Local Traditional Knowledge in its Urban Context:

A Case Study of Bai Ethnic Minority in Dali, China

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Abstract

As China experiences rapid urbanization, local traditional knowledge (LTK) has been increasingly brought to the public's attention as a significant feature of cultural identity and inclusiveness. Especially in the ethnic minority areas, it is important to respect LTK so that the cultural identity and social cohesion of ethnic minorities can be sustained in an increasingly urbanized environment. The objective of this research is to explore the incorporation of LTK during the process of urbanizing China's ethnic minority regions from the perspective of residents. Using Dali City as a case study, this dissertation investigates local Bai people's perspective on LTK with urbanization in mind. Questionnaire surveys, focus group discussions, and daily field observations are employed to examine how Bai LTK is impacting Dali's cultural landscape.

Based on the questionnaire surveys answered by 80 Bai people, this research finds that Dali has a well-preserved Bai cultural landscape. Complementary to the questionnaire findings, the focus group data and daily field observations provide robust conclusions on how local Bai people perceive the preservation of their culture. Respondents placed a high cultural value on Bai language, traditional architecture, and traditional festivals. Nonetheless, a discrepancy is evident between participants' preferences regarding the conservation of Bai traditions, which reveals the culture preservation is facing challenges.

By demonstrating that there are profound differences in Bai LTK conservation between the urban and rural areas, this study contributes to more realistic descriptions of the impact of urbanization in Dali. Particularly, it captures the cultural processes which transform the built environment and reveals a better strategy to integrate LTK with urban development. The decision-making process for ethnic culture preservation is highly complicated and refers to achieving a benefit equilibrium for every stakeholder using a more participative approach. LTK indicates an intrinsic value to a livable city and is instrumental in an inclusive urbanism. The research findings assert a better understanding of culture preservation from the perspective of Bai people in Dali and shed light on the interplay between LTK and sustainable development in the ethnic minority region.

Résumé

Alors que la Chine connaît une urbanisation rapide, les connaissances traditionnelles locales (CTL) ont été de plus en plus portées à l'attention du public en tant que caractéristique importante de l'identité culturelle et de l'inclusion. Surtout dans les zones des minorités ethniques, Il est important de respecter les CTL afin que l'identité culturelle et la cohésion sociale des minorités ethniques puissent être maintenues dans un environnement de plus en plus urbanisé. L'objectif de cette recherche est d'explorer l'incorporation des CTL dans le processus d'urbanisation des régions des minorités ethniques de la Chine du point de vue des résidents. En utilisant la ville de Dali comme étude de cas, cette thèse examine le point de vue des Bai locaux sur les CTL bai sous l'angle de l'urbanisation. En utilisant les questionnaires, les discussions en groupe et les observations sur place, j'analyse comment le CTL a donné les impacts sur le paysage culturel de Dali.

Sur la base des enquêtes par questionnaire, auxquelles 80 personnes Bai ont répondu, on constate que Dali a conservé un paysage culturel bai bien préservé. En complément des résultats des questionnaires, les données des groupes de discussion et les observations quotidiennes sur le terrain fournissent des conclusions solides sur la façon dont les populations Bai locales perçoivent la préservation de leur culture. Les répondants accordaient une grande valeur culturelle à la langue bai, à l'architecture traditionnelle et aux festivals traditionnels. Néanmoins, une divergence est évidente entre les préférences des participants concernant la conservation des traditions bai, ce qui révèle que la préservation de la culture bai est confrontée à des défis.

En démontrant qu'il existe de profondes différences dans la conservation des CTL bai entre les zones rurales et urbaines, cette étude contribue à des descriptions plus réalistes de l'impact de l'urbanisation à Dali. En particulier, elle capture les processus culturels qui transforment l'environnement bâti et révèle une meilleure stratégie pour intégrer les CTL au développement urbain. Le processus décisionnel pour la préservation de la culture ethnique est très compliqué et se réfère à la réalisation d'un équilibre des avantages pour chaque partie prenante en utilisant une approche plus participative. Les CTL représentent une valeur intrinsèque à une ville habitable et jouent un rôle dans un urbanisme inclusif. Les résultats de la recherche assureront une meilleure compréhension de la préservation de la culture du point de vue des Bai à Dali et mettront en lumière l'interaction entre les CTL et le développement durable dans la région des minorités ethniques.

摘要

随着中国城市化进程的加快，地方传统知识 (LTK) 作为一种文化认同和包容的重要因素引起了人们越来越多的关注。特别是在少数民族地区，城市规划师在城市化过程中大量使用西方科学，地方传统知识没有得到足够重视。在日益加深的城市化环境中，尊重 LTK 对保持少数民族的文化认同和社会凝聚力特别重要。本次研究将从居民的角度探讨地方传统知识在中国少数民族地区与城市化的相结合。本文以大理市为例，从城市化的角度考察了当地白族居民对 LTK 的认识。通过问卷调查、焦点小组讨论和每天的实地观察，本文着重探讨白族传统知识对大理市的文化景观的塑造和创新的过程。

通过对 80 名白族居民的问卷调查发现，大理保存了较为完整的白族文化景观。作为问卷调查结果的补充，焦点小组的讨论和每天的实地观察提供了关于当地白族对文化保护的看法和建议。受访者认为白族语言、传统建筑和传统节日都具有很高的文化价值。然而，他们对保护文化传统的看法并不一致，这意味着白族文化保护面临挑战。

本研究通过论证白族传统知识的体现在城乡之间有着明显差异，真实地呈现出城市化对大理的影响。特别是通过对改变建成环境的文化过程的解析，本文总结出将 LTK 与城市发展相结合的更好策略。保护民族文化的决策过程是复杂的，它需要一个参与性更强的方法来照顾到各方的立场。LTK 体现了宜居城市的内在价值，并在包容性城市的建设中发挥着重要的作用。研究结果从大理白族居民的角度进一步加深了对文化保护的理解，这有助于更好地将地方传统知识融入到少数民族地区的可持续发展。

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LIST OF ABBREVIATIONS

CNY	Chinese renminbi
DBAPG	Dali Bai Autonomous Prefecture People's Government
ICC	Intraclass correlation coefficient
LTK	Local traditional knowledge
MOHURD	Ministry of Housing and Urban-Rural Development
PRC	People's Republic of China
TNPC	The National People's Congress of the People's Republic of China
VIC	Village in the City
UPDY	Urban & Rural Planning & Design Institute of Yunnan

LIST OF IMPORTANT CHINESE TERMS

Bai ethnic group	*Bai-zu*，白族
Bai folk song	*Da-ben-qu*，大本曲
Civilian persons	*Min-jia*，民家
Ethnic identification	*min-zu-shi-bie*，民族识别
Four buildings and five courtyards	*Si-he-wu-tian-jing*，四合五天井
Feng Shui philosophy	*Feng-shui*，风水
Sea-view holiday cottage	*Hai-jing-fang*，海景房
Multiple courtyard houses	*Duo-jin-yuan*，多进院
Reading Chinese characters in a Bai way	*Han-zi-bai-du*，汉字白读
Three buildings with a screen wall	*San-fang-yi-zhao-bi*，三坊一照壁
Torch Festival	*Huo-ba-jie*，火把节
Urban population	*Cheng-qu-ren-kou*，城区人口
Village in the City	*Cheng-zhong-cun*，城中村
Village housing land	*Zhai-ji-di*，宅基地

Chapter 1. Introduction

1.1. Context

Since the economic reform in 1978[1] and the housing reform in the late-1990s[2], China has been experiencing rapid urbanization. In the past four decades, policies at all levels of government have put more weight on land-driven economic growth (Wu and Zhang, 2007; Jiang *et al.*, 2017). Municipal governments tend to use the land market to accumulate capital for urban development and use urbanization as an economic growth machine. As a result, China is facing increasing economic, social, and environmental pressures. Some of these pressures include the deterioration of the living environment, housing prices rocketing, and high vacancy rates (Choy and Li, 2017). Also, the characteristics of regional culture gradually weaken by the inflow of migrants, goods, and information (Meng and Liu, 2013). In response to these problems, the central government decided to launch the New Urbanization Plan[3] in 2014 (Chen, 2015; Chen, Liu and Lu, 2016), before the publication of the New Urban Agenda[4]. The New Urbanization Plan (2014-2020) is the first official plan that regards sustainable urbanization as a national policy in China; and notably, it pinpoints the need of transition from land-oriented urbanization to people-centred urbanization (Long, 2014; Chen *et al.*, 2016). Local culture preservation is regarded as a criterion for cultural diversity. One objective of the New Urbanization Plan is to build livable cities that conserve natural

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[1] After Deng Xiaoping came into power, there were a series of economic reforms that introduced the concept of a free market into China's development. Before these reforms, private business was not allowed, and there was no real estate market (Gu *et al.*, 2012).

[2] Theoretically, China's urban housing reform started in the 1980s. In 1983, the State Council drafted and wrote the private property ownership rights into the Constitution which paved the way for the urban housing market. When the allocation of welfare housing officially ended in 1998, it marked the completion of the housing reform and the establishment of a market-oriented urban housing system (Chen, Hao & Stephens, 2010).

[3] The New Urbanization Plan (2014 – 2020) is a response of the Chinese central government that promotes the idea of sustainable development and inclusive urbanization (Chen, 2015; Choy & Li, 2017).

[4] UN-Habitat III New Urban Agenda explains inclusive development as a process of participation that leads to the civic engagement of urban residents, fosters a sense of belonging and social cohesion, and is important to human settlements (United Nations, 2015). Although the statement of intent is clear for the New Urban Agenda, there have been several questions about how ideas of inclusiveness can be translated into practice, especially in where there are extreme imbalances in resource and power, and where the involvement of the poor is limited in the process of urban development (Shand, 2018).

landscape and local culture (National Development and Reform Commission, 2014). Moreover, this people-centred urbanization approach aims to promote more social services to rural areas and encourage rural migrants to settle in small cities and towns.

Urban areas are unevenly developed in Western China[5] where most minority regions are located. It has a much smaller number of urban clusters in comparison to Eastern China[6] (Han, Cao and Liu, 2018). The levels of urbanization in ethnic autonomous areas are particularly much lower than that of the national level (Cao *et al.*, 2014). Even the central government has launched the Western Development Program[7], this region still remains less urbanized. Apart from the natural conditions or the complicated topographic features of Western China, there are also socio-economic disadvantages, such as having a greater illiteracy rate in comparison to Eastern China, which hinders urban development in this region (Cao, 2010). Li (2017) suggests that more attention should be drawn to urbanization in Western China.

Dali city (hereafter, Dali), located in the Yunnan Province in Southwest China, has a high level of cultural diversity. In addition to the predominant ethnic group of Bai (68%), there are other 24 ethnic groups living in the city (Yang, 2018). With few competitive modern manufacturing industries, local traditional knowledge (LTK) is usually an important resource for tourism and economic development in the ethnic minority region (Liu, 2013; Zhao, 2015). Recently, LTK has been brought to the public's attention as a significant feature of cultural identity and inclusiveness. However, it has been omitted in urban planning for a long time in China, especially when cities

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[5] Western China includes Chongqing, Gansu, Guizhou, Guangxi, Neimenggu (Inner Mongolia), Ningxia, Sichuan, Shaanxi, Qinghai, Xinjiang, Xizang, and Yunnan.

[6] There are several ways to define Chinese territorial division. According to Anwear & Cao (2008), there are three major regions in China: Eastern China, Central China and Western China. The Western Development Program has modified the regional division since 2000 to state that Eastern China now includes the following provinces: Beijing, Fujian, Guangdong, Hainan, Hebei, Jiangsu, Liaoning, Tianjin, Shanghai, Shandong and Zhejiang (Li, 2017).

[7] The Western Development Program was initiated by the Chinese central government in 2000 as a national strategy to minimise the gap between urban development in Western China and the rest of the country (Li, 2017, 5).

continue to be further influenced by Western culture due to the Open Door Policy[8] (Chen, 2011). Although most cities in China are city level administrative units, they are usually comprised of both urban and rural areas. Many cities in ethnic minority regions, such as Dali, are still undergoing tremendous rural transformations. Embodied with rules, ritual and meanings, the Bai dwelling conveys the aesthetic appreciation of traditional culture (Liu, 2010; Liu, 2013). If traditional architecture was to disappear over time, it would be an unmerited loss due to urbanization. It seems integrating more LTK with urban development would support the central government's new urbanization strategy.

This research uses Dali as a case study to investigate the role of LTK in ethnic minority cities. Since Dali is historically the homeland of Bai people, this study explores the incorporation of LTK in the city's development through a Bai perspective of cultural preservation. Furthermore, this study attempts to answer the following questions: How do the Bai people understand the transformation of the built environment in Dali? How do these ethnic minorities alter their perceptions of traditional practices during urbanization? To obtain answers, a preliminary cross-tabulation analysis is conducted for the 80 unpublished questionnaires collected in 2017. Three focus groups are carried out in 2019 and analyzed through a "margin coding"[9] process to follow up the interpretation of survey findings. Moreover, in order to acquaint the researcher with the local cultural context, field observations are also being made across a variety of Dali's neighbourhood. The research result highlights the interplay between architectural traditions and the cultural landscape in Dali, it also asserts a better understanding of the Bai minority's urban experience.

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[8] The Open Door Policy has become a national policy of China in 1978. Its main objective is to achieve modernization through "selectively integrating Western technology and anything that is beneficial to China's development, such as management experience" (Han, 2018).

[9] The margin coding method is appropriate for identifying key themes and analyzing processes associated with a particular topic (Cameron, 2016, 219).

1.2. Thesis structure

This thesis consists of six chapters. This first chapter introduces the research context. The second chapter examines recent literatures relevant to this research while presenting the research questions and research framework at the end. The third chapter (methodology) provides an overview of the study area (Dali), data resource (questionnaire and focus group), as well as analytical processes. Chapters 4 and 5 elaborate on LTK and urbanization based on the results of data analysis. Lastly, the research findings, with empirical contributions, are summarized in Chapter 6. Research limitations will also be addressed in this chapter.

Chapter 2. Exploring urbanization and Bai culture in China

2.1. Urbanization in contemporary China

China has experienced ongoing urbanization since 1949, and especially after the economic reforms in the 1980s. Since then, the urbanization rate has increased dramatically and has been accompanied by massive rural-urban migration; rapid expansion of cities; and the construction of new city districts (Zheng, Wang and Cao, 2014; Long, 2014; Liu and Cao, 2017). The urban population rate has reached 59.58% as of 2018 (National Bureau of Statistics of China, 2019), demonstrating a 41.68% increase since 1978 (Li, 2017). It is therefore expected that urban population growth will continue. By removing some institutional constraints, like the bipolar Hukou system, the New Urbanization Plan has proposed a 60% national urbanization rate by the year 2020. The rate is expected to reach about 76% by the end of 2050 (Gu *et al.*, 2015).

Li (2017) finds that there are four interrelated factors that influence urbanization in China: the Chinese perception and the scope of urbanization[10]; the economics and central planning; the institutional factors; and the Hukou system (household registration system)[11]. Unlike other countries, a distinct feature of China's urban development is that government policy plays a crucial role in urban planning. The central government usually tries to promote economic growth by building cities. However, formal community participation is absent in urban decision-making (Cheng and Zhang, 2004; Gaudreau and Cao, 2015; Logan, 2018). As described by Shen and Shen (2018), the central government maintains control of political decision-making, while municipalities can control specific economic decisions on urban development locally. Nonetheless, small towns and urban districts in larger cities do not have any autonomy in decision-making. These administrative units cannot sell their land or manage their development (Gu *et al.*, 2015).

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[10] The population in both cities and towns is categorized as urban population in the census.

[11] The Hukou system was implemented in 1958 toward the management of socioeconomic resource allocation by assigning citizens to either an agricultural household status or urban household status. (Li, 2017).

2.1.1. Accelerators of urbanization

China's national urbanization rate was 11.8% in 1951, and 17.9% in 1978—only a 6.1% increase within 27 years (Chan, 2014). The turning point of 1978 was the Open Door Policy. This national policy allows China to shift to a socialist market-oriented economy and adopt modern concepts that are often associated with Western culture (Hu, 2018). Following these economic and policy changes, there came a process of commodification of land, surging rural labour surplus, and place promotion in cities (Chen, 2011). In the context of contemporary China, modernization is arguably a process of westernization, which has greatly increased since 1978 (Li, An, and Yang, 2007; Pan and Campbell, 2018). However, a growing public awareness of vernacular culture has emerged in recent years, and the central government also called for preserving local culture in the New Urbanization Plan (2014-2020).

Several institution-led reforms has also contributed to the greatly accelerated urbanization during the last four decades. In particular, they are the land policy reform[12], housing reform[13], and Hukou reform[14] (Han, 2012; Li, 2017). According to Chen *et al.* (2011), the reformed housing system has contributed to a remarkable increase in housing construction and rural-to-urban migration, which subsequently led to urban expansion in China. When the Hukou system became less restrictive in the 1990s, many rural surplus labourers started to seek jobs in cities. However, migrant workers could not access urban welfare without urban Hukou (Han, 2012). The latest Hukou reform came after the release of the New Urbanization Plan in 2014, aiming to extend the

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[12] In 1983, the State Council drafted and wrote the private property ownership rights (including real estate property rights) into the Constitution for preparing the transition to a market-oriented housing market (Chen *et al.*, 2011). In 1988, the new land administration laws were established for separating the right-to-use from the state-owned land ownership (Jiang *et al.*, 2017).

[13] After the land policy reform in the 1990s, the distribution of welfare housing still progressed slowly due to the continuing debate on the sale of state-owned land and company dormitory (Chen, Guo and Wu, 2011). The urban housing reform conducted in 1998 had abolished the welfare housing and enabled the rights for private property ownership (Chen *et al.*, 2011).

[14] After the 1990s, the liberalisation of Hukou allowed rural migrants to register as contemporary urban residents and get a job in cities (Weilier, 2015).

basic urban services to migrant population and rural residents (State Council, 2014; Chan, 2014). Additionally, it separates the land rights from rural Hukou. According to the Yunnan Department of Public Security (2015), this new household registration system will remove the separation between rural and urban class by only identifying the regional difference[15]. It will also provide rural residents with more social benefits without affecting their rights to agricultural land (Yunnan Department of Public Security, 2015). Moreover, the New Urbanization Plan claims to grant 100 million new Hukou to temporary residents in cities and towns where the urban population (*Cheng-qu-ren-kou*, 城区人口)[16] is lower than 3 million by 2020 (Chan, 2014). There will also be no restrictions preventing rural migrants from acquiring resident status in small cities and towns where the urban population is lower than one million (State Council of the People's Republic of China, 2014). Li (2017) suggests that this plan will facilitate a significant number of ethnic-minority migrants from rural areas to cities.

When considering the location, increasing populations within towns signifies the development of non-agricultural industries (Li, 2017). These towns are important for China's urbanization since they deal directly with labour surplus from the countryside. Large cities have a limited capacity to absorb the rural surplus labour force. Therefore, towns are usually assigned a significant role in receiving large portions of these rural migrants. It has been believed that these rural migrants positively influence the transformation of traditional lifestyles and civilizations. There is also evidence that this can increase secondary and tertiary industries in rural areas as a result of major economic growth (Wang and Hu, 1999). Ultimately, the newly released land management law consolidates the rural land rights and allows better commercial use of rural construction lands[17] (The National People's Congress of the People's Republic of China—TNPC,

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[15] For the purpose of promoting urbanization for rural population, the State Council drafted a unitary household registration system. It is suggested that rural and urban populations will be both registered in a "resident Hukou". Each province will abrogate the original Hukou system gradually based on their individual implementation scheme.

[16] Cities and towns in China are actually comprised of urban and rural areas.

[17] Starting January 1st, 2020, rural collective construction lands can enter the real estate market without the transition to state-owned lands (TNPC, 2019).

2018). This leads to the rural population being decreasingly enticed by urban Hukou as well as, subsequently, more resources captured for urbanizing the rural areas.

2.1.2. Land-centred urbanization

Contemporary urban development in China is centred on land. Since the economic reforms, marketization has a fundamental impact on the socio-spatial order of Chinese cities (Chen, 2011). A blossoming manufacture industry has drawn influx of migrants from rural to cities, it has led to extensive construction of urban housing. Making use of the market mechanism, local authorities stimulate investments and other economic activities through the housing market. Many of them regard urban construction[18] as the machine for economic growth and the solution to over-accumulation of capital. As a result, the growth rate of urban built-up has increased much more quickly than the growth of the urban population has. Between 2001 and 2007, the areas of cities at the prefecture-level had grown by 70% whereas the associated population increased by merely 30% (Zheng *et al.*, 2014). The contrast between these rates implies a significant number of vacant apartments. Urban land could be used more efficiently instead of building an oversupply of urban housing. Chen *et al.* (2016) suggest that urbanization is not only attempting to increase the urban area, but is also required the local authorities to balance every dimension of the development.

As part of the urban expansion, large amounts of cultivated land were transformed permanently to industrial and commercial use. This kind of transformation in land use resulted in many concerns such as waste of land resources and environmental degradation. Currently, cities that are developed through the strategy of privileging economic growth have excluded many stakeholders, particularly the poor and the marginalized (Mahadevia, 2001; McGranahan, Schensul and Singh, 2016). Mahadevia (2001) suggests that the new perspective of sustainable

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[18] Urban construction in China has two fronts. One is urban projects managed by municipal government and the other is rural non-agricultural development initiated by village collectives (Zhu & Tian, 2017).

development[19] should be inclusive, and people-centred[20]. According to Zhu and Tian (2017), inclusive urbanization in China could be successful through a three-pronged strategy: 1) subsistence farmers' right to their collective land should be defined clearly when treating land as an economic asset; 2) rural development and village improvement should be incorporated into municipal planning as one of the priorities, and providing enough social facilities and infrastructure; 3) urban spatial expansion should be restricted to curb urban sprawl. In response to the current urbanization challenges, the Chinese government is advocating for improved practices of sustainable development (Chen, 2015; Choy and Li, 2017).

2.1.3. People-centred urbanization

Within the international agenda, the publication of both the 17 Sustainable Development Goals (2015) and the Habitat-III New Urban Agenda (2016) gave rise to the concept of inclusive urbanization (Shand, 2018). Significantly, the 11th Sustainable Development Goal is to "make cities and human settlements inclusive, safe, resilient and sustainable" (UN, 2015). The commitment of leaving no one behind implies that inclusive urbanization must be the theme of the UN-Habitat III New Urban Agenda. According to Shand (2018), inclusion also refers to the distribution of benefits in which all city inhabitants can enjoy the same benefits of urbanization and realize their rights to the city[21].

As discussed earlier, the New Urbanization Plan is working towards people-centred

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[19] Sustainable development is a key term in contemporary development policymaking and debates. However, many development programmes emphasise the environmental aspect of urban development and economic growth which ignores the basic human needs for the poor in the developing countries and increased in social inequality (Mahadevia, 2001).

[20] People-centred development has gained increasing acceptance since the 1990s. It emphasises that development should be inclusive and use a bottom-up approach to consider all dimensions of sustainable development (Mahadevia, 2001).

[21] The Right to the city is an idea that was first proposed by Henri Lefebvre (Weiler, 2015, 7), and this idea can be recognized in the New Urban Agenda (2016) that "leaving no one behind" (UN, 2015).

urbanization in China (Cao *et al.*, 2014). The central government has made several important changes to improve the implementation. There are more institution-led reforms, such as the new Hukou reform and the new land management law, that aim to cover rural dwellers with basic urban services and protect their rights to the city. Along with these reforms, the central government has granted more autonomy to municipalities. Many local authorities are allowed to operate their own implementation schemes under a workable framework. For example, amongst the medium-size cities (with an urban population between 500 thousand and one million), those with higher carrying capacity could make own decisions to grant more Hukou to migrants (State Council of the People's Republic of China, 2014). This will urbanize the ethnic minority population by encouraging more minorities to live in cities (Li, 2017). Moreover, regarding the preservation of folk houses, the central government also highlights the need to respect the preference of local villagers (UPDY, 2018). However, without setting the same standard for all local authorities and lack of a universal monitoring system, it is difficult to ensure all municipalities are making real progress with good working ethics.

2.1.4. Urban planning experience

A top-down planning system is dominating urban development in China. Many Chinese metropolises are facing an increasing shortage of construction land; therefore, the central government has begun to shift its policy focus to the existing built-up areas in cities (Guo *et al.*, 2018). Li and Liu (2018) and Guo *et al.* (2018) both discuss the redevelopment of the Village in the City (VIC)[22] in terms of improving land-use efficiency, as well as how cities can use this kind of village as a growth machine.

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[22] Li & Liu (2018) state that the VIC (*Cheng-zhong-cun*, 城中村) is a special category of collectively owned land within urban areas. However, residential lands in the VIC cannot legally be developed for commercial use because they are regulated strictly by the rural administrative system (Li & Liu, 2018). They also argue that the development of VIC occurs because urban administrative and monitoring systems do not effectively cover the collectively owned lands in urban areas.

The Chinese government makes primary decisions in regard to urban planning at three different levels[23]. Many processes are political and have not fully met the needs of local people. On the planning and policy side, Logan (2008) describes that this top-down system is fragmented due to the contestation for authority between the different levels of government. Notably, there are competitions between different jurisdictions at the same level. Other challenges to the effectiveness of policy execution are the decisions being obstructed by municipal offices, along with the transitions between periods of centralization and decentralization (Logan, 2008). The local traditions that are essential to cultural identity have been ignored by the local authorities, architects, and developers for a long time (Chen, 2011; Yang, 2016). Recently, in light of cultural reflection and restoration, some architects have begun to appropriately merge traditional elements with modern building requirements and construction methods. In response to the culture preservation objective of the New Urbanization Plan, the Ministry of Housing and Urban-Rural Development (MOHURD) has published instructive guidelines for local builders. Since competitiveness is the basic objective of city branding[24], this has led to a variety of urban projects in China. For instance, the Dali municipal government has carried out many Bai architecture revitalization projects which seek to enhance the city's attractiveness and build the identity of the city (Zhao, 2015).

2.2. Minorities' urbanization in contemporary China

In addition to the Han majority, there are fifty-five ethnic minority groups officially defined by China's central government. This is the outcome of several historical and political processes. Due to differential policy treatment[25], the minority population has raised significantly in the past few decades. **Figure 2.1** compares population growth rates between Han and ethnic minorities

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[23] Like other countries, there are three levels of government in China: national, provincial, and municipal.

[24] City branding is the process of applying the strategy of product branding to cities. The practice of city branding in China started in the 1980s and has yielded both positive and negative outcomes (Zhao, 2015).

