之间的合作更加灵活。

农民在对换工还是雇工进行选择时受到市场规律的支配,他们会权衡短期和长期的利益,最终做出基于利益最大化的选择。伍德伯恩认为有两种根据经济和社会组织进行食物搜集的社会,即延迟回报系统(delayed return)和即时回报系统[15](immediate return)。延时回报系统以

食物资源剩余积累为基础,即时回报系统以食物资源的快速消费为基础。传统布依族家庭靠天吃饭,资源的积累依赖于季节性农产品的收获,剩余资源积累有限。单家独户的劳动力和生产能力无法满足建房的需要,农民只有依赖情感联结的换工以获取社会支持。这种换工行为体现为一种延迟性的劳动力交换。如今,本村劳动力在城乡之间出现了大幅流动,昔日村民间常态性的换工行为遭遇了人口流动的不确定性,于是昔日换工方式中的延迟性劳动力交换被雇工方式中的货币即时结算所取代。

现在板万村建房子取决于家庭的经济能力。在调查中我们发现,建造一幢两层的砖混结构的房子需要12~15万元。对于惯于种地的农民来说,即使去城里打工也很难一时凑齐钱款。村民会根据钱财的累积程度分阶段建造房屋(图10),一般先建第一层,同时建好通往二楼的楼梯,有钱后再建第二层或第三层,最后是内外装修。板万村大多数新民居有较长时间的建造跨度。村域内充斥着大量一层红砖、二层水泥砌块的由不同材料建造的看起来未完工的民居,但是房子内部却是正常的生活状态。

基于劳动力不足和情感联结的延时回报型营造模式导致民居的造型呈现出匀质和统一的状态;基于市场经济背景下的即时回报型营造模式由于各户不同的经济状况,使建造时间不同程度地被拉长而呈现"未完成"的状态。

4 结语

本文对近十几年来影响板万村空间形态变迁的特征与动力机制进行了分析。板万村作为西部少数民族贫困地区典型的山地聚落,政策干预、生计模式和文化涵化三个机制的耦合作用是推动其聚落空间变迁的根本力量。政策是契机,起发动机的作用;生计模式为聚落的发展提供资金支持,带来消费观念的转变;文化侵入则促使信仰系统和观念的转变。这三点是贵州少数民族地区聚落变迁的重要动力,在板万村得到了体现和证明。从板万村空间转型的特点来看,聚落和民居的营建大体经历了"垂直聚集型—平面分散型""自给自足

图9 民居的分化现象
Fig.9 differentiation phenomenom in dwellings

图10 新式民居立面构成
Fig.10 typical new residential facade form

型—外部汲取型""信仰型—世俗型""功能实用型—审美炫耀型""匀质型—分化型"和"延时回报营造—即时回报营造"的过程。

传统板万村布依族用单纯包容的信仰、勤劳互助的精神在原本贫瘠的自然环境中找到了可以栖居的家。然而,城市化、消费主义等外部的侵入却时刻提醒其自身是如何贫困与落后,这种外部的变迁是否会打破布依族居民"诗意的栖居"[16]的幻象?

在调研过程中与北京大学刘倩博士多次交流看法与思路,论文得到她的大力帮助和启发;册亨县原文联主席,工商联党组书记、常务副主席黄权昌在调研途中曾向我详细介绍布依族文化与聚落变化的基本情况。在此一并表示感谢!

参考文献:

[1] 福田亚细男,周星. 村落领域论[J]. 民间文化论坛, 2005(01): 78-89.

[2] 中国传统村落保护与发展研究中心. 第三批列入中国传统村落名录的村落名单[EB/OL]. [2018-04-15]. http://www.chuantongcunluo.com/index.php/Home/gjml/gjml/wid/963.html.

[3] STEWARD J H. Theory of Culture Change: The Methodology of Multilinear Evolution[M]. Chicago: Illinois University Press, 1955.

[4] 周政旭. 形成与演变: 从文本与空间中探

索聚落营建史[M]. 北京: 中国建筑工业出版社, 2017.

[5] 赵文娟, 崔明昆, 沙建. 工程移民的生计变迁与文化适应——以泸沽湖机场移民为例[J]. 云南地理环境研究, 2011, 23(03): 7-12.

[6] 王铭铭. 文化变迁与现代性的思考[J]. 民俗研究, 1998(01): 1-14.

[7] 童恩正. 人类与文化[M]. 重庆: 重庆出版社, 2004.

[8] 白浩然. 保安三庄汉族移民文化变迁——以大墩村为个案研究[D]. 兰州: 兰州大学, 2009.

[9] MILE D. The elementary forms of the religious life [M]. New York: Free Press, 1995.

[10] 周国炎. 布依族民居建筑及其历史演变与发展[J]. 贵州民族研究, 2002, 22(01): 82-87.

[11] 毛华栋. 中国当代的消费主义文化探索——以电子产品的消费为例[J]. 党政视野, 2011(11): 12-17.

[12] 王铭铭. 中国人类学评论. 第9辑[M]. 北京: 世界图书出版公司北京公司, 2009: 127-139.

[13] 拉普卜特, 常青, 徐菁, 等. 宅形与文化[M]. 北京: 中国建筑工业出版社, 2007.

[14] 任政. 资本、空间与正义批判——大卫·哈维的空间正义思想研究[J]. 马克思主义研究, 2014(06): 120-129.

[15] 周雷. 反思"非洲狩猎"与投资考察"十

日谈"——《非洲》联袂联合国开启非洲人文地理商务考察"集结号"[J]. 非洲, 2012(04): 70-74.

[16] 赵静蓉. 诗意栖居的本真性——论海德格尔在现代性进程中的"返乡之途"[J]. 南京师大学报(社会科学版), 2005(01): 113-117.

图片来源:
图1-3、5-8: 作者绘制
图4、9-10: 作者拍摄

Apendix B.2: Publication 2

解读和协商
——雨补鲁和板万村的乡土空间重现

Interpretation and Negotiation
—Reproducing Vernacular Space in Yubulu and Banwan Village

曹　卿　陈益阳　CAO Qing, CHEN Yiyang

摘　要　当代乡村建设，尤其是在多方介入的贵州偏远山区传统村落改造中，各方存在认知的分化和博弈，各个主体的行为相互协商并共同作用在空间实践中。本文以黔西南州两个传统村落空间改造为调查样本，分析介入乡建各个行为主体的行动逻辑与协商策略选择的相关因素；政策背景为协商提供舞台；当地政府为各方协商提供具体机会；资本是协商中的机会主义者，村民是他者想象的受益者，而专家建筑师起着协调者和引导者的作用。同时，通过对具体案例的分析，针对专家建筑师所参与的乡村改造中的协商提出解读：博弈是形塑乡土空间的手段；协商是解决认知碰撞的途径；博弈中的共识关系是不断变换的。因此，充分解读乡建中各方的博弈与协商逻辑，是把握乡村空间重现的重要抓手。

关键词　乡村建设；行为主体；协商；空间重现

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Abstract: Rural is materialized through social, ecological and political relations involving a variety of actors. The state, farmers, rural residence, government officers, and a host of non-human factors are engaged in the production and reproduction of vernacular space. Rural area in Guizhou Province was identified, as impoverished area, ethnic region and mountainous settlement, rural reconstruction, which conducted here, were complex and arduous. It will be argued that conflict can be easily arised during the process of decision-making and planning, and led to unproductive development interventions due to all involved actors with different backgrounds and expectations. Negotiation, however, may serve as an appropriate basic mechanism to organize social and spatial development efforts, and it provides a better solution for dealing with the conflicts that emerge within the participatory processes. What is more, negotiation is a crucial mechanism to shape the result of vernacular space reproduction.

This paper draws on comprehensive observation and interpretation in exploring the involved actors in spatial reproduction driven by rural reconstruction, and focuses on analyzing the action logic behind related actors and factors. Finally, the pragmatic aspect and potential of negotiation for vernacular special reproduction are discussed. The two cases, Yubulu Village, and Banwan Village are presented as examples, which are located in the periphery area of rural Guizhou. In the year of 2015 and 2016, rural reconstructions were launched in the two villages respectively.

In the processing of rural reconstruction of Yubulu and Banwan Village, five participating actors were contributed to the rural spatial reproduction. National policy and regional policy serves as judgment norms and provide a platform for negotiation activities, even though they are unable to participate dynamically into spatial reproduction. Local government is the organizer, investigator, and executor in rural reconstruction launched in poverty-stricken and remote villages which are unable to launch reconstruction by themselves. Local government is easily trapped in a development paradigm that leads to natural resource capitalized and cultural resource capitalized. Cultural poverty alleviation provides an opportunity for expert architects to get involved in the spatial practice in poor rural area. Expert architects have to undertake a non-traditional construction role, who not only provide professional consultation base on the full consideration of the symbolic and cultural value of the site but also act as negotiators to interpret and solve the conflicts in fund allocation, interpersonal relationships, and construction organizations. Villagers in Yubulu and Banwan may be opposed to the representation of space

which is proposed by the local government and expert architects. Villages are short of means of bargaining with other actors, however, villages could participate in the negotiation with tactics including forbear, resistance and reverse invasion. External capital is the main fund supplement to rural reconstruction in the remote village except for government finance. Some private enterprises did help targeted poor villages within the campaign of "10 000 enterprises assisting 10 000 villages," however, more private enterprises aim to get the profit of a natural and cultural resource with the slogan of "development" and "modernization."

Unlike construction work in the urban area, vernacular reproduction in rural reconstruction cannot totally rely on accurate planning drawings; on the contrary, these production activities were depended on many informal and improvised activities, which cannot be pre-designed in the planning texts. Conflicts in the rural reconstruction of the two villages are concentrated on the infrastructure construction, housing renovation, and public facilities construction. The four selected examples illustrate differences in problem orientedness, aspirations, and justification among involved actors, and discuss how negotiation achieves favorable results.

Negotiation for solving conflict is no disorderly but show a certain principle. Firstly, negotiation is the opportunities for embedding implicit knowledge. In rural reconstruction, the conflict of interests is the representation of the collision of ideas. However, the cognitive collision provides opportunities to understand each other and comprehended rural interpretation by stakeholders who are users and managers after reconstruction. Therefore, negotiation enables villagers to appreciate rural value and development potential, and also understand the concept of responsibilities and seeking mutual benefit. Furthermore, negotiation could deliver sustainable reconstruction approach to grass-roots officials. Of course, the design team would correct and improves ideas and methods in the process of negotiation.

Secondly, the consensus relationships among involved actors are constantly changing. Stakeholders could make the different tacit choice to maximize their interest when they encountered various issues related to land, dwell and other livelihood aspects. Different relationship networks could be formed based on and various interest pursuit and ideas. However, the coalitions that built on the specific situation were not stable, because related parties were agreed with each other on one thing, but would become rivals on another matter.

Thirdly, the investment of the reconstruction project came from the special fund of local government. The usage of the fund would think more about planning for a larger region and neglect whether the resource fit with the specific village development. The negotiations could provide a solution mechanism for the use of capital and resource. It helps to abandon the traditional cognition about capital, widen local government's vision about village development that infrastructure construction was not the primary goal.

Finally, negotiation is the way of shaping the results of rural reconstruction. In the process of spatial reproduction, "planner", "implementer" and "user" interplayed and respected with each other. The representation of vernacular space has resulted from the negotiation of involved actors.

Keywords: Rural Reconstruction; Involved Actors; Negotiation; Space Reproduction

0 引 言

古西南地区乡村的资金、土地与劳动力被大量抽离到城市，乡村成为权力、资本和智识争夺的场地。在乡村建设中产生了丰富的互动和博弈关系，其中，无论是掌握了最大行政管理权和经济资源的地方政府，还是寻找盈利机会的外部资本，抑或是秉持不同理念投身乡建的建筑师，均与村民一起投身到乡村空间实践的生产与再生产之中。乡建并非简单遵循设计图纸的空间生产。正如詹姆斯·斯考特指出，"任何生产过程都依赖于许多非正式的和随机的活动，而这些活动不可能被正式设计在规划中"[1]。协商便是乡土空间重现中的即兴

活动[2]，相较于规划图纸，它们是非正式的活动。在乡土空间的营造中，对建筑问题的处理不是强硬的"解决式"而是协商的"调和式"[3]。这种协商机制反映出参与各方之间共享的价值观念[4]。深入和系统地研究乡建中各方博弈的关系和实践形态有重要的现实意义。具体而言，本文主要从乡村建设过程中各利益主体的行动逻辑和互动过程出发，解读当前各方博弈、冲突的关系与特征，并探讨协商行为在乡建中对乡村空间重现的作用。

本文以2015—2016年在贵州黔西南州雨补鲁村和板万布依族村进行的传统村落改造为案例，运用案例分析法解读博弈各方的意愿和博弈过程。对乡建博弈的解读

得出的经验有时比一个纯粹的乡建理念更有价值。

1 乡村建设里的角色

1.1 政策背景

国家就如何振兴乡村制定了一系列自上而下的举措，在不断丰富这些举措的同时，也推动着实践学术理论的探索。基于这样的目标，文明生态村、社会主义新农村、传统村落保护、美丽乡村和村镇联动等建设模式也在不断优化升级，体现出中华民族多元一体格局中文化、地理、气候的多样性[5]。面对文化复杂多元、地景千差万别的贵州民族地区，地方政府根据乡村地区

的复杂性制定更加具体的政策。在乡建过程中，政策虽然无法动态地参与到协商过程中，却能够作为具体空间实践的支持力量和评判准则。乡建项目结束后，政府会按照政策标准针对项目的质量、数量和审计进行验收。政策的多元性为乡村的发展提供了更多的可操作性，为各方力量介入乡建提供了巨大的实践空间和博弈的舞台。

1.2 当地政府

地方政府是政策的实施主体，更是乡村实践的启动者和组织者，为各种空间实践提供物质条件和政策支持。然而，地方政府在制定政策时仍受困于西方中心主义的现代化思想[6]，坚持"以资为本"的发展主义。在多贫困人口、多民族、多山地的贵州，当地政府有时会以牺牲原生态文化和自然环境为代价去吸引投资。地方政府对现代化的理解还停留在器物的层面而忽视了其内生性发展潜力。这种以功效为趋向的理性发达容易改造和改变文化生态[7]，甚至彻底消灭传统。作为老少边穷集中地的贵州地区，在2020年全部脱贫目标的驱动下，政府更多是在经济扶贫上着手，忽略了对文化扶贫策略的探索。在乡村振兴大战略背景下，越来越多的城市过剩资本侵入西南农村。村民并没有激烈地拒绝掠夺自然资源和文化资源的资本，即便有不同程度的反对，也无非是农民为了自己能够获得更多利益的"战术"。当地政府工具理性的发展思路与逐渐缺失本体性价值而追求物质价值的农民相符合[8]。

1.3 专家建筑师

文化扶贫为专家建筑师介入乡村的空间再生产提供了具体的可操作机会。如何更有效地实现国家顶层设计关于振兴乡村的落地实践，地方政府意识到邀请专家建筑师来参与部分实践是可行的选择。建筑师承担着非传统的营建角色，不仅会考虑场地的象征性和文化价值，根据乡村的物质特性提供专业咨询，更重要地是通过协商来解决乡建中使用资金的具体空间分配权、人际关系的协商、生产组织的优化整合等问题。委托建筑师参与乡村建设的决策体现了地方行政的开放性，有效避

免"人脉社会"对地方政府行政的公平公正与建设品质的影响。并且，正如吉登斯对于"专家系统"[9]的论述一样，村民对专家建筑师所具有的专业知识的信赖大于政府官员的"指手画脚"。而地方官员也明白其中的道理，他们会邀请专家合作进行乡村建设的实施工作，村民的信任和政府的支持为建筑师的中立协商提供了基础。专家建筑师对于当地政府来说是推行空间实践的工具，对于村民来说是获得利益的保障；而建筑师本身扮演着乡村建设实践的智囊与精准化实施的权威。不同的期望和压力同时投向建筑师，其中，既有保留和发展传统文化的渴望，又有对现代生活的向往，还有对乡村旅游开发成果的期盼。建筑师不仅是博弈方，更应该是解读和调节博弈的角色，在博弈和"讨价还价"中尽量实现对村落理念性的策划和建设（图1）。

1.4 村民：基于他者想象的利益获得者

贵州贫困边远山区聚落的村民已经出现普遍分化。其中，有被城市化吸引进城打工的农民工；有对村落变化反应敏感的乡贤和宗族领袖；更有留守村寨以农业生产为生计的山民。身份的分化导致村民在视野、认知和经济诉求上产生分歧。然而，乡村的外部仍将村民作为一个整体来看待。在当地政府和投资者面前，村民通常被认为是利益最大化的攫取者。而这种期待，均是他者的想象。在分配具体利益时，并非所有村民都认可这种观点。大部分村民希望利益最大化，而有部分村民追求风险最小化而选择放弃利益，另外还有乡贤关心利益的平等分配对乡村社会稳定的影响。村民由于身份背景的不同在乡建中有不同的态度从而做出不同的选择。大部分情况下，当外部权力资本介入乡村建设时，村民缺少与各方讨价还价的手段，在真正的利益切身行动中，很难从利益的边缘走向中心。但在难得的机遇到来之时，村民并不想成为他者想象的利益获得者，为了实现自己的权益，村民通过隐忍、迂回和柔韧的策略[10]参与到空间利益的协商当中。

1.5 外部资本

外部资本是贵州偏远山区乡建过程中

政府财政之外重要的资金支持来源。从社会资金介入的时间段来看，可以分为早期介入协商财政支持、中期介入争取建设以及开发经营优先权、后期介入接手经营管理权以及交错介入共同协商开发等模式。外部资本是国有建设资金的有效补充，在贵州"万企帮万村"的精准扶贫中，企业投入大量资金用于包县扶贫行动。但是更多的社会资本参与乡村空间实践时往往以"发展"与"现代性"为口号，投资文化旅游服务与变相开发地产，以房屋流转和土地流转为形式与村委会以及农民签订合同，实现话语权和行动权利在乡村的侵入。乡土空间中原本属于乡村系统的生产资料变成资本空间生产资料，成为属于外界的"飞地"。因此，其他介入乡建的行动主体应该警惕这种资本"在地现代化"陷阱。

2 乡土空间重现中的协商叙事

2.1 村落背景

雨补鲁村和板万村分别位于贵州省黔西南州的兴义市和册亨亨县境内。雨补鲁村是民族地区内河谷盆地汉族聚落；板万村是依山而建的布依族聚落。两个村寨公共空间匮乏、卫生条件滞后，由于现代化的侵入，原有风貌被破坏，村落空心化和空间同质化严重。包县扶贫行动中，村民一开始没有强烈的参与意识。相比板万村式微的寨老组织，雨补鲁村有反应更加灵敏的乡贤和村长老，雨补鲁村在乡建过程中有较强的运作能力。

2.2 道路与发展：到达与链接的价值判断

交通系统与村落空间形态以及风貌呈现息息相关，甚至主导着整体的空间意向。

图1 建筑师在场与各方协商
Fig.1 negotiation between architect and other participants

雨补鲁村作为区域交通连接的一个节点，如何与外部连接是各方都关注的问题。雨补鲁村地处山地谷底，仅有一条村道由唯一寨门进入。清水河峡谷坐落在与村庄一峰之隔的另一侧，作为保护村落的天然屏障，如今成为了旅游景区。但是薄弱的基础配套设施导致景区经营处于半停滞状态。项目伊始，当地政府与专家建筑师都不约而同地将峡谷与村庄建立联动关系作为一个整体进行运营达成了共识。如何通过路径使这一人文景观与自然景观连接成为旅游整体目的地成为雨补鲁村建设的前置问题。

雨补鲁是清水河示范城镇镇村联动发展"美丽乡村"的示范点，地方政府计划修建一条穿村公路将雨补鲁村与清水河工业小镇以及清水河峡谷串联在地方发展格局中。并且，峡谷景区也希望借此通过政府投资，完成基础交通投资，方便游客到达，得以再次激活景区。村民则希望通过道路征地和青苗补偿来获得额外的财富，两者很支持通村公路的提议。然而，对于这个不在委托项目范围内的道路问题，设计团队提出不一样的意见：建议地方政府取消穿村公路规划，沿用已有的绕行公路，以保留完整的"天坑地漏"人文景观。此提议并未得到地方政府的认可，甚至部分村民也以"路通财通"加以侧面反驳。矛盾聚焦于是便捷交通的效率优先还是整体聚落风貌优先，这成为设计团队与政府以及村民

的分歧。通村公路势必会破坏原有村落肌理、大量过境交通会打破原有宁静的乡村生活。经过多轮协商，最后提出了既能保护雨补鲁完整的自然环境又能减少政府大笔资金投入的方案（图2）：取消修建公路，把修路的钱用在乡村整体风貌的保护上；从雨补鲁村开辟一条1 km的旅游步道联通景区，既保障了联通，又增添了新的旅游路线。同时，在雨补鲁的重要节点开设民宿与餐饮。这个方案很快得到了地方政府的认可，村民代表也很快意识到村落保护和文化保存的可持续发展意义。