[25] The One Child Policy did not apply to ethnic minorities.

from 1990 to 2010. The growth rates of minorities are higher than the Han, especially in the 1990s. The minority population as a percentage to the national population grew from 6.6% in 1982 (Wu, 2014) to 8.8% in 2012 (Guo, 2017). Even though the percentage of minority populations is relatively small, the absolute number is significant. According to Guo (2017), the number of ethnic minorities exceeded 119 million in 2012. Southwestern China contains the highest concentration of ethnic-minorities (Li, 2017). Apart from the fact that minorities have unique cultural characteristics, most of them live in peripheral locations. Cao (2010) argued that ethnic minorities are socially, economically, and politically significant to China's development. Education is important as it lets minorities better adapt themselves to the urban environment and integrate with China's modernization (Cao, 2010). However, Cao and Feng (2010) find that, due to cultural reasons, girls tend to get married at a young age and have less access to education in comparison to boys in the ethnic minority regions. Therefore, optimizing the socio-cultural environment may be a necessary governmental intervention in China's inclusive urbanization.
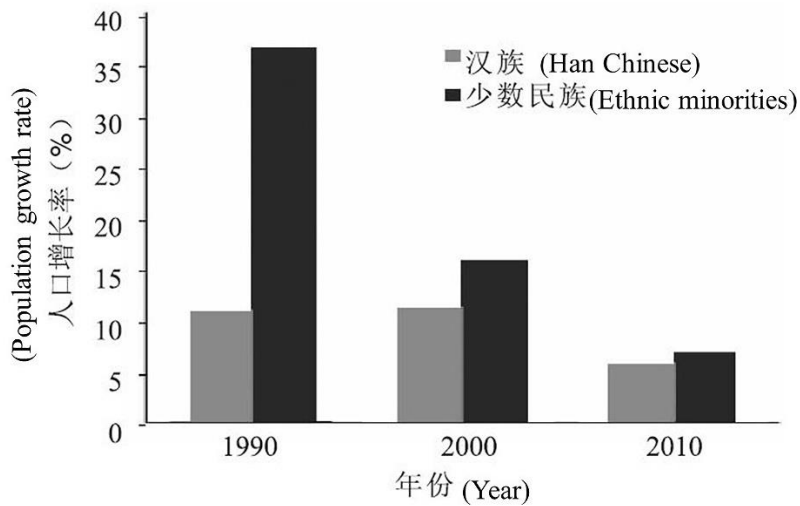
Figure 2.1. China's population growth rate from 1990 to 2010

Source: Cao *et al.* (2014, 24)

Among all the ethnic minority groups in China, eight of them have more than one million urban dwellers. They are Hui, Korean, Manchu, Miao, Mongol, Tujia, Uygur, and Zhuang (Zhu

and Blachford, 2012). If comparing the largest minority group with the smallest of these eight, the Zhuang had 16.6 million population in 2010 while the Bai only had about 2 million (Gustafsson and Yang, 2015; Guo, 2017). **Figure 2.2** depicts the urbanization rates of minorities from 1990 to 2010. While the increase in the total minority population is remarkable, they were not actively involved in the urbanization processes. The urbanization rate of minorities increased from 16% in 1990 to 33 % in 2010 and at the same time, the national urbanization rate jumped from 26% to 50% (Cao *et al*., 2014). Unlike the other ethnic groups, Korean people are extremely urbanized, holding a higher urbanization level than the population of China entirely (Gustafsson and Yang, 2015).
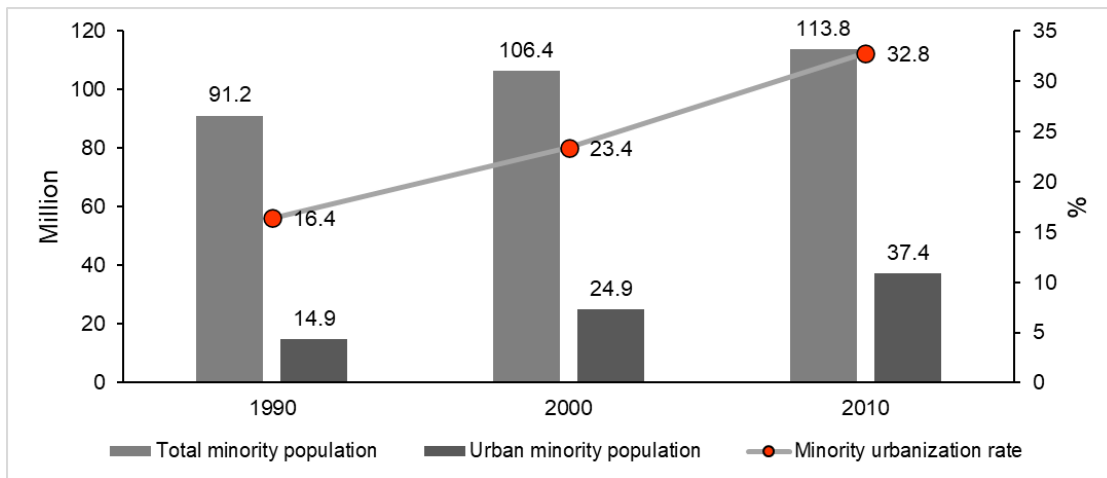
Figure 2.2. National ethnic minority population and urbanization rate

Source: Li (2017, 42)

2.2.1. Current trend of minorities' urbanization

Marketization, socio-economic development, and Hukou reform have increased the social mobility of Chinese ethnic minorities (Wu, 2014). China's urban environment became more multicultural when an increased number of ethnic migrants[26] moved to cities in search of a better life. In 2000, the ethnic minority population in China's urban centres had already passed nine

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[26] In China's inter-Census Survey, people who had lived in another county or city than where they registered their household status for at least six months at the time of the survey were defined as migrants (Gustafsson & Yang, 2015).

million. In Beijing alone, there were more than half-million minorities (Zhu and Blachford, 2012). Nonetheless, many ethnic minority groups, such as the Bai, Yao, and Tujia, that live in rural areas are less likely to migrate (Gustafsson and Yang, 2015). According to Gustafsson and Yang (2015), the pattern of how ethnicity relates to migration differs between citizens (including non-ethnic minorities) with an urban Hukou and those with a rural Hukou. They find that ethnic minorities with urban Hukou are less likely to migrate. This makes cities in Western China home to almost half of the national urban minority population (Li, 2017).

While urbanization patterns are uneven in China, the levels of urbanization are also different amongst ethnic minority groups, even when in the same region or province (Deng, Anwear and Cao, 2009). The urban-rural disparity is a noteworthy factor to China's urbanization, especially in ethnic-minority regions in Western China. According to Cao (2010), urban-rural disparity and regional inequality have been increasing during the last decade. Due to their remote locations, ethnic-minority regions are usually not chosen as sites of industrial investment. Overall, the development in these areas is heavily relied on cultural tourism and the reinvention of cultural traditions (Wu, 2014).

Central China[27] has seen a decline in its urban minority population since 2000, but the cities in Western and Eastern China have become increasingly attractive to ethnic minorities (Li, 2017, 53). The economic success of the Eastern region has made it particularly more enticing to live. In addition to the effects of the Western Development Strategy, Li (2017) states that the Western region has attracted more and more minority migrants because it is closer to their homelands.

2.2.2. Challenges of inclusion and adaptation to urbanization

Wu (2014) argues that minorities tend to have fewer personal networks outside of their homeland, and their lack of fluency in Mandarin or local dialects has also led them to be

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[27] Central China includes the following provinces: Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, and Hunan.

disadvantaged in the urban labour market. This disadvantage in urban labour market has led to the reinforcement of ethnic identity (Wu, 2014; Gustafsson and Yang, 2015). Some minority groups have a long history of agrarian culture and prefer living according to their traditional ways. Therefore, they are less likely to move to cities. Gustafsson and Yang (2015) predict that most cities in China will proceed to be less ethnically diverse than the official projection of the population statistics.

Ethnic-minority migrants adapting to urban life are faced with economic, social, and cultural barriers. Their success in overcoming these barriers depends on their household registration status, ethnic background, and personal ability (Li, 2017). Like the Han, minority migrants can work in big cities but cannot access the local social welfare, given that they do not register as a local resident. Furthermore, minority migrant workers usually lack the skills needed to obtain high-paying jobs, which makes it difficult for them to purchase alternative services in cities (Zheng *et al*., 2014). Marketization attracts new businesses and raises competition in the local labour market, which has affected the demographic and employment situations in many ethnic minority regions. It can result in social exclusion and marginalization of the local ethnic population in some of these regions (Cao, 2010; Zhu and Blachford, 2012).

Aside from the challenges of adapting to urban life for rural migrants, urban residents in ethnic minority areas are also experiencing difficulties in their attempts to conserve their traditional value systems and cultural heritage. For instance, the modern style dwellings found in mass media are now influencing local aesthetics, leading local people to replace traditional houses with modern ones (Yang, 2016). Furthermore, preserving the person-to-person transmission of cultural traditions has become more difficult. The younger generation may lose interest in learning traditional craftsmanship since there is a need to be committed to such learning processes. As Yang (2016) points out, the conservation of cultural heritage is very challenging as it requires high-level input of time, energy, and dedication.

2.2.3. Inter-ethnic relationships

Economic inequality has a strong potential to influence China's development and societal stability (Cao, 2010; Weiler, 2015). When marketization leads to social change and resource reallocation in cities, the actual benefits received by different ethnic groups vary and can lead to conflicts (Jia and Min, 2008). Some cities have experienced a growing number of unrest, conflict, and violence in the past ten years (Cao, 2009). Violent conflicts between the Han and some ethnic minorities in 2008 and 2009 particularly challenged the nation's social and political order (Wu, 2014). As ethnic diversities will not disappear, the relations between different ethnic groups will become more complex and interdependent (Zhu and Blachford, 2012). Therefore, a healthy interethnic relationship is essential for inclusive urbanization in China.

Minorities living in the geographically remote areas of Western China are usually disadvantaged due to the lack of infrastructures and resources, meaning that the human capital and family incomes are also affected (Cao, 2010). Gustafsson and Yang (2015) argue that the urban setting is crucial for the construction of ethnic identity, as many ethnic migrants become aware of the differences in customs and the economic disadvantages of their home regions. Han and Paik (2017) find that autonomous counties in non-autonomous provinces are historically more integrated with Han culture than those in autonomous provinces. However, the Mongolian[28], Manchu and Hui[29] are all found to be more like the Han people since they were more integrated into the Han society (Li, 2017).

Income disparity may lead to social unrest between Han Chinese and ethnic minorities. However, underdevelopment and poverty are more of a regional issue than ethnicity. Even with economic growth, the possibility of social conflict still exists in some minority regions such as Xinjiang and Tibet (Zhu and Blachford, 2012; Cao, 2010). Zhu and Blachford (2012) find that the

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[28] The Mongolian ethnic population is only about 20.75% of the regional population in Inner Mongolia, which is the first ethnic autonomous region established in China (Zhu & Blachford, 2012).

[29] Hui and Manchu do not face language barriers to communication because they are mostly Mandarin speaking (Zhu & Blachford, 2012).

Hui, Manchus, and Koreans[30] are economically advantaged compared to other minority groups because they have higher levels of urbanization, education, Mandarin language proficiency, and interaction with the Han.

2.3. Understanding the Bai minority

Historically, the Bai has been the dominant ethnic group in Dali, Yunnan—the capital city of both the Kingdom of Nanzhao (AD 738 – 902) and the Dali Kingdom (AD 937 – 1254) (Zhao, 2015). Today, Bai minorities are mainly concentrated in Yunnan province in the southwest of China. This section will first review the origin and geographic distribution of the Bai population, followed by urbanization of the Bai.

2.3.1. The origin and the geographic distribution of the Bai

The term Bai ethnic group (*Bai-zu*, 白族) did not exist until 1956 when it was officially used to refer to groups residing in Yunnan, Sichuan, and Guizhou provinces. For centuries prior, these groups had been known to other Chinese as civilian persons (*Min-jia*, 民家)[31] (Wu, 1990). The term Minjia was a product of the household registration system during the Ming Dynasty (AD 1368-1644) and was used to refer to inhabitants who had originally lived in Dali and speak Bai language (Liang, 2010). According to Wu (1990) & Liang (2010), the Minjia or the Bai appear to have been largely assimilated into the dominant Chinese culture a long time ago. Yunnan Province has the largest Bai population, followed by Guizhou Province, and Hunan Province (Cao, 2008). As of 2010, the Bai population in Yunnan remained at the same level as in the 2000 data (Guo, 2017). Concurrently, the number of Bai population increases in Guangdong Province and Zhejiang

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[30] Korean ethnic minorities are highly educated and well-integrated into China's Northeast communities (Zhu & Blachford, 2012).

[31] According to Wu (1990), a group of Minjia people in Hunan province also claimed for the Bai ethnic minority status during the ethnic identification project. Although no previous reports mentioned the existence of Minjia or Baizu in Hunan province, they successfully claimed the ethnic minority identity because they were believed to have migrated from Yunnan either at the end of the Song Dynasty or at the start of the Yuan Dynasty (Wu, 1990).

Province but had a slight decrease in Guizhou Province and Hunan Province (see **Table 2.1**). This demonstrates that, since 2000, many Bai people have been seeking jobs in the coastal provinces.

	Province				
Year	Yunnan	Guizhou	Hunan	Guangdong	Zhejiang
2000	81%	10%	7%	N/A	N/A
2010	81%	9%	6%	0.86%	0.60%

Table 2.1. Geographic distribution of Bai population (2000 -2010)

Most Bai minorities in Yunnan Province live in the Dali Bai Autonomous Prefecture in the Northwestern part of the province. **Map 2.1** illustrates the geographic location of Yunnan Province and Dali Bai Autonomous Prefecture. The Bai population had contributed to 34% of the total population in the Autonomous Prefecture by the end of 2016 (People's Government of Yunnan Province, 2017). Culturally, Bai minorities have close ties with the Han, and they have used Chinese characters as their written form of language (Guo, 2017).
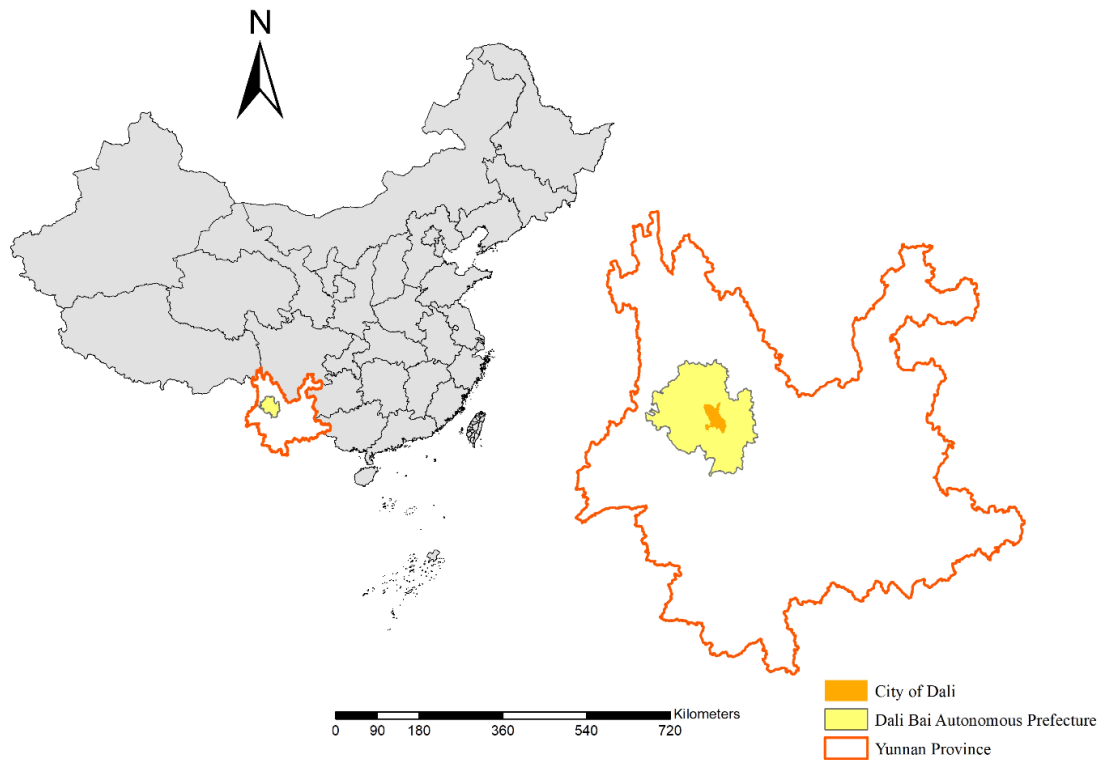
Map 2.1. Geographic location of Dali Bai Autonomous Prefecture

Source: All China Marketing Research LLC.

2.3.2. Urbanization of Bai population

Mostly motivated by economic, social, and political factors, many Bai people have moved to cities since 2000 (Zhang and Yin, 2013). In 2000, the urbanization level of the Bai minority in Western China was 20.53% (Deng *et al*., 2009). After a decade of rapid urban expansion, there is a growing number of Bai minorities living in cities. This is mostly due to the reclassification of Hukou registration and the migration of rural dwellers. In 2012, the number of Bai urban dwellers has increased to 39.86% of the total Bai population (Guo, 2017). **Figure 2.3** shows Dali's population growth and urbanization rates. The urbanization rate of Dali reached 51.5% in 2010 (Sun, 2016, 63). The official estimation for 2020 is 75%. It is also estimated that Dali will manage to have a 90% urbanization rate with a 20% increase in the total population by 2035 (People's Government of Yunnan Province, 2018).
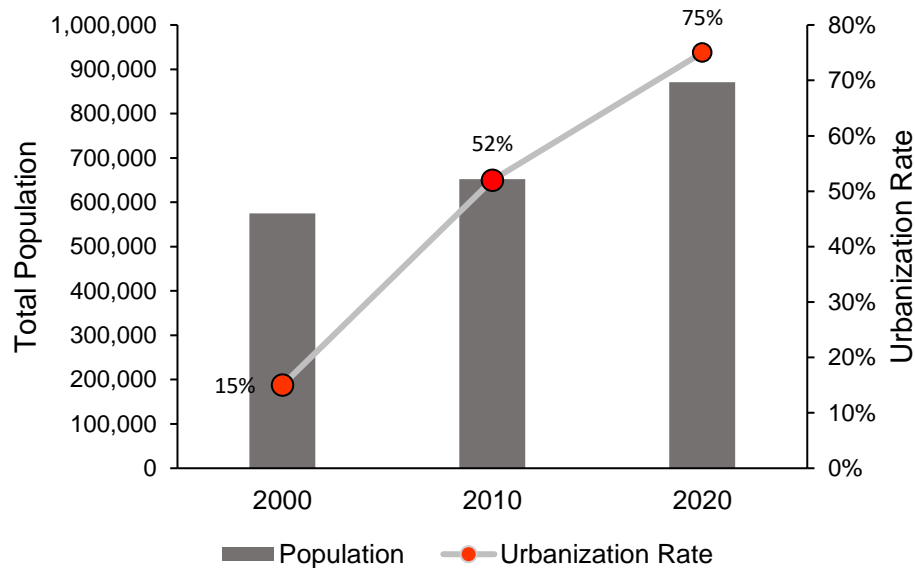
Figure 2.3. Population and Urbanization Rate in Dali

2.3.3. Empirical studies from national, regional, and city scales

Zhu and Blachford (2012) state that the adoption of market mechanism in urban governance has shifted China's social and ethnic relations. After 1978, market principles start to determine the allocation of resources and guide economic activities which leads to the increase in social mobility

and integration, but social stratification also occurs with growing discrepancy (Zhu and Blachford, 2012). However, it is difficult to generalize the socioeconomic condition of ethnic minorities from just one perspective because Chinese ethnic minorities are quite diverse. Li (2017) finds that, on the national scale, the census data has frequently been applied to examine minorities from the perspective of urbanization. Also, many researchers choose to analyze urbanization among different ethnic groups from an economic standpoint. For example, Gustafsson and Yang (2015) focus on the geographical mobility of minorities to examine if minorities including the Bai are less likely to migrate than the Han majority. Deng *et al*. (2009) study the urbanization processes among different ethnic groups in Western China. There is a dearth of literature that looks at the urban experiences of the Bai people alone.

Limited research has been conducted at the regional level to examine the Bai ethnic group. Wu (1990) and Liang (2010) both explore the issues surrounding official identification and cultural identity of the Bai minority in Yunnan Province. Zhang and Yin (2013) present research on four cities across China to analyze the relationship between ethnic migrant workers' employment and industry distribution. Specifically, the cities in their study are Shenzhen (South), Hohhot (North), Qingdao (East), and Kunming (West). Zhang and Yin (2013) find that most of the Bai migrants apply for jobs independently and are working in restaurants and the entertainment industry. Cai *et al*. (2007) study the Bai, Jingpo and Huayaodai communities in Yunnan to reveal that their community development is significantly influenced by cultural factors such as consumption, religion, and ritual practices. For instance, building a standard Bai house is the top priority within household consumption as it represents the prestige of the household head, family, and clan. Cai *et al*. (2007) argue that the people-centred approach is not only to engage local people in decision making but also to bring attention to the importance of considering residents' concepts of development in a community project. Fan and Wang (2017) have explored the traditional lifestyle and its relationship with the ecological environment in Dali Bai Autonomous Prefecture. This kind of lifestyle highly depend on the nature, local people plant with environmentally friendly farming

techniques and strictly follow the ethics of resource extraction. Fan and Wang (2017) suggest that the Bai traditional lifestyle is good for maintaining a healthy ecological environment.

In regard to the Bai minority, research is often carried out at the community level, mostly using Dali City as the study area. Using a suburban village of Dali as a case study, Dong (2017) demonstrates how Bai people's traditional ways of life have been transformed due to urbanization. This includes changes in economic activities, religion, and customs. She explains that since 2002, urbanization has continued to accelerate; this has pushed many Bai people into the secondary and tertiary industries. Unlike the middle-aged and the senior, those younger are not maintaining a traditional daily routine. Dong (2017) argues that advancements leading to online shopping have brought forth a new form of consumerism to Bai people. Moreover, a surge in economic developments has improved their living conditions. These improvements are shown by the transition of traditional Bai houses to modern concrete constructions. This empirical study suggests that modern architecture has become more popular and is now used to symbolize the transition to urban life. It is believed that traditional culture should mend with modern culture accordingly.

Since tourism has become an important industry in Dali, many scholars have chosen to study its influence based on different dimensions. For instance, Morais *et al.* (2005) investigate women's perspectives on the impact of ethnic tourism. Bai women reported that tourism has greatly increased their family income and has provided them and their children with the opportunity to broaden their knowledge of different cultures and languages (Morais *et al.*, 2005). Zhao (2015) uses Dali as a case study for public-private partnerships in heritage management because the municipal government has begun to make use of local historical and cultural assets to place branding. Local people are found to be proud of Bai houses and welcome city branding via Bai architecture revitalization. Zhao (2015) argued that preserving and promoting a heritage that makes a city unique from others is an effective tool for city branding. Zhao (2019) applies the concept of gentrification to explore the rural transformation in Dali. Many villages in the rural area have experienced a guesthouse boom which has gradually nurtured competition between newcomers and local villagers (Zhao, 2019). It is believed that both the processes of urbanization and tourism

growth have increased demographic and socioeconomic changes in rural Dali. Liu (2013) explores the influence of tourism development on sustaining the architectural tradition embodied in Bai dwellings in Dali. The commercialization of local traditions and the rise of the material consumption culture in contemporary China is arguably a result of urbanization. Liu (2013) argues that tourism development has greatly influenced the built environment and lifestyle of residents. For example, the introduction to new equipment and facilities consisting of Western styles of accommodation has improved the living standards of rural residences.

2.3.4. Urban experiences of the Bai

Like many other minorities, the Bai ethnic group has been profoundly transformed by urbanization, from productive activities to consumption, traditions, religion, and language. These changes can be a direct result of the economic reforms and the adaptation of a series of new policies in 1987 (Zhu and Blachfrod, 2012). For example, after 2000, Dali has been experiencing much higher levels of economic growth and urbanization which means that large amounts of cultivated land are being transformed into industrial and commercial uses. Therefore, about 80% of the farmers in some villages are required to look for jobs in the secondary and tertiary sectors (Dong, 2017). Furthermore, urbanization is also influencing the building layout and construction material of Dali's residential housing. In the past, most of the Bai houses were bungalows that built with clay and wood, or brick and wood (Yang, 2014; Dong, 2017). With current technology, many local people tend to build low-rise modern houses with reinforced concrete (Liu, 2010; Dong, 2017; Hu, 2018).

As tourism becomes an important source of economic growth in Dali, the increasing number of tourists, immigrants, and outside craftsmen has begun changing the social landscape of local communities (Liu, 2013). Even though the municipal government has issued an urban household status to some villagers, these villagers cannot fully enjoy the services provided for urban dwellers due to the lack of adequate urban facilities in these areas (Dong, 2017). In order to provide citizens exceptional satisfaction with their urban experience, Zheng *et al*. (2014) suggested that the national

and municipal governments must recognize the need to support people rather than forcing them to adapt to the projects of urbanization.

2.4. Local traditional knowledge in Dali

According to Antweiler (1998), studying the local ecological, cultural, and social context of a geographic location is critical to understanding the LTK. Traditional knowledge consists of the skills and information that are gained through experience from nature, such as the traditional thinking of Feng Shui (风水)[32] (Ren and Bai, 2013). In addition to traditional beliefs, traditional knowledge also includes the farmer's knowledge, ecological knowledge, and herbal medicines (Antons, 2013). For instance, farmers adapt to the environment by recognizing the constraints and opportunities of the nature through cultivation in everyday life. The Bai minority has copious amounts of experience in farming that emphasize the concept of harmony and they have successfully adopted the growth of new vegetable varieties for more income (Cai *et al*., 2007).

2.4.1. Bai language

Bai language was registered as "a language" by specific institutional interventions shortly after the founding of the People's Republic of China (PRC), however, this never resulted in any widespread codifications of Bai language use (Hefright, 2011). Hefright (2011) looks at this through the perspective of linguistics to find that Bai people consider themselves more like the Han than the other ethnic minorities in Yunnan. According to Wu (1990), about forty to sixty percent of the Bai vocabulary has been borrowed from Chinese. Bai language is more of a spoken language. Hefright (2011) discusses how to perform the local convention for reading Chinese characters known as "reading Chinese characters in a Bai way (*Han-zi-bai-du*, 汉字白读)". He argues that this performance cannot help with the preservation of Bai language since it will

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[32] Feng shui is a philosophy that is an important part of Han culture, but has also become a part of Bai culture after the Bai adopted it for several centuries (Ren and Bai, 2013).

preserve the lexis and morphosyntax of Mandarin. Nonetheless, Bai language is commonly spoken in everyday conversations in Dali, and most villagers have a high proficiency in their language (Dong, 2017).

2.4.2. Ritual practice

There are various ritual practices in the Bai community, many of which are related to religions and traditional festivals. These ritual practices unite the Bai people and enhance the community's identity (Cai *et al*., 2007). Worshipping Benzhu (village gods) and celebrating the Torch Festival (*Huo-ba-jie*，火把节) are two of the "Bai" cultural markers in the official ethnography today (Wu, 1990). According to Dong (2017), people worship Benzhu for health and good luck, especially during the New Year's Day and traditional festivals. The Bai community in Dali still celebrates the Benzhu festival every year. Villagers will perform folk songs and dances to show respect to their village gods (Dong, 2017). The Torch Festival is celebrated on the twenty-fifth day of June (Wu, 1990). When celebrating, Bai people in Dali put on traditional costumes and perform rituals for good luck (Fan and Wang, 2017). However, Dong (2017) finds that there are fewer young people participating in these ritual practices in comparison to the past.

The Sanyuejie Festival is another key event in Bai culture. Traditionally, the Sanyuejie Festival lasts for a week and serves as an important place for communication and exchanges. During the festival, visitors can enjoy different foods and watch street performances, and merchants from elsewhere can trade freely in a temporary marketplace (Zhang, 2008). Usually, each village has its own set of cultural norms and rules that guide the practice in different festivals. For instance, some Bai villages can only plant trees and flowers during the Willow Planting Festival and Mountain Worship Festival, and activities like grazing and timber cutting are not allowed during this time (Fan and wang, 2017).

Historically, the Bai people would live close to each other within the same clan. In the Bai community, harmony and peace are basic principles that guide the interpersonal relationship. For

example, making decisions on community affairs is to be based on collective interests rather than self-interest (Cai *et al.*, 2007). The Bai costume includes a headdress, undershirt, jacket, waist apron or waistband, pants, and fabric shoes. According to Dong (2017), after the 1950s, most Bai people started to only dress in traditional clothing for stage performances or traditional festivals. Now, they tend to wear modern clothes for their everyday attire (Dong, 2017).

2.4.3.   Traditional Bai architecture

Building a quality home is a lifelong pursuit for many Bai people and accounts for a very special part of their lives (Zhao, 2015). The goal of building a quality house is not only to enjoy a comfortable living arrangement but also to demonstrate the owner's social status (Cai *et al.*, 2007). Bai architecture communicates the local culture effectively. According to Liu (2013), the design of Bai dwellings reflects the resident's logic of rural life; utilization of indoor space represents the hierarchical relationship between family members; and symbolic meanings embodied in decorative features express the cultural values and beliefs of the household. However, many original Bai houses bear a low living standard and inconvenience (Liu, 2013). By transforming the function and quality of space in traditional dwellings, tourism development in Dali improves the living standards of rural homes (Morais *et al*., 2005). Liu (2013) finds that the architectural traditions embodied in the Bai dwellings are no longer a part of local culture but have become a component of tourism.

Traditional Bai dwellings are a type of courtyard house[33] that is enriched with local cultural elements in Dali. Their origin is tied to the era of Nanzhao Kingdom (AD 738-902), when the city had adopted many aspects of Han culture (Yang, 2014; Hu, 2018). The Bai craftsmen had learnt the culture and construction skills from the Han (Liu, 2010; Tian, Hu and Yao, 2011; Guo, 2017).

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[33] A courtyard house is a typical form of traditional Chinese house, and it is characterized by the courtyard (Wang *et al*., 2013).

Since then, houses in Dali have been deeply influenced by Han courtyard dwellings[34] (Liu, 2013; Hu, 2018). Over time, Bai people have developed their distinct domestic architectures to make it compatible with the local environment. Traditional Bai homes are characterized by screen walls (freestanding walls), colourful murals, and carved wooden doors and windows (Liu, 2010; Zhao, 2015; Urban & Rural Planning & Design Institute of Yunnan (UPDY), 2018). **Figure 2.4** depicts the characteristics of traditional Bai dwellings.
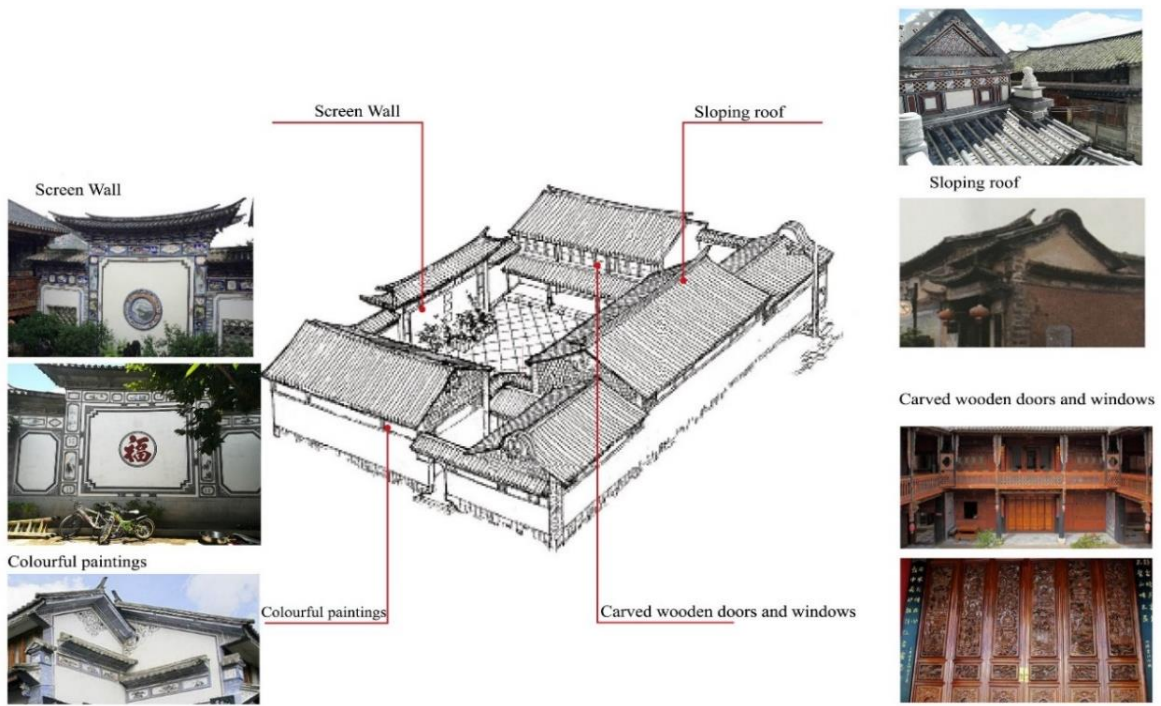
Figure 2.4. Basic characteristics of traditional Bai dwellings

Source: on page 49 of UPDY (2018) Guidebook

There are three typical layouts of traditional dwellings. **Figure 2.5a** illustrates the first kind "Three buildings with a screen wall" (*San-fang-yi-zhao-bi*，三坊一照壁). **Figure 2.5b** depicts the second type referred to as "Four buildings and five courtyards" (*Si-he-wu-tian-jing*，四合五天井). Lastly, as shown in **figure 2.5c**, the third type of layout is a complex of multiple courtyard houses

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[34] The Han courtyard dwellings varied from region to region due to different geographic characteristics. For example, the typical square yard dwellings in Beijing are different from the courtyard dwellings in Guangdong.

(*Duo-jin-yuan*, 多进院) (Liu, 2010; Liu, 2013). Each building is called a "fang" (wing), that serves as a basic unit of the courtyard (Wang, 2011).
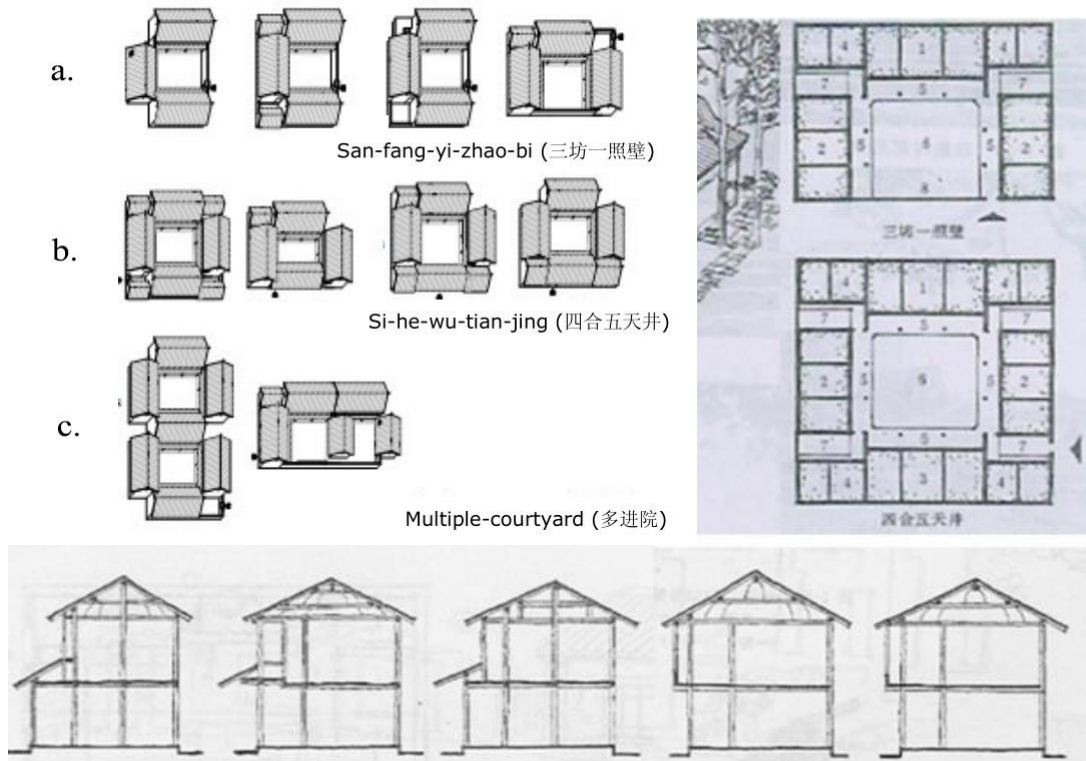
Figure 2.5. Typical layouts of traditional Bai dwellings

Source: on page 21, 41, and 72 of Chen & Wang (1986)'s article in Yunnan Minju, Vol.2 (Liu, 2013)

The buildings in a Bai residence are independent and enclosed, and the structure of the residence depends on the owners' economic conditions and family size (Tian *et al.*, 2011). Affluent families usually have bigger houses and more courtyards. These wealthy families can use the courtyards for landscaping and plants; for ordinary families, courtyards are normal places to dry crops (Sun, 2016). According to Yang (2014) and Sun (2016), most houses on the West coast of Erhai Lake have the important rooms facing East (the courtyard) with the back towards West (the street or mountains). This common building orientation reflects the fact that local dwellings must adapt to the natural environment and the climate of Dali. Sun (2016) states that it would allow Bai houses to avoid the influence of strong West and Southwest wind all year round. Likewise, local dwellings usually avoid having their main entrances facing South (Li & Li, 2013). Moreover, local

builders usually apply wide eaves[35] and deep sloping roofs to residential houses since Dali receives plenty of rainwater during the summer season (Liu, 2013).

The traditional architecture contains rich decoration content about blessing, story, and floral patterns. **Figure 2.6** depicts a kind of floral pattern near the roof. These decorations imply the cultural beliefs that enlighten morals (Meng and Liu, 2013; Yang, 2014).

Figure 2.6. Floral pattern on a Bai dwelling

A homeowner's socio-economic status can be distinguished by the design of their screen wall, gate tower (entrance), wood carving, and the painting and adornments on the front wall (Liu, 2013). Among all these features, some modern Bai dwellings mainly invest in the design of gate towers (Liu, 2010). The wealth of a family can be shown by the number of decorations their gate tower has. Nevertheless, not all Bai dwellings have a gate tower as it is very expensive (Wang, 2011). **Figure 2.7** shows the gate tower of a wealthy family. Rich households usually will have more decorations. Traditionally, gate towers can have up to three layers and have more colours, words and sculptures than Han courtyard houses do (Li and Li, 2013). According to Li and Li (2013), a gate tower will never be right opposite the main room or window since Feng Shui treats it as it is not propitious to the household. In addition to the gate tower, the screen wall is another prominent feature in traditional dwellings. The purpose of a screen wall is to retrieve the morning sunshine

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[35] Eaves are the lower part of the roof that overhang the wall of a building.

and bring the family happiness and good luck (Tian *et al.*, 2011; Sun, 2016). Therefore, screen walls are always well-decorated, containing a variety of paintings and words offering good wishes (Liu, 2010; Tian *et al.*, 2011).

Figure 2.7. A typical gate tower

Source: Wang (2011)

Due to an underdeveloped economy in the past, the original Bai dwellings mostly applied a mud and wood structure in the 1980s and 1990s (Dong, 2017). Today, few Bai people would consider using this traditional structure and even less would preserve their original houses. The speed-up in economic growth leads to new consumption patterns (Zou, 2015). Many villagers have replaced their old dwellings with modern architecture that used reinforce concrete (Liu, 2010; Dong, 2017; Hu, 2018). **Figure 2.8** shows a Bai dwelling that had been built several decades ago. Moreover, the number of traditional dwellings in Dali is declining quickly due to three factors— high construction cost, residents' demand for modern life, and national policies on the village housing land[36] (*Zhai-ji-di*, 宅基地) (Liu, 2010). According to Dong (2017), the labour cost and

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[36] Village housing land is one type of rural construction land that is owned by a rural collective and allocated to its members free of cost as a membership entitlement (Zhao, 2019).

time cost for traditional dwellings are high in addition to the expensive construction materials, which reduce residents' capacity to build a traditional home. Since economic development allows Bai people to enjoy better living conditions, Dong (2017) finds that many of them no longer want to live in a courtyard house with their extended family. Due to population growth, now households are receiving relatively smaller areas of land for housing than in the past which makes it unsuitable to build a traditional dwelling. Apparently, privacy and modern life have become more important for Bai people.

Figure 2.8. Old Bai homes in the rural area

2.5. Government policies on culture preservation

Since the 1990s, the principal government of Yunnan province has carried out a series of policies that focus on developing ethnic tourism (Wu, 1990; Liu, 2013). In addition to stimulating local economies, its objective is to improve the lives of residents and to preserve ethnic minority cultures (Gao, 2016; Yang, 2016). Even though the experience varied, many of the development projects in minority regions that commenced in the 1990s had impacted the local built environment (Yang, 2016). Gao (2016) finds that the objectives of these projects often emphasize the need to preserve traditional culture while not taking enough account of the changing local lifestyle.

The official Bai cultural revivals in Dali started in the 1980s, many folk and ethnic activities were encouraged and officially sponsored by the government as tourist attractions (Wu, 1990). The official promotion of Bai culture for tourism has coincided with the revitalization of traditional architecture. According to Yang (2016), the first national regulation on the protection of folk culture in Yunnan was established in 2000. Following that, a census on minority cultures and their intangible heritage was initiated between 2000 and 2002 (Yang, 2016). Since 2010, government departments such as the Cultural Heritage Bureau, the Institute of Cultural Relics, and the Institution of Non-Material Cultural Heritage Management have been working together on heritage management in Dali (Zhao, 2015). The municipal government also implemented a set of provincial rules for Non-Historic Folk Houses to regulate ordinary Bai dwellings and guide new construction. For instance, there are now local regulations for controlling the height of the houses (Gao, 2016). In 2014, *The Guidebook on Strengthening the Conservation of Chinese Traditional Villages* was published to guide the preservation of folk houses (MOHURD, 2014). Realizing that municipal governments and local builders in Yunnan needing technical support for the refurbishment of folk houses, the provincial government has also recently published a *Guidebook of the Improvement and Transformation of the Residential Dwellings in Yunnan Province* (UPDY, 2018). These guidebooks highlighted that the execution of refurbishment projects must receive consent from house owners. Policies of Bai dwelling preservation are discussed further in 4.2.7.

2.6. Research objective and questions

As previously discussed, to achieve inclusive urbanization, it is important to look at urban developments from the perspective of ethnic minorities. Scholars have investigated how urbanization influences minorities' cultural traditions and local knowledge through various dimensions: tourism studies, development studies, ecological research, land use planning, government policies, city branding, architecture, and construction materials. Many of these studies were conducted at the community level. Few researchers have explored the cultural process involved in minorities' urban development at the municipal level. According to the current

literature, it is evident that many local authorities in China have not paid enough attention to local traditional knowledge (LTK) as perceived by its residents (Yang, 2007; Liu, 2010; Chen, 2011; Liu, 2013; Zhao, 2015). On the other hand, as ethnic minority areas in China are socio-culturally varied and ecologically diverse, it is essential to consider the perspectives of local inhabitants regarding policymaking. Traditional knowledge of an ethnic group cannot be simply generalized to its clans from one geographic location to another.

The main objective of this study is to investigate the role of LTK in urban development in China's ethnic minority regions. This study explores the incorporation of LTK in Dali's development through an ethnic minority perspective of cultural preservation. It focuses on how urbanization is impacting local traditional life. Currently, Dali is experiencing a higher level of urbnaization in comparison to other cities within the Dali Bai Autonomous Prefecture. The hypothesis is that residents from Dali have a different perception of LTK than those from other cities since they have a higher level of urbanization and economic development. In order to fulfil this objective, the following research questions have been addressed:

How do the Bai people perceive their LTK enacted in Dali's urban development?

a. How do the Bai people understand the transformation of the built environment?

b. How do these ethnic minorities alter their perceptions of traditional practices during urbanization?

2.7. Definition of key concepts

In order to clarify what the study is about as well as the meaning of the research questions, and to build the conceptual model, definitions of three key terms are explained below:

"Minority"

Ethnic identification in China is constructed based on Stalin's definition of nationality in the 1950s. Stalin's four criteria for nationality identity—common language, common territory,

common economic life, and common psychological disposition—have guided the formalization of ethnicity status (Wu, 2014). Unlike many other countries around the world where belongingness to a specific ethnic group is based on self-identification, a person's ethnic minority status in China is assigned by the government by issuing official identity document at birth (Cao, 2009). This state-defined "minority" refers to categories rather than to actual groups, although a minority status is assigned according to a group of people's ethnic potential, they were not entirely the same in different locations (Beaud, 2014). For example, Wu (1990) finds that the Bai population living in the periphery of the Bai autonomous area in Eastern Yunnan had different customs in comparison to the Bai in Dali. Moreover, some minorities have situational ethnic identity because historically physical characteristics are not important in making racial distinctions in China (Wu, 1990). Western China is home to most minority groups, but the development gap between Western and Eastern China significantly widened throughout the 1980s and 1990s (Han and Paik, 2017). According to Han and Paik (2017), the main objective of the Western Development Program is to avoid any ethnic conflict raised by the economic disparity in ethnic minority regions. Moreover, the Chinese government also recognized the need to conserve ethnic minority cultures, and a cultural resurgence movement started in the 1980s (Yang, 2016).

"Traditional culture"

Culture includes traditions, arts, eating habits, and so on. It is a multidimensional concept which includes almost everything and has a diversity of classification and definition in academic discourse (Liu, 2013). The concept of culture can be expressed in a layered model (see **Figure 2.9**). The core represents a basic assumption related to behaviour and practice. The second layer is the beliefs and values related to behaviour and practice. The third layer is the social organization of specific behaviour and practice. The outmost layer represents a specific practice and its product. Culture should not be taken as a synonym of ethnicity despite having similar characteristics (Meusburger, Suarsana and Freytag, 2016). In China, ethnicity refers to a person's attribute registered in the census, but culture is not. Furthermore, traditional culture can be any cultural phenomena that has existed at a point of time in the history, but cultural tradition is traditional

culture that is handed down from generation to generation and is still practising in everyday life (Liu, 2017).
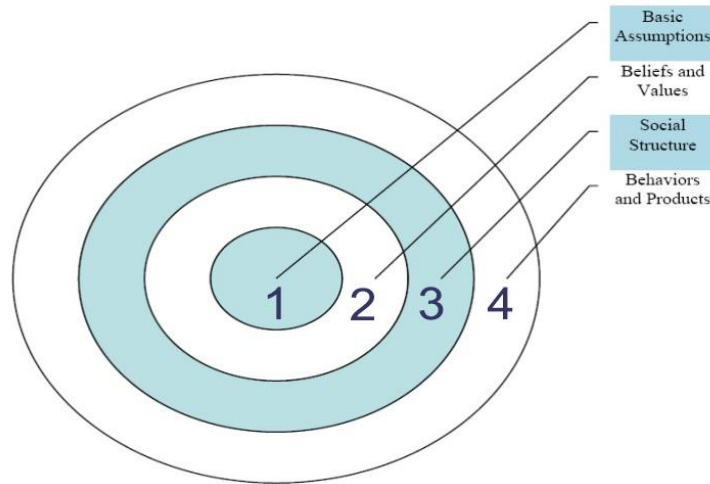
Figure 2.9. Layered model of culture

Source: Liu (2013, p. 27)

There is an interrelationship between culture and knowledge. Meusburger *et al*. (2016) argue that culture can shape learning styles, cognitive styles and attitudes toward education. Knowledge is a social process of education or learning, it can influence the cultural traditions, ethnic identity, and processes of acculturation (Meusburger *et al*., 2016). Traditional culture is a term that refers to the "tangible and intangible forms in which traditional knowledge are expressed or manifested" (Antons, 2013, 1407). In this study, traditional culture includes the tangible and intangible products of traditional knowledge that has been handed down from previous generations.

"Local traditional knowledge"

Thompson and Scoones (1994) view "knowledge" as a social process, and they suggest that knowledge is generated through the interaction between different actors or networks in society. Knowledge can be categorized using different dichotomies, such as the dichotomy between factual knowledge and orientation knowledge (Meusburger *et al*., 2016). Meusburger *et al*. (2016) state that factual knowledge includes local knowledge and "local does not mean stable, fixed, or isolated from external influences but site-specific or geographically situated" (p.14). Local knowledge, in

fact, has many alternative names. For instance, traditional knowledge, indigenous knowledge and situated knowledge are similar terms with different emphasis.

Antweiler (2016) realizes that the conceptualization of local knowledge is problematic, he summarizes the concepts of local knowledge into two categories. As shown in **Table 2.2**, each form of local knowledge has three subdivisions. Antweiler (2016) concludes that "local knowledge comprised skills and acquired intelligence, which is action-oriented, culturally situated, and responsive to constantly changing social and natural environment" (p.184). In this study, LTK refers to the language, architecture, believes, ritual practices, and cultural values that have been transmitted from generation to generation by the Bai people in Dali.

Description	Example
Declarative	
Recognition and naming	Attribution of entities to terms, discreet entities, and diversity
Factual	Traits of animals, plants, temperature, social status, prices, salaries, and administrative levels
Categorical	Classifications of organisms, colours, kinship, and development project types
Procedural	
General processes, rules	Farming calendar, religious calendar, environment crises, household cycle, and development-project cycle
Specific processes (scripts, schemas, and action plans)	Everyday routines (e.g., greetings and farewells, natural resource management, ritual sequences, project request schema, and nonroutines)
Complex (concepts, belief systems, and knowledge systems)	Cosmology, model of whole society, models of "honour," of "marriage," of "justice," cropping systems, therapies, and decision-making procedures

Table 2.2. Forms and levels of local knowledge

Source: Antweiler (1998, p.475, 2016, p.168)

"Traditional architecture"

According to Liu (2013), the term "traditional architecture" emphasizes a process which results in the built form and is confined within a specific period in the past. The built form is affected by a particular geographical setting, such as the terrain type, available local resources, and local customs. Therefore, traditional architecture varies across regions. However, "traditional" does not mean the built form is always static, because new technique is usually being adopted by local craftsmen.

The concepts of "folk architecture" and "vernacular architecture"[37] are closely related to traditional architecture. Folk architecture emphasizes the architectural elements as part of ethnographic assumptions (Liu, 2013). Liu (2013) states that the traditional architecture is not merely an architectural practice or a physical building, but also a living representation of cultural norms which embraced rules, ritual and meanings. This study will apply these concepts interchangeably. In this study, traditional architecture refers to the residential construction and the architectural traditions that have been transmitted and passed down for generations within the Bai community in Dali. Specifically, Bai architectural traditions include the traditional building layouts, decorations, and the use of local construction materials in Dali.

2.8. Research framework

Drawing upon existing literature and in line with the research objective and questions, a research framework has been developed for this research. This research presents the interaction between urbanization and LTK, addressing their influence on the built environment and the practice of cultural traditions. As illustrated in **Figure 2.10**, the framework consists of three parts: (1) the interaction between urbanization and LTK; (2) local Bai people's perceptions of LTK; (3) the built environment and the practice of cultural traditions.

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[37] The word "vernacular" is derived from the latin Vernaculus, meaning "native" (Liu, 2013).

Urbanization
(Industrialization, marketization, conflict of interest,
consumption of culture, reinvention of traditions,
changes in lifestyle & practice)

Land-oriented urbanization
(Unsustainable)

People-oriented urbanization
(Sustainable)

Urbanization of
Ethnic minorities
(Inclusive)

Traditional culture

Traditional knowledge

Local Characteristics & Traditions

Architecture, Ritual Practice
&
Folklife

Influence

Influence

Dali City (68% Bai minority)

Perceptions of Bai minority

The built environment

The practice of traditions

Outcome of investigation:

To capture the cultural process that is reshaping Dali's landscape, and to reveal the Bai perspective of integrating LTK with urban development.

Figure 2.10. Research framework

(1) Interaction between urbanization and LTK

Urbanization consists of industrialization and marketization in a specific geographic location. It leads to a variety of socio-cultural impacts, such as the syncretism of different cultures, the reinvention of traditions, and changes in lifestyle and practice. It has been witnessed that the land-oriented model has ignored many stakeholders during urban development. Thus, China is on a transition to the people-oriented urbanization. A successful transition requires respect for ethnic minorities and conserve local culture. When residents view the emphasized traditional aesthetics and branding their city as necessary concerns, LTK becomes increasingly important in urban prosperity (Clark *et al*., 2002). As discussed earlier, LTK in different geographic locations is embodied with local characteristics. LTK provides a valuable reference for including these local characteristics in urban planning.