对于穿村公路的协商，表面上是利益上的博弈，本质上是对乡村发展整体认知的差异。在贵州贫困偏远地区，"要想富，先修路"是发展的主导思路，修建道路被视为减轻贫困和经济社会发展的前提条件。然而，道路作为人类生活景观的重要部分，对社会文化和生态有多方面的影响[11]。通村公路会使雨补鲁迅速摆脱"隔绝"的状态，但在融入更宽广的发展过程中有丢失原有文化状态的危险。在协商过程中，建筑师在事件的研判过程中得到了充分开明的对待；另一方面，地方政府很快在公务员队伍中公开选拔了具有规划学科背景的干部担任副镇长，这一举措大大提升了政府对于发展的研判，同时也为专家的介入和沟通提供了更为专业的对接端口。这次协商不仅保留了原有村落格局，解决了景区连接的问题，更重要的是政府领

导也把改造的思路由新农村建设转移到了传统村落保护上，持续影响着后续的聚落内部空间的营造。

2.3 "平改坡"与风貌：协同建造的营造机制

现代化和消费主义的侵入使得两个村落体现出"传统—现代"分化现象[12]。基于村落传统和风貌保护的需求，建筑师提出核心区平屋顶民居的平改坡方案。其中，雨补鲁在改造工程中只对部分民居进行改造，初现效果时，地方领导对设计的信心得到了极大的加强，追加资金并加派干部到场配合，平改坡由核心区扩大到村全村域。板万村的平改坡方案也在建设伊始得到了地方政府的肯定与支持。

然而，"平改坡"的设计方案却受到了村民的质疑。现代化的刺激使得村民对住房的期盼是不断增加的楼层和面积。增加坡屋顶对村民意味着将来加盖楼层的可能性变小。由于村民都与政府自愿签订了改造合同，村民不想完全拒绝设计方案而使自己的住房丧失改造机会，他们期望自己的想法能在改造中得到实现。村民以拖延时间的策略倒逼政府和设计团队修改最初的设计方案。协商之后的方案是在不影响结构和风貌的条件下增加待建屋顶的高度，增加的高度扩展了屋顶内部空间的使用功能，村民欣然接受这样的改造（图2）。并且，建筑师特意根据每户的实际情况设计了进入屋顶空间的楼梯（图3）。除此之外，当地政府和建筑师制定了公平的改造原则。以板万村为例，二层民居只加建穿斗结构的坡屋顶；一层的民居则是将屋顶适度抬高以增
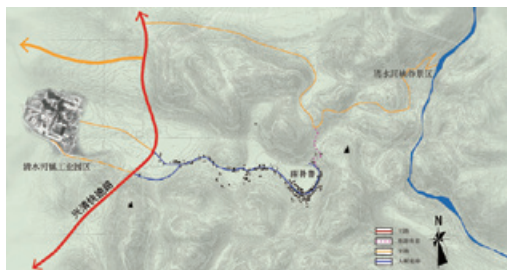
图2　工业园区—雨补鲁—峡谷风景区道路链接
Fig.2　road linkage connects industrial district, Yubulu Village and valley scenic spot

图3　雨补鲁民居改造
Fig.3　dwelling renovation in Yubulu Village

加使用空间。建筑师用不同的处理方式打消了居住在一层民居的村民因担心今后无法加建楼层而产生不公平的心理，使得各方参与的协同营造得以推动实施。

两个村落在历史上一直没有得到政府的关注和大力投资，村民一开始的态度是最大化自己的利益。村民通过故意拖延时间，用以"时间换取空间"的操作方式，迂回渗入权利之所在，同时把握时机，将其转化为"机会"[13]。在协商过程中，政府和设计团队一方面积极与村民沟通，取得村民的信任；一方面连夜邀回乡贤，召开村民大会，做说服工作；甚至通过其他政府福利，如宅基地审批等行政福利作为博弈杠杆迫使村民遵守改造规则。随着思想工作的开展深入，各方达成共识，制定了屋顶加高标准，并建立了村民监督机制。

"平改坡"的空间改造，通过给予村民参与某些空间改造机会的方式，把空间营造得真切且符合村民的生活。设计师引导地方政府重视风貌背后的实用功能，给群众争取福利；利用专业知识，消无声息地将"风貌"工程引向"风貌"和"实用"相生互进的方向，使得村民不只是他者想象利益的获得者，而是实实在在的受益者；通过乡村建设规则的建立，植入公平机制对村民进行干预，倡导了村民公平公正的意识；进而平衡了个体的自私。

2.4 抢拆抢盖与居住：利益攫取的手段

设计团队基于传统村落整体风貌的保存条件，提出了"保护为先，修缮结合"的建设思路。然而村民很快在自己那里形成了对该思路的解读，即"自己无法自由地增建楼房"。于是发生了村民利用工作人员夜间休息之时抢拆老房子、抢盖两层或多层水泥房，等待政府帮忙加屋顶的事件。另外，驻村的施工队白天从事乡村改造工程，夜间则帮村民拆除老房子，成为部分村民主导的抢拆抢盖的帮手。然而，基层干部受人情所致，没有及时对村民进行疏导教育。

建筑师在触动村民民居等核心利益上非常被动，只能派遣团队每天巡查，但无法强势阻止村民对自己居所的改造。村民采取设计团队在场时停工，离开时便加紧抢拆、抢盖的游击模式。迫于村民倒逼地方

政府和建筑师的形势，所有外部介入单位与乡贤紧急召开了工作会议，会议决定强化干部的监督责任，坚决依照改造方案有序推进，并且根据村民的表现来决定后续的投入与建设。乡贤随即连夜召开全体村民大会，对村民自身的利益与集体利益做共生诠释，决定建立村民道德讲堂。各方对事态的及时处置，抑制住了抢盖、抢拆的行为。

整件事的背后，除了村民的权宜之计和施工队对利益的争取，还与地方政府忽视对村民的个体发展与村落整体发展的逻辑关系进行解释有关。这场博弈中，地方政府释放出发展旅游的信号，使得村民意识到土地升值的可能；而建筑师在设计过程中强调建筑的文化价值与保护教育，让村民意识到未来很难有再修新房的机会。村民对风貌核心区宅基地价值升值的想象引发了抢拆、抢盖事件的发生。这场博弈止于建设各方坚决遵守项目开始时制定的改造规则。其结果被各方所接受，最终集体利益获得尊重，且公共利益之后确实反哺了众多村民的发展。

2.5 小学与功能置换：生活还是展演的选择

对于教育资源匮乏的偏远山区少数民

族聚落，拥有一座小学是非常幸运的。板万小学同金丝楠神树、山神庙、戏台、村委会等一起构成了板万村重要的社会空间。然而，县政府却打算撤销板万小学，并将学生分配到镇中心小学。小学是搬离还是保留，建筑师和地方政府之间有不同的思路。由于当地政府没有在村域内公布撤校计划，村民并没有参与到学校去留的协商之中。

在板万村开展旅游业，将布依族的各种文化通过展示向外部推介，这也是册亨作为"中华布依第一县"的一种诠释。当地政府在初期的项目讨论会上表达出撤离小学的计划，并希望建筑师将小学改造成布依族民族文化博物馆，同时作为民族村落旅游的服务中心。当地政府以投资方的强势角色试图说服建筑师按照政府的思路来实施规划设计。然而，建筑师认为小学除却功能空间上的作用外，在山区日渐空心化的背景下还维持着村落的社会组织与生活，应该作为重要的节点进行升级和扩展，并强烈地表达出假如小学撤校，便不与政府签订合同的态度。经过多次协商交流后，当地政府与建筑师达成共识，强化了板万小学核心区域的角色（图4），不仅完善了教学空间，还增加了展示布依族文化的乡土教室。小学的保留不仅维持了原有的社会
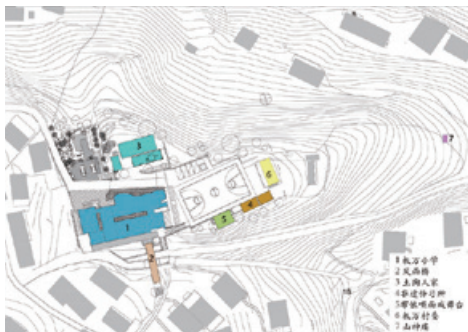

图4　板万村核心区域
Fig 4　core area in Banwan Village

空间，增添了新的功能空间，还为将来发展乡村旅游业增加了环境意义。

学校的去留表面上看是"撤点并校"在偏远村落的无奈之举，实为当地政府与专家建筑师对少数民族聚落发展的方向是"展演空间"还是"生活空间"的认知差距；同时，村寨信仰空间实现了去神圣化，变成现代休闲、审美空间与保留社会空间，延续了乡土生活。小学与其周围的空间充满了村落的集体记忆，小学的保留成为板万村改造实践中物质与文化空间延续的开始。

3 乡建中博弈行为的逻辑和经验

乡村建设早已超出空间改造范畴，它包含了诸多异质性群体（官、民、资、学）共谋之成果，承载、浓缩的是城乡差距、农民价值观之变化、官民合作的困难以及地方社会文化与现代性的冲突。博弈行为不是杂乱无章而是有序的，因此，如何理解隐藏在行为背后的逻辑和经验总结是非常重要的。

3.1 隐性知识嵌入的机会

在乡建中思想碰撞的地方即是利益冲突的地方。作为现代性尤其是消费文化和文化涵化作用的结果，利益主导并影响着基层干部、村民、施工方对乡村建设的过程中的价值判断。全球化在西南民族地区的语境中更多体现为文化资源的资本化[14]。村民的文化不自信和当地政府文化不自觉现象在贵州边缘地区普遍存在。然而，作为设计方的专家建筑师期望对物质性的空间进行保护、修复，使其回归传统聚落形态和生活状态。这种非"模式化"，非"风情化"的空间再造与当地的利益主体在思想认识方面存在分歧。这种认知的碰撞是为了解各方思想提供了契机。需了解各自利益主体对乡村和建设的解读，尤其是村民与基层领导的想法，因为他们才是乡村的主体和日后的管理者。因此，建筑师应该抓住这个机会，让村民了解乡村的价值与发展，使其懂得责任共担、利益共享的理念；让基层官员了解到乡村的振兴不仅有大兴土木，还有意识的跟进。当然，设计团队在思想碰撞和协商的

过程中也会纠正和完善自己的乡建思路。隐性知识的嵌入为在空间再造中统一思想提供了契机。隐性的知识通过人与人、观念与观念之间混融、叠加，最终被嵌入和糅合于空间营造之中。

3.2 不断变换的共识关系

乡建中由于会涉及土地、居住、民生等不同问题，不同主体会依据其利益做出策略选择，其中最常见的便是结成短暂的共识关系。甚至有时会在同一时间维度上形成不同的关系组合。例如，在雨补鲁公路修建的选择上，村民与当地政府形成联盟；在改造居民时，村民与施工队利益互补；而在板万小学的去留上，村民则与设计团队达成一致。短期利益联盟经常遭遇的一个局面是双方的互相依赖度不高，因为双方在一件事上是结盟关系，但在另一件事上却为利益对手。为了达到利益追求，不可避免地要有一番明争暗斗，结果也许是互惠互利，也有可能双方就此分道扬镳。

3.3 资本使用的解决之道

雨补鲁和板万村改造工程的投资来自当地政府的项目资金。然而，政府投资的项目资金是指标化的，即每年的资金要完成各类指标[15]，如危房改造多少户或通村公路修了多少公里。因此，当地政府对筑路和停车场建设这类的改造有明确的要求。除此之外，村落改造有时会被整合进更高一级的规划之中。例如雨补鲁村作为镇村联动的一个示范点，通村公路的修建虽然能更加有效地将工业小镇、雨补鲁和清水河峡谷连接起来，但是会改变原有的村落格局，因此，在使用筑路时有时会在考虑更大区域的规划而忽视资源与村落发展的契合度。另外，村民对村庄公共事务的冷漠导致村民参与乡建的意识不足，对资本使用的收益还是通过"等靠要"、钻空子等态度，村民联合施工队伍与其他外部资本的利益分食的现象有导致乡建陷入困难的风险。专家建筑师参与的空间协商为乡建资本的使用提供了一种解决机制，有利于改变在偏远贫穷村落使用资本的老习惯，使得乡镇政府对资本的使用不再局限于筑路和打造旅游村，而是将资本的输入与村

落的需求有机结合起来。另外，协商给了村民运作空间，在下乡资本的落地过程中作为受益者的村民参与到了对资本的使用与监督过程中。

3.4 形塑乡建成果的手段

没有一蹴而就的乡建。当地政府的成绩、设计团队的愿景、资本的利益和村民的需求都渴望在乡建中得到实现。无论是村民、施工队的机会主义还是设计团队、当地政府的互惠主义都成为空间实践的手段，各方都有影响乡建成果的能力。政府希望乡村能满足国家的发展标准因而对乡建结果有明确的要求。贵州边远和少数民族地区对资本的吸引能力有限，当地政府对已投入的资本方有一定程度的纵容，导致施工方和资本方有很大的行动权。村民的理性自利使其总是最大程度地争取利益而在民居改造时通过"抵制""拖延"等战术，使空间改造按照自己的意愿实施。而作为协调角色的设计团队，在方案设计中会保持开放的态度，在保证原则的基础上充分了解乡村的民俗和生活习惯，对设计方案进行积极修改。因此，在具体的空间实践上，"投资者""规划者""实施者"与"使用者"在空间再造和使用上达成一种彼此交错、互相博弈而又彼此尊重的状态，乡建所呈现的状态是共同协商的结果。

4 结 语

在乡建实践中，现代建筑学在与乡村传统的相互渗透和融合方面还有所欠缺。因此，建筑师需要从专业技术层面向社会层面扩展，成为调节各方空间利益行为的均衡器。由于乡村自身的复杂性与矛盾性，建筑师所面临的问题早已经不再是传统意义上的"建筑设计"。已有的知识结构已经无法支持通过直接文本解读与传统的到场踏勘解读完成设计的全部支持信息，迫使建筑师不断自我扩展传统的现场踏勘的解读方式，将传统的文本与到场解读扩展到扎根与即时在场解读。这种扩展极大地丰富了解读的维度，有利于发现多层次的复杂问题，并为设计提供了多维度的协商空间。而建筑师通过在场的解读与协商的途

径, 使这种复杂性成为可能。另一方面, 对乡土社会及其空间的全面而深入的解读是重现乡土空间的基础。然而, 这种基于原有村落整体的有机更新自身充满了多维度的矛盾性问题, 此类问题的出现呈现出多样性和时间上的随机性。因此, 如何把握这种多维度的复杂性成为乡土重建的核心问题。

参考文献:

[1] SCOTT J. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed[M]. New Haven: Yale University Press, 1999.

[2] BALACHANDRA L, BORDONE R C, MENKEL-MEADOW C, *et al*. Improvisation and Negotiation: Expecting the Unexpected[J]. Negotiation Journal, 2010, 21(4): 415-423.

[3] 刘超群. 栖居与建造: 地志学视野下的传统民居改造[J]. 广西民族大学学报 (哲学社会科学版), 2018, 40(1): 8-18.
LIU C Q. Dwelling and Building: Traditional Chinese Residence Regeneration from a Topographical Perspective[J]. Journal of Guangxi University for Nationalities, 2018, 40(1): 8-18.

[4] 韩冬青. 类型与乡土建筑环境——谈皖南村落的环境理解[J]. 建筑学报, 1993(8): 52-55.
HAN D Q. Typology and Vernacular Architecture environment-Environmental Understanding of South Anhui Village[J]. Architectural Journal, 1993(8): 52-55.

[5] 费孝通. 中华民族多元一体格局 (修订本) [M]. 北京: 中央民族大学出版社, 1999.
FEI X T. The Pattern of Diversity in Unity of the Chinese Nation[M]. Beijing: China Minzu University Press, 1999.

[6] 潘家恩, 温铁军. 三个"百年": 中国乡村建设的脉络与展开[J]. 开放时代, 2016(4): 126-145.
PAN J E, WEN T J. The Context and Development of Rural Construction in China[J]. Open Times, 2016(4): 126-145.

[7] 梁茜. 乡村文化生态价值的现代性境遇与重建[J]. 广西民族大学学报 (哲学社会科学版), 2014, 36(3): 62-65.
LIANG Q. Modernity Predicament and Reconstruction of the Ecological Value of the Rural Culture[J]. Journal of Guangxi University for Nationalities, 2014, 36(3): 62-65.

[8] 贺雪峰. 中国农民价值观的变迁及对乡村治理的影响——以辽宁大古村调查为例[J]. 学习与探索, 2007(5): 12-14.
HE X F. The Impact of Changing of Chinese Farmers'Values on Rural Governance—A Case of Survey of Dagu Village in Liaoning Province[J]. Study & Exploration, 2007(5): 12-14.

[9] GIDDENS A. The Consequences of Modernity[M]. New Ed edition. Cambridge: Polity Press, 1991.

[10] 折晓叶. 合作与非对抗性抵制——弱者的"韧武器" [J]. 社会学研究, 2008(3): 1-28.
ZHE X Y. Cooperation and Unconfront-ational Resistance: Tenacious weapons of the weak[J]. Sociological Studies, 2008(3): 1-28.

[11] 周永明. 路学: 道路、空间与文化[M]. 重庆: 重庆大学出版社, 2016.
ZHOU Y M. Roadology: roads space and culture[M]. Chongqing: Chongqing University Press, 2016.

[12] 曹卿. "政策—生计模式—文化"聚落变迁动力解释模式——以贵州省黔西南册亨县布依族板万村为例[J]. 西部人居环境学刊, 2018, 33(4): 106-112.
CAO Q. "Policy-Livelihood-Culture" Driving Force Interpretation Model for Settlement Change —A Case of Banwan Village, Guizhou Province[J]. Journal of Human Settlements in West China, 2018, 33(4): 106-112.

[13] 吴飞. "空间实践"与诗意的抵抗——解读米歇尔·德塞图的日常生活实践理论[J]. 社会学研究, 2009(2): 177-199.

WU F. "Spatial Practice" and Poetic Resistance: On Michel de Certeau's theory of the practice of everyday life[J]. Sociological Studies, 2009(2): 177-199.

[14] 彭文斌, 汤芸, 张原. 20世纪80年代以来美国人类学界的中国西南研究[J]. 西南民族大学学报 (人文社科版), 2007, 28(11): 9-16.
PENG W B, TANG Y, ZHANG Y. American anthropologists' research of Southwest China since 1980's[J]. Journal of Southwest University for Nationalities(Humanities and Social Science), 2007, 28(11): 9-16.

[15] 刘建平, 陈文琼. "最后一公里"困境与农民动员——对资源下乡背景下基层治理困境的分析[J]. 社会科学文摘, 2016(3): 49-51.
LIU J P, CHEN W Q. "The Last Mile" Dilemma and Mobilization of Farmers —An Analysis of the Predicament of Local Governance in the Context of Resource to the Countryside[J]. Social Science Digest, 2016(3): 49-51.

图片来源:
图1: 设计团队提供
图2、4: 作者绘制
图3: 作者拍摄

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Appendix B.3: Publication 3

<div style="text-align: right">

贵州省——作为理解中国农村

发展策略的『实验室』曹卿 卡尔·奥托·艾勒夫森

</div>

摘要：贵州省作为一个地理位置偏远、欠发达和多民族聚居的省份，在某种程度上它可以被视为中国农村发展策略的"实验室"。农村问题是中国政策制定和实施的核心之一，强有力的政府政策以不同方式参与并塑造着农村的未来。尽管现代化和农业的高效生产目标已经确定，但是农村战略似乎倾向于不断尝试和调整的做法，这表现在政府对大量村庄关于未来的处理方式上。本文旨在界定和讨论贵州省不同的农村发展策略。这些策略具有不同的基本意图，从通过提供基本需求和安全来维持农村，到需要创新政策来更新农村生产并最终使农村与城市相兼容。

关键词：农村挑战　农村发展　农村策略　乡村更新

引言

作为布依族的栖居地，板万村坐落在贵州群山环抱的山谷之间（图1），不熟悉地形的人们几乎无法顺利进入。从镇政府所在地出发，也需要在崎岖的盘山道路上行驶一小时才能到达。板万村作为一个传统的布依族村寨，其独特的乡村形态

图 1 贵州省板万布依族村寨

风貌、乡土文化、吊脚楼建筑使得村寨成为一个当地重要的文化遗产。2016 年 7 月，秉承对社会与美学效益的双重追求，中央美术学院建筑学院的专家团队在板万村开展了传统村落改造。村寨的风貌特色被强化，居民的生活条件和社会服务得到提升，增加了的旅游设施也将作为引擎，推动扶贫和整个地区的后续发展。这种由当地政府资金资助的"设计介入"代表了贵州为消除贫困、改善生活条件和普遍实现农村现代化而采取的策略之一。[1]

一、乡村的挑战

来自农村的年轻人到城市来建设新的环境，从而为工业化提供大量、可靠的劳动力。在改革开放的过程中，大部分农村在某种程度上被城市化政策所忽略，甚至在经济方面出现了恶化，导致农民的生活条件落后于城市。也许更加严重的是，这种情况也影响了粮食生产。中国人口占全世界的 19%，然而耕地面积只占全球资源的 9%，随着土地被用于城市化建设，这一比例每年都在减少。[2] 因此，耕地在中国是稀缺资源，当国内农业生产力没有表现出需要的增长时，这种情况

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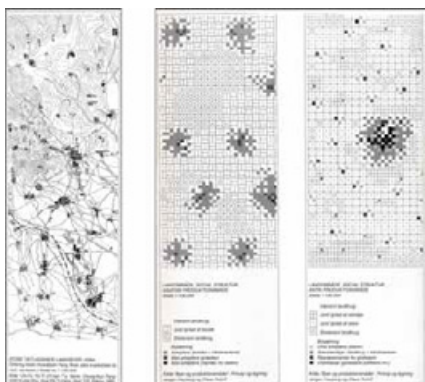
图 2 东西方乡村聚落系统的差异

就变成了问题。这便引发了对土地所有权、产权以及农业生产工业化可能性的讨论。引用一位多年参与乡村建设的建筑师的话："随着中国高速城市化发展的背景下，中国乡村的衰败成为近年的关注点，也是政府所特别关注的国家发展与繁荣的一个重要组成方面。"[3]

在中国约有5.5亿人生活在农村，其中大多数人生活在河流沿岸以及江河之间平坦的、可以进行耕种的平原上。农村贫困人口主要集中在中西部地区的沙漠、丘陵、山区和高原地带。由于缺乏普遍接受的定义，中国的村庄数量存在争议。通过互联网的搜索显示，预估数字在100万到300万之间；有些学者认为世界三分之一的村庄在中国。[4] 这些数字包括并入大都市发展的城中村、被遗弃的村庄，以及行政村、自然村和民族村等类别。

欧洲人往往被中国聚落结构的密度所震撼。从空中看，中国东部就像是一块块逐渐融入城市结构的"村庄地毯"。然而，中国西南的群山叠嶂却将乡村与城市隔离开来。这种空间模式是气候、农业资源和水资源的共同作用，但中国特有的村庄栖息地及其小而密集的耕地也是历史的产物。参照东亚和欧洲农村的生产体系的图表，两者的差异是显著的（图2）。（左图）是北京房山主城周围的传统聚落结构图

(1885)，它显示了一个传统东亚的农业栖息地。右边的两张图显示了亚洲社会结构和生产方式与欧洲古代奴隶社会的主要区别：（右图）地中海文化是一个奴隶社会，庄园经营着大型物业，其所有者通常居住在古希腊城市的"城邦"。（中图）中国的农业生产是建立在农业家庭的基础之上，它是由家庭单位组成的，而这些家庭单位通常由乡村宗族联系在一起。这种中国农村和村庄的基本形态却在历史中保存下来。欧洲大部分地区的农村地区都以大型农场为主，工业化农业通常是合作经营的，中国的农业仍旧以集约种植的家庭土地为基础。土地改革和农业产业化这一问题亟待解决。从贫穷到超级富裕，从孤立到完全融入全球文化和经济，中国约有300万个村庄呈现出巨大的多样性和复杂性。从天堂般的肥沃土地到几乎没有生产力的，贫瘠、干旱的土地形成了这些村庄的不同环境。在这种复杂的形势下，农村政策和政府涉及农村的战略是多方面的。

二、贵州

贵州在历史上处在东南亚诸国和北方汉族政权之间，从文化地理的概念上属于佐米亚地区。[5] 这片领域不属于中国历史上主要河流运输系统的一部分，使它在政治和经济上成为一个腹地，它的发展相对独立于汉人政权，奥克斯（Oakes）认为该地区在历史上是"贫瘠和无利可图"的。[6]贵州作为一个山地省份，山地丘陵覆盖了其92.5%的面积。贫瘠和脆弱的喀斯特地貌限制了耕地的容量。因此，贵州省在历史上被形容为"天无三日晴，地无三里平，人无三分银"的地区。

贵州省远离东部平原、主要河流和交通走廊等快速发展和繁荣的地区。自1949年以来，以自然资源为基础的工业化一直相当薄弱，有限的工业仅限于伐木和水电站等初级产业。2010年，贵州省的少数民族人口有1250万，占全省总人口的36.11%。少数民族多居住在乡村地区，2017年底，贵州省的城市化率为46.02%，在全国排名倒数第二名。然而，2017年的贵州省的城市化增速却比十年前高出20个百分点。

尽管这一显著的城市增长率因城市人口（包括城市管辖范围内农村地区的居民）的重新定义而存在争议，但这些数字反映了该地区近十年来由于农村复兴政策

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和城市化而发生的巨大变化。为了应对问题与挑战，国家和地方政府主导了一系列自上而下的规划和自下而上的振兴举措。作为实施不同农村政策的试点省份之一，贵州省致力于区域的发展、生态环境的改善和扶贫。早在 2001 年，政府就已经决定在贵州、云南、内蒙古和宁夏开展移民扶贫试点。2008 年，贵州省率先启动了危房改造工程。2013 年，政府在包括贵州在内的省份开展美丽乡村建设的试点项目。2017 年，在包括贵州的七个省份开展了全域旅游。因此可以说，贵州省一直是执行政策的主要战场，这些政策正在改变农村地区的社会空间关系、当地经济、生产以及居民的生活水平。

三、发展策略的定义

关于农村政策的辩论是至关重要的。农村的生产方式和聚落结构正在发生转变，这一转变涉及土地所有权、农业工业化程度以及传统乡村结构的维持程度等核心问题。贺雪峰和李昌平两位学者在 2016 年于复旦大学举行的学术会议上立场鲜明地展开讨论：两个立场分别是"保底"与"进取"。[7]贺雪峰认为农村的特点是"半工半农"，即农业生产和家庭成员在城市工作相结合。农村为城市失败者提供了安全保障体系，是现代化的"稳定器"和"蓄水池"。在他看来，尤其是在资源不足的农村地区，应该把更多的精力放在"保底"的策略上。这些将农村地区的作用局限于传统农业生产和旅游业的想法受到严厉的批评。[8]作为一位从事研究和乡村建设活动几十年的实践者，李昌平指出，农村建设需要创新、企业活动以及通过建立示范村来调整生产结构。农村社区应重组为促进土地集体所有制和新型"内置金融"的社会建设。贺雪峰则认为李昌平的乡村实践在宏观上是有问题的，以创新旅游业为基础的示范村的发展可能会成功，但从市场的角度来看，示范村的模式不能简单复制。每一个以乡村旅游和文化生产为基础的村庄都不可能转变成同一种市场导向的产业，因为村庄的数量与之间的差异实在是太多、太大了。

针对贵州的调查结果表明，大多数正在使用的策略，例如危房改造和扶贫项目可以被视为"保底"的策略。然而，与学术讨论相比，这些策略涉及的范围可能更广：一、其中一个维度表达了作为自然资源所在地的农村与作为栖息地的农村之间的差

图 3 板万村卜公山南向山坡上覆盖着大量光伏太阳板矩阵

异。二、以改善居民的经济条件、住房质量和获得更多社会服务为目的，出现了维持现有聚落结构的策略与将村庄迁入城镇的主导趋势之间的差异。三、定义区别于民营企业为主导而以政府为主导的项目，从而能够区分自上而下和自下而上的战略，并能够在大规模战略和小规模经济干预之间划清界限。

　　由于景观地貌特点，贵州并不是农业产业化优先发展的地区。除了基础设施项目和自然资源开发以外，农村政策主要涉及为农村人口寻找就业机会和改善农村人口的生活条件。总体来说可以归纳为：国家发展服务的新技术和基础设施策略、打破传统村庄结构并将人口重新安置到城镇或新建村庄的易地搬迁策略，以及保护传统村落结构的乡村振兴战略。

四、国家农村战略

　　与能源、基础设施建设和农业现代化有关的项目大多是由上而下、规模宏大并由政府主导，但是在某种程度上它们独立于现有的生活环境。新技术和对新能源的

图 4 南昆铁路兴义段的高架桥

探索引发了对大多数位于乡村的自然资源的更广泛利用。在贵州旅行，人们可以看到覆盖着太阳能电池板的巨大山坡，如图3所示的位于贵州册亨县板万村的山地。国家基础建设项目可能是近十年来对农村地区最具影响力的政策，其中包括公路、高速铁路、电力和天然气管网和数字网络建设。这些公路和铁路水平地穿过景观地形，它们遵循的是基础设施的逻辑，而不是当地的景观逻辑（图4）。

几个世纪以来，"茶马古道"穿过贵州山区，连接中国与东南亚和印度。这条环绕山峰的"小径"连接着各个地区，但并没有改变该地区的相对孤立。20 年前，政府提出了"西部大开发战略"用于加快中西部地区的发展。毫无疑问，这对贵州基础设施数量和质量产生了很大的影响。

中国农村政策的主要挑战来自未来工业化的程度，尤其是耕地的所有权问题。中国的农业很大程度上仍然是由家庭经营的小型农业单位组成：农民以家庭为单位，向集体经济组织（主要是村、组）承包土地等生产资料和生产任务。农户在承包期内可依法、自愿、有偿流转土地承包经营权。学者认为，加强农村土地集约化管理是农业机械化生产、提高生产力和质量水平的前提。农业改革与"土地权"问题

密切相关。这个问题看似简单，但深入研究起来却很复杂——就像皮特 · 何（Peter Ho）在 2015 年《中国土地所有权》书中所阐述的一样。这与户口制度和基本的村庄和家庭权利有关，很难解决。[9]增加农业产品的产量，而不是从根本上改变土地的所有权是所有农村政策的目标。

五、改善贵州农村人居环境——易地搬迁

扶贫一直是政府投资的总体目标，这一战略往往就包含易地搬迁政策。通常，易地搬迁是在一个行政区域内自上而下的移民规划。除了改善生活条件和福利的考虑之外，在许多情况下，易地搬迁的背后还有基于生产和生态的考虑。地方政府启动了一系列移民安置方案，它们打破原有村庄结构，重新安置了人口，把农田改造成森林和草地，既有利于农业生产，又有利于生态保护。

贵州人口从 1953 年的 1500 万增长到 2010 年的 3474 万。人口增长与现代化生产方式不可避免地导致了对脆弱生态环境的过度利用：滥伐森林，水土流失，使得喀斯特地貌的荒漠化成为可能。特别对位于武陵山区、乌蒙山区、滇黔桂地区的少数民族贫困地区的地方政府提出了很大挑战。如前所述，为了使人们摆脱贫困和防止环境退化，贵州已于 2001 年被选为四个实施移民搬迁的试点省份之一。2012 年至 2020 年间，贵州省政府增加了 200 万人的安置计划。从政府的角度来看，扶贫移民和生态移民都是实现一系列发展和环境目标的高效项目。然而，这些项目是否能完全获得移民的内在认同有待检验。如今，易地搬迁已被重组为公共和私人伙伴关系的策略。扶贫项目不再仅仅被视为政府的责任，而是由各级政府、国有企业、私营企业和社会组织密切合作的。2015 年启动的"万企帮万村"活动中，民营企业开始定点帮扶贫困村。[10] 一些企业率先与贫困县结对展开扶贫行动。 2015 年 12 月，乌蒙山区的大方县启动了移民搬迁行动。恒大决定投资 30 亿元人民币，使当地 18 万人口脱贫，这意味着 16.4% 的当地人口易地搬迁。如图 5 所示，在这一系列易地搬迁项目中，旧村被拆除，人们被安置在新建的城镇中。恒大投资温室、灌溉系统和畜牧业相关资源。不明确的是，村民是应该被视为村民，还是农场工人。

易地搬迁战略可以视为农村逐步城市化的一部分。20 世纪 90 年代中期，政府

图5 乌蒙山区移民搬迁行动

首次提出发展中小城市，形成了新城的发展模式。这项政策解决的是城市人口扩张的问题，但也试图成为分散经济和工业发展的模式。党的十八大提出了农村的现代化，并引入了分散式的新城市化模式。[11]城镇发展和村庄搬迁是这种城市化和现代化的一部分。在城市结构和建筑方面，新城反映了中国大规模城市发展和特大城市类型的一般模式。图6是册亨县的高洛新区，新区由近三百个沿着笔直道路的多层公寓组成，公寓将居住区分为几个住宅群。根据册亨县政府的规划，将有九个镇的约3.2万人搬迁到高洛新区。新的定居点的空间格局与传统聚落无关。这些新式民居从少数民族乡土建筑中提取了一些传统元素并用在建筑装饰之上，但是大多数住宅楼都遵循着城市发展项目中的"简单复制"的逻辑。

　　贵州易地搬迁的项目中包括来自有着不同价值体系、信仰和生活方式的居民。这对于今后的管理将会是巨大的挑战。为了维持原有社会关系网络，地方政府实施的"整村安置计划"意味着将一个村作为一个安置单位。在这一过程中，原本根植于地域和场所的生计模式、地方知识和经验却无法直接转移。实际上，重新安置的居民获得了福利和现代生活设施，但在大多数情况下，他们失去了原来地方和历史

图 6 册亨县高洛新区房屋分配现场

的联系。通常情况下，被安置居民不会在新的居住地分配到耕地。安置点中工作机会通常优先考虑能适应激烈市场竞争的受过良好教育的人。一些报道显示，由于缺少工作机会和在新安置点中的高生活成本，不少定居者已经返回到他们原来的聚落。[12] 为了完成意图和计划，地方政府会积极地报道有多少户居民搬迁到新安置点。但是，关于评估和长期影响的公共信息却很少。

六、改善现有村庄和空间格局的策略

对中国农村未来的讨论总是包含着挑战。尽管村里的人口随着年轻人和有较高劳动能力的人迁徙到城市而被"稀释"，但大多数移民仍旧通过户口与村子联系在一起，他们的土地权仍旧留在村里面。从历史上看并与其他大陆相比，中国的乡

图 7 贵州雨补鲁村的"花海"景观

村栖息地的数量、位置、空间格局和形态方面表现得相对稳定。然而，在这几十年里，这些乡村受到现代化政策和其他转型力量影响较大。在学术界，有人提出这样一个问题：作为物理结构、社会和法律系统以及生产单位，有多少村庄能够生存下来？专家预言说，将会有多达 70% 的村庄被重新安置，现有的建筑将被拆除或不进行维护。[13]

（一）国内旅游

　　贵州省成为中国最有前途的旅游目的地之一，生态和民族文化旅游是发展和开拓新兴产业和工作场所的主战场。从历史上讲，"大众旅游"在中国是一种新现象，它与有规定假期、业余时间、有足够的财力的中产阶级联系在一起。高效的基础设施使旅行变得容易，使得居住在人口稠密地区的人们更加方便地抵达许多有吸

引力、风景如画和历史悠久的景观、遗址和村庄。对国内旅游业的投资一直是实现农村发展最便捷的途径，这既是贯彻中央和省级政策的自上而下的战略，也是地方自下而上进程的结果，其中即包括对整个村寨的大规模项目也包括小规模的家庭投资。近年来建造的建筑包括许多乡村旅游的项目，乡村旅游的典型景点主要是如图7所示的历史村落、风景名胜区、非物质文化遗产所在地（通常与少数民族有关）以及各种农业主题公园，例如茶场、渔场、酒厂和高科技农业或者有机农场。

从 2010 年左右开始，政府首先制定了全面的乡村旅游政策。而贵州的民族旅游萌芽可以追溯到 20 世纪 80 年代，但在当时还不能作为发展地方和区域经济的重要举措。贵州于 1991 年首次提出"旅游扶贫"的概念，目的是通过发展民族旅游，提高当地人民的生活质量，从而消除农村贫困。在一个拥有能够吸引游客的村落和风景区，旅游业可以成为实现现代化的一种非常有效的手段。参考奥克斯 20 年前出版的《中国旅游业和现代化》一书，"旅游业的作用是国家的现代化和边缘地区的发展，它尤为重要，因为国家'开放'一个地区进行旅游业的成本要比其他现代化计划的成本低得多"。[14]

（二）住房策略

为保护村庄而实施的最常见的方案和投资是对其基础设施的更新与提升。由于地域气候的差异和文化的复杂性，贵州民居呈现出类型的多样化。少数民族聚落的传统民居材料多以木、黏土和陶片为主，并易受各种环境的影响。如何组织一个村庄的空间结构、建筑类型和公共空间是由历史传统和掌握重建、修复乡土建筑技能的工匠所决定。"原始庇护所将形式的持久性与物质的短暂性结合起来。建造和修复几乎是一项经常性的活动。"[15] 由于结构和自然材料的特点以及气候和地理因素的影响，居民不得不进行日常的维护。乡土建筑意味着修复、重建，有时甚至是改变。2008 年，一场雨雪灾害造成了贵州农村房屋的大规模损毁，并引发了政府更新住房的计划，贵州率先启动了农村危房改造的试点。该政策的任务是让农村地区的低收入群众拥有一个体面的家。

然而，这项政策却对传统村庄的物质文化遗存构成了威胁，并形成了新的民居类型。首先，无论是在当地村民还是干部中，人们普遍认为传统乡土住宅的形态

图8 传统聚落中的新式民居

是落后的、不实用的、不适合现代社会的。政策执行者和受益者都积极推动新的民居建设而不是翻新旧民居。其次，经济补贴制度鼓励人们重建住房，尽管这不是他们的首要计划。年轻人临时迁徙到城市，他们在乡村的建筑缺乏日常的维修，这加速了房屋的衰败。另一个因素是，寄回家乡的钱往往投资于新房的建造，这通常会对村落形态留下明显的痕迹（图8）。然而，有时建筑建造成本超出了他们家庭的经济承受能力，反过来又加剧了家庭的贫困。许多凝聚着少数民族文化、具有较高人文价值的聚落和房屋遭到破坏，往往被文化价值不高和技术标准较低的新民居所取代。

（三）传统村落的综合策略

　　20世纪80年代以来，随着民族认同工程的实施，贵州少数民族文化保护政策留下了深刻的烙印。2012年，住房和城乡建设部、文化和旅游部和财政部公布了中

图9 2018年11月苗年新年的庆祝活动

国传统村落名录，到2019年底，共有6819个村庄入选这一名录。纵观不同省份，有成千上万的村庄被标上了有形和无形遗产的价值，被纳入保护计划中。"传统村落"这一类在我国农村政策中已变得非常重要。

在这一过程开始时，政府选择示范村以建立遗产保护模式并同时促进旅游业。其中一些城镇和村庄具有世界遗产名录的特点，在商业上取得巨大的成功。位于贵州黔东南州雷公山山坡上的西江千户苗寨可能是接受游客最多的少数民族旅游村。高速列车和优越的高速公路为游客提供了便利，游客会参加热烈的欢迎仪式，在设计好的游览路线内参与策划好的活动，例如在观景台自拍与合照，在村子里新建的广场观看歌舞表演和手工艺演示。就像在世界的许多其他地方一样，贵州的民族文化经历了再生产的过程，地方和文化元素都被商品化了，成为吸引国内外游客的一项文化表演（图9）。

图10 册亨县丫他镇纳相村

（四）设计介入对村庄的保护

　　本文所谈的"设计策略"可以被看作更温和的保护方法，旨在缩小商业旅游的影响，加强文化保护的多样性，并在现有的村庄生产系统的基础上进行建设。在过去的几十年里，许多建筑设计项目被引进来加强乡村的经济、社会和文化。这一趋势也符合中国政府的政策。2013年，中央一号文件强调了"美丽乡村建设"的任务。应该注意，如果"美丽"等同于视觉美，并给予充分的审美体验和良好的功能，那么"美丽"的内核概念比上面的意义更加广泛。政府的政策赋予在贵州乡村进行设计介入和空间实践的合法性。设计介入有不同的模式：有自上而下的政府项目、来自村里的独立倡议以及来自设计师和其他参与者的倡议。这些项目还涉及更广泛的目的：扶贫、公益、旅游开发、小型艺术试验和建筑项目。在贵州省开展设计介入时，某些基本方面必须加以考虑。首先，贫困、移民造成的村庄空心化和乡镇与村一级的资金收入匮乏，使得大型项目融资困难。其次，当地遗产价值和承载当地知识和

图 11　贵州省雨补鲁村

身份认同的口述历史逐渐失传，导致地方文化自觉性下降。以少数民族聚落的乡土建筑为例。汉族社会有流传有序的书籍和书面标准来记录和叙述建筑的形制和技术守则，这些重要的物质载体将技术和建筑规则传授给下一代。而少数民族的建筑技艺主要通过学徒模式来传承。在这种情况下，设计介入不仅是为了扶贫和物质福利，而且是为了保护和更新文化遗产。最后，贵州偏远山区的地理区位增加了施工的难度，不仅使得设计介入的成本高昂，并且生产和施工效率也远小于平原地区。

　　我们在贵州调研的村寨中，几乎所有的设计介入都是自上而下的，但是过程中由于专业性的不足，忽视了乡村聚落的异质性特征。图10是册亨县的纳相村改造后的鸟瞰图：整个村子都被改造了，民居都用相同的、几乎是复制的手法进行处理。新建民居模糊了传统聚落结构。房屋的质量提高了，但传统乡村文化似乎被忽视和淡忘了。

图 12："天坑地漏"：雨补鲁村改造中的大地景观

　　设计干预模式是对早期有争议结果的实践的反思。地方政府已经意识到，对传统村落的设计干预需要聚落社区与专家的共同参与 。雨补鲁村的改造是新的发展模式案例。雨补鲁村是兴义市以北 30 公里的一个汉族村寨。和该地区的其他村庄一样，雨补鲁村中传统住宅逐渐衰败，取而代之的是标准的住宅，公共卫生设施缺失，公共空间没有得到很好的维护。显著的地方特色，对旅游的追求和作为城镇就业市场的一部分促使雨补鲁村尝试了新的策略。新的角色参与其中：来自中央美术学院的团队对村落的历史、布局和建筑形态进行了详细的调查，测绘了每一栋房屋并调研了村寨的遗产价值。调查的结果作为与当地村民进行讨论和设计介入的重要参考（图 11）。由师生组成的设计团队与当地工匠和村民一起营建了这个项目，并增加了一系列受当地历史和生态环境启发的艺术项目，以提高游客的好奇心（图 12）。

七、未揭露的策略

目前，中国农村实施了一系列的农村策略，其中大部分在贵州贫困地区表现得非常明显。政府投入了大量资金，城市化与现代的手段不断涌现。农村人口的未来与村庄的未来密切相连，也与聚落结构和农村人居环境应演变的总体政策密切相关。

本文试图揭示中国农村战略的复杂性。回到贺雪峰和李昌平两位学者的讨论中，一方面，贺指出了通过提供基本需求和保障来维持农村的政策，另一方面，李强调的是要走出一条中国特色的城乡协调发展的道路。在这个背景下，从雨补鲁村相当务实的实践中可以汲取经验，即这些策略即能维持基本的需求又能提出创新，既能改善生活环境又能服务于旅游业。村落被保留的同时还能被"美化"。农业生产保留下来，旅游业被添加到经济基础中，既为村民"返乡"打开了大门，也为那些在更广阔的劳动市场上繁衍生息的人们打开了大门。这些期望的效果是相当务实的，是通过缓慢的参与过程来实现的：扶贫、当地生活和生产的现代化，美丽乡村建设甚至是当地乡村文化的复兴和重建。

（曹卿：挪威奥斯陆建筑与设计学院博士研究生，卡尔·奥托·艾勒夫森：挪威奥斯陆建筑与设计学院教授）

注释：

[1] 曹卿、陈益阳：《解读和协商——雨补鲁和板万村的乡土空间重现》，《西部人居环境学刊》2019年第3期。

[2] 数据来源于前瞻数据库制作的1961—2018年中国人均耕地面积：2018中国的人均耕地面积为0.09公顷，而世界平均水平为0.19公顷，http://d.qianzhan.com/xdata/buystep1

[3] [挪威]卡尔·奥托·艾勒夫森：《乡建路上，有我们——关于当下乡建的思考》，马俊译，中央美术学院（内部读物），2018，第5页。

[4] 根据 http://factsanddetails.com/china/cat11/sub72/item1088.html显示全球大约有100万个平均居民数有900个人的村庄，而这些只占全球村庄的三分之一。作为筹备古根海姆《乡村，未来》展览的一部分，AMO/OMA在2018年春季对中国乡村进行了一系列数据调查得出中国大约有300万个乡村的判断 （引自2018年6月stephen Peterman在中央美术学院的讲座）。

[5]James C Scott. ,*The Art of Not Being Governed: An Anarchist History of Upland Southeast*

Asia （Yale University Press, 2011）．

[6] Oakes, T. ,*Tourism and Modernity in China* (Routledge, 1998),p.83.