(2) Local Bai people's perceptions of LTK

When urbanization brings in the inflow of migrants, capital, and new ideas, LTK integrates these impacts and evolves to meet the needs of modern life. Dali is a typical minority city in Southwest China, but 68% of its residents are Bai minorities. The urbanization process and LTK engage in the evolution of cultural landscapes respectively, and eventually affect residents' perceptions of traditional practice and built environment. People-centred development emphasizes the importance to consider residents' need using a bottom-up approach, so it is necessary to respect the Bai minority regarding their understandings of homes and their expectation of urbanization.

(3) The built environment and the practice of cultural traditions

This research will measure the condition of culture preservation by investigating whether LTK is expressed in Dali's landscape. This landscape includes Dali's built and cultural environment, including residents' traditional practice in everyday routine. The built environment consists of all forms of human-constructed urban features, such as buildings, parks, and roads. Historically, the accumulated traditional knowledge has profoundly influenced the built environment in ethnic minority regions. However, cities become similar across China when they

receiving more influence from Western culture. To prevent a homogenous urban built environment, integrating LTK in urban development would be essential.

Chapter 3. Methodology

A case study approach allows an intensive study on minorities' urbanization and provides local insights into the transmission of LTK. **Figure 3.1** provides an overview of the research design. Overall, this study employs both quantitative and qualitative methods to explore how LTK influences the cultural landscape of Dali. The investigation includes consulting relevant literature, conducting field research, and data analysis.
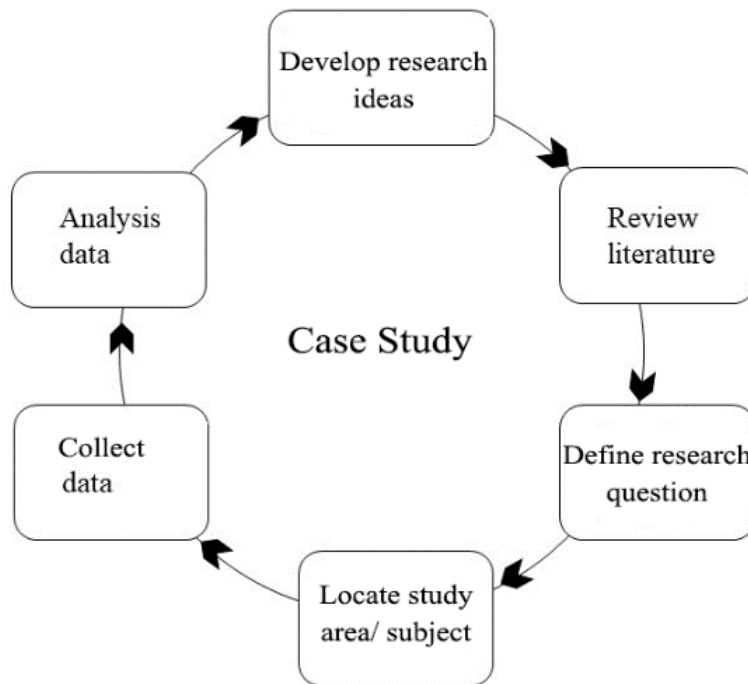
Figure 3.1. Research design

Figure 3.2 illustrates the research workflow. This study goes through two cycles of investigation. The first phase of research included an analysis of the questionnaire data in order to proceed to further investigation in the field. This section starts by introducing the selection of the study area, followed by the data collection, and the data analytical process.
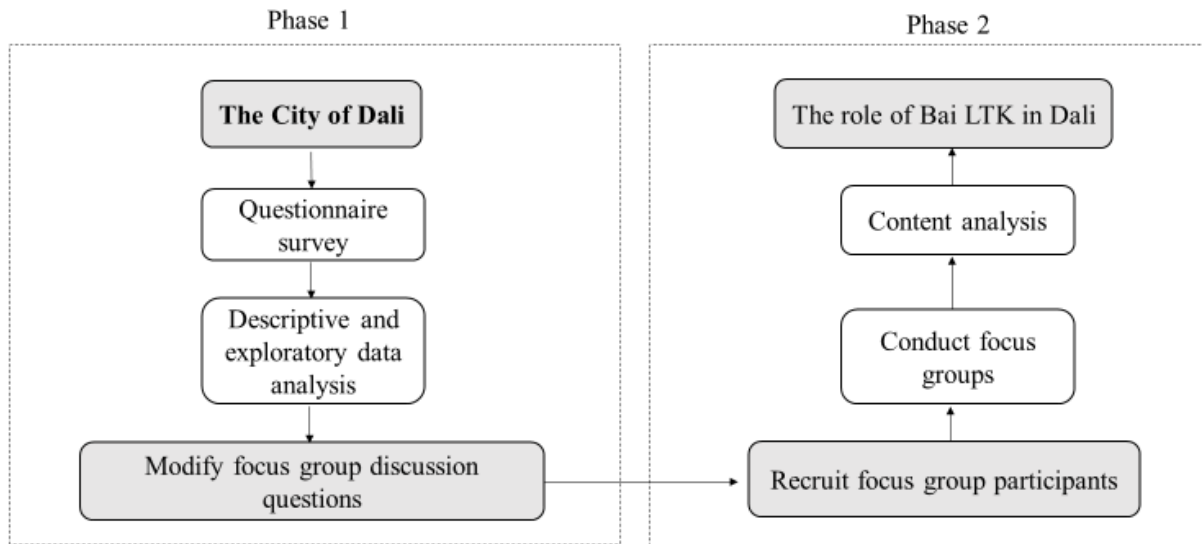
Figure 3.2. Workflow chart

3.1. Study area selection

Most of the Bai population in Yunnan live in Dali, while the rest are scattered amongst other counties including the provincial capital city of Kunming (Wu,1990). Dali City, being both the economic and cultural hub of the Dali Bai Autonomous Prefecture, has also experienced a much greater urban population growth and rural transformation than other counties. Another reason to select Dali is that the city's historical and cultural environment has been well maintained in comparison to many other county-level cities in China.

Dali's population is comprised of 25 ethnic groups, and 68% of them are Bai (Yang, 2018). The administrative division of Dali has changed several times in the past[38]. According to Dali municipal government (2019), the city was established in 1958 and expanded again in 1983 when Xiaguan City merged with Dali and became Xiaguan Town[39]. As a response to the need for economic growth, two subdistricts (Tianjing and Manjiang) were established in 2000. Dali kept

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[38] Dali reflects one type of Chinese city formations—a city can be formed by grouping several towns together.

[39] According to DGAPG (2019), Xiaguan Town will be separated into Xiaguan Subdistrict and Taihe Subdistrict in 2020.

growing in the next few years, and two more towns (Shangguan Town and Shuanglang) on the North coast of Erhai Lake merged with Dali in 2004 (Dali municipal government, 2019). **Table 3.1** shows the current administrative divisions.

Governmental Administrative Level	Category	Name	Location to Erhai Lake
County-Level	City	The City of Dali	
Township-Level	Town	Haidong, Wase	East
		Xiaguan	South
		Yinqiao, Wanqiao, Dali Town	West
		Shuanglang, Shangguan, Xizhou	North
		Taiyi Yi Ethnic Town, Fengyi	N/A
	Subdistrict	Tianjing, Manjiang	South

Table 3.1. Administrative Divisions in Dali

There are eleven townships and two subdistricts under the City of Dali (CNBS, 2018). Particularly, Xiaguan Town serves as the downtown area. **Map 3.1(a)** shows the current boundary of Dali. The city now has an area of 1,700 km2, with an annual average temperature of 15.7 degrees Celsius and annual average precipitation of 909.7 mm (Statistic Bureau of Yunnan Province, 2018). By the end of 2018, the total population of Dali reached 638,054, including 68.16% Bai minorities, 3.07% Yi minorities, and 24.55% Han Chinese (People's Government of Dali City, 2019). **Map 3.1(b)** depicts the land cover of Dali in 2010. The city is built near the Erhai Lake and is surrounded by mountains. Unlike elsewhere, Dali is not a typical product of urbanization processes. Although Dali is a city level administrative unit, it still has a great area of agricultural land. Since many Bai people live in rural areas, this study takes into account the rural dwellers when recruiting participants.
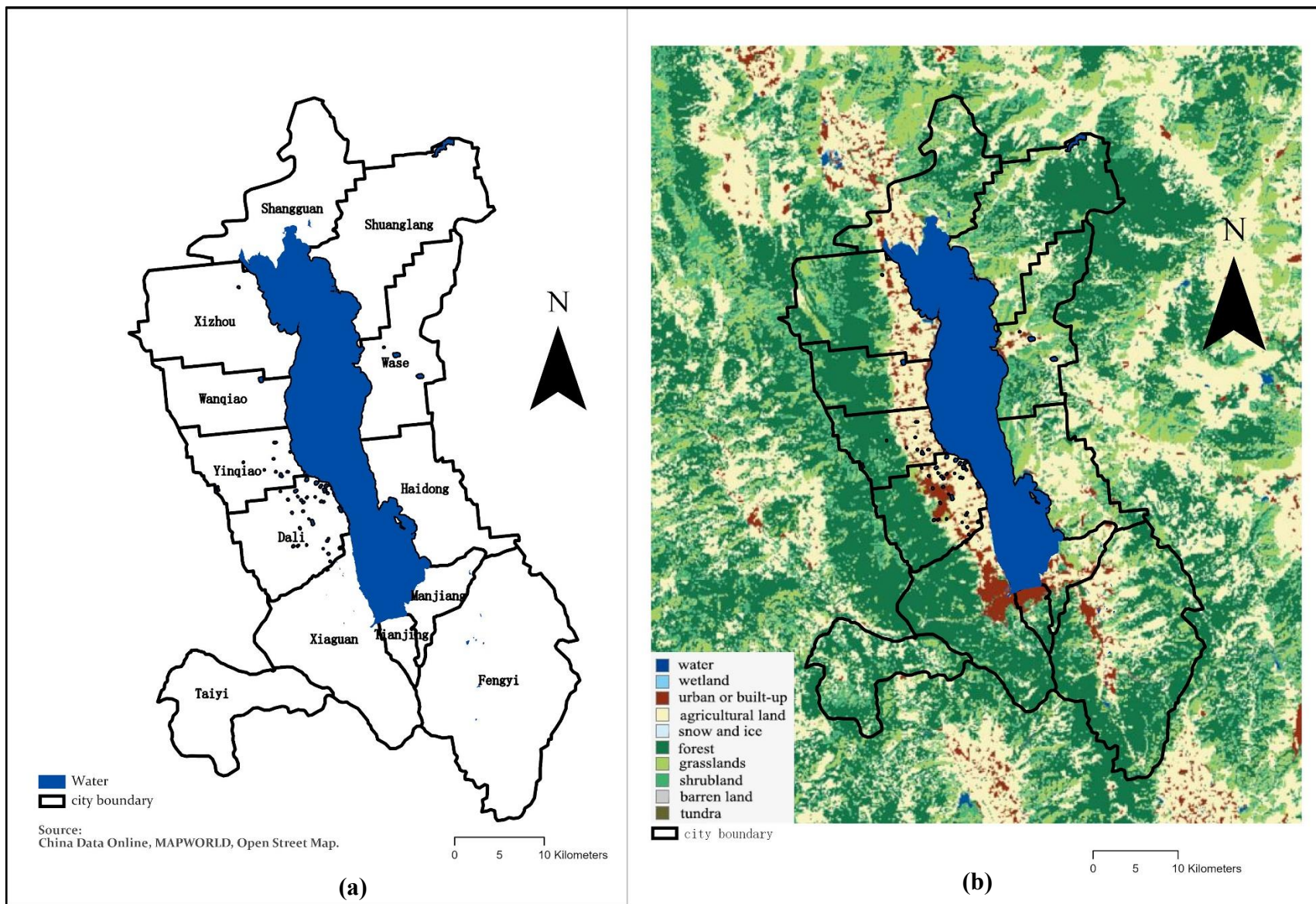
Map 3.1. The City of Dali

3.2. Data resource

There are three categories of data in this research. The socio-spatial data include satellite images and GIS data. Spatial data is collected from several online sources such as Open Street Map (2018), Google Earth Pro (2018), and China Data Online which is powered by All China Marketing Research LLC (2018). The secondary data include the questionnaire survey and statistics of Dali[40]. Questionnaire surveys will help answer the research questions, however, it may be insufficient for capturing different point of views of local people. In order to have a better interpretation of the survey results, primary data will be collected through focus group discussions.

3.2.1. Authorized second-hand questionnaire survey

Questionnaire surveys (in simplified Chinese) were originally conducted for a joint project between the University of Ottawa and Yunnan Agricultural University. This joint project— "Cartographie des connaissances traditionnelles locales"— was led by Professor Huhua Cao and Professor Fachun Du. The title of the questionnaire was "Traditional Bai Culture Conservation During the Processes of Urbanization in Dali City". The purpose of this survey was to investigate the role of public participation in local community planning and the inheritance of the Bai traditional culture in Dali, where urbanization has increased over the year.

Questionnaire surveys were carried out by a research team from Yunnan University in July and August 2017. A Ph.D. student was leading the team. Survey participants were recruited through a simple random sampling method. During the survey, the team was divided into smaller groups which consisted of five people each. Then, each group was assigned a survey location. There were four locations: Wase (East coast), Xiaguan (South coast), Wanqiao (West coast), and Xizhou (North coast). The questionnaires were issued to 100 different individuals living in different neighbourhoods. The surveys were conducted in community centres, parks, offices, and villagers'

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[40] Two main sources of statistics are Statistic Bureau of Yunnan Province and National Bureau of Statistics of China.

homes. Participation was voluntary. Although the questionnaire did not capture the specific residential address of each respondent, their community and township were recorded. This study only uses 80 of these questionnaires. It is discussed further in 3.2.3.

The questionnaire had five sections with mostly multiple-choice questions and one open-ended question (please refer to **Appendix i**). The first section of the questionnaire asked for the participant's demographic information. The second section asked questions about the participant's neighbourhood[41] and its surrounding public space. The third section asked questions related to their residential dwellings. The fourth section was about respondents' perception of Dali's urban development and culture preservation. Finally, these respondents could provide their own opinions on how to conserve Bai culture during urbanization.

3.2.2. Focus groups

Questionnaire data would provide a good picture of Dali City's built and cultural environment from the perspective of Bai minorities. However, more data was required to fully answer the research questions. In the second phase of the investigation, supplementary focus groups were conducted to understand the survey findings deeply. Mixed-gender groups were organized to allow the researcher to identify different perspectives between men and women. After obtaining permission from the University of Ottawa Research Ethics Board, key participants who were above eighteen years old were recruited by visiting local communities and introducing this research to residents in Dali. More participants were recruited subsequently through the snowball sampling strategy. Specifically, a brief introduction to this research was circulated to potential participants within several social media groups. Then, focus groups were scheduled for the interested participants accordingly. Participants also received a reminder text message containing

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[41] During data analysis, participants' neighbourhoods are defined based on National Bureau of Statistics of China survey boundaries.

information about the assigned session, including the date, time, and location. Each location was a safe and comfortable place suggested by the key participants. Since most villagers were not familiar with and lack of knowledge of using online group chat, online focus groups were not considered in this study.

Due to time constraints and the real condition in the field from July 17th to August 13th of 2019, only three face-to-face groups were successfully organized (see summary table in **Appendix iii**). Every year, starting from mid-July to August, there is the high season for tourists in Dali, and several important festivals take place within this time. The nature of the focus group setting had discouraged participation as most villagers were quite busy in this tourist season. Also, while the focus group setting did allow for some interactions among participants, it did not evoke expected instability or obvious collision between two opposing point of views in the discussions. Suggestions to similar research in China would be using more flexible methods, such as interviewing, and to avoid conducting fieldwork during the tourist peak.

Focus group respondents were carefully selected and comprised of Bai people who lived in Dali for at least twenty years. Most of them were men (64%). Participants' neighbourhoods were varied. Seven of them were recruited from the urban area while the rest were recruited from the countryside. Of the eleven participants, none of them had recently moved. Six (55%) participants had full-time employment, while five were university students and were still financially dependent. Participants from each focus group were in the same age group respectively. Three (27%) participants in the first group were identified as middle-aged adults (36 to 55 years of age). The three participants in the second group were young adults (aged 26-35) and the five participants in the third group were youth (18-25 years old).

All group discussions followed a similar pattern and were carried out in an informal setting. Snacks and non-alcoholic drinks were offered to participants to help them relax. At the beginning, participants answered some ice-breaker questions. Next, participants were given a short overview of some key findings in the questionnaire survey. Participants were encouraged to discuss their

opinions on each finding for the remaining session. Minor adjustments were made to the discussions' agendas according to the on-site nature of a focus group. Two group discussions were audio-recorded after receiving consent from participants, while one focus group was recorded only by handwritten notes.

The researcher positioned herself as a Chinese student who was completing a short-term study in Dali. Most local people were friendly towards the student who was interested in Bai culture and were willing to help, so she was able to gain trust from the gate keepers (i.e. seniors in the village) and to build a connection with local communities. Notably, the researcher is a Chinese citizen from South China and had completed nine-year compulsory education in the country. The researcher's cultural background allows her to acquaint herself with Dali's local cultural context easily by spending time living with villagers. After visiting different communities and talking to many Bai people in Dali, the researcher decided to facilitate all focus groups in Mandarin since most Bai could speak Mandarin. At least in this study, all interested participants were bilingual. Therefore, conducting focus groups in Mandarin did not affect the quality of data collection and interpretation. Moreover, the researcher focused on how participants understand the survey results based on their lived experiences rather than raising questions based on researcher's subjectivity during the group discussions.

Additionally, daily field observations were conducted in different neighbourhoods in Dali. Depending on the weather, the researcher biked around at least three different villages or visited four different urban communities by bus per day. During these trips, notes regarding local economic and cultural activities were written on notebooks, photos of local dwellings were also taken. These data resources are analyzed in Chapter 4, and the results are applied to the discussion in Chapter 5.

3.2.3. Data analytical process

The questionnaire analysis began with a data screening process, which included checking raw data and dealing with missing fields. Since this analysis will mainly focus on the Bai respondents, 20 participants were removed from the original sample. This included nineteen Han and one Yi respondents. As a result, there are 80 valid questionnaires for this study. Prior to the main analysis, another series of data cleansing was completed with the assessment of descriptive statistics of the data frame in the R software. Missing answers might mean that the respondent did not want to answer or that they were uninterested. However, the data cleansing strategy was to correct all missing fields. One way to deal with a missing field was to look for an indication of some related questions. Another way was to treat the missing answer as if the respondent answered "other" to the question since the respondent might have an opinion that was not provided in the multiple-choice options. After the data cleansing procedure, a series of exploratory data analyses and visualizations of analysis results were performed in the R software. Maps, tables and graphs are presented in Chapter 4.

Furthermore, participants' perspectives on the built environment and the conservation of Bai culture (Part 4 of the questionnaire) were all coded on a five-point Likert scale. The intraclass correlation coefficient (ICC) can assess agreements among these eighty observers. Herein, the ICC estimates and their 95% confidence intervals were calculated using the R statistical package "psych". This analysis assessed the average agreement (ICC2K) among questionnaire respondents based on the two-way-random-effects model. The ICC result is presented in 4.1.4.

For focus group discussions, all handwritten notes and audio records were transcribed for qualitative data analysis. The transcribed data were coded following the "margin coding" process as described in Cameron (2016, p.219) and were classified into themes according to discussion topics. Analysis and results are presented in Chapter 4.

Chapter 4. Data analysis and results

This chapter presents the data results in two parts. First, the questionnaire results will be introduced. Then, the outcomes of focus group discussions will be presented.

4.1. Questionnaire

This section presents the results of the questionnaire analysis in four parts. Starting with a brief summary of the participant distribution, a description of the characteristics of the participants will be followed. Participants' general perceptions of the built environment, ritual practice, and folklife are then introduced. The last two sections address the perspectives of participants with respect to the landscaping and Bai culture conservation in Dali.

The survey participants came from twenty-two different neighbourhoods in Dali (see Appendix ii for details). These neighbourhoods were aggregated to the basic administrative level. 29% (23) of participants lived on the West coast of Erhai Lake[42], 26% (21) lived on the South coast[43], 24% (19) were from the North coast[44], and 21% (17) were from the East coast[45]. As **Map 4.1** illustrates, participants were not equally distributed in each administrative boundary. The red area represents the urban area, orange represents the suburb, and the green represents rural[46]. Since there was only one participant from the suburban area, this person would be reclassified as an urban participant later in the analysis. Most participants (74%) lived in rural areas of Dali.

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[42] The West coast of Erhai Lake is long-established and includes Dali Town, Wanqiao, and Yinqiao.

[43] The South side of Erhai Lake is the urban centre of Dali City, which includes Xiaguan, Tianjing, and Manjiang.

[44] On the North side of Erhai Lake, Xizhou is one of the long-established settlements.

[45] The East coast of Erhai Lake is the new development zone, which includes Haidong and Wase.

[46] Although the questionnaire survey was aggregated at the township level, the classification was based on the surveyed neighbourhoods and followed the Urban-rural Division Code for the Year 2017 (NBSC, 2009; NBSC, 2017). The latest Urban-rural Division Code for year 2018 was updated in January 2019, but this analysis applied the code for year 2017 because the survey was carried out in 2017. Even if this analysis applied the latest code, the only change would be that the surveyed neighbourhoods in Yinqiao and Dali have become suburban areas.

Moreover, 60% (48) of the sample were registered in rural Hukou[47] and 67% (32) of these rural Hukou holders had never moved.
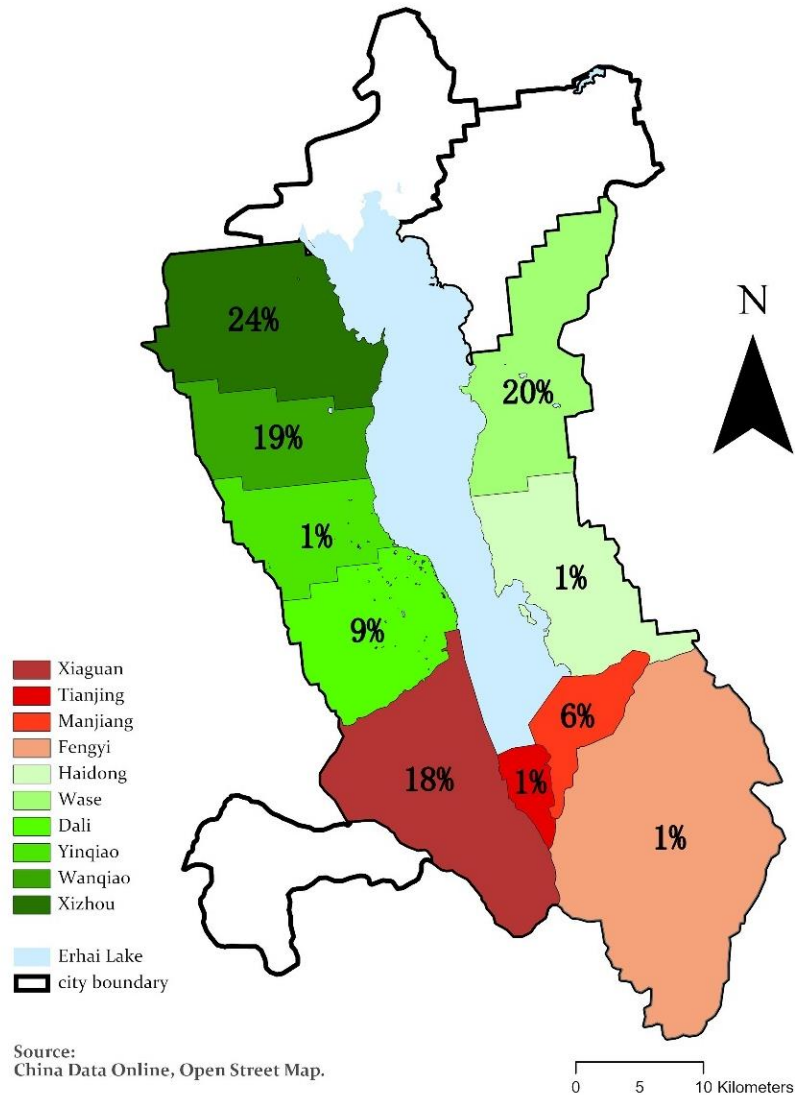
Map 4.1. Distribution of questionnaire participants

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[47] Recall that the household registration system in China assigns citizens to either an agricultural or urban Hukou. The most remarkable feature of this difference is that the resident with a rural Hukou usually has the right to enjoy the bonus of village collective lands (The National People's Congress, 2019). However, as Yunnan Province's implementation scheme for the latest Hukou reform became effective in 2016, both rural and urban residents held a "resident Hukou" while benefits associated with their original Hukou categories remained unchanged (Yunnan Department of Public Security, 2015).

4.1.1. Demographic information

The current sample consisted of an equal number of female and male participants, but they were not distributed equally between urban and rural areas. **Table 4.1.1** delineates the gender composition by areas. There are higher percentages of female participants (15%) in urban areas while rural areas have higher percentages of male participants (39%). By looking at each township individually, Tianjing (urban), Fengyi (suburb), Haidong (rural), and Yinqiao (rural) each had only one participant. This suggests that comparing respondents' answers to each survey question to their administrative boundaries would lead to a biased analysis. A good solution would be to classify the administrative boundary by level of urbanization.

Neighbourhood	Urban	Rural
Male	9	31
Female	11%	39%
Total	21	59
	26%	74%

Table 4.1.1. Gender of participants by place of residence

Figure 4.1.1 depicts four age groups. The average age range of respondents was between 26 and 35 years old.   The student and youth group (aged 18-25) and the middle-age group (36-55 years old) each made up 31% of the sample for this study, while young adults (aged 26-35) constituted 24% and those retired[48] (aged 56 and above) constituted 14%. The majority (80%) of the student and youth group were women. However, men dominated the middle-age (68%) and the retired group (82%).

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[48] In China, the average retiring age for women is 55-year-old and 60-year-old for men.
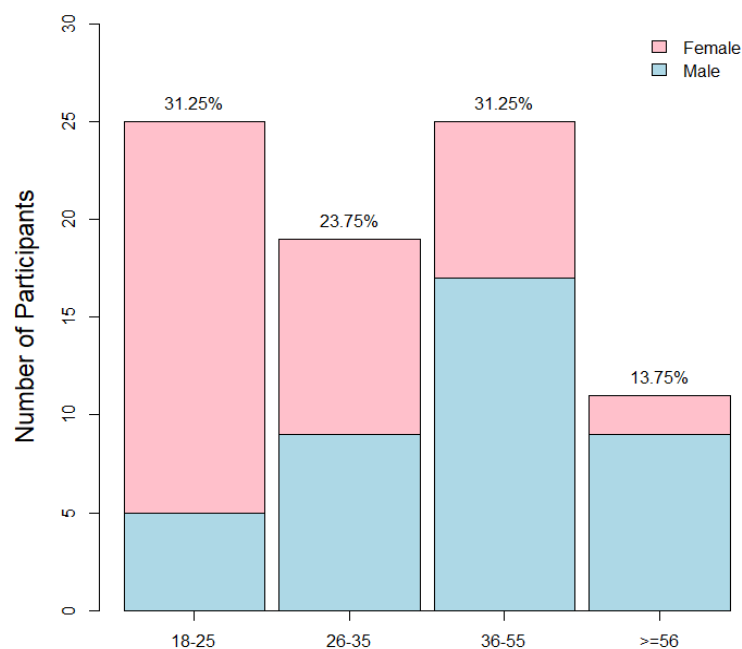
Figure 4.1.1. Gender of participants by age

Table 4.1.2 has combined the "18-25" and the "26-35" age group. Overall, 55% of participants were young people (aged 18-35) and 74% (59) of them were from long-established Bai neighbourhoods[49]. Traditional neighbourhoods in the rural area had a relatively higher proportion of elderly participants. It was likely that rural communities had a greater aging population than urban communities.

Age	Urban	Rural	Total
<=35	12	32	44
	15%	40%	55%
36-55	8	17	25
	10%	21%	31%
>=56	1	10	11
	1%	13%	14%

Table 4.1.2. Age composition of participants by place of residence

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[49] Neighbourhood classification in this study was based on the National Bureau of Statistics of China survey boundaries. A long-established Bai settlement in Dali is usually a traditional village in rural areas.

The survey participants were considered long-term residents. 80% (64) of participants had been living in the city for more than twenty years and the rest of them also reported that they had been living there for more than ten years. By comparing the age and the length of time of residency in **Table 4.1.3**, it appears that only four (5%) participants were newer to the city. All of them were female who had completed high school education and spoke Bai language at home. Possibly, they might come from other counties or townships within the Dali Bai Autonomous Prefecture. Except for two young participants, 98% (78) of the sample had lived in the city all year round. These two participants include a female university student between 18-25 years old and a male government employee within the age of 26-35. It is likely these two participants had not been in the city year-round due to studies or work in another city.

Length of time in Dali	Age				
	18-25	26-35	36-55	>=56	Total
10< years <20	12	2	1	1	16
	75%	13%	6%	6%	
>=20 years	13	17	24	10	64
	20%	27%	38%	16%	

Table 4.1.3. The length of time living in Dali City by age

More than half of the participants (64%, n=51) in the sample had never been to a megacity like Beijing, Shanghai, and Guangdong in Eastern China. However, their perceptions of Bai culture conservation were not considerably different from those who had travelled. Participants were less likely to travel in distance no matter if they were urban or rural residents. This kind of mobility might be affected by income and occupation. Among the 36% (29) of who had travelled to the megacities outside of Yunnan province, sixteen of them (55%) had a monthly income higher than the average income group (2001-4000 CNY) while seven of them (24%) were earning a salary less than 2000 CNY per month. This group of participants tended to have an education higher than high school (n=25). On the other hand, participants who were working for the government were found to travel more than the other occupation groups.

As illustrated by **Figure 4.1.2**, most participants were able to read and write sufficiently since 92% (73) of participants had completed nine-year compulsory education[50]. The median and the average education of the sample fell in the senior high school category[51]. The distribution of the educational outcome seems right-skewed. 32% (26) of participants had education below the average. However, there were a significant number of participants who had a university education (26%, n=21). These well-educated participants were likely working in office jobs. Particularly, the undergrad group consisted of 22% (4) students and 33% (6) government employees[52].
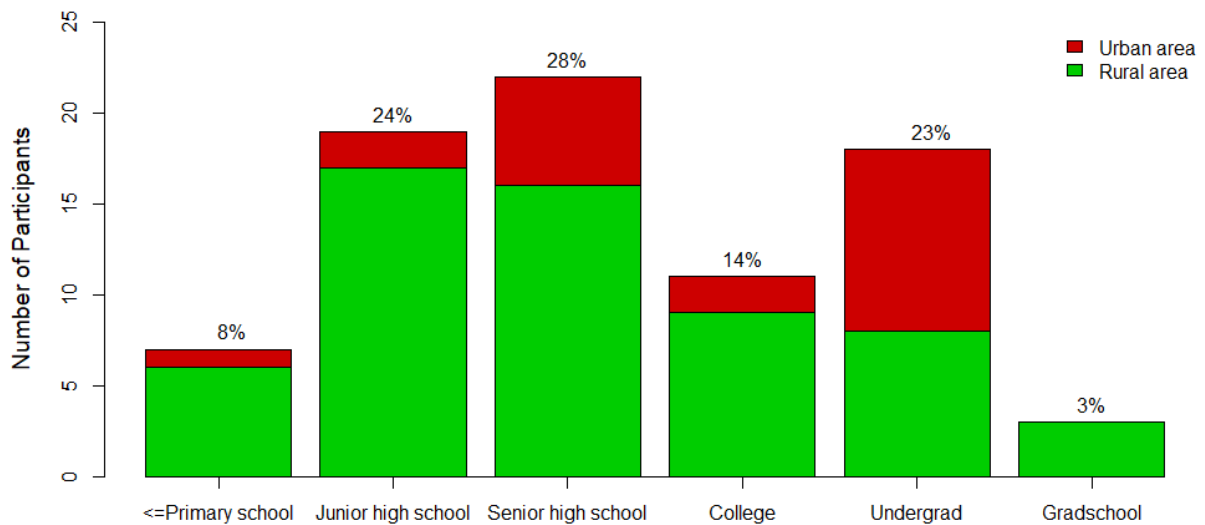
Figure 4.1.2. Education level of participants

On the other hand, participants who had less than senior high school education were commonly identified as farmers or industrial workers. **Figure 4.1.3** depicts the number of participants varied across different employment groups. The largest employment group in the sample was "farmer" (30%, n=24). It consisted of mostly young to middle-aged participants, in

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[50] The Chinese government has imposed nine-year compulsory education for public school students from Grade one to Grade nine.

[51] The education system in China includes six phases: kindergarten, primary school, junior high school, senior high school, college/university, and graduate school.

[52] To be a government employee in China requires higher levels of education; indeed, participants who reported that they were working in the government had an undergraduate degree or above.

which 25% (6) were aged 26-35 and 54% (13) were 36-55 years old. Most all of those in the farmer category lived in rural areas (especially in Wanqiao, Wase, and Xizhou). Herein, farming should be recognized as the main economic activity in these rural areas. Nonetheless, the composition of "Other" occupational group implied that there were also other economic activities in rural areas. Since few participants had provided further information[53], specific occupations for participants in the "Other" category remained unclear. These participants might be working in the tertiary sector, such as customer services.
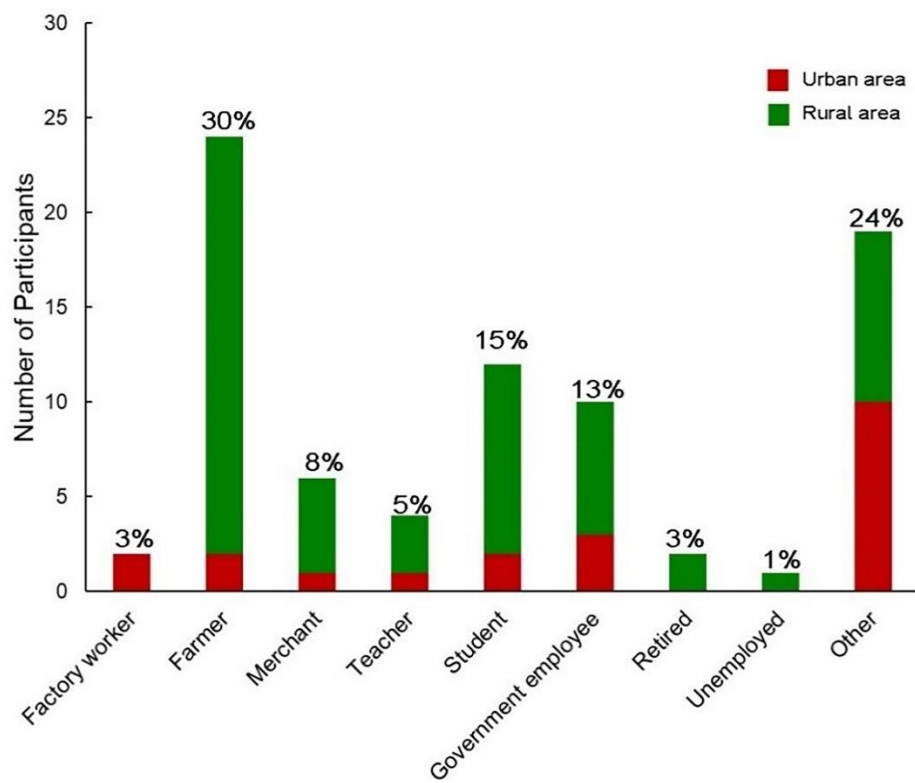
Figure 4.1.3. Employment of participants

Income distribution among the participant is apparently consistent with the occupation. The average monthly income in the sample was between 2,001- 4,000 CNY (Chinese Renminbi), it constituted 28% (22) of participants. **Figure 4.1.4** shows that most participants were earning a monthly income less than 4,001 CNY and 46% (37) of participants were in the lowest income

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[53] Only one of the Xiaguan participants had specified what the "Other" employment was, and he named it "livelihood" ("民生" in simplified Chinese).

group (2,000 CNY or less per month). The lowest income group was constituted by a significant number of farmers and students, while the average income group had 41% (9) of farmers.
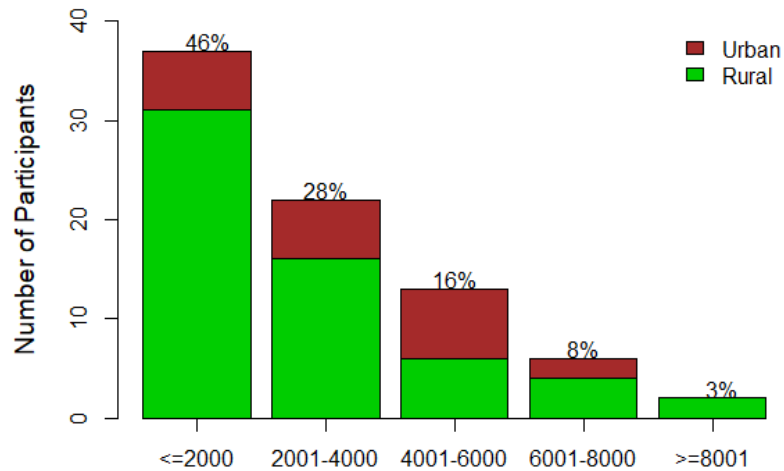
Figure 4.1.4. Monthly salaries of participants

The income group which had a monthly salary between 4,001-6,000 CNY was made up of mostly government employees. There were only 11% (8) of the sample earned more than 6,000 CNY salary per month. Six out of eight (75%) of these participants were working in the public sector. They reported that they were either government employees or teachers. The rest of the participants (3%) in the highest income group held postgraduate education. Overall, 90% (72) of the sample had a lower monthly income than the official statistic average[54]. The next section will discuss the Bai language proficiency among different age groups.

Proficiency in Bai language

The ability to speak local Bai language signifies a person's roots in Dali. Among these survey participants, 90% (72) of them could speak it. However, having the oral skill of Bai language does

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[54] According to the Yunnan Statistic Yearbook 2018, the annual average wage of employees in the public sector was 75,300 CNY in 2017 in Dali. Thus, the monthly average wage for employments in the public sector would be 6,257 CNY. However, given the lack of data, the monthly average income of those who were self-employed or working in informal economic activities was unknown.

not necessarily mean that they are speaking it at home. **Table 4.1.4** shows that there were seven (10%) Bai speakers who spoke Mandarin[55] at home. Two of them were from urban areas: one was a male teacher and the other was a woman who did not indicate her occupation exactly. They were both in middle age. The other two were rural participants: one was a middle-aged farmer and the other was a young government employee. They both had a college education. There was also one female participant who lived in the suburb. She was of the age 18-25, had a bachelor's degree, and reported her occupation as "volunteer".

Ability to speak Bai language	Language speak at home			
	Bai	Mandarin	Both	Total
Yes	65	5	2	72
	90%	7%	3%	
No	1	7	0	8
	13%	88%	0%	

Table 4.1.4. Language spoken at home

Among those who could not speak Bai, 75% (6 out of 8) of these Mandarin speakers were young people (aged 18-35). Xiaguan (urban) and Dali Town (rural) seemed to have more Bai people who could not speak Bai language. This could be because these areas had a larger number of migrants[56] from other parts of China, which makes Mandarin the language that is most used in communication.

Figure 4.1.5 depicts the variation of the language spoken at home among different age groups. Patterns are the same amongst the young (aged 18-35), middle-age (aged 36-55), and elderly (aged 56 and above) groups. Most participants spoke Bai language at home while about 20% of participants in each age group spoke either Mandarin or both. Particularly, 20% (2) of the elderly

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[55] In this dissertation, the term "Mandarin" is used to referred to standard Mandarin and a local version of Mandarin (Dali Han dialect). These two languages were Han people's languages from the perspective of research participants.

[56] Among the township and district that had temporary residents (without local Hukou) greater than ten thousand, Xiaguan had the highest number of migrant (74,548 people). Tianjing ranked the second (23,452 people) and followed by Dali Town (18,833 people) (2010 Cencus).

group reported that they spoke both Han and Bai language at home. These two participants were both males who held an urban Hukou and lived in Dali City for more than 20 years. One of them lived in a rural area working as a teacher while the other lived in an urban area and was a retired factory worker. Choosing to speak both Han and Bai language at home might be related to the participant's household environment, especially if their spouses do not speak Bai. Overall, participants who tend to speak Mandarin in their daily conversations were likely well-educated and lived in an environment with more migrants. The following section will explore whether Hukou affects the number of Bai language speakers.
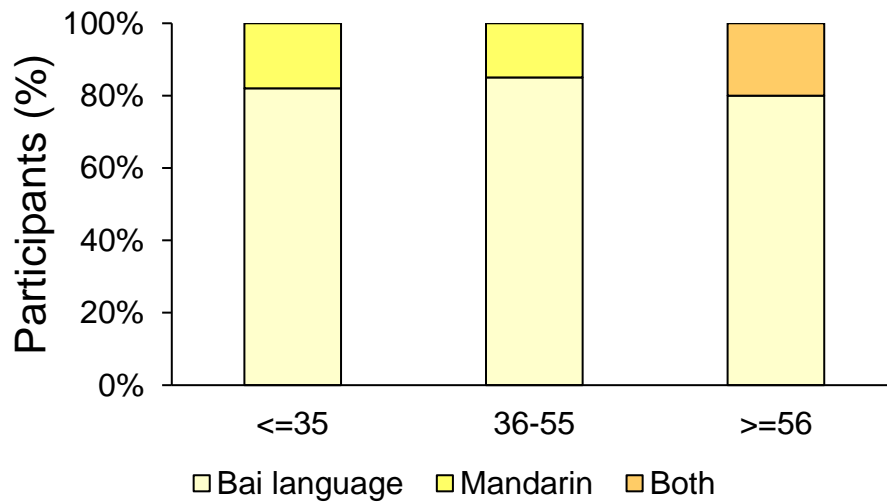
Figure 4.1.5. Language spoken at home by age group

Potential impact of Hukou on Bai language users

Recall that 60% (48) of the sample were registered in rural Hukou. Half of them (n=24) were farmers, and they formed the biggest occupational group in the sample. This is because Dali still has a plentiful amount of agricultural land. **Figure 4.1.6** describes the number of different Hukou holders in each surveyed area. The analysis here should exclude the area with one participant. Otherwise, they would make the comparison invalid. Obviously, most of the surveyed areas had more rural Hukou holders, except the urban centre Xiaguan. 86% of Xiaguan's participants were

urban Hukou holders. This could be because Xiaguan is highly urbanized and functions as the city's downtown.
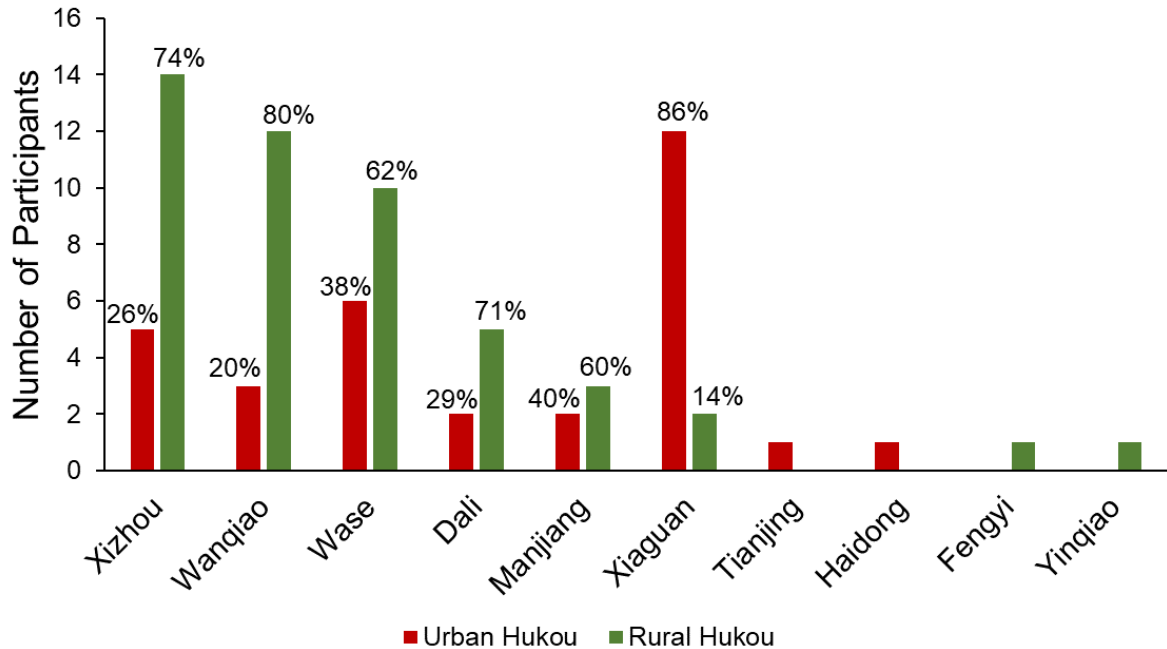
Figure 4.1.6. Participant's Hukou status by township/district

Xiaguan has a similar proportion of Mandarin (43%) and Bai language (57%) speakers. The urban setting appears to be critical to a larger number of Bai people speaking Mandarin at home. **Figure 4.1.7** indicates that participants with an urban Hukou had a higher potential to speak Mandarin instead of the Bai language. It cannot yet be concluded that Hukou would have an impact on a person's ability to speak Bai language. In this case, Hukou is a geographical factor. Apparently, the language environment is significant for the Bai language speaker to communicate in this language. A participant's place of residence and personal background has been found to be more relevant than Hukou to a participant's perception of traditional Bai knowledge.
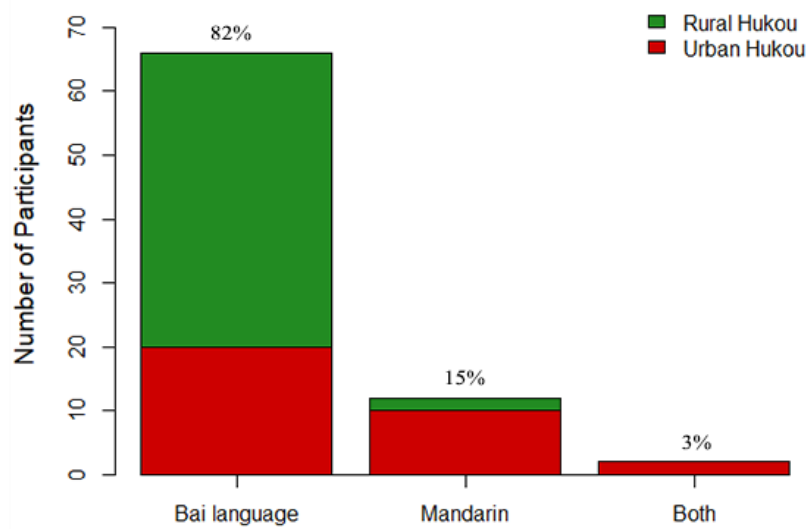
Figure 4.1.7. Language spoken at home between different Hukou holders

Participants' religions

Of the sample, 69% (55) of participants had a religion. Only 31% (25) claimed that they did not. **Figure 4.1.8** shows the number of participants in each religious group individually**.** The largest religious group was Benzhu (45%), followed by Buddhism (8%). Moreover, 10% (8) of the sample reported that they follow other religions, but only two of them specified which ones. One of them was a young female from an urban neighbourhood. She believed in both Benzhu and Buddhism. Another was a 75-year-old male farmer who stated his religion as "*Xing-Ru-Hui* (兴儒会)". Overall, most of the identified religions in the sample were within the mainstream religions. Being the biggest group within mainstream religions in Dali, Benzhu was likely a critical component of the local culture. The next section will start discussing different themes of the questionnaire survey. It follows the order of local dwellings, ritual practice and folklife, and public space and culture preservation.
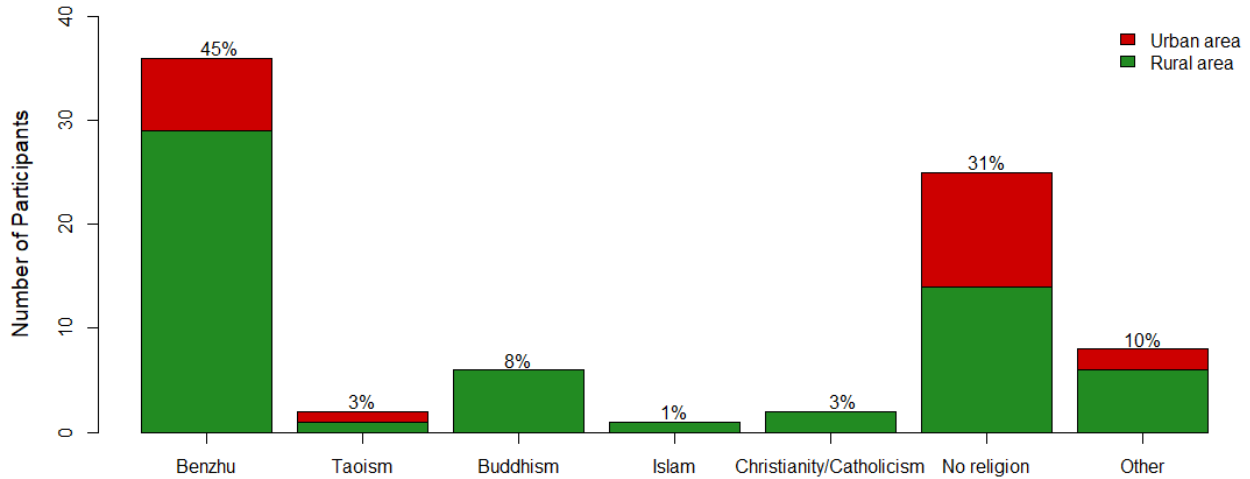
Figure 4.1.8. Participants' religions by development level

4.1.2. Local dwellings

This section explores the local Bai dwelling through the eyes of the survey participants in four parts. It is presented in the following order: building orientation, house type, house exterior and building structure, construction material, and architectural layout.

Building orientation

Sunlight appears to be an important consideration when building local dwellings. As shown in **Figure 4.1.9**, 51% (41) of participants agreed that sunlight was the main factor of building orientation, followed by 15% (12) of who reported "Street". In the "Other" factor group, two of them (10%) had made multiple choices but the sunlight was still one of the main factors.
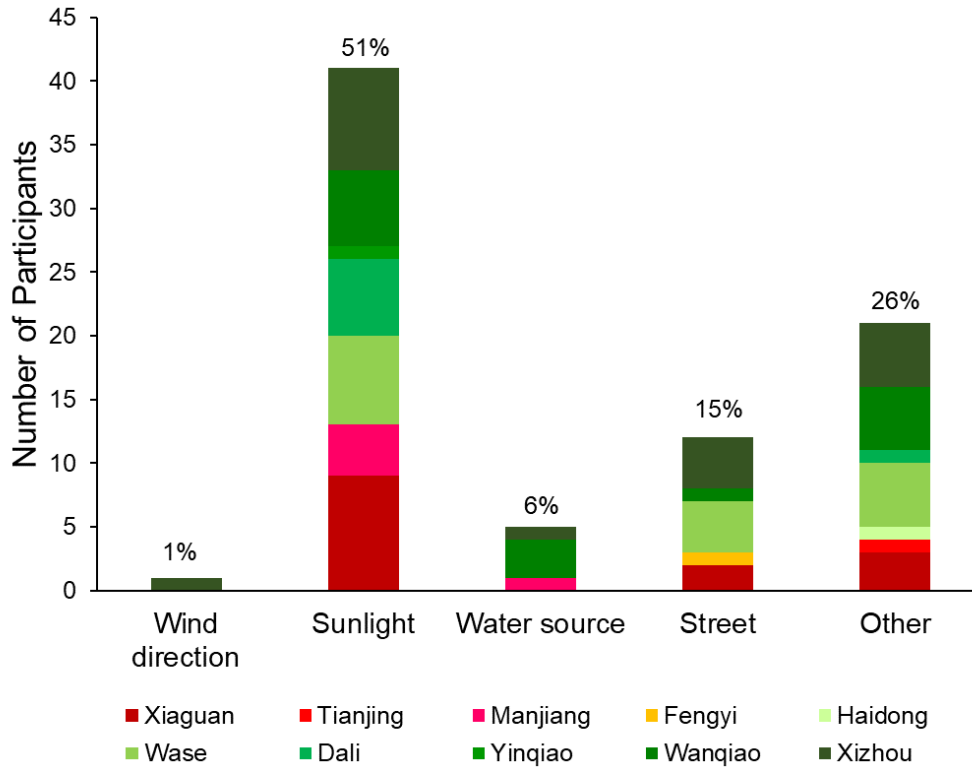
Figure 4.1.9. Main factor of building orientation by township/district

Figure 4.1.10(a) shows that many participants had an East-facing home and considered sunlight as a significant factor for the orientation of buildings. In **Figure 4.1.10(b)**, East-facing buildings were identified as the most popular building orientation regardless of participants' religions[57]. By orienting to the East, homes can receive sunlight in the morning. The screen wall will also bounce light into the courtyard as the sun moves West in the afternoon (Sun, 2016). It becomes apparent that local dwellings are still incorporating traditional knowledge.