[7] 熊万胜、刘炳辉：《乡村振兴视野下的"李昌平—贺雪峰争论"》，《探索与争鸣》2017年第12期，第77—81页。

[8] 李文钢、张引：《当乡村振兴遭遇发展主义——后发展时代的人类学审思》，《西北民族大学学报》（哲学社会科学版）2018年第6期，第82—89页。

[9]Peter Ho., *Institutions in Transition: Land Ownership, Property Rights, and Social Conflict in China* (OUP Oxford, 2005).

[10]在这场活动中，私营企业正式参与帮助贫困村庄。大型合作社从一开始就带头与贫困县结成对子，开展扶贫行动。

[11] 这项政策与大力发展消费市场和私人及公共服务的意图有关。为了能够以可操作的方式处理城市增长（假设城市化速度不会放缓）。大会指出，在未来10—20年，中国城市人口增长的至少一半应该发生在中小城市。

[12] Lo K，Wang M．*How Voluntary is Poverty Alleviation Resettlement in China?* (Habitat International, 2018,73),pp.34-42.

[13] 李昌平：《中国乡村复兴的背景、意义与方法——来自行动者的思考和实践》，《探索与争鸣》2017年第12期，第8页。

[14] Oakes, T., *Tourism and Modernity in China* (Routledge, 1998),p.132.

[15] Tuan, Y-F. ,*Space and Place: The Perspective of Experience* (Univ of Minnesota Press, 2011) ,p.104.

Apendix B.4: Publication 4

多民族、山地、贫困地区传统村落保护与改造新实践

The new practice of traditional village protection and renewal in Guizhou's ethnic, mountainous, and poverty-stricken areas

摘要： 贵州作为多民族聚居、贫困、山地高原三重叠合区，在此开展的乡村复兴运动无疑具有特殊性和艰巨性。本文通过发生在贵州的两个古寨修复项目，总结出在西部地区进行乡建的几点经验：处理好古寨改造中民族性和现代性的关系；注意保护山地聚落与平原聚落的不同特点；平衡创意性与低成本的矛盾；设计介入乡建，提高落后地区人居环境的美学标准；注重传统文化遗产的生产性保护；学术专家介入乡建，建立政府-高校-企业-媒体联动机制。同时，通过反思知识分子在唤起当地民族自觉性中的作用，探索西部地区在新的时代背景下的乡建道路。

关键词： 少数民族地区；山地聚落；扶贫；设计介入；乡村更新新模式

Abstract: Guizhou province is identified as the combination of multi-ethnic settlements, impoverished areas, and mountain plateau by multi-disciplinary definitions. Rural revival movements, which developed here, are unique and arduous. Inspired by two rural reconstruction projects which carried out in Guizhou province, several experiences about rural reconstruction are put forward: deal with the relationship between nationality and modernity in the rural reconstruction; understand the difference between mountainous settlement protection and plain settlement protection; balance contradiction between creative and low cost; design intervened in rural reconstruction is an excellent way to improve the aesthetic standard of living environment in backward region; make an effort into the productive protection of traditional cultural heritages; academic elites involved in rural reconstruction and built linkage mechanism among government-college-enterprise-mass media. In the meantime, we try to explore rural reconstruction roads in the western region in the background of the new era by considering the role of the academic expert in arousing the consciousness of local people.

Keywords: Ethnic minority region; Mountainous settlement; Poverty alleviation; Design intervention; Alternative village renewal model

由建筑师、艺术家和社会活动家推动的乡村建设项目近些年犹如雨后春笋一样在全国各地开展开来，由于中国是一个区域差异较大、历史文化复杂的整体（费孝通谓之"中华民族的多元一体格局"，人类学家王铭铭谓之"文化复合性"[1]），不同的团队在不同的地区开展的乡村建设项目也呈现出迥然不同的特点。学界对中国乡村建设运动的历史、源流、模式进行过各种争论和总结，而笔者对贵州两个传统村落与改造设计的深入调研中发现，乡村建设的地点选择，直接决定了乡村建设的模式。讨论乡建模式，不能离开具体地域的历史、地理、经济、民族、文化状况进行抽象的总结。东部发达地区和西部落后地区、汉族文明腹地和少数民族聚居地区、平原地区和山地丘陵地区的乡建，在政府管理、物资来源、施工队伍、当地社区支持、后续发展模式等各个方面都有着巨大的差异。

1 选点

贵州省作为 2020 年全国农村贫困人口全面脱贫的重点省份，对全国有着指标性的意义。山地少数民族的贫困乡村，不像东部沿海富裕乡村一样有充沛的资金和文化自信，青壮年劳动力的流出加剧了传统村寨的衰败。秉承对社会效益和美学效益的双重追求，中央美术学院建筑学院的专家团队在 2015 年和 2016 年分别在贵州省黔西南布依族苗族自治州的雨补鲁村（图 1）和板万村（图 2）进行了传统村落保护和改造设计。设计团队选择在**贫困地区，多民族聚居地区**和**山地高原**地区三重叠合区的贵州开展乡村改造，希望乡村复兴能在深度贫困地区聚焦，向难处发力，希望能用建筑作为引擎，带动扶贫和整个地区的后续发展。同时，

团队期望利用艺术和设计介入乡建和扶贫，弥补贫困地区和发达地区的生活品质差距，提高当地居民生活的美学标准和美学感受。这种由政府资金资助的"设计介入"代表了贵州为消除贫困、改善生活条件和普遍实现农村现代化而采取的许多不同的策略之一。正如团队成员所认为的，即使是在中国最贫困落后的地区，人民也有追求美和享受美的权利。

图 1：贵州省兴义市清水河镇雨补鲁村传统村落保护与改造设计。（来源：曹卿拍摄）

图 2：贵州省册亨县丫他镇板万村传统村落保护与改造设计。（来源：曹卿拍摄）

1.1 选择贫困地区

贵州位于中国的西南部，历史上处在东南亚列强和北方汉族政权之间。这片领域不属于中国历史上主要河流运输系统的一部分，使它在政治和经济上成为一个腹地，它的发展独立于汉人政权，人文地理学家奥克斯（Oakes）认为该地区在历史上是"贫瘠和无利可图"[2]

的。贫困、移民造成的村庄空心化以及镇村两级的资金收入匮乏，导致村寨自身无力进行乡村改造。设计团队试图寻找一种能够使乡村脱贫和激发乡村潜力的策略模式，利用建筑设计的低技策略来平衡创意和成本的冲突。在贵州，乡建和扶贫是一体两面、不可分割的事业，设计团队期望在改造过程中改善乡村的人居环境，提高村民生活水平，让贫困乡村的村民也能过上有尊严的生活。期望帮助山地少数民族逐步建立起本地区的文化自信，重拾自身的文化内核，对自己的命运更加有把握。

1.2 选择少数民族地区

贵州山地少数民族缺少书写文字，不像中原汉族有完整的记录历史。在口口相传的过程中，文化和历史不断遗失，从而导致日渐薄弱的文化自觉性。乡村经济的积屡积弱和现有的行政体系导致原有内生性宗族自治系统的逐渐退化，并且城市化的发展导致更多的年轻人去大城市打工，在消费主义和文化涵化的作用下使得他们对本民族的文化更加没有自信。贵州偏远乡村中大量的传统建筑遭到闲置废弃，代之以不伦不类的新式民居。因此，设计团队在在雨补鲁村和板万村进行乡村改造的时候，注重发掘其历史，地方文化特性。建筑作为凝固的历史，其造型要反映和适应当地文化内里，村民的生计模式，并且整个设计实践秉承传统文化、传统工艺的生产性保护与少数民族日常生活能够有机结合。在建筑保护和改造的同时，设计团队还重视少数民族无形历史和非物质文化遗产的保护与发展。例如，设计团队在板万村进行维修吊脚楼的时候需要从外地聘请匠人，因为本地人只有很少的人掌握建造吊脚楼的技术和经验。布依族不像汉族有《天工开物》、《营造法式》等关于建筑技术和形制的规范书籍，本民族的历史和技艺都是靠师傅带徒弟口口相传的模式，匠人在变老和去世之后面临后继无人的窘境。因此，雨补鲁村和板万村的改造设计是一个系统工程，不仅要关注建筑风貌的改造和提升，更要对口述技艺和非物质文化遗产进行保护和延续。

1.3 选择山地地区

贵州是典型的喀斯特山地地区，群山环抱之间散落着面积不大的坝子和山间平地，人们在水源和田地附近建设村寨，聚落分布有着大分散小聚居的特点。同时，山地聚落和平原聚落有着巨大的差别 近几年，贵州省为了减少贫困人口和保护生态环境实施了易地扶贫搬迁工程，旨在把偏远、交通不便、环境恶劣地区的人们迁到省内交通便利的小平原地区居住。这一政策在短短几年之间改变了贵州延续了千年的山地居住习惯。山地地区的人们在传统上存在于"人一地"互动的生存系统[3]，呈现出一种稳固的文化系统心态，搬迁后的人进入了陌生环境，谋生手段发生变化。由于土地资源的有限性，村民迁入异地时需要开展农业以外的经济活动，然而贵州山地格局很难建设大面积厂房和工业园区。耕田和水的不足，超出自然承载力的人口迫使更多的人去外地谋生，加速了当地村寨的空心化。

2 改善人居环境

传统村落保护与修复的空间改造对象主要是民居室内外空间，基础设施和公共空间。室内空间对村民来说既是居住场所也是祭祀和生产的空间，它是每个家庭生产生活的核心；基础设施包括道路，给排水，电网和网络，它是保证现代生活的基础保证；公共空间是乡村的心脏，它是凝聚村寨的重要场所。然而，诚如板万村这样位于大山深处的少数民族村寨，它的空间格局也已经受到城市化的冲击和缺少资金而发生剧烈变迁，室内空间的世俗化现象越来越严重，并且内部空间格局不再适应现代化的生活；雨补鲁村和板万村缺乏现代社会标准的基础设施；公共空间正在退化和荒废。设计团队针对这些空间和功能要素在当地文化框架下进行现代化改造，希望提高人居环境，让当地人享受生活的便利，也要恢复村落本来的乡村活力。

2.1 以生产性保护为目的地空间改造和修复

传统吊脚楼是集居住，祭祀和生产为一体的综合体。它是中国传统农村实现自给自足的一个空间体现。中国传统乡村的工业和手工业是农业附加收入手段和乡村实现自给自足的重要方面[4]。而这些手工业产品则分布于无数的家庭之中。以板万村为例，传统生计除了水稻种植以外，酿 *biang dang* 酒，布依绣和土陶产品制作等手工业与农业配合保证了传统乡村社会健康循环状态。传统手工艺和乡村生活同属于一个系统，两者不能单独生存，传统手工艺其实就是传统社会中的生活方式，原本就是自然而然的人居生活状态。在板万村民居建筑改造工程中设计团队注重激活和振兴原本的传统工艺；而传统的工艺保护也对民居的保护和改造也产生影响。

在对板万村全村传统吊脚楼进行结构扶正和基础加固之后，设计团队有意识选择了一家住在传统吊脚楼经常酿酒的人家进行整体改造，*biangdang* 酒是当地布依族家家户户都酿制的一种酒，具有浓厚的地域特色和一定的经济效益。板万村里的传统酿酒生产和生活是不分开的，改造强调在提升生活质量的同时还能进行生产活动。为了减少生产生活的相互影响，提高生产的专业性和扩大生产量，也为了古寨改造及旅游开发能与本地村民互惠互利，设计团队对吊脚楼内部空间进行了调整和提升，让居住空间更加干净和卫生，也让酿酒生产空间更加独立和高效（图 3）。除了酿酒坊，设计团队还选择了一栋闲置吊脚楼和正在使用的新式民居改造为锦绣坊和土陶人家，希望为村民类似的改造提供示范。

图 3：改造好的酿酒坊一方面能满足酿酒制造的全过程，另外改善原有居住环境。图中蓝色部分为生产（酿酒）空间，黄色部分为起居空间。（来源：曹卿绘制）

2.2 基础设施改造

传统村落没有现代意义的基础设施，但是村民利用他们的智慧针对山地地形建造了水井和排水沟，解决了吃水问题和房屋安全等问题。然而，乡村经济的滞后使板万村传统的设施无法满足日益增长的生活需求，尤其是大量的从外打工的村民对本村的设施条件更加失望。为了提高人居环境质量和应对将来要开展的乡村旅游，设计团队配合兴义市和册亨县各专业

部门对雨补鲁村和板万村的基础设施进行现代化提升。在地的基础设施的改造提供了不同于贵州普遍实施的易地搬迁的策略，它是保护传统村落的基础。

在道路规划上，疏通原有主干道，根据古寨环境提升方案调整部分路线，贯通每一栋民居的入户小路，保证居民正常的生产生活所需，道路系统也能将村落中非物质文化体验、自然环境观赏、休闲娱乐等公共空间整合串联起来（图4）。基础建设也是一个系统工程，它不是冰冷的物理设施的生硬介入，也需要在可能的情况下反映特定的风土人情、民宿礼仪和生存状态。除此之外，针对山地聚落垃圾处理难和木建筑消防问题，设置合适的消防水缸和垃圾收集点。对给排水管和电线进行埋地处理，在满足使用的同时不会对传统聚落空间产生视觉污染。

图 4：基础设施改造不仅是物理设施的升级，也促进乡村空间的适应更新。图为雨补鲁村的改造中将水渠、步道和景观有机结合起来。（来源：曹卿拍摄）

2.3 公共空间改造

公共空间的概念是现代化的产物，它作为概念于1960年代初成为西方现代城市规划的研究议题[5]。传统村落的"公共空间"是村寨的心脏， 正如卡尔莫纳（M Carmona）[6]所提的公共空间的实体可达性，视觉可达性和象征意义的可达性，它是群体活动的空间和文化意义投射的场所。板万村的"公共空间"存在于"盘龙山"、土地庙和每家每户的堂屋，也存在于布依戏、八音坐唱、哑面戏、浪哨等活动中，它是宗族祭祀、家庭聚会议事和日常交往的空间。对村落"公共空间"进行修复和在当地文化框架下的现代化设计改造，一是可以起到凝聚全村人，避免传统公共空间的荒废和村寨空心化，提升布依族文化自觉和文化自信的作用[7]；二是为了将来的乡村旅游提供必要的景观。

传统板万村虽然每家每户都有祭祀祖先的中堂，但是破败的祭祀空间和缺少的公共空间使得整个村落作为整体缺少凝聚的公共场所[8]。在村落祭祀公共空间的改造中，传统民居和新式民居中作为核心空间的堂屋和火塘得到保留和维护；原生态的保留和修缮了以山神庙为中心的祭祀空间，修复其原始灶台，让原本正在退化的祭祀活动变得隆重起来，也对乡村带来活力。在村落世俗公共空间改造中，首先结合地形和周围建筑环境把板万小学操场改造为可以满足集会和教学的中心广场，并且结合这个广场空间，建立布依戏传习所，这样为村寨中的布依戏和八音坐唱提供一个训练和表演的场所，每年腊月期间板万村的布依学会都会组织布依戏的表演，修建传习所和舞台为了年轻人和外地游客了解布依族的文化提供了一个窗口（图5）。针对实际需求及利用地形条件修建方便小学生上下学的风雨桥，不仅使其成为一个公共交流空间，村民还能在其中进行生产活动（图6）。

改造后的板万村是一个生活场所，不是一个"展演"场所，但也考虑了未来乡村旅游发展的空间需求。在山神庙祭祀空间的景观设计中，打造疏通东侧下至主路的木栈道，不仅方便本村人的祭祀活动，游客在游览此处的过程中，不仅会体会到冲天而上的古树风光，同时还能感受到板万古老的民俗习惯。在板万小学的改造设计中建立"乡土教室"（图7），里面陈设板万村的民俗，文化，通过一些生产工具，生活器具，习俗仪式等方面不仅让本村的小学生对本民族文化有比较深的了解，也为外来的游客了解板万的背景和布依族的文化提供一个合适的场所；在古寨核心区利用一闲置吊脚楼改造为大食堂，并且对食堂周围空间进行环境改造和修建凉亭使其成为一个满足村民集会和游客休闲的小广场。

总之，对于逐渐失去活力的传统村落，公共空间的修复和提升对于增强其传统习俗，比如山神、土地神祭祀活动提供便利，也对传统非物质文化遗产，比如布依戏和八音坐唱提供相应的场所，这对濒临消失的文化和习俗的一个织补也是重建乡村社会秩序，增强邻里关系的必要工作。

图5：扩建后的小学通过增加乡土文化展厅、综合教室、图书馆、留守儿童之家、室内活动场所、公共厕所、教室周转房等功能，不仅能满足学校自身教学功能，同时成为村民学习知识，加深对乡土文化认识的场所。（来源：曹卿拍摄）

图 6：板万村新建风雨桥被村民作为生产和生活空间来使用。（来源：曹卿拍摄）

图 7：板万小学新建乡土文化教室。（来源：曹卿拍摄）

3 设计介入和提高乡建的美学标准

"中国要美，农村必须美"[9]，这一目标，体现了"农村美"在"中国美"中的重要地位。传统乡村的美是来自有血缘关系和地缘关系构建的有机的乡村活力和村落与自然环境、农耕方式相互协调的空间模式。设计团队所做的工作就是贡献美，希望能够唤起村民对美的

向往，让村民也能享受到高品质的美学设计。设计的模式类似于"空降式"改造，这是一种高校科研机构先进的建筑设计策略和美学设计思想与山地少数民族贫困村寨的直接对接，力图对当地村落景观环境进行整体提升。设计团队对村落的历史传说、地理景观、生计模式、风土民俗、村落结构进行详细的梳理和提炼后，以村落为舞台，以艺术作为手段，通过艺术的力量和建筑师、艺术家的智慧，唤起当地人对自己所居住村寨的兴趣，振兴日渐式微的村寨。

3.1 设计介入乡建

本文所提的"设计策略"可以看做针对传统村落保护更温和的方法，旨在缩小商业旅游的影响，加强文化保护的多样性，并在现有的村庄生产系统的基础上进行建设。2013 年，中央农村工作会议提出"中国要美，乡村必须美"体现了恢复农村宜居、可持续发展的紧迫性。设计介入乡建是让设计和艺术与当地文化和生活相结合，能让最贫困地区的人们也能享受最美好的设计与艺术。然而，设计团队在对雨补鲁村和板万村调研的时候发现本村人尤其是年轻人对本村本民族不关心也没有很深入的了解，位于大山深处的板万村更加如此，这对于只有口述历史的布依族是一个及其不利的现实。这意味着当寨老和老一辈人故去的时候，传统村落的历史、技艺、记忆将逐渐消失。设计团队希望通过艺术介入乡村，以村寨为舞台，以村寨文化为剧本，连接人与自然，人与乡村文化，通过艺术的手段打造大地景观或者景观节点。希望能增加本村人和外地游客对村寨的好奇心，提升村寨的辨识度。