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[57] Home buyers in China usually consult the Feng Shui master for the best building orientation, but Feng Shui originated in Taoism. It is necessary to see if religion can influence participants' preference for house orientation.
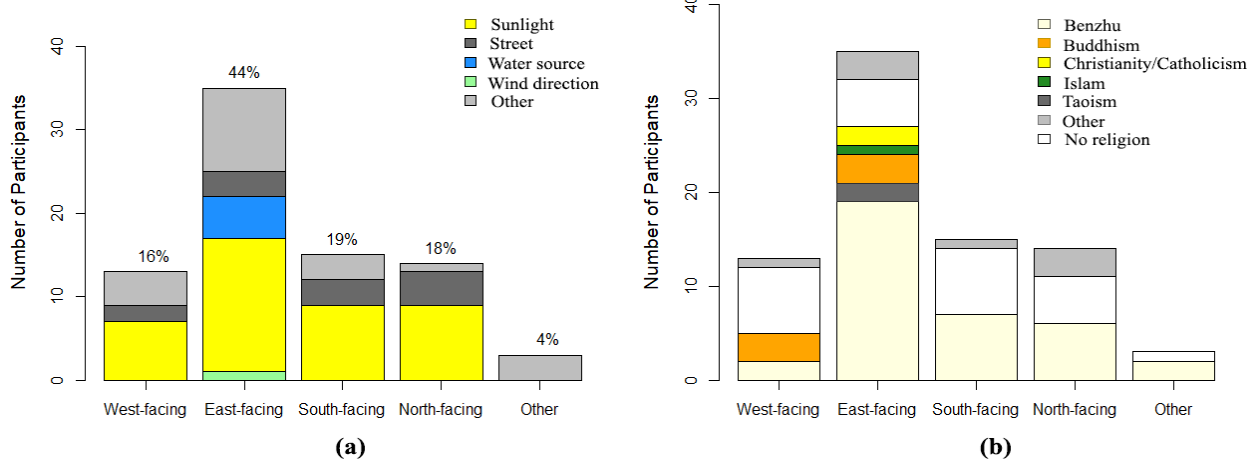
Figure 4.1.10. Building orientation by environmental factors and religions

The building orientation may also relate to the topography of the place of residence. For example, there were five rural participants who lived in an East-facing house in Wanqiao, near the water. They reported that the water source was the main factor of building orientation. Since their houses were East-facing, they could enjoy the beautiful view of the Erhai lake. Among 44% (35) of participants who had an East-facing residence, 31% (25) of them lived on the West coast of Erhai Lake. By taking advantage of the topography, these participants could have their houses facing the lake and its back to the mountain (Sun, 2016). Nevertheless, buildings that were influenced by the street had different building orientations[58]. Yet, participants who were living near the street likely had their houses facing the street so it would be easier to access to the road network.

House type

Figure 4.1.11(a) shows that the sample has two main types of residential housing. 45% (36) of participants were living in modern residential housing while 35% (28) of participants were living in traditional Bai dwellings. In **Figure 4.1.11(b)**, most traditional dwellings were in rural areas, but these areas also had a significant number of modern buildings. Urban areas, on the other

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[58] It is difficult to track the geographical pattern for these buildings because participants did not provide their mailing addresses.

hand, had mostly only modern homes. Among participants who had moved before, 31% (11) of them had moved from a different style of residence to a modern building in the urban area. Additionally, 25% (9) of these participants had moved to a Bai dwelling that was like their former residences. For those who had moved before and lived in rural neighbourhoods during the time of the survey, they tended to live in similar style homes. Overall, the rural area appears to better conserve Bai dwellings than the urban area.
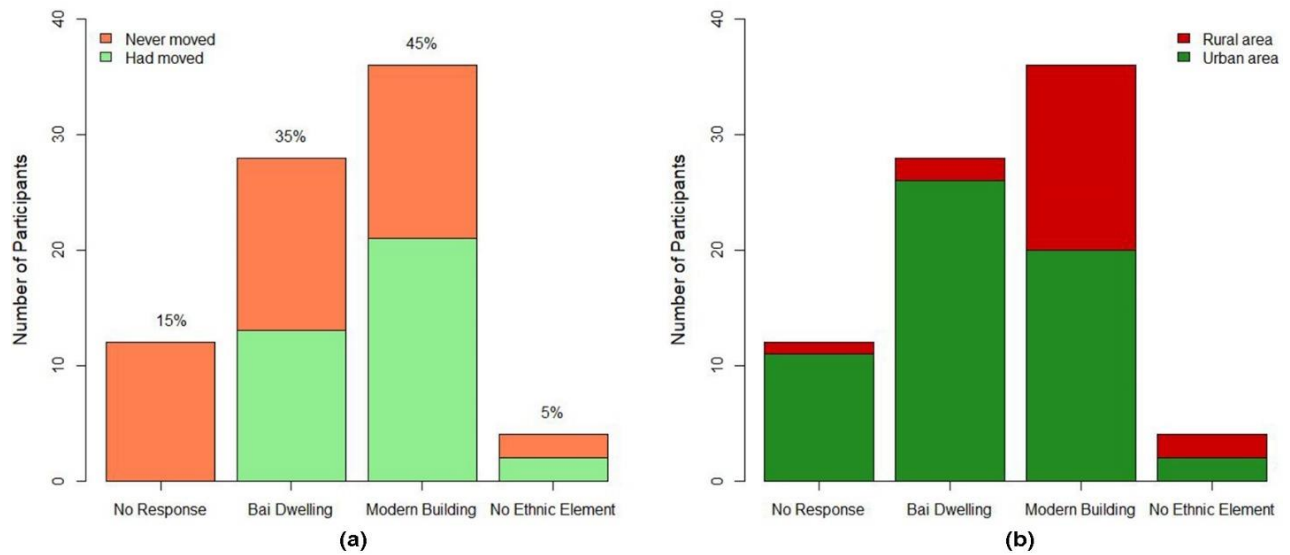
Figure 4.1.11. Architectural style of the participant's current residence

Colour for house exterior

The most popular colour for a house exterior in Dali was white. In the sample, it was the main colour chosen for both traditional dwellings and modern buildings. As illustrated in **Figure 4.1.12(a)**, 85% (68) of participants claimed that white was the primary colour of their residences. However, 52% (42) of participants who chose the colour white actually lived with their parents. **Figure 4.1.12(b)** shows that these participants included 61% (49) of those who used limewash paint for their exterior walls, 13% (10) used decorative tiles and 11% (9) made use of other materials. Among the nine participants who reported "Other" materials for the exterior wall, two of them stated that they used both limewash and decorative tiles. It appears that limewash is the

most used material for exterior finishes. Concurrently, religions have little influence on participants' preferences for white colour.
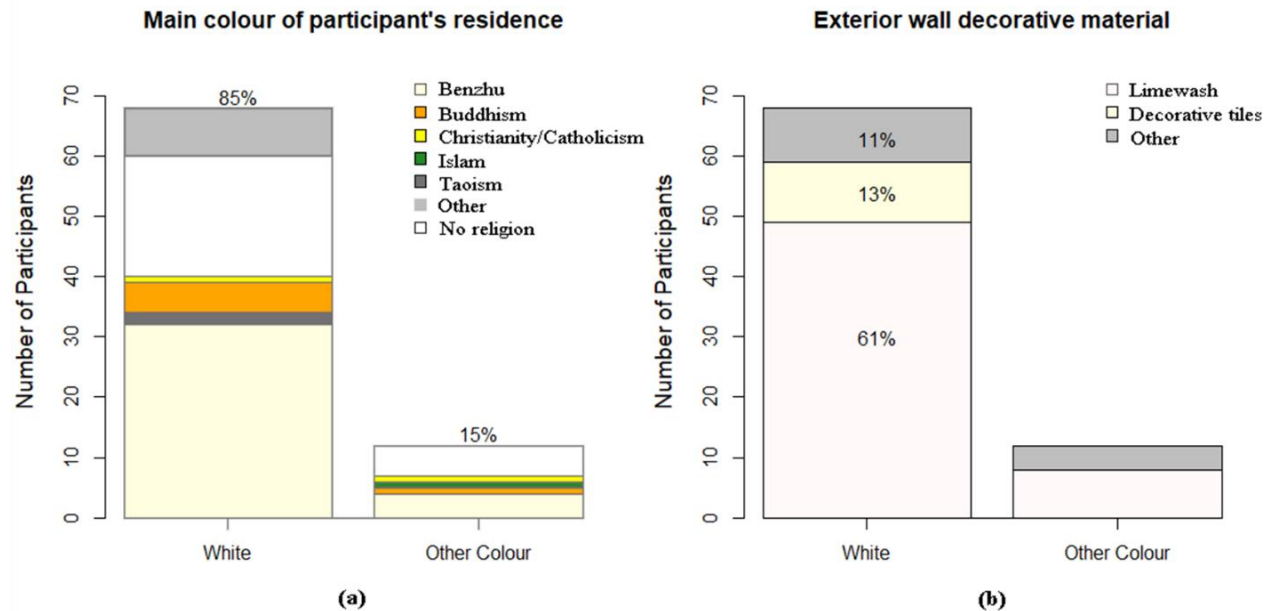
Figure 4.1.12. Main colour for local buildings

In general, local dwellings tend to retain white as the theme colour for the exterior. **Figure 4.1.13(a)** depicts an overall impression of local dwellings at the community level. 66% (53) of participants felt like a key element to the dwellings in their neighbourhoods were white walls and grey roofs. However, six (8%) participants disagreed with this impression. There was no evidence to justify why, but these six people reported that the houses in their neighbourhood did not have white walls or grey roofs on their own houses. Moreover, there were 26% (21) of participants who answered "Neutral". They were more of rural than urban participants. Respondents from rural areas might pay less attention to the architectural style in their neighbourhoods than urban participants.

Figure 4.1.13(b) illustrates that among the participants whose neighbourhoods had extensively applied the style of white walls and grey roofs, 43% (34) of them had a residence that was built with a steel and concrete structure while 16% (13) had a residence that was built with

brick and wood. 25% (20) of survey respondents' houses were identified as modern architectures in comparison to 28% (22) of them were recognized as traditional Bai dwellings. Apparently, "white walls and grey roofs" reflected the mainstream aesthetic components in local architecture, and it was popular in both traditional and modern houses.
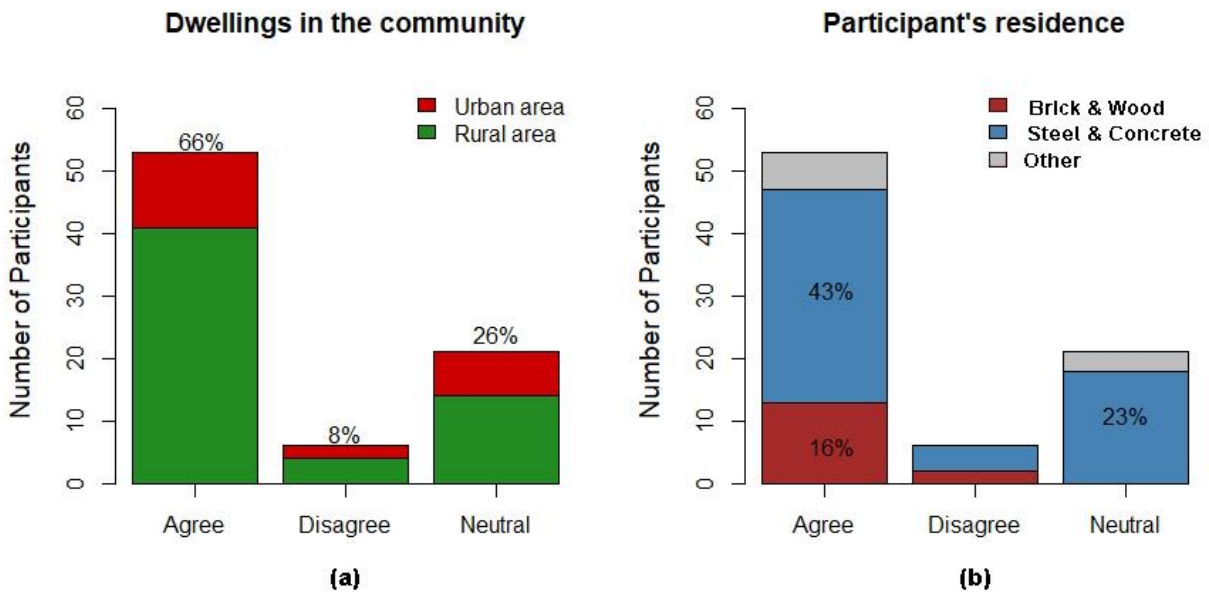
Figure 4.1.13. Application of "white walls and grey roofs"

Building structure

The application of a traditional structure[59] was less popular than the traditional house exterior in the surveyed areas. Only 19% (15) of participants' houses had a traditional structure of brick and wood in comparison to 70% (56) that had steel and concrete. Moreover, there were four (5%) respondents who reported that their houses employed both. Apparently, not all traditional Bai dwellings had a brick and wood structure. Only eight (29%) that were built with this structure, while 54% (15 out of 28) of traditional houses in the sample used steel and concrete. Overall, the

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[59] Depending on the place of residency and the financial condition of the family, the traditional structure of Bai dwellings in Dali could be either clay and wood, stone and wood, or brick and wood.

steel and concrete structure was commonly used in local dwellings and it would become the trend towards housing construction in Dali.

House decoration

Taking into consideration the participants' perceptions of their neighbourhood dwellings, applying traditional decorative features is positively correlated to the style of white walls and grey roofs. These features on Bai dwellings include wall paintings, wood carvings, stone carvings, and clay sculptures. **Figure 4.1.14(a)** shows the adoption of traditional decorative features in participants' neighbourhoods. 63% (50) of participants in the sample, mostly those living in rural areas, agreed that dwellings in their neighbourhoods usually had these decorative features. Only nine (11%) participants disagreed. These nine participants included six rural residents who had painted decorations on their homes, and three urban participants who did not have any decoration. These respondents might consider their neighbourhoods as having a low level of painted decorations. There were also 26% (21) of participants answered "Neutral". More than half of them were from rural areas (n=13) and had traditional decorative features on their houses (n=12). It is possible that these rural participants might be less likely to observe the surroundings of their neighbourhoods, or that the dwellings in these neighbourhoods do not utilize all the decorative features mentioned in the surveyed.
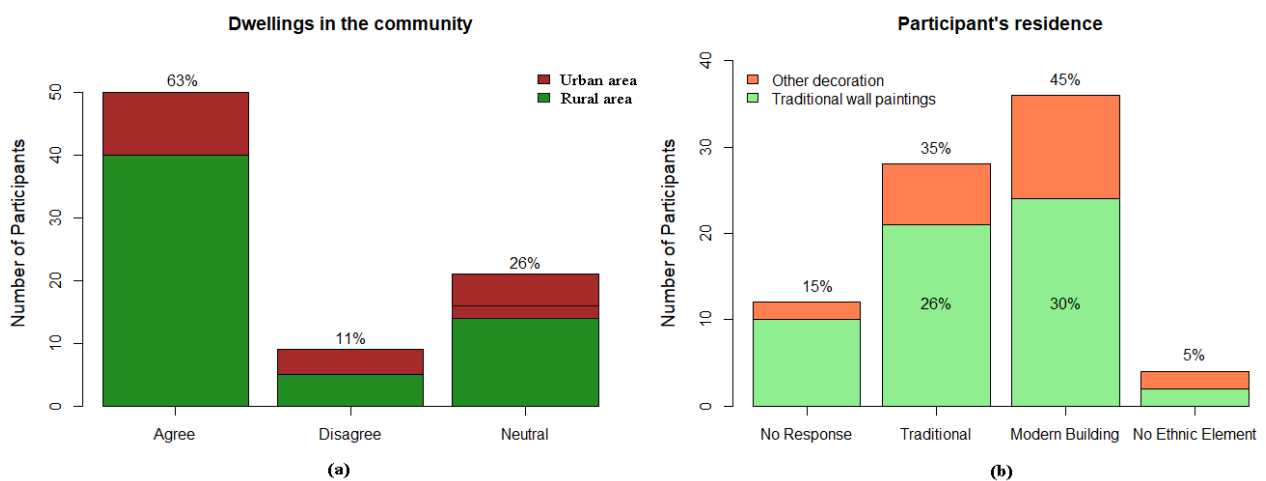
Figure 4.1.14. Adoption of traditional decorative features

Wall paintings were generally applied to buildings of all types and statuses. **Figure 4.1.14(b)** illustrates how wall paintings have been used in different types of buildings. 71% (57) of participants reported that in their homes, they had wall paintings of flowers and birds, landscapes, and poems. This range of imagery not only appeared to be popular in traditional Bai dwellings but in modern architecture as well. This included 26% (21) of traditional dwellings and 30% (24) of modern residences. Wall paintings were shown to be the most popular traditional decorative feature in Dali.

Construction material

Figure 4.1.15(a) portrays the participants' impressions of using stones [60] in their neighbourhood. 60% (48) of participants, mostly living in rural areas, felt like dwellings in their neighbourhoods had used stones extensively. Only eight (10%) participants disagreed. Half of these eight participants were from urban areas and expressed that they did not feel dwellings in their neighbourhoods had traditional decorative features either[61]. The majority (7) of these eight participants lived in a modern building that was built with steel and concrete. Different than the adoption of traditional decorative features, there were slightly more participants (30%) who could not confirm whether stones were commonly used in their neighbourhoods. This might suggest that stone has become less popular.

As illustrated in the previous section, painted decoration seemed to be more popular than stone and wood carvings. Marble and wood carving as a decorative material had dropped in each type of building in comparison to mural. **Figure 4.1.15(b)** shows that only 19% of modern houses and 23% of Bai dwellings had marble or wood carving. In fact, half (51%) of participants reported that they did not have any marble or wood carving in their residences. Among the 49% (39) of

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[60] Stone in Dali City included Marble, bluestone, and cobblestone.

[61] They consisted of two merchants who had high school education and two employees of the public sector who had university education.

participants who had utilized marbles and wood carvings as decoration, only four were urban residents. It was likely that most urban dwellings did not make use of marble or wood carvings. This might be because many houses in urban neighbourhoods were developed by real estate companies[62].
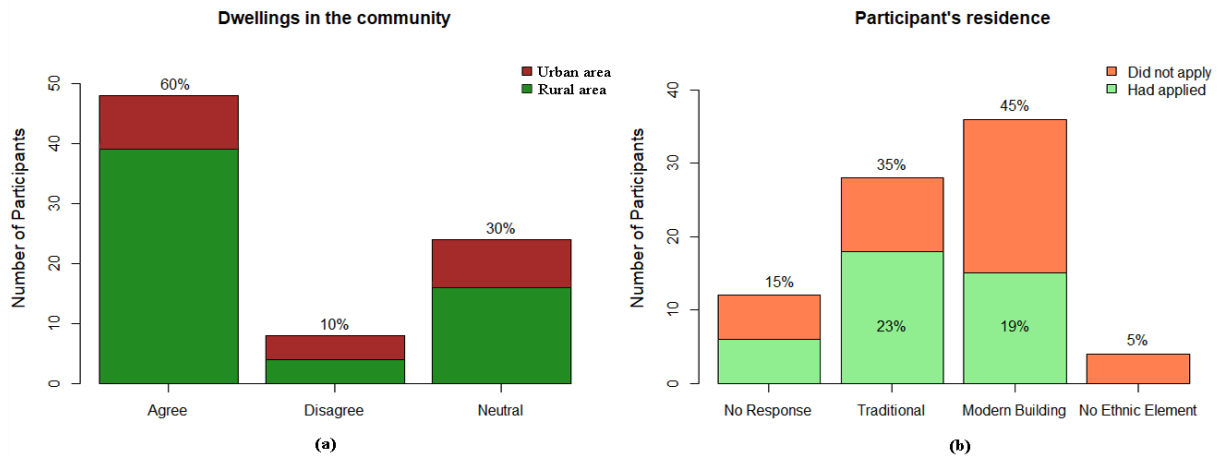
Figure 4.1.15. Stones and wood carvings used for building constructions

Although stones and woods are relatively expensive materials, the adoption of marble and wood carvings seems to have not been correlated to income. Among the thirty-nine participants whose houses had these materials, 54% (21) of them had earned less than the average income group (2,001- 4,000 CNY monthly), eleven (28%) of them had earned more than the average income group, and only five (13%) participants had a monthly salary that was higher than 6,000 CNY. In general, local dwellings applied less marble and wood carving than mural, but many Bai houses still retained these traditional features as a significant decoration.

Architectural layout

Traditional architectural layouts in Dali City included "three buildings and one screen wall" and "four buildings and five courtyards" (see **Figure 4.1.16**[63]). Apparently, traditional architectural

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[62] The urban area had many real estate developments which were usually mid-rise and high-rise condominiums.

[63] Pictures were taken in two different villages in Dali Town during the summer of 2019.

layouts were conserved well in the rural and long-established communities, such as villages in Xizhou, Wanqiao, and Wase. These rural communities also had a great number of traditional dwellings that applied the "white walls and grey roofs" style extensively.

Figure 4.1.16. Traditional architectural layouts

As depicted in **Figure 4.1.17**, 55% (44) of participants thought that most of the houses in their neighbourhoods had a traditional architectural layout while the other 45% (36) of participants did not. For those who disagreed, the housing in their neighbourhood might have other types of layouts that are modernized. Many urban communities, especially downtown, did not maintain these architectural layouts.
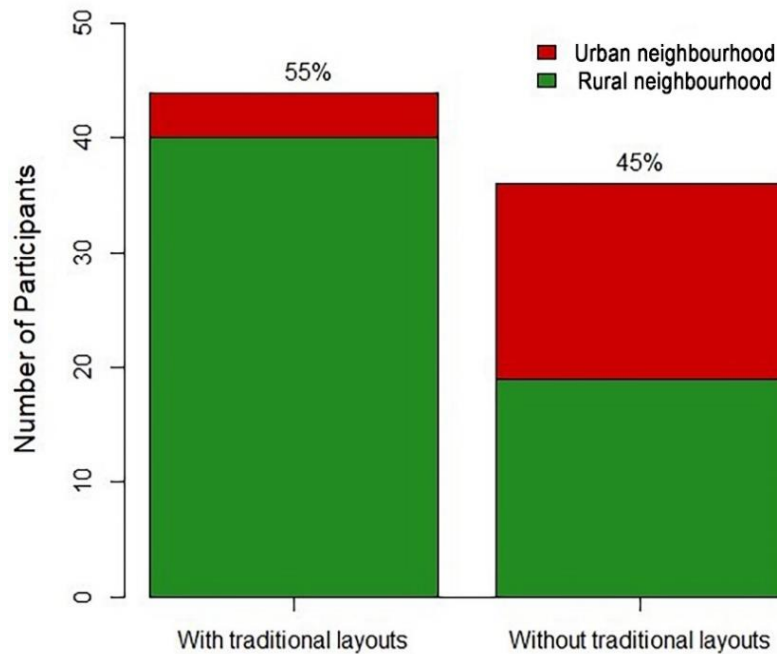
Figure 4.1.17. Impression of traditional architectural layouts

Since the rural area has a relatively stable population and is less likely to have rapid real estate development due to the farmland conservation policy [64], traditional Bai dwellings were concentrated there. The satellite images in Google Earth show that the land coverage in these rural communities has experienced little change between 2010 and 2019. Moreover, traditional architectural layouts were designed for a big household. In the past, extended families often resided together in the same courtyard dwelling. The urban area's decline in traditional courtyard houses might reflect the fact that there has been a change in the family structure of Bai households. It is possible that the family size has become smaller. Section 4.1.3 will discuss more on the current Bai community culture.

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[64] In order to ensure food security and to protect farmer's rights, farmlands and rural housing lands are protected under government regulations.

4.1.3. Ritual practice and folklife

This section first discusses the worship of Benzhu gods and ancestors in rural and urban areas. It will then follow a discussion of different ways of festival celebration. These are significant aspects of the Bai cultural traditions that carry a special meaning for ethnic identity.

Worship of Benzhu gods and ancestors

Benzhu temple is an important place for ritual practice in the Bai community[65]. Most participants reported that there was a Benzhu temple in their neighbourhoods (84%, n=67), except for thirteen (16%) participants who were mostly from urban areas. This finding is consistent with the statistic of participants' religions, in which Benzhu is the largest religious group and is prominent in rural areas. There were relatively fewer participants who worshiped Benzhu gods in downtown (Xiaguan). The diversity of lifestyle in urban areas compared to rural areas could be part of the explanation.

Ancestor worship seems like a crucial ritual practice in Bai culture. Among local households, it is common to place ancestry tablets[66] at home. In the sample, 60% (48) of participants had ancestry tablets at home. Among participants who did not (n=32), 31% (10) of them believed in Benzhu, 22% (7) had other religions, and 47% (15) did not follow any religion at all. Many of these participants (23 out of 32) lived in rural areas. **Figure 4.1.18** illustrates how the traditional practice varies between different types of residences. There was no correlation between house type and the ancestry tablet enshrined at home. The probability of having an ancestry tablet at home was about the same between traditional dwellings and modern homes. It is likely that more and more Bai households are choosing not to place an ancestry tablet at home.

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[65] In addition to village gods, some Benzhu temples also have ancestral halls where residents can place a tablet for their ancestors. The "Qingguan Miao" (Qingguan Temple) in Dali Ancient City is one of these Benzhu temples.

[66] An ancestry tablet is usually a small piece of wooden plate with ancestors' names on it. The ancestry tablet symbolizes the spirit of ancestors is still existing in this world.
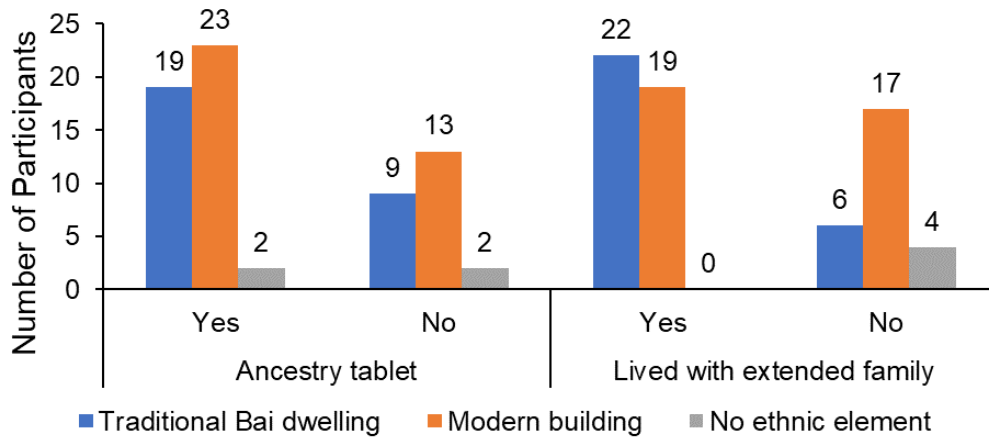
Figure 4.1.18. Traditional practice by house type

The proportion of participants living with their extended family approximated to that of who placed ancestry tablets at home. This may imply that the older generation prefers to have ancestry tablets at home. It was interesting to find that not all rural households were living with their extended family. Only 68% (40 out of 59) of rural participants confirmed that they lived with extended family. Perhaps not coincidently, many rural participants had adapted to a different lifestyle. Many urban Bai households appear to live in a nuclear family. Only seven (33%) urban participants were living with their extended family (7 out of 21). This change in family structure may justify why traditional architectural layouts have become less popular and why not many traditional Bai houses remain in the urban area. Furthermore, participants who lived in a modern dwelling were less likely to live with extended family in comparison to participants who lived in a traditional dwelling.

Living with parents may influence the level of traditional features that appear at local homes. **Figure 4.1.19** shows that participants live with extended family have a much higher chance to have traditional features at home than those do not live with extended family. Furthermore, senior family members are likely to ask for preserving the ancestry tablet and using traditional materials in house construction.

Figure 4.1.19. Bai traditional features at local homes

Traditional festival and Bai costume

Traditional festival[67] is a significant component of folklife in ethnic autonomous regions. Celebrations of traditional Bai festivals prevailed in almost all surveyed areas. 94% (75) of participants stated that there were celebrations for traditional festivals in their neighbourhoods. Only five (6%) urban participants said there were not. Apparently, the celebration for Bai festivals is still retained as a popular cultural tradition in Dali. However, some urban communities may be less likely to celebrate these festivals as they are multi-ethnic and managed differently than rural villages.

Bai costumes also have a symbolic meaning for the folklife in Dali[68]. However, these costumes appear to be less prevalent than the celebration of traditional festivals. According to the sample, 74% (59) of participants reported that there were residents wearing Bai costumes in their neighbourhoods. Most of them lived in rural areas (n=51). Nonetheless, it was not evident if the

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[67] For example, Benzhu festival is the biggest festival of the year in Dali City. Each Bai village organizes celebration for their Benzhu (village god).

[68] One young female student from Manjiang Village was emphatic in the focus group discussion that Bai costume was the best representation of their traditional culture in Dali City. Bai costume not only had a symbolic value of the local landscape but also expressed the traditional knowledge of tie-dye technique and handicraft.

costumes were generally used as casual wear in these neighbourhoods. On the other hand, 26% (21) of participants had not witnessed anyone in their neighbourhoods wearing traditional clothing. Eight of these participants were from rural areas while the remaining thirteen lived in urban areas. Explicitly, there were more rural residents wearing Bai costumes than urban residents. Urban residents who were living in downtown were even less likely to wear Bai costume in daily life.

4.1.4. Public space and culture preservation

The intraclass correlation coefficient (ICC)[69] is calculated to assess participants' agreement upon landscaping and the conservation of Bai culture. The ICC value is 0.772, it indicates good inter-rater reliability[70] and shows a high agreement among participants' ratings of Dali's built environment and culture preservation. More details are provided in this section. Respondents' impressions of the public space are discussed first, then, their perceptions of preserving Bai culture.

Typical plants in public space

As shown in **Figure 4.1.20**, "Big green tree" is one of a typical plant[71] in Dali. It holds symbolic meaning for public space[72].

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[69] The intraclass correlation coefficient ranges from zero (total disagreement) to one (perfect agreement), and this method is strongly depended on the variance of the assessed population (Costa-Santos, Bernardes, Ayres-de-Campos, Costa, A. & Costa, C., 2011).

[70] ICC values less than 0.5 were suggested as poor, values between 0.5 and 0.75 were considered moderate, and values greater than 0.75 could be concluded to be good or excellent (Portney & Watkins, 2009).

[71] Typical plants in Dali City included camellia, orchid, azalea, bamboo, and "big green tree" (Ficus hookeriana).

[72] The space nearby the "big green tree" is always a place for leisure and community events.

Figure 4.1.20. "Big green trees" in Dali Town

Figure 4.1.21 compares participants' impressions of typical plants at the municipal level and at the community level. It shows that the level of typical plants in their neighbourhood is almost consistent with the municipal level. Particularly, 70% (56) of participants agreed that there was a "big green tree" in their neighbourhood while 5% (4) participants disagreed. However, the "big green tree" was more common in rural villages in comparison to urban communities. Most participants (58%, n=46) reported that the "big green tree" could be found in the community centre, while 18% (14) of participants suggested the "village entrance" and "other location" respectively. Six (8%) participants did not respond which maybe because they did not know how to answer, or they had never paid attention to the location of a tree. Apparently, a typical plant like "big green trees" can be easily found in the community centre either in rural or urban areas.
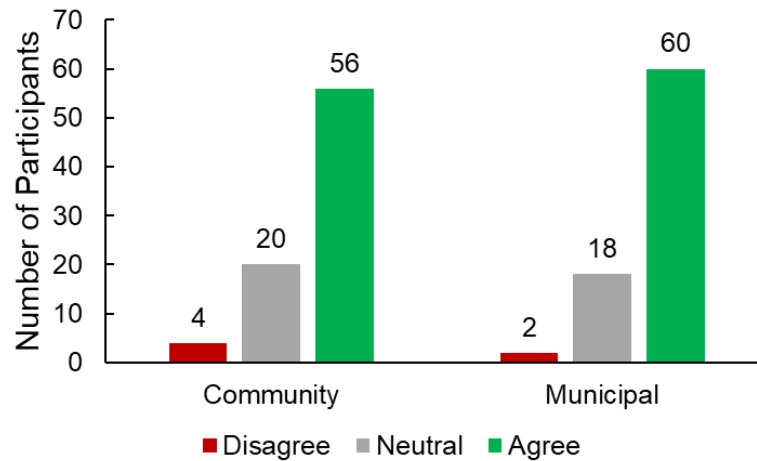
Figure 4.1.21. Participants' responses to the existence of typical plants

Bai culture preservation

According to survey participants, Dali's built environment does generally reflect the characteristics of Bai culture. There were more men taking a position of agreement than women, and more women taking a neutral position. Perhaps these male participants were more determined and knew more about the city since they had an older average age[73]. **Figure 4.1.22** depicts residents' perspectives on the built environment over several aspects. By excluding participants who felt neutral, 85% (49) of participants agreed that the built environment in the city had reflected the art of traditional handicrafts[74], leaving only nine (16%) participants who disagreed. There were slightly more men (6) who disagreed than women (3). On the other hand, the majority (73%, n=22) of participants within the neutral category were young (aged 18-35).

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[73] The average age for female participants fell in the 26-35 age group while the average age for male participants fell in the 36-55 age group.

[74] Bai traditional handicrafts included wood carving, stone carving, wall painting, clay modelling, and tie-dye.
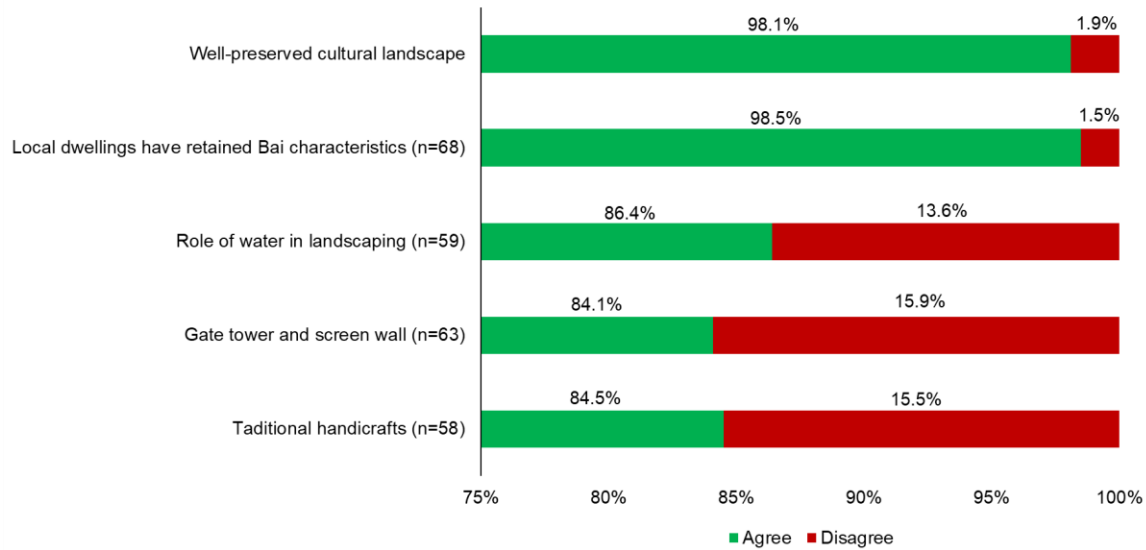
Figure 4.1.22. Participants' perspectives on Dali's landscape

86% of participants (86%, n=51) felt that water[75] had played a role in the city's landscaping while eight (14%) participants disagreed. Most of the participants who agreed also highlighted that there were water streams in their neighbourhoods (63%, n=32). There were also more young participants who were unsure about the use of water in landscaping. Young participants might pay less attention to that. Overall, traditional handicrafts, gate towers and screen walls, and water streams have played a significant role in creating the city's image.

Participants in the sample generally thought that local dwellings have retained the Bai decorative characteristics. In this question, fewer participants took a neutral position in comparison to other perspectives of the artificial landscape in Dali. Only twelve (15%) participants were unsure about whether local dwellings had retained the Bai decorative styles. These participants who were unsure relatively had lower education and had never moved. However, whether a participant had moved did not affect how this person perceived the conservation of Bai architectural characteristics. Much of the sample agreed that wall decorations, gate towers, and screen walls had displayed the Bai architectural traditions (99%, n=67). Only one (1%) elderly female participant from an urban

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[75] Water has an aesthetic value in traditional landscape design. Many traditional gardens make use of water and stones to create a pleasant scenic area.

neighbourhood disagreed. It is quite explicit that the level of Bai architectural traditions is lower in urban areas. Nonetheless, the sample had a positive perception of culture preservation according to their common impression of extensive use of Bai decorative styles in local houses.

Dali has experienced an increasing growth in tourism. Along with the flow of capital and new immigrants, there were different levels of cultural exchanges across the city. The questionnaire asked if tourism had a cultural impact. 98% (52) of participants agreed that the Bai culture was well preserved. Regardless, in the neutral category, only one (2%) young female student from a rural neighbourhood disagreed. Different than the conservation of Bai architecture in Dali (24 participants strongly agreed), the degree of agreement on culture preservation was slightly lower (18 participants strongly agreed). This could be affected by a higher level of "neutral" feeling. Those who felt neutral mostly consisted of young and middle-aged participants, they were not sure whether Bai culture was well preserved.

The questionnaire also asked how participants perceived the cultural impact of tourism in Dali. Nearly half (46%, n=37) of the sample agreed that the development of tourism was positive to the preservation of Bai culture. This was commonly agreed upon by both urban and rural residents. Only ten (13%) participants suggested that tourism had a negative influence on Bai culture. These ten participants were mostly rural residents, young to middle-age, and had either a college or university level education. 26% (21) of participants thought that tourism had little impact on Bai culture and twelve (15%) were unaware. Only nine (11%) respondents had provided their own suggestions on culture conservation. These participants commonly suggested that more government intervention is required to enhance the cultural consciousness, preserve Bai architectures, and maintain the traditional folklife. They seemed to believe that government policies, propaganda, and funding are crucial for conserving Bai culture during urbanization.

Figure 4.1.23 illustrates how participants agree with culture preservation under urbanization, and concurrently how participants perceive the cultural impacts of tourism. Among the participants who agreed that Bai culture has been well conserved, 35% suggested that tourism has a positive

impact on Bai culture. Only two (3%) participants considered tourism as a negative influence. The rest of the participants within this category were either unsure (13%) or suggested that tourism has little cultural impact (15%). Participants who felt neutral about the condition of cultural preservation had almost equal agreements on each impact category. Overall, most respondents appreciated the current outcome of culture preservation and a significant number of participants considered tourism as being beneficial to Bai culture.

Unaware any impact — 3% / 13%
Little tourism impact — 10% / 15%
Negative tourism impact — 10% / 3%
Positive tourism impact — 11% / 35%

■ Not sure   ■ culture is well preserved
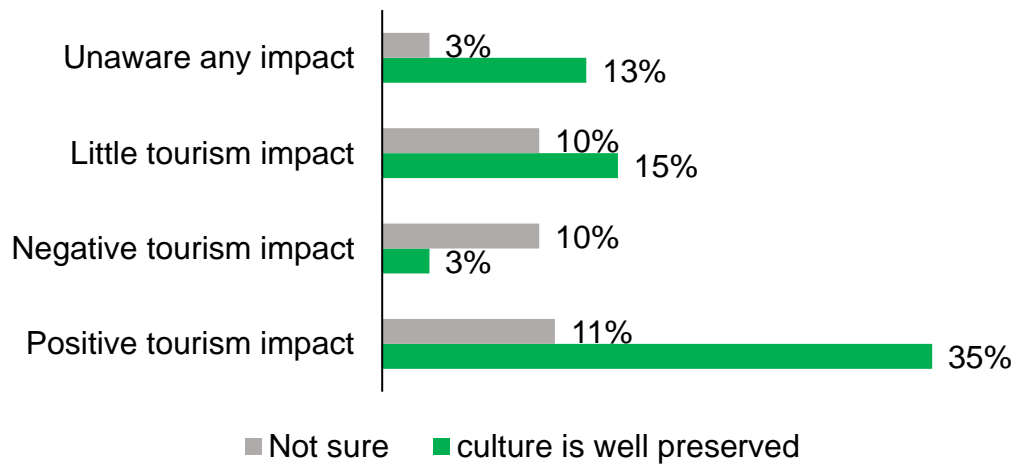
Figure 4.1.23. Culture preservation condition by impact of tourism

The last question in the survey was open-ended. 46% (37) of the sample had given advice on how to conserve Bai culture during the urbanization process. Of this 46%, there were slightly more men (n=22) offering suggestions than women (n=18). Participants who had higher education were also more likely to give advice than those who had not completed the nine-year compulsory education. Many of these participants were university students (n=12), followed by farmers (n=9) and government employees (n=5). Participants' suggestions can be grouped into four categories – government policies (n=16), propaganda (n=9), government leadership[76] (n=4), and collective effort[77] (n=8). The keyword "government" was frequently mentioned by participants, which

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[76] Participants stated that everyone should make efforts under the leadership of the government instead of using the plural "we".

[77] Most participants in this category briefly stated what should be done, the word "government" was not mentioned.

reflects that top-down thinking is very common in China. Many participants suggested that the government should take more responsibility for conserving Bai culture.

Many of the suggestions made by participants were merely a statement of the need to preserve traditional Bai culture. Only eleven out of thirty-seven participants had specified what and how to do. These eleven participants frequently pointed out the need to speak Bai language (n=5) and to preserve the traditional Bai dwelling (n=8). Two rural middle-aged male participants considered government funding and financial support as an important booster for promoting Bai language speaking and traditional Bai houses. New schooling methods and education programs were other solutions that had been proposed by four participants. They included two young female students who suggested that schools should open new courses on Bai language and traditional Bai handicrafts. Moreover, fifteen (19%) participants suggested the need to enhance Bai cultural consciousness, and five (6%) of them wanted to fully conserve traditional Bai culture. These participants seemed to have a strong emotional connection to cultural preservation.

According to the content of all these suggestions, questionnaire participants frequently mentioned the need to preserve "Dali Bai cultural characteristics". Nonetheless, it is possible that participants' understandings of this term were affected by their personal knowledge. Perhaps few of them had a good idea of what these characteristics were, and their individual impression of Bai characteristics could be entirely out of line with another's. The next section will present the result of focus group analysis. It seeks to investigate the extent to which LTK in Dali are explained by residents' perceptions of the built environment, Bai language, ritual practice, and folklife.

4.2. Focus groups

The data from the focus group discussions helped interpret most findings from the questionnaire survey. The main purpose of the focus groups was to understand and explain how urbanization influences the feelings, attitudes, and behaviours of local Bai people toward LTK.

This section presents the results of the focus group discussions in two parts. It first introduces the demographic background of participants from focus group number 1, 2, and 3 accordingly. After that, the results are summarized into five topics – local Bai language, local dwellings, ritual practices, traditional festivals, costumes, and policy regulations. The first focus group had three participants from a village near the Dali Ancient City. They included a couple, Mr. and Mrs. Zhang, who were in their 50s. And Mr. Wang in his 40s. All three participants had a job and were financially independent. They were also owners of rental properties[78]. **Figure 4.2.1** shows the landscape of a rural village, where the focus group was conducted.

Figure 4.2.1. Rural villages nearby a tourist destination

The second focus group contained three young working professionals. These participants were between 26 to 32 years of age, single, and financially independent. Mr. Gao and Mr. Yang were from different urban neighbourhoods in Xiaguan, while Miss Zhang was from a rural neighbourhood. **Figure 4.2.2** shows the landscape of urban neighbourhoods in Dali.

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[78] Dali Ancient City is one of the famous tourist destinations in Dali City. Many villagers in the nearby villages had built rental properties to lease to small business and tourists.

Figure 4.2.2. Urban neighbourhoods in Dali

The third focus group consisted of five university students who were from a Village in the City (VIC). They were Mr. Duan, Mr. Li, Mr. Bi, Miss Yang, and Miss Zhao. Mr. Duan, Mr. Yang, and Mr. Bi went to university in Kunming, the capital city of Yunnan Province. Miss Yang was studying at a local university and Miss Zhao was studying in another province. All participants were in their early 20s, financially dependent, and lived with their parents.

Figure 4.2.3. Villages in Dali's urban area

4.2.1. Bai culture in Dali

Like the information retrieved from the last part of the questionnaires, focus group respondents considered local culture to consist of Bai language, traditional dwellings, festivals, and Bai costumes. These cultural aspects have been found different between urban and rural communities. All focus group participants agreed with the questionnaire result—rural communities had more Bai cultural elements than urban communities. They explained that the rural environment would be more supportive of conserving "traditions" since there were less population and more historical landscape.

Each focus group recognized a strong connection between Bai and Han culture as "Bai culture was always convergent to Han culture", but they did not consider it as being a drawback. Participants perceived Bai culture as being developed based on the root of Han culture. As Wang from the second focus group pointed out, "Bai culture has been following developmental patterns of the Han since the ancient time, architecture was one example. I don't think it is bad to integrate with Han culture". Participants felt like it was unfeasible to conserve all traditional Bai culture since it was notably unrealistic to always live in the traditional way. Respondents seem to argue that Bai culture conservation is conditional in practice and that it should be optional. Overall, no respondent had the incentive to preserve all traditions. To "keep up with the current development and make life easier" was the consensus among all focus groups.

4.2.2. Local Bai language

From participants' perspectives, Dali has a well-maintained Bai language environment while receiving increasing influence from Standard Mandarin. Bai language was indispensable for everyday communication. All three focus groups agreed that "locals" (native villagers) usually communicated with each other in Bai language, but communicated with "outsiders" (migrants and tourists) using Mandarin. Now, a lot of the Bai speakers are also speaking Mandarin. Respondents viewed Mandarin as a "must learn" language given that it is considered to be "more useful". This

was especially apparent in urban areas such as Xiaguan, where there has been a growing number of migrants. Although Mandarin has become increasingly popular, Bai language is still an active language that dominates the area. Only two university students in the third focus group thought that the role of Bai language declined, while all other participants disagreed with this proposition. Other focus group participants expressed that most locals were still speaking Bai language every day and were so impressed that children could easily learn the language in the streets. Furthermore, local Bai language has been influenced more by the Dali Han dialect[79]. According to the second focus group, the current Bai language has evolved by incorporating more "Han dialect vocabularies". Mr. Yang's (from the second group) commented about the similarity between Bai language and local Han dialect in his village. In his perception, these two languages were almost the same. All three focus groups perceived Bai language as "one of the local dialects". Mrs. Zhang (from the first group) compared Dali to Guangdong Province as "it is the same as you were in Guangdong, people speak Cantonese, other local dialects, and they also speak Mandarin".

Like some of the questionnaire survey respondents, focus group participants urged to preserve local Bai language since it was more connected to their Bai identity and easier to achieve than preserving the traditional architecture. Focus group participants commonly thought that it would be difficult for them to make commitment to conserve everything in Bai culture, but Bai language was an exception. Different than other cultural elements, Bai language is still a big part of local life and there is no cost for preserving it. Furthermore, Mr. Gao commented that language signified a connection between them and their ancestors, so it is their responsibility to carry it onto the next generations. Although the respondents all perceived it as being, each group had a different opinion on how the next generations are to be taught the language. All focus group participants agreed that a school environment is not required for learning it. Participants in the third focus group perceived this Bai language learning process as an "imperceptible influence". As Miss Yang from the third group stated, "even a newcomer would be able to develop fluent Bai language skill over time

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[79] Dali Han dialect is a local dialect that is different than the standard Mandarin or the Yunnan version of Mandarin.

simply by living in a Bai neighbourhood". Participants in the second group also agreed that learning Bai language was easily taken for granted, and children are not required to learn how to speak it the same way they are to study Mandarin.

All focus group participants considered that it should be a parent's responsibility to teach the next generation Bai language. They noted that many parents from urban areas preferred to teach their children Mandarin as a first language. As Mr. Yang from the second focus group pointed out, recent generations of children living in urban areas tended to learn Mandarin first before learning to speak Bai. Many parents believed that this strategy could prevent children from speaking accented Mandarin. Even though the third focus group agreed that teaching the next generation Bai language was essential for parents, they did suggest that teaching children to speak it as the mother tongue should be optional. The first reason for this belief was that it would be unrealistic in most cases of intermarriage. Secondly, Mandarin is closely connected to a person's social mobility. Like their parents, the third focus group considered that teaching children Mandarin should be a priority because it will give children more opportunity to go to a better school. Different than the participants who were from urban areas, participants from rural areas would give priority to teaching children Bai language. They believed that it was important for children to speak Bai fluently before studying Mandarin. For example, Miss Zhang from second group described how small kids would learn to speak Bai before reaching school-age. She said: "Everyone was speaking Bai language in the village, and children were usually taken care of by their grandparents, no one would speak Mandarin to them". Furthermore, Miss Zhang disagreed with urban residents' pursuit of learning "very standard" Mandarin since the Bai accents did not affect how people understand the conversation.

The experience of the third focus group participants demonstrated that a Bai language environment is critical for gaining proficiency in learning the language. This group of participants recognized that younger generations knew how to speak Bai, but that it was not mandatory for them to speak it at home or at school. Therefore, they usually opted to speak Mandarin. As Mr.

Duan in the third group pointed out: "If I speak in Bai but people beside me do not, then I would not speak it". Mr. Li's experience was typical among Bai youths. He was born in a rural village but raised in the urban area of Dali. "My parents as well as my grandparents only talked to me in Mandarin since I was a kid", Mr. Li explained, "I was too used to the Mandarin environment and I did not know how to speak fluent Bai language until I made friends in the village where villagers speak Bai language most of the time".

4.2.3. Local Bai dwellings

The focus group participants recognized two types of local Bai dwellings. The first type was the traditional dwelling built with local construction materials, such as stones and wood. Respondents referred to this as "old houses". In contrast, the second type of local dwellings participants acknowledged was "new houses". These are modern concrete construction with some Bai architectural traditions. **Figure 4.2.4** shows an example of "old house" on the left and a "new house" on the right.

Figure 4.2.4. "Old houses" versus "new houses"

Decoration

Wood carvings and clay artworks seemed to be not quite popular on local Bai dwellings. Focus group participants did not know much about wood carvings as a house decoration in Dali. They felt that wood carving was more popular in Jianchuan County[80]. Some respondents from the second and third groups pointed out that wood carving and clay arts are very expensive. Ordinary Bai households did not have these decorations except those who were operating a guesthouse. This indicates that not many local families are willing to spend money on them. It also demonstrates that the representation of ethnicity on residential houses has a specific purpose.

The first focus group did not think of traditional Bai dwellings as being much different from other Chinese courtyard houses since many of these courtyard houses elsewhere have also applied the "white wall and grey roof" style. Other features presented on Bai dwellings, such as the screen wall and Feng Shui (风水), were also previously adopted from the old Han dwellings. The third group did not regard the "white walls and grey roof" style and screen walls as key elements of the traditional Bai architecture. Instead, they perceived colourful murals as being the core representative of traditional houses (see **Figure 4.2.5**). Nevertheless, most participants agreed that all these characteristics should be conserved since they have become a part of Bai culture.

Figure 4.2.5. Colourful mural on the screen wall

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[80] Jianchuan County is a county located on the northern part of Dali Bai Autonomous Prefecture.

Bai architecture preservation

Respondents commonly agreed that traditional Bai dwellings were being preserved better in rural areas and scenic spots. All groups shared the same view when they were asked to evaluate the best culturally conserved area in Dali. They ranked Xizhou (rural area) as the best location maintaining Bai architecture preservation. Respondents felt like many old Bai houses have remained in Xizhou, and most villagers were still living a traditional lifestyle. **Figure 4.2.6** depicts the landscape of Zhoucheng Village in Xizhou. The urban area was in a different condition from the rural area. According to the second and the third focus group, there were only a few traditional Bai dwellings remaining in urban areas. Even in suburban villages, many people were living in modern dwellings. One exception to this is both extremely rich and extremely poor families. Wealthy families may choose to live in traditional dwellings since they can afford to the upgrades to meet a modern lifestyle. Inversely, poor families can only live in their old Bai homes because they are not able to afford either the renovation fee or the cost of building a modern dwelling.