发展工、农业和旅游业不是复兴偏远山区村落的唯一途径。村寨中的景观亮点凝聚地理、历史、文化在传统村落的空间肌理上有重新增加了一层新的活力节点。艺术成为村寨新的名片，激发越来越多的年轻人的文化自觉，对本村本民族的历史产生兴趣，恢复他们对这篇土地的信心。正如在雨补鲁村做的"天坑地漏"（图 8），就是一件与当地地质特点和农业生产相关联的地景艺术。这个设计把村寨中原来的"田变湖，湖变田"[10]的神奇景象进行艺术再现，对地质特点和历史记忆进行艺术强化，并且有着强烈的参与感。笔者在 2017 年国庆节期间在雨补鲁做田野调查的时候，发现游客与这个作品的互动最多，并且在游玩的过程中自然而然地了解这个村寨的历史与传说故事。通过这些景观设计创造了设计师、游客、村寨和本地人的一种在场邂逅，它连同村落空间保护和改造一起形成了一种新的文化标识、一种新的旅游经济模式、一种新的乡土自信。

图 8：雨补鲁村的大地景观——"天坑地漏"。（来源：曹卿拍摄）

3.2 基于在场和日常生活的建筑之美

　　乡村建设即需要充足的金钱投资但更加需要智识投资。在很多乡村或者新农村建设中会看见与本地历史文化没有关联的设计，例如在山地吊脚楼建筑群中点缀汉族的红灯笼，或者在乡村公共空间里摆放假水车。其实此类景观设计更加需要小而精的设计。智识投资不同于金钱投资，它不追求资金的积累，反而在意更合理，有度，尊重和美丽。低技策略和就地取材就是智识投资的在场设计策略，做好这个工作就能在山地少数民族贫困地区实现建筑之美。山地少数民族贫困山区虽然有丰富的文化积累但没有多余的资金进行建筑建造，地技策略和就地取材就是面对现实条件，利用传统建造智慧，试图以低造价和低技术来营造出拥有高品质的的设计，在经济条件，建筑美学之间寻找 一个平衡点。我们希望让建筑之美能成为村落日常生活的一面，让偏远山区的 民享受更有品质的美的同时让他们在潜移默化 之中提升自己的文化品位和文化自信。正如罗杰·斯克鲁顿(Roger Scruton)在《建筑美学》一书中将"美学"与感觉兴趣作了区分，认为美学乐趣不是感官上直接反应的乐趣，而是依附于思考过程并受其影响的 [11]。例如，设计团队设计了一个草屋公共装置（图9），村民和游客都觉得很漂亮，但当被告知这是基于贵州当地传统粮仓的造型而创作的公共空间，村民和游客都对稻作文化产生浓厚的兴趣和好奇心，并更加喜爱这个草屋设计。

图 9：雨补鲁村的"草屋"装置。（来源：曹卿拍摄）

总之，建筑和景观作为一种表现的艺术。它们包含一种基本的"叙述性"因素，是一种精心描述的故事[12]。无论是艺术介入乡建还是基于在场现实和日常生活的建筑之美的打造，都是基于当地文脉而进行的创作。建筑之美不仅在表现形式之美，还在叙述当地的文化和生活。设计团队希望能让偏远山区的村民有资格享受建筑、空间之美同时也能理解建筑、空间之美。

4 政府-学界-企业-大众媒体联合造就的乡建模式

雨补鲁村和板万村改造资金来源来自于当地政府的支持和爱心企业。然而贫困地区的乡村改造，不能单独依靠任何一方力量，否则会给政府和企业带来沉重的负担。设计团队希望探索一种可持续的乡村改造的模式，能够为村寨带来持续的关注和活力。然而，位于偏远山区的贫困少数民族村寨位于交通不便和资讯欠发达的区域，从"资本逐利"的经验上来看，这些区域一般都是资本和大众不去关注的地方。如何在这些山区实现可持续的复兴是设计团队一直思考的问题。除了动员和鼓励村两委和村民在物理空间改造完成后进行自发性的开展乡村旅游，设计团队还利用大众媒体的宣传让村落快速成为热点，提高其知名度，成为众所周知的特色旅游地区。同时，利用高校资源和文化部教育部主办的非遗传承人群研培计划，让最贫困地区与发达地区建立联系，建立一种长期互惠的模式。

4.1 大众媒体的关注

巧合的是，两个村寨改造过程之中或改造之后都与国内知名电视媒体合作过。在大众媒体播出节目后两个村落迅速成为话题热点，形成一种"媒介奇观"。媒介奇观虽然受到政治经济文化势力的左右和消费主义逻辑的掌控[13]。但是，它会使贫困落后的区域可以快速与

广泛的受众联结在一起，电视受众可以转化为实际的游客，良好的游览体验和口碑可以成为乡村复兴至少是乡村经济提升提供可持续发展的资源。笔者在对两个村子的回访过程中对采访游客中发现，大多数游客是因为电视节目而认识这两个村落，由于电视媒体的呈现让观众对村落产生很大的好奇心。当然，并非所有乡村改造都能有机会与大众媒体合作，并且不能否认大众媒体在宣传村寨时会出现偏差，比如会受消费主义的影响而有目的的引导观众的价值判断。但是对媒体力量的借用，使得山地少数民族贫困村落能够突破交通的限制，并以最小的代价接触到更广泛的受众。

4.2 高校−乡建互惠模式的建立

山地多民族贫困地区的村落具备特色的民俗文化和山地景观。设计团队在改造雨补鲁村之后和当地政府一同设立了中央美术学院（兴义）教学实践基地，并第一次在村里召开了乡村建设研讨会。学术机构与地方展开合作，一方面，学术机构利用本身的优势，比如在艺术、建筑和设计的科研创作优势，服务区域和乡村建设，提高乡建品质和乡村知名度，促进旅游业的发展；另一方面，乡村或者合作地方也能为学术机构提供良好的教学与写生资源，为未来的艺术家提供创作和展示的平台。这是一种互赢、互惠的合作模式。无论是学术机构还是乡村在这种合作中各取所需，共同受益，山地少数民族贫困地区的村落可以在这种合作当中找到发展乡村的机会。这是一条乡村，尤其是山地少数民族贫困村寨可持续复兴的模式。除此之外，设计团队和板万村村委会共同选择 10 名绣娘参加文化部教育部主办的非遗传承人群研培计划，培训的计划是让绣娘开阔视野，充分认识本民族手艺的价值内涵，并且与发达地区、专家建立起联系，让她们回乡生产创作时能保持自信，利用自己的手艺来致富。

因此，乡村复兴的可持续性是空间改造结束之后要思考的方面。一个需要当地政府的持续关注和支持；需要社会优质资源和乡村的互惠对接，而这种互惠不是外部资本对乡村自然资源的汲取；也需要村民把握机会，不断增强文化自觉和文化自信，利用自己的手艺和其它优势在真正做到经济，文化的可持续发展。

5 讨论：政府、企业之外的第三方力量

"精准扶贫"和"万企帮万村"计划，决定了政府和企业是贵州扶贫事业的主体。政府依靠科层制度和基层干部的快速反应，企业依靠雄厚的资本和人力物力支持，都将为贵州的扶贫和乡村复兴注入强大的活力。在这一历史进程中，学术专家和大众媒体的力量不应该缺席。

"公共知识分子"（public intellectual）是近十年以来，中外知识界讨论的一个热点问题，特指那些凭借独立身份，借助知识和技术的力量，对社会表现出强烈的公共关怀和参与意识，从而体现出公共良知的一群文化人。显然，知识分子的本义便包含了"公共"的含义在其中 [14]。1987 年，美国学者雅各比（Russell Jacoby）在《最后的知识分子》一书中首先提出"公共知识分子"的概念。在他看来，现代知识精英的学院化、专业化，正慢慢让其"公共"光环面临褪色，因此应该重新强调"公共"两字，借此呼吁重建知识分子的公共性 [15]。所谓"公共性"，不仅指面向公众发言、关注公共事务；也蕴含着代表 公众利益、批判意识、公共良知和人文精神等多重涵义 [16]。上个世纪初，留学归来的学者晏阳初选择了河北定县（今定州市）作为试验区，带领一批教授、学者、医务人员进入农村，从认字开始帮助农民触摸现代文明。他们的努力使定县成为当时闻名世界的"乡村建设实验区"。晏阳初认为，乡村建设的使命既不是"救济乡村"，也不是"办模范村"，而是要立足于"民族再造"这一艰巨而长期的使命。在一百年后的今天，中国的东部地区大部分已经脱离了贫困

和愚昧，大学，特别是重点大学，作为现代社会的知识精英汇聚地，理应为西部地区的乡建贡献自己的智力和才干，而"民族再造"这一思想在少数民族地区有了新的内涵和现实意义——通过学术专家在大众媒体领域的发声，通过大众媒体与学术专家的合作，以设计和智识介入乡建，以舆论和监督保障公平，以文化保护和传承重塑少数民族的民族自信，最终促进民族地区的乡村复兴。

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参考文献：

［1］王铭铭, 舒瑜. 文化复合性[M]. 北京联合出版公司, 2015.

［2］T Oakes. Tourism and Modernity in China[J]. Tourism & Modernity in China, 2014.
[M].人民出版社,2015.

［3］ 刘希磊. 少数民族生态移民经济发展与文化变迁研究[D].贵州财经大学, 2013.

［4］［7］ 费孝通. 费孝通论文化与文化自觉[M]. 群言出版社, 2005.

［5］ 陈竹, & 叶珉. 什么是真正的公共空间?—西方城市公共空间理论与空间公共性的判定[J].国际城市规划, 2009, 24(3), 44-49.

［6］ Carmona M. Public places, urban spaces the dimensions of urban design[J]. 2003.

［8］ 孟繁玮. 民间艺术与当代生活——原生修复以民为本——吕品晶谈民间艺术与当代生活[J]. 美术观察, 2017(3):4-9.

［9］ 资料新华社. 中共中央国务院关于加大改革创新力度加快农业现代化建设的若干意见.

［10］ 胡泉纯. 天坑地漏 SINKHOLE FLOOR DRAIN[J]. 设计, 2017(14):34-35.

［11］ 王贵祥. 建筑美的哲学思辨--读罗杰·斯克鲁顿的《建筑美学》[J]. 建筑学报, 2004(10):82-83.

［12］ 刘圻. 建筑美:日常生活的美学——《建筑美学》阅读札记[J]. 建筑与文化, 2005(9):78-87.

［13］ 汤浩. 媒介地理学视野下的传媒奇观[J]. 西南交通大学学报:社会科学版, 2008, 9(2):114-117.

［14］［15］李名亮. 微博、公共知识分子与话语权力[J]. 学术界, 2012(6):75-86.

［16］拉塞尔·雅各比, 雅各比, Jacoby,等. 最后的知识分子[M]. 江苏人民出版社, 2006.

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REFERENCES:

Bai, W., & Cai, Y. (2014). The Criteria and Strategies of Peasant Everyday Resistance: James C. Scott's Study on Peasant. *Journal of South China Agricultural University (Social Science Edition)*, 000(1), 123–131.

Bai, Y. (2012). Urban-Rural Dual Structure under the Chinese Perspective: Its Formation, Expansion and Path. *Academic Monthly*, 05, 67–76.

Baan, I., Shu, T. by W., Kjeldsen, K., Friis, N., Frampton, K., Bouman, O., Dong, Y., & Chen, A. (2017). *The Architect's Studio: Wang Shu and Amateur Architecture Studio* (M. J. Holm (ed.)). Lars Muller.

Barnow, F. (2002). The City of the Landowner: *Urban Systems and Urban Architecture in the Antique Greek World and the Roman Empire*. Royal Danish Academy of Fine Arts, School of Architecture Publishers.

Bolchover, J., & Lin, J. (2013). *Rural Urban Framework. Birkhäuser*.

Cao, Q. (2018). "Policy-Livelihood-Culture" Driving Force Interpretation Model for Settlement Change—A Case of Banwan Village, Guizhou Province. *Journal of Human Settlements in West China, 4*, 100–106.

Cao, Q., & Chen, Y. (2019). Interpretation and Negotiation— Reproducing Vernacular Space in Yubulu and Banwan Village. Journal of Human Settlements in West China, 34(3), 82–88.

Cao, Q., & Ellefsen, K. O. (2022). The Guizhou Province as a Laboratory for Understanding Strategies for Rural China. In *Chinese Village Artistic Construction (Second Series)* (pp. 105–123). People's Fine Arts Publishing House.

China Daily (2019). "Big data looms large in Guizhou". Accessed August 01, 2020, http://www.chinadaily.com.cn/kindle/2019-02/27/content_37441741.htm

Chio, J. (2014). *A landscape of travel: the work of tourism in rural ethnic China*. London University of Washington Press.

CNN, (2018). "Guizhou: the road to success". Accessed July 01, 2019, http://advertisement-feature.cnn.com/2018/guizhou/the-road-to-success/

Coggins, C. R., & Yeh, E. T. (2014). Producing Shangrilas. In E. T. Yeh & C. R. Coggins (Eds.), *Mapping Shangrila: Contested Landscapes in the Sino-Tibetan Borderlands*. University of Washington Press.

Cornet, C. (2015). Tourism development and resistance in China. *Annals of Tourism Research, 52*.

CPC Central Committee and State Council. (2013). *Opinions on accelerating modern agriculture development and further strengthening rural development*. People's Publishing House.

Deng, L., & Xiong, C. (2011). The Influence of the Characteristics of the Illiterate and Semi-literate Population in Ethnic Minority Regions in Guizhou on Regional Development. *Guizhou Ethnic Studies, 6*, 76–81.

Denscombe, M. (2007). *The Good Research Guide* (3rd edition). Open University Press.

Ding, G., Peng, K., Wang, W., & Jiao, S. (2016). Research on the Typology of Rural Development in China: from the Perspective of Builders. *Urban Development Studies, 23*(10), 60–66.

Dong, H. (2008). The weak identity as a weapon: subaltern politics of the peasant resistance for rights. *SOCIETY, 28*(4), 34–58.

Ellefsen, K. O., & Ma, J. (Eds.). (2018). *Country road, take us home - Thoughts on countryside construction Writings from the CC Research Program CAFA 2018-2019*. CAFA, Visual Art Innovation Institute.

Ellefsen, K. O., & Lundevall, T. (2019). *North Atlantic Coast : A Monography of Place* (1st ed.). Pax Forlag.

Fei, X. (1992). *From the Soil: The Foundations of Chinese Society* (First Edition, A translation of Fei Xiaotong's Xiangtu Zhongguo edition). University of California Press.

Fei, H. T. (1999). *The Pattern of Diversity in Unity of the Chinese Nation*. China Minzu Unibersity Press.

Feilden, B. M. (2003). *Conservation of Historic Buildings* (3 edition). Architectural Press.

Fukuta, A. (2005). Theory of village territoriality (X. Zhou, trans.). *Forum on Folk Culture, 0*(1), 78–89.

Gauche, E. (2017). Tourismification of a Shui Village in the Mountainous Province of Guizhou (South China): Imaginaries and the Use of Landscape for Political Ends. *Revue de Géographie Alpine*, 105.

Giugni, M. (2003). Was It Worth the Effort? The Outcomes and Consequences of Social Movements. *Annual Review of Sociology, 24*, 371–393.

Goodman, D. S. (2004). China's Campaign to *"Open up the West": National, Provincial and Local Perspectives*. Cambridge University Press.

GZG, (2016). "Guizhou was approved to build the first national big data pilot zone". Accessed July 11, 2020, http://www.guizhou.gov.cn/ztzl/2016qglhzt/gzdsjdj/201603/t20160301_377739.html

GZG, (2018). "Notice on highway construction in Guizhou in the next five years". Accessed April 05, 2019, http://www.guizhou.gov.cn/zwgk/zcfg/szfwj_8191/qff_8193/201807/t20180702_1396222.html

GZZFCXJST, (2019)."Guizhou rural dilapidated house renovation in the past ten years". Accessed January 4, 2019, http://zfcxjst.guizhou.gov.cn/jszx/jqdt/201902/t20190202_2234934.

html

Harrell, S. (2002). *Ways of Being Ethnic in Southwest China* (New Ed edition). Seattle: University of Washington Press.

He, X. (2007). The Logic of Farmers' Action and the Regional Difference in Village Administration. *OPEN TIMES, 1*, 105–121.

He, X. (2013). Several thoughts about Chinese small-scale peasant economy. *Journal of Nanjing Agricultural University (Social Science Edition)*, 13(6), 1–6.

He, X. (2015). Elderly agriculture: "half-cultivator half-worker" livelihood model in left-behind villages. *Governance, 30*, 19–20.

He, Y. (2015). Vernacular Building: A Means of Reflection. *Human Settlements Forum in West China, 3*, 6–11.

He, X. (2017). Rural reconstruction for whom—Implementation prerequisite of rural revitalization. *Exploration and Free Views, 12*, 71–76.

Hillman, B. (2003). Paradise Under Construction: Minorities, Myths and Modernity in Northwest Yunnan. *Asian Ethnicity, 4*, 175–188.

Ho, P. (2005). *Institutions in Transition: Land Ownership, Property Rights and Social* Conflict in China (1 edition). Oxford University Press.

Hoggart, K., Black, R., & Buller, H. (1995). *Rural Europe: Identity and Change* (1 edition). Routledge.

Hoggarth, L., & Comfort, H. (2010). *A Practical Guide to Outcome Evaluation*. Jessica Kingsley Publishers.

Homeland. (2018). *Songkou Model*. Fujian People's Publishing House.

Huang, D. (2014). The analysis of Bouyei song's production in terms of natural, social and cultural factors. *Guizhou Social Sciences, 11*, 84–89.

Huang, S. (2014). Three Contexts, Three Methods: The Sociality of Hsieh Ying-chun's Architecture. *New Architecture, 01*, 4–9.

Huang, S.-Y., & Hung, Y.-H. (2016). Fieldoffice Architects In Situ: Reflecting on the Rural-Urban Mix in Yilan, Taiwan. *Architectural Design, 86*, 58–65.

Huang, Y. (2017). Farewell to Villages: Forced Urbanization in Rural China. *In China's Urbanization and Socioeconomic Impact* (pp. 207–227).

Huang, Y. (2018). A research on the implanting the concept of ecological museum in the protection of cultural heritage in ethnic villages. *Guangxi Ethnic Studies, 6*, 102–107.

Jabeen, S. (2017). Unintended Outcomes Evaluation Approach: A plausible way to evaluate unintended outcomes of social development programmes. *Evaluation and Program Planning, 68*.

Jacoby, R. (2000). *The Last Intellectuals American Culture in The Age Of Academe*. Basic Books.

Ji, Z., & Kang, Z. (2019). Re-shaping the Subject: Important Approaches of Art Intervention in Rural Construction: Case of Longtan Village, Xiling Town, Pingnan County, Fujian Province. *Ethnic Art Studies, 32*(2), 99–105.

Jones, P. B., Petrescu, D., & Till, J. (Eds.). (2005). *Architecture and Participation*. Routledge.

JTGZ, (2018). "The achievements of traffic construction in Guizhou". Accessed August 15, 2019, http://jt.guizhou.gov.cn/xwzx/xwfb/201803/t20180307_28198201.html

Kang, Y., & Xue, K. (2018). Relationship between rural modernization and new urbanization from the perspective of rural revitalization strategy. *Journal of Shandong Agricultural University (Social Science Edition), v.20;No.76*(01), 6+16–19+35.

Knapp, R. G. (2000). *China's Old Dwellings*. University of Hawaii Press.

Lei, C. (2018). Lyu Pinjing: Looking for the "lost beauty" in the rural village. *Policy Research & Exploration*, 9, 82–85.

Li, C. (2015). *Encountering the local: response to the development intervention from actor's aspect*. Social Sciences Academic Press (China).

Li, C. (2017). The Background, Meaning and Methods: Thinking and Practice from a Practitioner. *Exploration and Free Views, 12*, 63–70.

Li, Z., & Shan, T. (2017). The value, mechanism and path choice of cultural poverty alleviation in the construction of minority nationality villages. *Guangxi Ethnic Studies, 5,* 25–31.

Li, W., & Zhang, Y. (2018). When Rural Revitalization Confronts Developmentalism: Anthropological Reflection of Post Development Time. *Journal of Northwest University for Nationalities (Philosophy and Social Science), 6*, 76–83.

Li, Y., Zhang, Q., Wang, G., McLellan, B., Liu, X., & Wang, L. (2018). A Review of Photovoltaic Poverty Alleviation Projects in China: Current Status, Challenge and Policy Recommendations. *Renewable and Sustainable Energy Reviews, 94*, 214–223.

Lin, H., & He, X. (2016). Urban-Rural Dual Structure in China: From "Exploitation Type" to "Protection Type." *Journal of Beijing University of Technology (Social Sciences Edition), 16*(6), 1–10.

Lin, Y., Cai, F., & Li, Z. (1994). Reflection of the China's Overtaking Strategy. *Strategy and Management, 1*(6), 1–12.

Liu, C. (2018). Dwelling and Building: Traditional Chinese Residence Regeneration from a Topographical Perspective. *Journal of Guangxi University for Nationalities (Philosophy and Social Science Edition), 40*(1), 8–18.

Liu, Z. (2010). Rustic ambience- Review two rural architecture practices from the angle of

local conditions. *Architecture & Culture, 06*, 108–109.

Lo, K., & Wang, M. (2018). How voluntary is poverty alleviation resettlement in China? *Habitat International, 73*, 34–42.

Long, N. (2001). *Development Sociology: Actor Perspectives* (1 edition). London and New York: Routledge.

Luo, Y. (2018). Alternative Indigeneity in China? The Paradox of the Buyi in the Age of Ethnic Branding. *Verge: Studies in Global Asias, 4,* 107.

Luo, H., & Zhao, C. (2015). Outlining principles of the revitalization of southern Chinese villages—A case study of Pingnan Beicun in Fujian and beyond. *Architectural Journal, 09*, 1–6.

Luo, Y. (2018). Alternative Indigeneity in China? The Paradox of the Buyi in the Age of Ethnic Branding. *Verge: Studies in Global Asias, 4*, 107.

Luo, Y., Oakes, T., & Schein, L. (2019). Resourcing remoteness and the "post-alteric" imaginary in China. *Social Anthropology, 27*, 270–285.

Lyu, P. (2016). Conservation of Traditional Villages in Yubulu. *Urban Environment Design, 10*, 214–217.

Massey, D. (1991). A Global Sense of Place. *Marxism Today*, 38.

Massey, D. (1994). *Space, Place and Gender*. Polity.

Maurer-Fazio, M., & Hasmath, R. (2015). The Contemporary Ethnic Minority in China: An Introduction. *Eurasian Geography and Economics, 56*, 1–7.

Mauss, M. (2014). *Sociology and Anthropology* (B. She, trans.). Shanghai Translation Publishing House.

MCT (2019). "Main methods and effects of tourism poverty alleviation in Guizhou". Accessed 12 April 2022, https://www.mct.gov.cn/whzx/qgwhxxlb/gz/201911/t20191106_848712.htm

Meng, F. (2017). Abstract and Reconstruction:Design Strategy of Rural Residence in Dongziguan, Hangzhou. *Development of Small Cities & Towns, 10*, 26–32.

Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. SAGE Publications, Inc.

Mills, A. J., Durepos, G., & Wiebe, E. (2009). *Encyclopedia of Case Study Research*: (D. A. J. Mills (ed.); 1 edition). SAGE Publications Inc.

MOFCOM, (2015). "Vision and actions on jointly building Belt and Road". Accessed August 10, 2020, http://www.mofcom.gov.cn/article/resume/n/201504/20150400929655.shtml

MOHURD (2012), "Guiding opinion on strengthening the protection and development of traditional village". Accessed 14 April 2022, https://www.mohurd.gov.cn/gongkai/fdzdgknr/

tzgg/201212/20121219_212337.html

Moseley, M. J. (2003). *Rural development: principles and practice*. Sage Publications.

Ning, Z. (Ed.). (2019). *Rural geography of China*. China Architecture & Building Press.

Norberg-Schulz, C. (1979). *Genius Loci: Towards a Phenomenology of Architecture*. Rizzoli.

Notar, B. E. (2006). *Displacing desire: travel and popular culture in China*. University of Hawaii Press.

Oakes, T. (1997). Ethnic Tourism in Rural Guizhou: Sense of Place and the Commerce of Authenticity. In M. Picard & R. E. Wood (Eds.), *Tourism, ethnicity, and the state in Asian and Pacific societies* (pp. 35–70). University of Hawaii Press.

Oakes, T. (1998). *Tourism and Modernity in China*. Routledge.

Oliver, P. (2003). *Dwellings: The Vernacular House Worldwide* (1st edition). Phaidon Press.

Otero-Pailos, J., Fenstad Langdalen, E., & Arrhenius, T. (Eds.). (2016). *Experimental Preservation*. Lars Müller Publishers.

Ou, yuehua. (2020). Research on the development status and future trend of digital economy in Guiyang. *Zhongguo Xinxihua*, 12.

Pan, J. 'en, & Wen, T. (2016). The Context and Development of Rural Construction in China. *Open Times*, (04), 126–145+7.

Pan, Y. (2002). A Contradictory "Text": A Record of the Field Research of the Soga Ecological Museum. *LITERATURE AND ART STUDIES*, 1, 104–111.

Pan, Y. (2006). The Distorted "Text": An Anthropological Observation of Suojia Ecomuseum. *JOURNAL OF HUNAN UNIVERSITY OF SCIENCE & TECHNOLOGY (SOCIAL SCIENCE EDITION), 9*(2), 104–108.

Pedgley, O. (2007). Capturing and analysing own design activity. *Design Studies, 28*, 463–483.

Peng, Z. (2018). Review and perspective of development evolution of small cities and towns. *Development of Small Cities & Towns, 36*(9), 16–17.

Peterman, S. (2020). Villages with Chinese Characteristics. In Countryside. A Report: Countryside in your pocket! (pp. 124–147). Taschen GmbH.

Plummer, J. (2004). Introduction. In J. Plummer & J. G. Tayler (Eds.), *Community Participation in China: Issues and Processes for Capacity Building*. Routledge.

Plummer, J., & Remenyi, J. (2004). Enhancing Local Government Capacity for Community Participation. In J. Plummer & J. G. Taylor (Eds.), *Community Participation in China: Issues and Processes for Capacity Building*. Routledge.

Plummer, J., & Taylor, J. G. (2004). Key Factors and Processes Affecting Participation. In J.

Plummer & J. G. Taylor (Eds.), *Community Participation in China: Issues and Processes for Capacity Building*. Routledge.

Poston, D., & Mackerras, C. (1994). China's Minorities: Integration and Modernization in the Twentieth Century. *International Migration Review, 30*, 828.

Qu, S., Zhang, X., & Zhou, Q. (2019). Policy Evolution and Innovation of Relocation for Poverty Alleviation. *Journal of Northwest A&F University* (Social Science Edition), 19(1), 15–22.

QXNGOV, (2018). "Chinese poverty alleviation resettlement policy". Accessed February 05, 2020, http://www.qxn.gov.cn/ztzl/tpgj/ydfpbq/201912/t20191220_33901278.html

Rao, Y. (2014). Study on the Experience Related to the Renovation of Dilapidated Houses in Rural Guizhou. *Journal of Guizhou Minzu University (Philosophy and Social Science)*, 3, 151–154.

Rao, Y., Xu, Y., & Luo, Z. (2015). Relation between Development Mode of Poverty Alleviation Tourism, Relational Embeddedness and Knowledge Transposition —A Case study of Xinfeng County in Guangdong Province. *Journal of Guangxi University for Nationalities (Philosophy and Social Science Edition), 6*, 128–133.

Rapoport, A. (1969). *House Form and Culture* (1 edition). Pearson.

Rosenberg, L. (2014). Urbanising the rural: Local strategies for creating "new style" rural communities in China. *China Perspectives*, 2013, 63–72.

Rossi, A. (1984). *The Architecture of the City* (New Ed edition). MIT Press.

Sahlins, M. (2009). The Whole is a Part. Intercultural Politics of Order and Change. In M. Wang (Ed.), & H. Chen (Trans.), *Chinese Review of Anthropology, Volume 9*. World Publishing Corporation.

Seamon, D., & Sowers, J. (2008). Place and Placelessness, Edward Relph. In *Key Texts in Human Geography* (pp. 43–51). Sage.

SCIO, (2016). *"China's Progress in Poverty Reduction and Human Rights."* Accessed April 05, 2019, http://www.scio.gov.cn/zfbps/32832/Document/1494402/1494402.htm

Scott, J. C. (1987). *Weapons of the Weak: Everyday Forms of Peasant Resistance* (New edition). Yale University Press.

Scott, J. C. (1999). *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New edition). Yale University Press.

Scott, J. C. (2011). *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia. New Haven,* London: Yale University Press.

Shannon, K., Meulder, B. D., & Lin, Y. (Eds.). (2014). *Village in the City: Asian Variations of Urbanisms of Inclusion*. Park Books.

She, X. (2008). Cooperation and Unconfrontational Resistance: Tenacious weapons of the weak. *SOCIOLOGICAL STUDIES, 3*, 1–28.

SGC, (2000). "State Council on the implementation of the western development. Notice of policy measures," China Government. Accessed April 06, 2019, http://www.gov.cn/gong-bao/content/2001/content_60854.htm

Sun, L. (2001). Rural China: The practical form of state-peasant relationship—discuss on "process-event analysis" method. *Economy and Management Digest, 19*, 12–15.

Tang, K. (2015). Home places altered in space and time – Recycling meanings in defining the Chinese countryside. *TIME + ARCHITECTURE, 03*, 16–22.

Tashi, G., & Foggin, M. (2012). Resettlement as Development and Progress? Eight Years On: Review of Emerging Social and Development Impacts of an "Ecological Resettlement" Project in Tibet Autonomous Region, China. *Nomadic Peoples, 16*, 134–151.

Teilmann, K. (2011). Collaborating on Rural Development: Experiences and Lessons from Local Action Groups in Denmark. *SSRN Electronic Journal*.

Tian, P. (2017). The transformation of "model research" and the discipline renewal of Development Sociology. *China Social Science Review, 4*, 32–39.

Tuan, Y.-F. (2001). *Space and Place: The Perspective of Experience* (25th edition). University of Minnesota Press.

Tu, S., & Long, H. (2017). Rural restructuring in China: Theory, approaches and research prospect. *Journal of Geographical Sciences, 27*, 1169–1184.

Wang, D. (2007). The Co-Constructioning of Village Habitat and the Involvement of Architects. *TIME + ARCHITECTURE, 4*, 16–21.

Wang, H., Zhao, Q., Bai, Y., Zhang, L., & Yu, X. (2020). Poverty and Subjective Poverty in Rural China. *Social Indicators Research, 150*.

Wang, J. (2001). Culture as Leisure Culture as Capital. *Positions East Asia Cultures Critique, Vol. 9*, 69–104.

Wang, L., & Yotsumoto, Y. (2018). A different interpretation from Cornet's on tourism development in an ethnic minority village in China. *Asia Pacific Journal of Tourism Research, 23*, 1–15.

Wang, M. (1997). *The Culture and Right in the Perspectives of Villages*. Beijing: Joint Publishing Co.

Wang, M. (2016). Parts as the Wholes: The broadening of the scope of community study from the perspective of a village. *Sociological Studies, 4*, 98–120.

Wang, M., & Lo, K. (2015). Displacement and Resettlement with Chinese Characteristics: An Editorial Introduction. *Geography Research Forum, 35*, 1–9.

Wang, S., Kjeldsen, K., Friis, N., Frampton, K., Bouman, O., Dong, Y., Chen, A., Baan, I., Trefold, & Jørgensen, C. (2017). *Wang Shu and Amateur Architecture Studio* (M. J. Holm & S. Damstedt (eds.)). Lars Müller.

Wang, W. (2014). On the Construction of Beautiful Countryside: Current Situation and Countermeasures. J*ournal of Huazhong Normal University (Humanities and Social Sciences), 53*(1), 1–6.

Wang, Y., Long, N., & Ye, J. (2010). *Rural transformations and development: China in context: The everyday lives of policies and people*. Edward Elgar.

Wen, T. (2013). *Eight crises: Lessons from China (1949-2009)* (1st edition). Beijing: Dongfang Publisher.

Wen, T. (2018). The Rural Rejuvenation Initiative in the Perspective of Eco-civilization and Comparison. *Journal of Shanghai University (Social Science Edition)*, 35(1), 1–10.

Wenlvnews (2020), "From primitive village to beautiful village". Accessed 20 April 2022, http://www.wenlvnews.com/p/307220.html

Wilson, C. (2014). Semi-Structured Interviews. In *Interview Techniques for Ux Practitioners* (pp. 23–41).

Woods, M. (2004). *Rural geography: Processes, responses and experiences in rural restructuring*. London: SAGE Publications Ltd.

Woods, M. (2011). *Rural*. Routledge.

Wu, J. (2015). Running away is the best? Ecological resettlement of ethnic minorities in Guizhou, China. *Geography Research Forum, 35*, 95–112.

Wu, J., & Iredale, R. (2015). Minority mobility in Guizhou Province, with a focus on planned resettlement and its implications for ethnicity and identity. In *Handbook of Chinese Migration Identity and Wellbeing*.

Wu, L. (2018). Rural China in the Process of Modernization in the Past One Hundred Years —The "Rural Society" in the Strategy of Rural Revitalization. *Journal of China Agricultural University (Social Sciences Edition), 35*(3), 15–22.

Wu, W. (2010). *Study of Sociology with Chinese Characteristics*. The Commercial Press.

Wu, Z. (2015a). THOUGHTS ON RURAL CONSTRUCTION FROM THE PERSPECTIVE OF CONSTRUCTION SUBJECTS. *City Planning Review, 39*(11), 85–91.

Wu, Z. (2015b). Whose countryside, who will build it? Thoughts on rural construction mode. *Annual National Planning Conference 2015*, 9.

Xinhua, (2010). Investment in Guizhou infrastructure construction had exceeded 440 billion ten years after the Great West Development Strategy was initiated in 2001. Accessed April 06, 2019, http://www.gov.cn/jrzg/2010-07/01/content_1643326.htm

Xiong, W., & Liu, B. (2017). The debate between Lichangping and Hexuefeng in the view of rural revitalization. *Exploration and Free Views*, (12), 77–81,86.

Xu, S., Gan, Y., & Fang, S. (2019). Review on the Research of Tourism Targeted Poverty Alleviation Mechanism in China. *Tourism Forum, 12*(4), 94–101.

Xu, X., & Liu, L. (2018). On the Cause of Campus Violence by Left-behind Children and the Countermeasures. *Journal of Zunyi Normal College, 20*(3), 161–163.

Yan, L., Liang, C., & Hu, Z. (2017). Conservation of Historical and Cultural Towns and Villages in China. *Aussie-Sino Studies*, 3, 85–97.

Yang, L. (2011). Ethnic Tourism and Cultural Representation. *Annals of Tourism Research*, 38(2), 561–585.

Ye, J., & Li, C. (2009). *The Methods of Sociology which Taken Actor as Orientation. Guizhou Social Sciences, 10*, 72–79.

Ye, L., & Huang, Y. (2016). The Design intervention of Contemporary Rural Construction from the Perspective of Capital Motivation. *New Architecture, 4*, 7–10.

Ye, X. (2009). *China's Urban-Rural Integration Policies. Journal of Current Chinese Affairs – China Aktuell, 38*, 117–143.

Yeh, E. T., O'Brien, K. J., & Ye, J. (2013). Rural politics in contemporary China. *The Journal of Peasant Studies, 40*(6), 915–928.

Yin, H., & Xu, Y. (2011). Research on Construction Model of Rural Tourism Eliminating Poverty in Poor Areas of Guizhou Province. *Guizhou Agricultural Sciences, 39*(10), 197–200.

Yin, R. K. (2003). *Case Study Research: Design and Methods* (3rd edition). SAGE Publications, Inc.

Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (Sixth Edition). SAGE Publications, Inc.

Yuan, L. (2015). *Ethnicity or nationality?: Minority policy and ethnic conflict in contemporary China* (pp. 151–168).

Zainal, Z. (2007). Case study as a research method. *Jurnal Kemanusiaan, 9*.

Zeng, Y., & Guo, H. (2016). The Formation Mechanism of Agro-Taobao Village: A Multiple-Case Study. *Issues in Agricultural Economy, 37*(4), 39–48.

Zhang, X., Wang, Z., Xie, Q., Wei, L., Qu, X., Lin, S., & Du, Y. (2016). Reconstructing the Vernacular: Four Representations of the Value of Design by Architects. *Architectural Journal, 08*, 96–100.

Zhao, C., Li, C., & Wang, L. (2016). Rural Demands and the Attitudes of Architects. *Architectural Journal, 08*, 46–52.

Zhao, X., & Cheng, L. (2018). Discussion on Rural Revitalization: A Case Study of Wencun in Hangzhou. *Modern Urban Research, 4*, 23–29.

Zhou, R. (2015). Three Issues of Rural Constructions. *World Architecture, 2*, 20–23.

Zhou, E., & Mao, D. (2017). The Practice and Its Consequence of Relocation of Poverty Alleviation – An Analysis of a Social and Cultural Transformation. *Journal of China Agricultural University (Social Sciences Edition), 34*(2), 69–77.

Zhou, Z. (2016). An Approach to Explore the Formation and Evolution of Mountainous Minority Settlements——A Case of Guizhou Province. *Human Settlements Forum in West China, 03*, 8–16.

Zuo, J. (Ed.). (2020). *Bishan12: Architects in villages*. CITIC Press Group.

Zhou, Z. (2016). An Approach to Explore the Formation and Evolution of Mountainous Minority Settlements——A Case of Guizhou Province. *Human Settlements Forum in West China, 03*, 8–16

ENDNOTE:

1 The 16th National Congress of CPC issued China's 11th Five-Year Plan (2006-2010) and has given the top domestic priority to "build a new socialist countryside." Its official slogan outlined broad goals: "develop production, enrich livelihood, civilize rural habits, tidy up the villages, and democratize management."

2 The concept "Taobao village" appeared for the first time ten years ago, denoting villages showing online shopping exceeding 10 million Yuan a year and including more than a hundred businesses. Counting 20 in 2013, AliResearch reports the number of qualified Taobao villages reached 4310 in June 2019, including a total number of 660,000 online shops. The villages and shops are localized in 25 of China's provinces. The spatial distribution of Taobao Villages has begun to show a pattern that coincides with the Chinese "East-Middle-West" economic and geographical gradient structure, and Taobao Villages are densely situated in the eastern coastal area and exhibit rapid fissile proliferation mostly in these areas.

3 In the article *Urbanising the Rural: Local Strategies for Creating "New Style" Communities in China*, based on extensive research of two case studies of transition from traditional rural villages to urban-like communities, Rosenberg notes that local officials are keen on land that not only bring the potential benefits for villagers but also as a potential boost to local government revenue.

4 For example, in the book *Village in the City: Asian Variations of Urbanisms of Inclusion*, Meulder and Shannon study "village in the city" that are undergoing to become parts of cities and, therefore, may be considered a particular form of penetration modernization of urbanization. They note that the urban villages provide an alternative function to the generic city, such as the "handshake housing," which can provide super dense migrant housing for a mass population of migrant workers.

5 Rural migrant workers in 2017, accessed July 9, 2019, http://data.stats.gov.cn/easyquery.htm?cn=B01&zb=A0514&sj=2017D

6 Rural migrant workers in 2021, accessed May 12, 2022, http://www.stats.gov.cn/xxgk/sjfb/zxfb2020/202204/t20220429_1830139.html

7 http://www.cpad.gov.cn/art/2014/2/8/art_28_21624.html says Guizhou initiated the removal of 2.04 million people between 2012-2020. It has been reported that the total number of migrants will exceed the migrations in the Three Gorges Project, and it is considered the single biggest relocation in recent China.

8 This phenomenon will be discussed in Chapter 4.2.5.

9 In his book *The Culture and Power in the View of Villages*, Wang Mingming attempts to show that the vernacular folk tradition is not an obstacle to modernization but instead helps promote the modernization process due to the high adaptability of tradition.

10 The original references have been translated from Chinese by the author.

11Referring to Qing Cao and Karl Otto Ellefsen's "Guizhou – Understanding Strategies for Rural China." The article is *Chinese Village Artistic Construction* (2022) and is integrated as a part of this thesis.

12 For example, the Guizhou-based Louna International Architects' camp invited many well-known architect/design institutes to conduct various design interventions in the Louna village; Fu Yingbin's studio conducted several participatory projects of various scales and with different functions in Guizhou's rural area.

13 The issues mentioned here are the conflicts between infrastructural construction, local landscape, and the livelihood of rural villages. Throughout China, the government invests a large amount of capital in infrastructure construction, e.g., a high-speed rail and highway network, to link urban and remote rural areas. It seems inevitable that the mountains are flattened, the lakes are filled, and huge artifacts are implanted in the farmlands.

14 "The expert architects in the Banwan project" refer to a group of architects led by professor Lyu and commissioned by the local government. Unlike the conventional role in architectural practice, Professor Lyu and his team also intended to serve as researchers, advisors, and facilitators for comprehensive village development.

15 Facts, arguments, and parts of the text in 1.2.1 are from the article by Qing Cao and Karl Otto Ellefsen, "Guizhou –Understanding Strategies for Rural China," 2022.

16 The article's authors were involved in post-graduate programs directed by the Visual Innovation Centre at the Central Academy of Art (CAFA) in Beijing in 2018 and 2019.

17 According to Chinadaily.com on Sept. 23. 2018, China's amount of arable land per capita is 0,09 hectares, while the world average is 0.19 hectares. However, different sources give different numbers: "China has to feed nearly a quarter of the world's population with just 7 percent of its total farmland, and food security has long been regarded as a major source of political legitimacy for the ruling Communist Party." Quoted from https://www.reuters.com/article/us-china-agriculture-land/chinas-total-arable-land-falls-for-fourth-year-in-2017-resources-ministry-idUSKCN1IK059.

18 Karl Otto Ellefsen, Ma Jun, Eds. (2018). Country Road, Take Us Home – Thoughts on countryside construction. *Writings from the CC Research Program CAFA 2018-2019*. Beijing: CAFA, Visual Art Innovation Institute. Preface.

19 "China Population (Live)," Worldometers, accessed March 9, 2018, http://www.worldometers.info/world-population/china-population. As of March 2018, China's total population is an estimated 1.413 billion. Based on data from the National Bureau of Statistics of China (NBS) in 2018, 560 million people lived in the Chinese countryside.

20 According to http://factsanddetails.com/china/cat11/sub72/item1088.html, there are around a million villages with an average of 916 people; they determine this to be 1/3 of the world's villages.As a part of their preparation for their Guggenheim exhibition on the rural world, AMO/OMA conducted a survey based on Chinese statistics in the spring of 2018 and came to a total of close to 3 million villages in China (ref. lecture by Stephan Peterman at

CAFA in June 2018).

21 Barnow, Finn, (2002). *The City of the Landowner*, Copenhagen: Royal Danish Academy of Fine Arts School of Architecture. P. 14-15

22 Willem Van Schendel first proposed the concept/name Zomia in 2002. It refers specifically to the areas centered in highland Asia that extend from the highlands of Pakistan, Afghanistan, Tajikistan, and Kyrgyzstan through the Himalayas, the Tibetan Plateau (including Qinghai), and northwestern China's Xinjiang region, and in the south to the lower end of the peninsular Southeast Asian highlands. In his renowned book "The Arts of Not Being Governed: An Anarchist History of Upland Southeast Asia," James Scott reduced the region of Zomia defined by Van Schendel; in his map, Zomia includes the areas above the altitude of three hundred meters from northeastern India to highland in Central Highlands of Vietnam. It includes five Southeast Asian nations (Vietnam, Cambodia, Laos, Thailand, and Burma) and four provinces of China (Yunan, Guizhou, Guangxi, and part of Sichuan).

23 "Han Chinese" is frequently used in anthropological vocabulary and discussions concerning "Nationality Recognition" and the modern nation-state in periphery areas of China. However, the term "Han Chinese" is used in this thesis as a historical concept, not in describing and discussing China today.

24 The poverty line is an estimate of the minimum necessary income to furnish essentials; if under it, an individual is considered to be living in poverty. It is adjusted over time according to the level of socioeconomic development. For example, the poverty line had increased from 366 RMB in 1978 to 2 952 RMB in 2016.

25 The *Outline for Development-Oriented Poverty Reduction for China's Rural Areas* (2011-2020) maps out 14 contiguous impoverished areas, eleven of which are in ethnic autonomous areas, and 592 key counties for national development-oriented poverty alleviation work, 263 of which are in ethnic autonomous areas.

26 The three contiguous destitute areas are the Wuling mountain area, Yunnan-Guangxi-Guizhou rocky area, and the Wumen mountain area.

27 By late 2019, Guizhou had relocated 10 090 natural villages, and a total of 1.88 million had been relocated into the 946 new settlements. Information retrieved from a government report published on December 24, 2019, accessed July 2020: http://paper.people.com.cn/rmrbhwb/html/2019-12/24/content_1963030.htm.

28 At the time of writing, no official data describes the program outcomes. However, *China's Progress in Poverty Reduction and Human Rights*, published in October 2016, indicates that by the end of 2015, roads had been paved with tarmac and cement in 96.1 percent of towns and townships and 86.2 percent of administrative villages, and shuttle buses served 95.5 percent of towns and townships and 83.1 percent of administrative villages in contiguous impoverished areas.

29 Meaning of ethnic minority in English, accessed July 16, 2021, https://dictionary.cambridge.org/dictionary/english/ethnic-minority.

30 Driven by Soviet notions of nationality and stages of history, the Chinese government has had an "ethnic identification project" since 1950. Fifty-six nationalities (The Han and fifth-Five groups officially designated as minorities) were officially recognized by the government until 1979. Guizhou's many ethnic identities might be disputed because people lived intermixed in certain areas and did not conform to the classification model. Although some scientific methods were implemented to finalize the result, there is still much dispute in specific areas; for example, some groups who lived on the northern bank of the Nanpan River were identified as Bouyei nationality, and some groups that lived in the southern bank were identified as Zhuang nationality. Both groups speak the same language but share a similar livelihood.

31 Bulletin of the 7th National Census (NO. 2). Accessed May 27, 2022, http://www.stats. gov.cn/xxgk/sjfb/zxfb2020/202105/t20210511_1817197.html.

32 The data is based on the information from the seventh national population census in 2020.

33 The central government proposed the national Great Development of Western China strategy in 2001.

34 Figures retrieved from the 7th Chinese National Population Census, 2020. Accessed June 10, 2022, http://hgk.guizhou.gov.cn/publish/tj/2021/zk/indexch.htm.

35 Guizhou Statistical Yearbook 2012. Accessed May 27, 2022, http://hgk.guizhou.gov.cn/publish/tj/2012/indexch.htm.

36 According to Chinese statistics, Tibet has the lowest urbanization rate – 30.89% by the end of 2017.

37 In 2020, the illiteracy rate in the Guizhou province amounted to 8.78 percent.

38 Guizhou Statistical Yearbook 2021. Accessed July 15, 2022, http://hgk.guizhou.gov.cn/publish/tj/2021/zk/indexch.htm.

39 At the beginning of the 21st century, the Chinese government put forward the *Merging rural schools into town schools* policy to promote educational equity and balanced development of compulsory education in rural areas.

40 The administrative village is the 5th level in the Chinese system for the government and the lowest administrative unit in the People's Republic of China.

41 The villager group is set up under the village committee and the grassroots autonomous social organization. The villager group is neither an economic organization nor an administrative organization.

42   The natural village has no formal administrative and governmental role; the villages are defined by morphological and functional criteria based on the villagers' rights to cultivate their land.

43 In 2012, the Ministry of Housing and Urban-Rural Development and other departments launched the list of *China's Traditional Villages*. In late 2019 there were 6 819 villages on

the list. Banwan village was the first village in Ceheng County to be included in this list.

44 Banwan ancient village is the core part of the whole settlement, consisting of No.3 and No.4 villager groups. No.1, 2, and 5 villager groups are settlements formed in the past two decades. No.6 villager group is mostly Han people who relocated from Xingyi in the 1960s.

45 Based on a Yata government report from 2014, the incidence of poverty in Banwan was 34.33%. There are 152 registered impoverished households, or 587 people identified and registered as impoverished.

46 According to Ceheng county annals, from the Ming Dynasty onwards – i.e., for the past six centuries – Han Chinese have immigrated to the region due to government efforts to settle and colonize. According to records of Banwan Mojing, a group of soldiers migrated from Long Xi, Jiangxia, Henan, and Zhangyu had built their settlement in Banwan five hundred years ago. According to the Banwan *zhai lao* (priest or shaman) Lu Zhenguang, the local people's ancestors might be Han Chinese who had migrated to the Yun-Gui Plateau in response to the sustained government effort since the Ming Dynasty to settle and colonize Guizhou. These soldier-settlers were sent to certain selected spots, where they added to or replaced the native dwellers.

47 One mu equals 666.67 m2.

48 The author collected the price of grain and economic crops data in the fieldwork conducted in 2017.

49 Tung oil is a Chinese specialty and the main raw material used for making paint and ink. In addition, it is widely used to waterproof buildings and for machinery, weapons, vehicles, ships, and electrical equipment.

50 Interview with Li Yushan (The deputy village director), 12 October 2017.

51 The reason for implementing this policy will be elaborated on in Chapter 4.

52 According to the Yata town government's statistics in 2018, there are 1 118 able-bodied laborers in Banwan, of whom 873 worked away from home either seasonally or annually.

53 Lu Zhenguang told the author about the story of Cen Guan and his troupe during an interview in October 2017.

54 Rituals for the memory of Cen Guan and the divinity of the mountain.

55 Bouyei people traditionally believe in spirits and worship their ancestors. Every Bouyei village or clan has its sacred writings describing the Bouyei's origins, the story of the sun, moon, wind, rain, lands, forests, and ancestors. This set of books – called "Mojing – should be sung at all Bouyei religious ceremonies.

56 In my article "The new practice of traditional village protection and renewal in Guizhou's ethnic, mountainous, and poverty-stricken areas," I refined the three main geographical characteristics of sites where the Banwan and Yubulu projects developed.

57 Fei Hsiao-tung (1999) calls it "the pattern of diversity in unity of the Chinese nation," and Wang Mingming (2015) calls it "cultural complexities."

58 I will do the literature review about Chinese rural construction in Chapter 2.

59 I visited Banwan annually from 2017 to 2019 and 2021 to document the facts, changes, and effects. I stayed for two weeks in the village every time. Unfortunately, the pandemic that broke out at the beginning of 2020 made it difficult for me to conduct fieldwork in the same year.

60 Pan and Wen classify three rural reconstruction movements in the past century. The first rural construction movement was bottom-up social reform led by public intellectuals started in the 1920s, represented by Liang Shuming, James Yen, and Lu Zuofu. The second movement occurred after the Communist Party gained power in the 1950s and was a government-led top-down industrialization and urbanization movement. Finally, the third rural reconstruction movement emerged at the turn of the 21st century and is characterized by the extensive participation and intervention of a broader social force, including a number of Chinese architects. Nowadays, we find that many architects seize the opportunities opened up by government policies, such as poverty alleviation, rural cultural initiatives, and post-disaster reconstruction.

61 In his article *Three Issues of Rural Constructions*, Zhou Rong proposes three rural practice schools. The culture school refers to architects applying architectural elements to echo the vernacular environment and create a sense of "a cultural landscape" or even nostalgia. Architects might even build extreme designs that were previously only possible in urban areas, often with hardly any acceptance from the community. The technology school places a great deal of emphasis on the technical application of vernacular traditional material and construction. The society school aims for spatial construction to rebuild the community and strengthen the sense of identity in the village, rather than pursue expressive design and signature styles.

62 In his book *Bishan12: architects in villages*, Zuo Jing, note the changes in the role of the architect in rural commissions have led to a discursive shift from design intervention to social intervention; the focus has gone from designing and promoting building quality and architectural aesthetics to reconstructing the social, economic, and cultural relations of rural society.

63 My conference paper *"The new practice of traditional village protection and renewal in Guizhou's ethnic, mountainous, and poverty-stricken areas"* has been accepted by the 2nd Doctor of Arts Forum undertaken by Shandong University of Arts & Design (2021). Shandong Fine Arts Publishing House will publish the paper.

64 Morphological analysis intends to understand the underlying structure of architecture and built environment by examining the patterns of the elements that compose it (synchronically) and as part of the process of their development (diachronically). One might say, "Morphological analysis is the study of the main elements underlying the apparent

chaos." Accessed July 7, 2022, https://www.igi-global.com/dictionary/morphological-analysis/51271. Morphological analysis in the study of the built environment is a strong tradition at the Institute of Urbanism and Landscape, the academic environment for my thesis.

65 Professor Karl Otto Ellefsen gave a lecture titled "The Concept of 'Place'" to the Countryside Construction Studio of CAFA on the 8th of December 2017.

66 The architecture morphology can be interpreted as a pragmatic response to the geographical features, available resources, topography, craftsmanship, and individual decisions.

67 Zhou Zhengxu firstly defines the "mountain, river, woods, paddy field and residences" as the holistic space of a settlement.

68 The fieldwork demonstrates that many locals consider Wang Shu's unique design impractical. For example, the space in the newly built house is small for villagers to store farming tools and some rooms are humid due to the proportion of courtyard and an insufficiently long cornice.

69 While many scholars have talked about the total number of natural villages in China, I would like to refer to the data from a speech by Feng Jicai when he was vice-chairman of the China Federation of Literary and Art Circles and a well-known village preservation expert. In the speech for the "Experience Exchange Meeting of National Traditional Village Archival Investigation," Feng Jicai noted that the number of natural villages in China had dropped sharply between 2000 and 2010 from 3.63 million to 2.71 million. "Traditional Villages Disappeared, Where to Settle Down the Nostalgia", accessed July 06, 2018, http://www.chuantongcunluo.com/index.php/home/search/details/id/1417.html

70 Rem Koolhaas statistically defined the typical Chinese village at the Guggenheim exhibition (Countryside, The Future). For example, the average administrative village consists of 6 smaller "natural" villages. The average administrative village has an overall area of 15.9 km2. The average distance between two natural villages is 579m. These data were used in the MOMA exhibition by Koolhaas.

71 The phenomenon refers to top-down financial and intellectual investments in a single impoverished village to achieve rural construction in a relatively short time.

72 According to the definition of Wilson (2014), semi-structured interviews can be more flexible and allow the researcher to better understand the perspective of the interviewees. In semi-structured interviews, a researcher is able to refocus the questions, or prompt for more information, if something interesting or novel emerges.

73 Before 2002, the vernacular architecture and settlement experienced a stable evolution within an established traditional framework.

74 In his book on the formation and evolution of the history of Guizhou settlement, architect Zhou Zhengxu notes reasons for lacking historical information on Guizhou's minority settlements, mentioning first the mountainous regions of Guizhou, which remained outside of the cultural system of Central China for a thousand years, and second, the lack of literacy and

written texts in the history of hill people.

75 Zhou Zhengxu seems to work in a structuralist tradition where normally both a diachronic (historical) and synchronic (today) analysis is conducted. When historical material is not available, even the synchronic study might give historical information.

76 The feedback was provided to local managers during the author's fieldwork and CA-FA-led academic seminars in Banwan.

77 In the urban-rural economic relations, the most typical one is the urban-rural dual structure that exists in many developing countries. According to Lin and He, the urban-rural dual structure in China manifests a kind of "urban preference" and "the policy of discrimination" against rural areas. They consider the urban-rural dual structure as not only a natural difference in industrial structure but also a state-dominated system setting.

78 Wen Tiejun is a Professor and Director of the Rural Reconstruction Center at the Renmin University of China.

79 Information comes from Wen Tiejun's lecture (title: Centenary Rural Reconstruction & Green Creative) at the Central Academic of Fine Arts in Beijing in 2018.

80 Overtaking strategy has been the leading development strategy since the founding of the People's Republic of China. The key characteristic is to prioritize the development of heavy industry in China. There is a sharp contrast between the capital and technology-intensive sectors and other extreme backward sectors. At the beginning of reform and opening up, this specific development strategy was criticized.

81 Wen Tiejun notes that rural China has absorbed the attendant crises generated from the modernization, industrialization, and economic development of China from the 1950s onwards. One of the fundamental reasons is that rural China is based on the small peasantry and village community that ensures rural livelihood protection and acts as a crisis carrier to the external crisis.

82 Lin and He considered that the "protective type" of the urban-rural dual structure has been growing since the late 1990s with the development of the market economy.

83 In their classification, an "urban village" (*cheng zhong cun*) is a village that has been engulfed by the expansion of urban areas. "Factory village" was considered a new industrial paradigm that emerged when global industries relocated to take advantage of the attractive conditions, including the abundant resource of land and cheap labor. Consequently, many villages swap fields for factories. "Suburban village" refers to a traditional settlement grown into the field of suburban dwellings. "Contested village" refers to when the village shifts from a purely agrarian community to one that engages in a diverse range of economic activities, contestations between numerous stakeholders emerge through the ambiguity of development rights, compensations, and the status of the land. "Rural village" refers to villages that predominantly contain old and young migrant workers. The village has become economically dependent on the city, and it still holds a symbolic meaning as a home.

84 "Zhongguo Tongji Jianjian", accessed May 20, 2021, http://www.stats.gov.cn/tjsj/ndsj/2012/indexch.htm.

85 "Urbanization in China 2008-2018", statista, accessed July 31, 2020, https://www.statista.com/statistics/270162/urbanization-in-china/.

86 Referring to the argumentation from the pending article by Karl Otto Ellefsen and Qing Cao, "Guizhou –Understanding Strategies for Rural China," 2021.

87 At the conference, the two scholars systematically introduced their opinions and practices, which led to what some scholars call the "Debate between Li Changping and He Xuefeng."

88 "Semi-work and semi-farming" refer to the formation of the intergenerational division of labor within the family: young people leave home for work, and elderly people stay home for farming. As a result, the household income comes from work and farming.

89 Referring to the facts and data presented in Chapter 1.

90 Referring to the facts and argumentation from the pending article by Karl Otto Ellefsen and Qing Cao, "Guizhou –Understanding Strategies for Rural China," 2021.

91 According to the White Paper on the Development of Digital Economy in China 2020, the advantage of Guizhou for developing the big data industry includes the excellent air quality, rich electric power supply, cool climate, and being far from the seismic belt.

92 The tech industry included a range of topics such as digital economy, digital security and risk control, big data industry, Artificial Intelligence (AI), and smart manufacturing.

93 For example, the Guizhou government created a platform that can show detailed information about the poverty population and connect real-time information on job demands of different sectors to labor potentials in specifically targeted problem areas. Relevant information can be found in the report "Guizhou big data helps with targeted poverty alleviation." Accessed March 15, 2022, http://dsj.guizhou.gov.cn/xwzx/snyw/202005/t20200525_60581479.html.

94 In Chapter 5, a detailed depiction and analysis of a photovoltaic project launched in Banwan village.

95 The design team had visited five villages before they finalized the selection. The livelihoods and agricultural production are both important aspects of the investigation. The name of villages and the selection process will be elaborated on in Chapter 5.

96 The central government proposed the national Great Development of Western China strategy in 2001.

97 Notably, more than 897 000 locals have been lifted out of poverty since Guizhou in 2017 implemented the three-year action plan for tourism in order to boost poverty alleviation (MCT, 2019).

98 Guizhou Statistical Yearbook 2016. Accessed May 27, 2022, http://hgk.guizhou.gov.cn/

publish/tj/2016/zk/indexch.htm.

99 According to the data provided by the government, a huge population has been raised from poverty over the past 30 years. However, Wang et al. (2020) point out that the poverty line cannot fully reflect all aspects of poverty and the more subjective perception of situations. Li and Shan (2017) also question the measurement of poverty standards, which are based solely on household income; as they note, what might be called cultural poverty widely exists in many undeveloped areas. They consider cultural poverty a subjective factor that could be positively influenced by more education opportunities for farmers, especially children. With regard to the Banwan project, it is important to note that development is not only about the economy, poverty alleviation, and living standards; there is a cultural element to these processes that must be taken into account.

100 "Main indicators on province population census in 1953, 1964, 1982, 1990, 2000, and 2010". Accessed July 15, 2019, http://202.98.195.171:81/tj/2020/zk/indexch.htm.

101 Zhang Dingling, deputy head of Yata town, interview by author. Banwan village, 12 July 2016.

102 E.g., as Huang notes in the article "Farewell to Villages: Forced Urbanization in Rural China" in *China's Urbanization and Socioeconomic Impact*, many farmlands are circulated to specialized households and companies for the large-scale farming and industrial park.

103 Guizhou Daily. (2014). Guizhou's plan for ecological resettlement: two million immigrants go beyond the relocated people in the Three Gorges Project. Accessed January 29, 2020, http://www.cpad.gov.cn/art/2014/2/8/art_28_21624.html.

104 Zhu Yingli, "Village incorporate. A model for poverty alleviation by rural reconstruction", ed. Karl Otto Ellefsen and Ma Jun, in *Country Road, Take Us Home – Thoughts on Countryside Construction*, (Beijing: CAFA, 2018) 58 – 76.

105 In December 2015, the Evergrande Group started resettlement processes in Dafang County, in the aforementioned Wumeng Mountain Area, settled by ethnic minorities and one of 14 contiguous destitute areas in China. Evergrande decided to invest 3 billion RMB, intending to lift 180 000 members of the local population above the poverty line – this meant the relocation of 16.4% of the population in the area.

106 The Major Function-Oriented Zone Planning is an important spatial planning effort in China. It is a national strategic, basic, and binding planning in the field of territory development.

107 According to Baidu Baike, https://baike.baidu.com/item/%E5%9C%B0%E6%96%B9%E7%97%85/6441599?fr=aladdin, endemic diseases often occur only in a specific area and are closely related to certain natural environmental factors, such as geology, landform, water quality, climate, food, living conditions, and living conditions.

108 An anonymous officer from the office of the Local Chronicles Compilation of Ceheng County, interview by author. Ceheng County, September 11, 2018.

109 According to statistics from China Tourism Academy, the number of domestic tourists reached 5.01 billion, and the revenue reached 4.57 trillion RMB in 2017. Accessed January 16, 2020, http://eng.ctaweb.org/html/2019-4/2019-4-25-13-8-35355.html.

110 "How Tourism is Becoming a New Driving Force in China's Growth," Xinhua, China Daily 2018-03-05, https://www.chinadaily.com.cn/a/201803/05/WS5a9d08eda3106e7dc-c13faad.html, accessed January 16, 2020.

111 Li Wenteng "Typologies of Chinese Domestic Rural Tourism" in Karl Otto Ellefsen/Ma Jun ed. *Country Road, Take Us Home – Thoughts on Countryside Construction*. (Beijing: CAFA, 2018) 84 – 101.

112 By 2019, 724 Guizhou villages were enlisted in the fifth patch of traditional Chinese villages, and the number of traditional villages ranked first in China. At the same time, Guizhou has been steadily upgrading hardware and software infrastructure and is now one of the country's most promising travel destinations.

113 The term "experimental preservation" is used at AHO, the Institute of Architecture, to denote preservation strategies open to challenging established preservation strategies.

114 According to Wikipedia, an "ecomuseum is a museum focused on the identity of a place, largely based on the local participation and aiming to enhance the welfare and development of the local community" (Ecomuseum, 2020). Norwegian Museum expert John Gjestrum elucidates several specific forms and contents of ecomuseums, including heritage, community, inhabitant, cultural memory, and public knowledge. All the natural and cultural heritages in a particular area can be regarded as part of the ecomuseum.

115 These four ecological museums are located in Suojia (Miao's settlement), Zhenshan (Bouyei's settlement), Longli (Han's settlement), and Tangan (Dong's settlement). The Norwegian government and the Chinese government support the ecological museums in Guizhou.

116 By the end of 2019, 6 819 villages in China were included in the Chinese Traditional Village List.

117 The Housing and urban-rural development of the People's Republic of China, Ministry of Culture, and State Cultural Relics Bureau have jointly issued guiding opinions that focus on preventing the occurrence of construction destruction such as blind construction, overdevelopment, and improper renovation and promoting the implementation of traditional village protection projects.

118 In a symposium on rural reform held in 2016, Xi set three slogans for village development; one is beautiful. The three slogans are "China wants to develop, and agriculture must be robust; China wants to be beautiful, countryside must be beautiful; China wants to thrive, farmers must be prosperous."

119 When the expert architect team left Banwan at the beginning of 2017, some infrastructure works were still under construction. Professor Lyu, therefore, visited Banwan village

periodically to check the progress of the work. However, without the in situ monitoring of expert architects, some follow-up work more clearly expressed the interests of government officials and the construction company.

120 The construction process of the Banwan project will be presented in a reality show made by the Shanghai-based TV station Dragon TV. Because of the television program's timetable, the main part of the construction had to be finished by 15th November 2016.

121 I visited Banwan village and conducted field investigations twice in 2021.

122 The main construction work was completed in October 2015.

123 The *Beautiful Countryside* as a concept was officially proposed at the 18th National Congress of the Communist Party of China in 2012. The "beautiful" in the Beautiful Countryside refers to external beauty, defined generally and literally, and the achievement of sustainable development in terms of economy, politics, culture, society, and ecology. Due to the specific geographical and architectural characteristics and its endogenous development ability, Yubulu village was selected as the model for Beautiful Countryside.

124 Eight students were recruited from the design team, five of whom were CAFA graduates. Working under Professor Lyu, the student team conducted a detailed village survey in the pre-planning phase. Three of them returned to the school after the summer vacation, and the remaining students worked with the construction team, government officials, and villagers over seven months on every aspect of the renovation work.

125 Xingren, Xingyi, and Ceheng are three of the nine administrative regions of Qianxinan Autonomous Prefecture.

126 In Guizhou, it is not uncommon for a construction company to prepay construction expenditures and receive payment from the government later in government-led construction projects. In such cases, the construction company has a degree of influence over the project.

127 Following the central government's slogan "Beautiful Countryside Construction," Ceheng County initiated a series of government-led village renovations to develop ethnic tourism. In 2015, for example, the Ceheng government collected the construction funds from various channels to conduct countryside constructions, which included fifteen demonstration village constructions.

128 After interviews with several people, including village cadres and the village shaman, the design team concluded that the No.3 and No.4 villager groups' locations overlapped with ancient Banwan before the village began to expand and encroach on the bottom area of Bugong Mountain and Panlong Mountain.

129 As an agricultural people, the Bouyei worship the Land, mountain, water, and insects. Just like Huang (2014) states, the Bouyei's culture illustrates their fear and worship of nature.

130 The expert architect preemptively proposed that the buffer zone should be sufficiently large to include all necessary cultural and social values. This buffer zone was not included in

the contract; thus, it was just a suggestion to the local government about future development.

131 For example, the construction company attempted to convince the local government to construct a new parking lot and tourist service center at the beginning of the construction phase. This massive construction quantity may bring considerable economic income to the construction company.

132 I am introduced to these thinkers mostly by my supervisor and not through their writing, mostly in Norwegian.

133 James Scott (1987), for example, analyzes what he considers everyday forms of peasant resistance in his well-known book "Weapon of the Weak: Everyday Forms of Peasant Resistance." On page xvi of this book, he clarifies that the peasant resistance behaviors include "*foot dragging, dissimulation, false compliance, feigned ignorance, slander, arson, sabotage*." Furthermore, he considers these resistance behaviors effective and suited to the peasants' social structure and characteristics.

134 Xue Dingshan is a fictional character in ancient China's opera and folklore. He is the son of Xue Rengui, whom Emperor Taizong of the Tang Dynasty ordered to take command of the west. Bao Zheng was a very important politician during the reign of Emperor Renzong in China's Song Dynasty. Bao Zheng today is honored as the cultural symbol of justice in Chinese society.

135 During the research, the design team found that the new portrait of Chairman Mao and other generations of the Party and state leaders of the People's Republic of China hung on the wall behind the ancestral tablet of many stilt houses and new houses. Furthermore, the walls encircling the main room were decorated with modern portraits of pretty girls from calendars, famous tourist sites in China, and computer-generated personal portraits in Tiananmen Square or at the Great Wall.

136 As mentioned earlier in this thesis, Cen Guan's story was recorded in the *Mojing*, a book in which Bouyei's sacred writings, including the myths, legends, songs, and folktales, are collected.

137 *Chuandou* refers to a method of wooden frame construction with tie beams mortised into or tenoned through the columns to form an interlocking matrix.

138 The design team heard murmurs of discontent from villagers about the development firm and the local government.

139 Before 2002, the only access to the outside for Banwan was through the Banqi. Improving the connection between Banwan and Banqi would facilitate the transportation of construction materials.

140 Some funding for house construction comes from the *Rural Dilapidated Building Renovation* program.

141 Banwan village is located in the karst landscape, where the environment is fragile, and the surface soil could easily suffer severe degradation if the forestry resources are not well

kept.

142 Interview with a local resident Lao Lu, 4 October 2017.

143 This survey drew on a small sample size to foster an in-depth understanding of the experiences, feelings, and events that were created and happened in both vernacular architecture and newly-built residential buildings.

144 Interview with a local resident Mrs. Huang, 8 October 2017.

145 The exhibition shows findings from the rapidly changing non-urban areas in the world. Rem Koolhaas and AMO led the series of investigations. As a featured case study in the exhibition, the Chinese village shows how China is developing the future of its countryside. Koolhaas and AMO worked with scholars and students at the Central Academy of Fine Arts (CAFA) in Beijing to conduct the Chinese village research. Based on the resource platform of CAFA, a research team consisting of an interdisciplinary group of experts ranging from agronomists to social scientists and architects worked together with students from the CAFA to develop the direction and content for the exhibition.

146 Sociologist and countryside practitioner *Zuo Jing* has published two books presenting the most discussed topics related to contemporary rural projects, entitled *Bishan12 & 13: Architects in Villages*.

147 Architect Chen Haoru's project *Pig Barn* used bamboo as the primary material. Architect Mu Jun gained renown for his new type of rammed earth buildings. Wang Shu's architecture can be seen through the lens of craft use. The streaked rammed earth walls, randomized masonry, and woven bamboo give unique characteristics to his architecture.

148 In 2014, Pritzker laureate Wang Shu began the renovation of Wencun, a village near the culturally rich Hangzhou. Wang Shu did not renovate the whole village but only selected 24 houses located mainly at one end of the village and renovated them with different prototypes. In a sense, by mixing contemporary architectural elements like abstract geometry with diverse local materials, Wang Shu used Wencun to test his ideal rural living space and spatial aesthetic performance.

149 They present many featured case studies in their book entitled *Rural Urban Framework – Transforming the Chinese countryside*. For example, their Jintai village construction in Sichuan province aims to provide an alternative model for redevelopment of the place affected by the earthquake. Moreover, the small-scale bridge in Lingzidi village, for example, provides several social hubs for seating and a relaxation area in the local community.

150 In the project introduction for the 16th International Architecture Exhibition of La Biennale di Venezia 2018, Professor Lyu elaborated on the design concept.

151 These renovation rules were set and confirmed by professor Lyu before the project construction.

152 Fa'shi is the original construction code of the building environment: it is a set of rules for structural carpentry followed by craftspeople.

153 These strategies were distilled from Professor Lyu's exclusive interview published in the architectural magazine.

154 The article is submitted to the 2nd Doctor of Arts Forum undertaken by Shandong University of Arts & Design. The paper has been accepted and will be published by Shandong Fine Arts Publishing House.

155 "From primitive village to beautiful village". Accessed April 20, 2022, available at http://www.wenlvnews.com/p/307220.html.

156 In China, tourist attractions were graded according to the criteria on a scale initially from A to 5As.

157 Another two of the most significant considerations are the scale and time issues. Much the same can be said regarding these two issues compared between two projects. For example, the project in Yubulu involved 571 people in 2015, and the project in Banwan village (in the renovated area) involved about 500 people in 2016. Moreover, the Yubulu and Banwan projects spent about seven months on construction.

158 The working attitudes of the design team and the government's political propaganda enable all households to perceive the design team as a responsible and capable group to achieve a satisfying development.

159 The Banwan primary school is one of four schools (except for the town center primary school) that offers whole-day primary education in Yata town.

160 An interview with the school teachers in 2017 indicated that the young teachers were unwilling to stay in Banwan but eager to be teachers at county/town schools.

161 Although merging rural schools into town schools improves teaching quality by doing away with rural schools and transferring related students to the township central primary schools, which have better teaching resources, results are disputed. For example, in the remote mountain region, this policy damages the stable family-school relationship, cracks the cultural network in rural areas, and increases household burdens.

162 One crucial reason for closing the primary school is the increasingly smaller numbers of primary school children, partly due to rural out-migration.

163 Information about school building design concepts is obtained from Lyu Pinjing.

164 This group of carpenters also took the wooden construction of the Banwan school and training room for Bouyei opera.

165 In 2012, the Protection Center of Intangible Cultural Heritage of Guizhou Province chose Lu Zhenguang as the provincial-level intangible cultural heritage inheritor for his contribution to the Bouyei opera's inheritance.

166 The main aim of renovation work is to give all decaying stilt dwellings good qualities of the spatial and existing structure for future living and development conditions. The design team only proposed the detailed design scheme for the embroidery workshop, brewing

workshop, and canteen, which will be elaborated on in the following section of this chapter.

167 One crucial reason for the previous developer to select Banwan as a cultural tourism destination was the improved roads, which certainly facilitate more continuous movement between Yata town and Banwan village for both tourists and village residents.

168 To attract more viewers, Dragon TV proposed the show title "The Last Bouyei Home," used by the local government for its future tourism promotion.

169 Skilled carpenters normally master a handmade ruler to help check the building's measurements quickly and efficiently. This skill is obviously based on the comprehensive understanding of the structure and composition of the architecture of the Bouyei folk.

170 Lu Ban was a legendary master carpenter of the Spring and Autumn Period. He was revered as the god of builders and contractors.

171 Early in the project, the head of the construction team was asked to follow the architects' technical drawings. However, he always asked the rest of the builders to follow his ideas, putting him in direct conflict with Professor Lyu and his team.

172 *Productive Protection of Intangible Cultural Heritage* was proposed in 2006. It emphasizes inheritance and development, protection, and self-development and aims to enhance villagers' protection awareness and cultural consciousness, bringing obvious economic benefits.

173 The negotiation process between the house owner and government officials was recorded by Dragon TV.

174 "Three Changes" refers to the renovation of pigsties, dry toilets, and kitchens. In Banwan, twenty waste collection tanks were constructed throughout the village, and the village committee received 5 000 RMB to deal with the waste every quarter.

175 The well is the only water resource for the households living in the settlement's upper area. However, during the construction period, the builder groups occupied the well for the construction work in the daytime, and residents could only reserve water for the following day in the evening.

176 Expert architects still provided many forms of assistance to Banwan village in the post-construction period.

177 The pandemic that broke out at the beginning of 2020 made it impossible for the author to conduct fieldwork in Banwan village.

178 Interview with the visitor, 1 October 2017.

179 Interview with a resident, 7 October 2017.

180 Interview with Li Xianrong, 3 October 2017.

181 Taobao is a Chinese online shopping website owned by Alibaba. It was devoted to facilitating consumer-to-consumer (C2C) retail by providing a platform for small businesses and

individual entrepreneurs. Using the Taobao e-commerce network, young people and migrant laborers can return to the countryside and start an online shop, which provides a new opportunity to trade outside the city and a capacity to sustain rural settlements.

182 Interview with He Biao, 30 September 2017.

183 Interview with Li Jincun, 3 October 2017.

184 I will briefly introduce this external organization in Chapter 5.3.4.

185 I deliberately selected two interviewees who had taken part in the training course in Suzhou in 2017. It is crucial to ensure that this group's views are included in the evaluation, and I, therefore, select a quota on a 'non-random basis' to ensure that, however small they are, this group is included. Another five interviewees were randomly selected in the village when I conducted the survey.

186 The Rural China Construction Research Talent Training Program was funded by China National Art Fund. One of the important practices in the program is tutors led a group of students who came to Banwan for one week to construct the Bouyei opera stage.

187 During a discussion of Bouyei's traditional culture, the anthropologist complained that the giant parking lot construction destroyed one of the Bouyei totems. She explained that the Banwan Bouyei worshiped the land and usually used not-easily-noticed stones representing the God of Land.

188 Interview with Li Yushan (The deputy village director), 12 October 2017.

189 In 2002, the local government had given each household twenty black goats for free to enrich livelihood and diversity; see Chapter 1.

190 Many households selected a mountain area close to Guangxi province for grazing their sheep. Normally, people travel half an hour by motorcycle on a zigzagging road connecting Banwan and the pasture.

191 Interview with a young teacher from the school, 8 October 2017.

192 I conducted the first extended investigation from October 1, 2017, to October 21, 2017. Without attempting to evaluate the success or merits of the Banwan project, this investigation focused on the facts and tried to find out why such an approach would not lead to the desired results in some respects.

193 The funds were sponsored completely by the County government.

194 According to a questionnaire survey to the College Young League, 29 out of 32 interviewees (91%) would like to participate in events including sacrificial activities, festival celebrations, and other public activities. And 28 out of 32 interviewees (88%) considered the renovated public space could facilitate the community to organize activities.

195 The size of the opera troupe is around 15 people. Eight members accepted the interview. In the survey, interviewees point out the main reasons of Bouyei opera is not popular as

before, such as the story of the opera is too old and unable to give the local people a more fresh feeling, the rhythm is too slow, and the story is boring, and the Bouyei opera will take a long time to learn.

196　When the external organization "took over" the operation of the development program, I entered the second phase of your observation of post-construction. My research focus of field investigation shifted from finding the gap between expected outcomes and actual outcomes to observing the village development and transformation in which an external organization got involved.

197　According to the contract between households and local government, the local government gained the managing rights for the stilt houses, and some selected renovated newly built dwellings.

198　They saw themselves as "producers anchored to the land" in a familiar and stable market with given prices rather than as "businessmen" who had to take on new roles, invest and risk losing money, using time for business and eventually weakening their reputation and social standing.

199　The village direct of Banwan village was invited to participate in several external training on how to develop the rural economy and tourism; however, I was told that the village direct did not propose any development strategy.

200　In his article "The Logic of Farmers' Action and the Regional Difference in Village Administration" (He, 2007), He Xuefeng notes that the village administration is related to the local economic development, the varied momentum of administrative push from the top down, and the different cultural situation of different rural regions. According to my observation, cadres understand where their power and pay come from and would like to follow the instruction of a higher level of government.

201　Cooperative members in Yujing company are divided into two main categories: the village committee and village collective, who hold eight shares, and the villager representatives, who hold four shares. 11 000 RMB per share.

202　Many members of the Yujing company often complained about the difficulties and challenges of running development programs without proposing any operation strategy and activities.

203　The founder of Big Mountain Small Traveler set up the non-governmental organization Big Mountain Small Love (BMSL), whose primary purpose was to support educational activities in Qianxinan Autonomous Prefecture. In 2016, taking advantage of the high-quality locally-produced sugarcane, they established the limited company Big Mountain Small Farming to produce brown sugar in Qiaoma town. Based on the interview with Li Zhengfang, one of the founders, the purpose of the brown sugar factory was to provide financial support for volunteer teaching activities and provide a self-sufficient business platform to attract people who had migrated back to their hometowns.

204　Interview with Li Zhengfang, 3 September 2019.

₂₀₅ The BMST has, without a doubt, made contributions and put effort into the settlement. They have regularly organized summer camps and volunteer teaching activities and set up rural homestays with professional management that bring benefits to the settlement.

₂₀₆ BMST hired two girls from Banjie village to manage the canteen's specific affairs and hired one salesgirl from Anlong County to look after the gift shop. Only three skilled staff members were recruited from Banwan for the housing decoration and repair.

₂₀₇ China Central Television (the national television station of the People's Republic of China) has selected Banwan village as a sample of "Beautiful Country" and had a video shoot in August 2021. I was invited by professor Lyu to participate in this program and to conduct a field investigation.

₂₀₈ The earlier part of the chapter has elaborated on *jin gu zi*'s actions.

₂₀₉ I will discuss what disciplines and capacities should be the program operators in the post-construction phase of the project in Chapter 6.

₂₁₀ Interview with resident Huang Tinghua, conducted by the author in Banwan village, 2 August 2021.

₂₁₁ Even though the expert architect had not signed a formal cooperation agreement with BMST, a form of implicit cooperation has been formed.

₂₁₂ For example, the Chinese Pavilion at Venice Biennial in 2018 aimed to investigate "Building a Future Countryside." Exhibitors presented their proposals and strategies for the future of Chinese rural development. Many media had reported the proposal for the Chinese Pavilion and described the contributions of the participants.

₂₁₃ Wuzhen scenic area is China's most successful cultural tourism resort destination. Data showed that Wuzhen received 9.15 million tourists in 2018. The revenue from tourism was 1 905 billion yuan, and the net profit was 734 million yuan.

₂₁₄ "Bishan plan" could be considered an acupuncture strategy and is a series of projects initiated by an artist Ou Ying. Ou Ning and his friends transformed several traditional buildings located in Bishan village in Yi County into a book store, a bar, and a dining space. The effect of the "Bishan Plan" has been questioned by some scholars who thought Ou Ning's practices are stiff implantation of elite culture. The villagers of Bishan are not the beneficiaries of the project (Wu, 2015).

₂₁₅ Dali village is an ethnic Dong village in Guizhou province. In 2014, a group of experts and students from Peking University Archaeology and Museology College initiated the repair and maintenance work of traditional buildings in Dali village.

₂₁₆ The drum towers and covered bridges (wind-rain bridges) are unique building styles of the Dong. A Dong village or a large family has traditionally joined together to build one drum tower as a symbol and gathering place for the village or family.

₂₁₇ A series of interviews were conducted when the author returned to Banwan. Interviewees

who lived in the newly built buildings showed positive attitudes toward the newly added roof. By conducting interviews with residents, local village committees, and tourists between 2017 and 2021, almost all interviewees were delighted with the architectural aesthetic performance of Banwan village.

218 Some renovation works were done after the expert architects left Banwan village. Many constructors were cutting corners on good quality to save time and money. However, many interviewees in the community had complained that the poor quality of certain physical constructs was caused by the expert architects' faultiness design.

219 Several professional architects expressed almost the same point of view during the conversation. Their names are not shown. Anonymity was preferred by the interviewee.

220 In the thesis, signature architecture refers to architecture that expressed the architect's stylistic signature.

221 I have described the design and construction process of the covered bridge in Chapter 5.2.3 and analyzed its social effect in Chapter 5.3.2.

222 The information (when I conducted the interview and who was interviewed) of the interview was provided in Appendix A.8.

223 The surveys mentioned here referred to all the on-the-spot investigations I conducted between 2017 to 2021. The results of which were the basis for discussing the cultural and socio-economic influences.

224 By the end of 2020, the Yata town government issued the annual report on Banwan village's poverty alleviation.

225 Referring to Qing Cao, "The new practice of traditional village protection and renewal in Guizhou's ethnic, mountainous, and poverty-stricken areas." The article is submitted to the *2nd Doctor of Arts Forum undertaken by Shandong University of Arts & Design* (2021) and is integrated as a part of this thesis.

226 In April 2016, the Central Academy of Fine Arts officially established the Teaching and Practicing Base of CAFA in Xingyi. Yubulu village was included and served as one of the most important practice platforms.

227 During the Yululu site visit on National Day in 2017, I found that the tourists showed great interest in these artworks, which have become important tourism assets to attract external visitors.

228 Chinese Foundation for Poverty Alleviation (CFPA) was founded in March 1989 and administrated by the Poverty Alleviation and development of the State Council Leading Group Office. It is a social non-profit organization to donates funds domestically and abroad.

229 Based on an online interview with Zhang Yuanping, management staff in Yata town, 15 January 2021, conducted by the author.

230 In 2015, the *10 000 Enterprises Assisting 10 000 Villages* campaign was launched, in

which private enterprises help target poor villages. Many powerful enterprises took the lead in pairing up with poor counties to engage in poverty alleviation actions.

231 In Chapter 6.2.3, I have already discussed the limitation to the expert architect's competence. The discussion raised a reflection that concerned the breadth of the discipline and specific areas of expertise that are needed.

232 Professor Lyu had strived for ten training quotas for Banwan in the beginning. As the training program was held during the busy agricultural season, two female villagers were concerned that the training program would interfere with agricultural production and withdrew from the training opportunity.

233 Li Maolan said that she could earn around 3 000 RMB per month. Usually, she sold her handmade clothes at the rural markets held periodically in Banjie village and Yata town.