Figure 4.2.6. Zhoucheng Village, Xizhou

Focus group participants expressed full appreciation towards the traditional decorative features on Bai dwellings. Ideally, they would like to preserve all these features and to live in traditional dwellings. However, this has been viewed as impractical. None of the respondents really showed interest in living in an "old fashion" dwelling for more than one week. Respondents suggested that traditional Bai houses had three kinds of disadvantages. First, "old houses" are less

functional. According to the first and the third groups, these dwellings are super inconvenient in terms of the layout and amount of daylighting. The second group pointed out that bathrooms were not allowed to be built inside the traditional Bai house. This means that someone living in a traditional dwelling is required to leave their property so that they can use a public toilet. The second disadvantage is that these houses can hardly provide economic benefits. All three groups preferred modern houses because the extra levels can provide them a source of rental income. Traditional Bai architecture is not able to build more than two storeys, so landlords are unable to build more rental units for profit. Another disadvantage of these dwellings is its costly construction and maintenance works. All respondents found that the cost of traditional building materials and labour is much higher than that in modern home construction. Miss Zhang from the second group highlighted the importance of savings when describing the process of paying for a traditional dwelling to be made. Different than when buying a condo unit in the urban area, no one can apply for a bank mortgage for rural houses and the builders request full payments in cash. Furthermore, traditional houses require constant maintenance. For example, grass grows on the old sloped roof every year which takes a lot of time when removing it off the roof. Mr. Yang from the second group complained, "Those maintenance was very troublesome".

Given the disadvantages of traditional Bai dwellings, respondents all perceived modern houses to be more realistic to live in. They also considered the reducing number of traditional dwellings in Dali as a general trend of urbanization. More local Bai people were going to give up traditional dwellings, and many old homes were being demolished to make room for modern architecture. **Figure 4.2.7** shows a construction site in a suburban village where a traditional Bai dwelling is being destroyed.

Figure 4.2.7. A construction site in a suburban village

Some of the traditional features of Bai dwellings—the grey sloped roof, screen wall, wood carving, marble decoration, and wall painting—are still being applied to many modern houses. Although most participants agreed that these traditional architectural features should be conserved, not all of them were willing to spend money on these architectural features, even if they were to become rich. There were different opinions between the young and old generations, and between residents in the scenic area and urban area. The first group who owned rental properties near a tourist spot said that they would want to spend money on the traditional aesthetic design for their new houses. Since many of their neighbours were doing it, they also considered that Bai architectural traditions make their houses looked more attractive.

Members of the second and third groups felt that Bai architecture preservation should respect personal choices. They did not see the need to make their houses being attractive with more Bai elements. Miss Zhang, from the second group, argued that these traditional architectural features were significant since they had cultural meanings. However, she personally preferred modern designs. She also pointed out that many villagers in her area would choose the modern style if they were not required to follow the culture preservation policy. This policy requires houses to follow a design of "white walls and grey roof" design with the used of limewash paint (more details are discussed in section 4.2.7). **Figure 4.2.8** shows examples of modern Bai dwellings in villages. The

building on the left located in a suburban village where the policy is not mandatory. This property has only kept the gate tower from the traditional dwelling.

Figure 4.2.8. Modern Bai dwellings in villages

The young respondents felt that many Bai architectural traditions were "gorgeous but useless" nowadays, especially the screen wall. Mr. Yang and Mr. Gao from the second group perceived these features as merely an expression of rich households. The modern house on the right in **Figure 4.2.8** shows a screen wall on the top floor as an extra decoration piece. Respondents from the third group described it as being an optional decoration. They noted that the screen wall takes up a large area of dwellings. Land for housing is scarce and has become more expensive, so many residents prefer to build more rooms instead. House owners who want to have a screen wall and more rooms at the same time need to be innovative. Moreover, the students in the third group stated that young people who were financially dependent usually had limited power on decision-making while parents were able to designate how the houses would be built.

4.2.4. Ritual practice

Ancestry worship is shown to be very common in Dali. Traditionally, each Bai household would have ancestry tablets at home. However, not every family is placing an ancestry tablet at home now. There are new ritual practices related to ancestry worship. The idea of ancestry worship varies between urban and rural areas. According to respondents of the first focus group and Miss Zhang from the second group, many rural Bai families still place an ancestry tablet at home. They believe it is a significant cultural tradition and it would never change. They also described the big wooden table for serving the spirits of ancestor flowers and fruits. In addition to these offerings, rural families would offer daily incense to their ancestors.

Figure 4.2.9. Sticks of incense in rural neighbourhood

These ritual practices have been simplified in urban areas. According to the second and third discussion groups, few urban households would burn incense now and even fewer Bai families have an ancestry tablet at home. Nonetheless, many urban residents retained the spiritual value of ancestry worship. Instead of placing ancestry tablets at home, urban residents have developed other forms of ancestor worship. The second group stated that Bai people living in urban areas are more

likely to go to the cemetery. Although many urban households do not even have an ancestry tablet at home at all, some did still have a table for offerings. Mr. Yang from the second group pointed out that placing an ancestry tablet at home and burning incense everyday are no longer obligatory in urban neighbourhoods. Mr. Gao from the second group explained, "If everyone else in your neighbourhood was not doing it anymore, you would not take it seriously and follow the tradition exactly". Students in the third group felt like urban development was transforming the traditional lifestyle quickly. However, they thought it was unnecessary to preserve everything from the past because many old practices were not suitable in the urban environment anymore. For instance, urban residents are less likely to light incense at home in comparison to rural residents. The second focus group described how it would be unrealistic to burn incense at urban homes. The urban areas have a higher density and the risk of fire is always a concern in urban neighbourhoods. Moreover, many urban homes are tenant-occupied which means there are usually regulations applied.

4.2.5. Traditional festivals

Participants demonstrated how traditional festivals are closely related to tourism in Dali. Like many of the questionnaire respondents, focus group participants described tourism as having a positive impact on Bai culture preservation. The middle-aged respondents from the first group considered tourism as a strategy for the diffusion of Bai culture. Although it was agreed by those in the second and third focus group, the commoditized traditional festivals cause these young participants a considerable amount of discomfort. To their belief, the traditional festival has become quite different than what it was in the past. The second group felt like some festival celebrations are organized just for the tourists, and many outside merchants are selling products from elsewhere. It was also expressed that locals are sometimes treated as tourists and charged a higher price for products. The third group's impressions of traditional festivals were also altered by the recent cultural invention. For example, the Benzhu Festival is still celebrated every year; however, the level of festival atmosphere varies between the urban and rural areas, and rural

villages usually have better holiday spirit. They noted that tourism raises competition among villagers, and that the social bonding is weakening.

While the first focus group did show interest in participating in festival celebrations, those from the second and third groups expressed little interest, even if it would be celebrated in the old way. These young respondents did not want to perform traditional dances in front of crowds. Adding to this disinterest, the young generations have also been introduced to more options as to how they can spend their holiday. According to the second group, only the elder generations have time to participate in events that occur during the traditional festival. Younger people have started going to the cinema or relax at home instead. The third group believed that many young people prefer to go to Karaoke or do some shopping with friends during the holiday.

4.2.6. Bai costumes

All the three groups recognized the cultural value of traditional clothes but prefer wearing modern clothing in their daily lives. They perceived the Bai costume as a type of dancing dress and a uniform for tourist services. According to the first group, the costume was no longer a casual dress many years ago, but it was common for villagers to dress in traditional clothes when performing traditional dances. Mrs. Zhang from the first group said, "like many women under the age of 60, I would only wear Bai costume for dancing and performance during festivals." The second group had never even worn a Bai costume as they just did not want to. People from the third group had only worn the costumes once for school performances. These young participants in the second and third group thought it would be odd to wear cultural apparel in a regular setting. This was described by the second group participants as "doing costume play in the normal day". The third group also mentioned that it would not be accepted for them to do so on a normal day. All respondents agreed that it was mostly older women who still wear traditional clothing daily. As Miss. Zhang from the second group explained, "Senior women like my grandma were more

comfortable with traditional clothes, they were too shy to put on other clothing". **Figure 4.2.10** shows two rural senior women in Bai costume.

Figure 4.2.10. Senior women in local Bai costume

All three groups thought that tourism had brought the Bai costume to life. Younger generations no longer wear traditional clothing, besides those who work in tourist agencies or in hospitality. All respondents felt that the Bai costume is not suited to urban life. For those in the first group, Bai costumes are inconvenient to wear while they work. The second and third group considered it to be inconvenient for modern life as traditional costumes are difficult to wear. Mr. Yang from the second group stated that it would take a long time to put on every pieces and details properly. Mr. Gao from the second group also suggested that now most people are living in a fast-paced environment, and no one wants to spend more than half hour putting on traditional clothes before they go out. According to all three groups, many Bai people do not even own traditional clothing because they are expensive.

All focus group participants were still optimistic about the future of Bai costume. They did believe that tourism could promote their cultural apparel. The second group even offered some suggestions to preserve this costume. In their opinions, the village office can work to encourage villagers to dress in Bai costume during traditional festivals. The third group also agreed that it would be more acceptable to wear the costume while participating in festivals.

4.2.7. Policy and regulation

In recent years, the local government[81] has made a series of Bai culture preservation policies in Dali. These policies stipulate the appearance of residential buildings, which includes the restricted building height, white exterior walls, and grey roofs. Building height is commonly regulated throughout the city while the conservation of traditional Bai architecture mostly targets the historic sites and long-established villages[82]. For example, dwellings in villages near the Dali Ancient City have been limited to being no more than three storeys. However, dwellings in suburban villages can have more than three. Mrs. Zhang from the first group explained, "The dwelling inside Dali Ancient City were restricted to two storeys, for the purpose of maintaining a good historical scene, the nearby buildings could not be too high". Overall, every respondent considered these regulations to be a good strategy to maintain the city's image and promote Bai culture. Nevertheless, they also suggested that the municipal government should respect ordinary house owners' personal interests.

Culture preservation policies are not applied to every part of the city. Villages that are within or nearby the tourist area usually have more regulations on residential housing. For instance, Mr. Yang from the second group pointed out that Bai buildings in the rural area are restricted to three

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[81] The local government consists of the government of Dali City and the government of Bai Autonomous Prefecture. Both offices are located in Dali City.

[82] There are policies and regulations for conserving the tangible and intangible Bai heritage respectively. The scope of protection for tangible heritage such as Bai architecture, has been expanded from the original Dali ancient city and cultural relics protection units at all levels to include historical streets, villages, and towns (DBAPG, 2013; Li, 2015).

storeys while urban dwellings can be up to six. Different from dwellers living in historic villages, urban residents can make their own decisions on the refurbishment of their houses. This may suggest a limitation of the preservation policy as it could lead to an uneven quality of Bai architectural revitalization across the city. However, the second and third group thought that architecture preservation should be place-based. They believed it would be more reasonable to carry out in areas that have a historical background and a supportive population. This was because the preservation policy has not been welcomed by everybody.

The most discussed policy on Bai culture conservation was the promotion of traditional wall paintings[83]. According to the second group, the ordinary Bai houses are private properties and owners should be allowed to make decisions based on personal preferences. Miss Zhang from the second group felt that, although villagers well regarded the Bai dwelling renovation projects, the government should do more to consult them before starting renovations. She complained, "the government should first explain and convince the villagers rather than just forcing everyone to follow the policy". Miss Zhang and Mr. Yang from the second group suggested that the conservation of Bai architectural traditions in non-historic area should be voluntary. However, Mr. Gao from the same group did not fully agree with this idea. He was aware that culture preservation was completely voluntary in the urban area so very few people acted.

When discussing the role of government in culture conservation, all participants agreed that the government should take the lead. The third group believed that cultural preservation should be a collective effort. As Mr. Li from the third group pointed out, "it was Bai people's culture not the culture of the government, so local Bai people should share the responsibility of culture preservation". These young students seemed to be more idealistic than participants in other age groups. When they were asked if they were willing to spend money on Bai costume, they changed their minds. Those from the second and third group are unable to preserve the traditional dwelling

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[83] Since the government did not restrict the mural to a specific template, homeowners had the free ability to decide what would be drawn.

since it requires huge amounts of money. Mrs. Zhang from the first group suggested that the municipal government should provide a subsidy for Bai people to build traditional houses. The second group had a slightly different idea. They perceived cultural preservation as a process of conserving the intrinsic value of Bai culture, not as a duplication process. Instead of merely conducting a conservation project on traditional dwellings, respondents suggested there should be innovation because most Bai people were no longer living in a traditional life. Overall, all participants intended to pursue a modern lifestyle regardless of their age. The next chapter will discuss how to incorporate Bai LTK in Dali's urban development.

Chapter 5. Incorporating LTK in urban development

The traditional lifestyle in Dali has changed gradually during urbanization. Throughout this transition, much of the cultural landscape of the city has transformed (Morais *et al*., 2005; Liu, 2010; Liu, 2013; Dong, 2017; Hu, 2018; Zhao, 2019). Different levels of government are starting to take action in order that in the future, more of the traditional cultural landscape is preserved. However, some focus group participants felt like it is done merely for the purpose of developing tourism. This chapter is going to discuss the syncretism of different cultures in Dali, as well as the dynamics and complexities of LTK preservation. Then, it will highlight potential improvements to the current culture preservation. A summary of the role of LTK will be presented at the end.

5.1. Syncretism of different cultures

Traditional Han culture is very important for the development of ethnic minority culture in Dali (Han and Paik, 2017). This includes elements of Han language, religion, and architecture (Wu, 1990; Liu, 2010; Tian, Hu and Yao, 2011; Hefright, 2011; Liu, 2013; Guo, 2017; Hu, 2018). In the era of globalization, the mobilization of people, goods, and cultures is being greatly enhanced. Cultural exchange has established much of Bai culture's developments. As a middle-aged rural merchant from the focus group pointed out, "blocking other cultures will make Bai culture disadvantaged in the modern society, a living culture needs to communicate with the outside world". In fact, since the 1980s, the syncretism of different cultures has started remodeling Dali's landscape. Changes are being shown through the language environment and the design of local architecture.

5.1.1. A changing language environment

Due to the commodification of Bai culture in Dali, many other ethnic groups are also living in a Bai style residence and some of them can be found wearing the Bai costume while working in

the hospitality industry. Moreover, Bai minority cannot distinguish themselves from the Han majority based on their physical appearance or their way of living, knowledge of Bai language would usually be the only way to distinguish them from the Han (Wu, 1990). Apparently, conserving Bai language would be more meaningful to its people residing in Dali. The questionnaire and focus group results, as presented in Chapter 4, shows that most Bai people still speak local Bai language in everyday conversation. However, more urban dwellers speak Mandarin. Although the questionnaire results do not show local people's proficiency in Mandarin, the focus group and the field observation demonstrate that most Bai are bilingual. According to focus group informants, Mandarin is the most important language to be learned. To explain this, focus group participants noted that the "Bai language is merely spoken by people who are living in Dali, people do not speak this language elsewhere". While it could be believed that this would put the Bai language environment at risk, a lot of research participants seemed unbothered. Several focus group respondents voiced that even newcomers could easily adopt the language by just spending time in Dali. However, this might be affected by participants' perceptions of their language. They believed that the local language environment would be conserved well given their confidence to make the commitment of speaking the language in their daily conversation.

The urban setting appears to be a big challenge to the maintenance of a positive Bai language environment. Being the prefecture's culture and transportation hub, urban areas in Dali do have the highest numbers of human mobility[84]. This incoming population brings a rising inflow of different cultures and languages that influences and transforms the original traditional communities (Morais *et al*., 2005; Hu, 2018). Particularly, the increase of migration and tourism has made Mandarin the dominant language in urban areas. From a functional perspective, knowing

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[84] There are three types of floating population – tourists, labour migrants, and students from the towns nearby. Dali, being the hub of the prefecture, has better junior and senior high schools. In addition to high school education, Dali University also attracts students nationwide.

Mandarin is essential for someone who wants to obtain better employment and higher education (Cao, 2010).

Dali's Bai language has started to lose its former characteristics by adopting more Mandarin vocabulary. The amount of Bai people who know how to speak the original Bai language is decreasing fast. In addition to the competitive urban labour market (Wu, 2014; Gustafsson, 2015), the transformation of the local language environment leads to the reinforcement of the cultural identity. Many young focus group participants felt like they were responsible to pass down Bai language to future generations. On the other hand, these participants also noted that they believe bilingualism will end up being the trend of the local language environment. One urban resident, an IT technician in his 30s, said, "it was nearly impossible for the Bai not to speak any Bai language or Mandarin and that they must learn both". Most informants acknowledged that they are not able to stay with their conventional lifestyle and needed to adapt to the current economic developments where Mandarin is the primary language to know. This can manifest the fact that local Bai people just perceive their language as a local dialect.

Many respondents argue that teaching Bai language should be a shared responsibility between the school and family. Bai language is the mother tongue of its people. Therefore, it is critical that preschool children are being taught to speak it, especially if it is not included in a school's curriculum. In this case, family education is playing even more of an essential role in conserving the native language. However, most informants had yet to see this importance. Many parents are choosing not to speak Bai language to their children with the fear that it will affect their learning of standard Mandarin and English (Hefright, 2011; Dong, 2017).

Few participants considered the need to invest in Bai language. Only two young female university students in their twenties suggested that schools should add new courses on it. However, while these were good suggestions theoretically, it would be very hard to execute. Bai language is a spoken language without codification, making it very difficult to implement on a school curriculum. Additionally, there would be a lack of trained teachers and available teaching materials

(Hefright, 2011). One elementary teacher, a rural resident in her 30s, talked about an art programme at her school that focuses on Bai traditions. The school invited artists to give one class on *Da-ben-qu* (大本曲) folk songs every week. She was happy that this programme gave young children a chance to learn about Bai culture. Rather than just teaching it in a traditional manner, it seems more effective to use folk songs when teaching Bai language. To ensure a positive bilingual environment, schools should also try to teach and promote the Bai language by integrating it into a formal programme.

5.1.2. Influence of Western-inspired homes

Over the last four decades, interpretations of local dwellings have changed significantly from being a concept of architectural result to that of a dynamic cultural process (Liu, 2013). The increasing economic developments and exchanges of ideas in Dali indicate that its built environment is being reshaped. A woman in her 50s, who worked as a farmer and a tie-dye artist in a traditional village, said, "the previous rural homes were built with mud and a timber framework, but were too poor to incorporate any decoration". After receiving more tourists and foreign investments, residents in Dali had become interested in Western architecture and started to apply new materials when building their homes (Liu, 2010). Local dwellings, from both the exterior and interior, have been deeply influenced by Western aesthetics. A farmer and mason in his early 60s had provided great insight into these circumstances. He made note of the growing popularity of modern concrete construction and Western design after 2000. The man also discussed how he noticed wealthy families liked to apply decorative tiles while others were only able to afford using limewash in the past. This situation, however, has reversed in recent years since the revitalization of Bai architecture.

In the last two decades, urban developers have built many European theme towns and "Europa style" residential districts nationwide (Jiang, *et al.*, 2017). In Dali, these Western-inspired homes are called "sea-view holiday cottages (*Hai-jing-fang*, 海景房)". They were formed due to the

growth of tourism and the hospitality industry, but later many villagers also adopted the Western cultural elements in their residential houses (Liu, 2013). The municipal government has imposed restrictions on the house exterior to eliminate the impact of Western-inspired homes. Funding was also provided to encourage villagers to restore Bai architectural traditions (Zhao, 2015). As described in the questionnaire result, 85% of residential housing are white and 52% have made use of limewash. However, not all residents were in favour of this Bai architectural tradition. A sales representative in her 30s, from a village nearby the lakeshore, complained that municipal officials requested all villagers to paint the house exterior with limewash since the original decorative tiles were seen as a violation of Bai architectural traditions. Being the owner of a modern dwelling, she personally liked decorative tiles better.

Since 2000, the number of Western-inspired homes in Dali has dramatically increased (Liu, 2010; Yang, 2016; Dong, 2017; Hu, 2018). This has directly led to the replacement of traditional construction materials. Also, many Bai people no longer apply the hierarchical indoor space arrangements to new constructions (Liu, 2013; Hu, 2018). While giving suggestions to preserve Bai culture, two young female students in the survey raised concern that Western designs have become very popular in Dali. All focus group participants felt as though Bai architectural traditions should be applied only to the exterior as they all preferred a Western rather than traditional interior design. A rural homeowner in her early 30s stated her preference for the Nordic design as it made the indoor space simple and comfortable. Another homeowner, a cleaner and landlord in her 50s, pointed out that she favoured French windows and Western kitchen as they made her home brighter and more convenient.

5.2. Dynamics and complexities of culture conservation

Local Bai peoples' perceptions of LTK started to change as their neighbourhoods experienced economic advances (Liu, 2010). Many research participants expressed concerns regarding some elements of LTK now being "backward" and no longer performing a function in modern life. The

varied perceptions of respondents demonstrated a significant difference between urban and rural areas. This leads to the discussion of how to balance tradition and modern lifestyle during urbanization.

5.2.1. Managing urban-rural difference

The contrasting views of LTK between urban and rural residents is a product of the different social structures these people live in. As a professor from Dali University in his 50s pointed out, "Culture preservation should be regional, because social structures vary in urban, rural, and mountainous areas". Attitudes toward Bai language may also vary among different social structures. Urban areas have welcomed a Mandarin-speaking language environment, and urban Bai people regularly pursued standard Mandarin over accented Mandarin. In contrast, rural residents were not as worried about the "accent" problem created by their mother tongue since they felt it would not create a language barrier. Villagers usually prioritize teaching children their native language over Mandarin as it is very much required in everyday communication in rural areas. A suburban villager, in her early 30s, pointed out that because of how frequently Bai language is spoken around them, it is more essential for young kids in the villages to adopt Bai before learning other languages. Aside from the urban-rural variation in the perceptions of Bai language, residents' attitudes toward conserving traditional Bai dwellings also varied.

The meanings behind traditional Bai houses have changed (Meng and Liu, 2013). A large part of this is related to changes in family structure. Traditionally, a courtyard house would hold a large extended family. Now, more and more people are choosing to live in a nuclear family structure (Liu, 2010). This way of life is especially common in urban households. Research participants were able to acknowledge the cultural value of traditional Bai dwellings, but preserving the original Bai home seems to have become meaningless for real life. 50% of participants in the survey have moved to modern houses that are displaying less or no ethnic elements. Obviously, land in urban areas is much more costly than it is in rural areas (Liu, 2010). Since it is more

affordable, many urban Bai people choose to build modern homes instead. According to the second and third focus groups, preserving Bai architectural traditions in the urban area would be "unnecessary" and "a waste of money". A more enticing option is to keep the extra money to purchase luxurious home appliances and cars that will improve living standards (Zhao, 2019). While most urban residents thought of the traditional dwelling as a dream home, few considered it to be a kind of good investment.

Far distance from tourist destinations is another reason for urban homeowners' choice not to invest in traditional Bai dwellings. Urban landlords are given very little incentives because they do not receive a lot of tourists in their areas. Instead, their tenants are usually migrant workers who are looking for affordable rent. A young landlord from a village in the urban area stated that she did not think this kind of investment was worth it since most tourists would not be renting a vacation house in the urban area. The rural area, in contrast, invites more tourists given its historical landscape and other attractions. This encourages rural homeowners to invest in traditional Bai features. In fact, operating guesthouses have become a great source of income for some villagers. A lot even strive to distinguish their guesthouses by elements of ethnic culture (Zhao, 2019). Despite many traditional Bai homes have been replaced by modern constructions in the countryside, rural houses have still retained a significant level of traditional Bai features (Dong, 2017). A middle-aged guesthouse owner, from a village near a scenic area, renovated her guesthouse on her own to include more Bai features. She felt it would make her house more appealing to tourists and would have a good financial return in the long run. This guesthouse owner appreciated Dali's tourism developments and was confident that traditional Bai features would be conserved well in the upcoming years.

5.2.2. Balancing traditional and modern lifestyles

As the traditional lifestyle in Dali experiences a transformation, preserving the LTK becomes more of a challenge. Particularly, the residents' adaptation to a modern lifestyle has been reflected

by their now altered perceptions of ritual practice and traditional festival celebration. For example, more and more Bai households do not place an ancestry tablet at home because it does not match the modern furnishing. A rural villager, in her early 30s, shared that in the traditional custom an ancestry tablet would be placed in the central room for a deceased family member. It is believed by Bai people that an ancestry tablet allows the person's spirit to stay. This practice remains to be very normal in Dali, however, the numbers of those placing ancestry tablets in their homes do seem to be decreasing. This is mainly because the younger generations are more adapted to the modern lifestyle and view their traditions differently than the older generations.

Dong (2017) finds that Bai people now apply more emphasis to the meaning of the ritual instead of practicing it in the traditional way. According to focus group participants, ancestor worship is no longer restricted to placing ancestry tablets at home. Now, younger generations prefer other forms of ancestor worship. For instance, some Bai people hang up pictures of their deceased family members, and others keep a table used to offer fruits and flowers to the spirits of ancestors. Moreover, many urban residents are likely to visit a cemetery or the temple's ancestry hall. An urban resident in his 30s mentioned, "usually you would only be asked to place an ancestry tablet at home if you were living with seniors". Indeed, the questionnaire results also demonstrate that people living with their parents are more likely to preserve the traditional features at home. Nonetheless, elderly adults who live financially dependent on others are often absent from the decision-making processes of their household (Zhao, 2019). Since more and more young people no longer living with their parents, the practice of worshiping ancestry tablets at home may continue to decline in the future.

The transformation of the traditional lifestyle is reflected through the tendency to build modern Bai dwellings. Modern houses are found to have more advantages in comparison to traditional dwellings (Hu, 2018). Focus group participants outlined these advantages according to three main aspects. First, modern homes are more functional. They allow the installation of solar

panels [85], modern baths, and roof gardens (Liu, 2010; Liu, 2013; Zhao, 2015; Hu, 2018). Furthermore, Bai people now prefer taller buildings, whereas the traditional building structure is restricted to only two storeys. Second, modern homes are more cost-effective (Liu, 2010). A rural resident in her 50s noted that due to the surging costs of traditional materials and labour, modern houses were cheaper. She could also use the extra levels as rental properties to gain an alternative source of income. Third, modern dwellings provide more convenience and comfort. Particularly, modern constructions have better daylighting and ventilation. They do not need nearly as much regular maintenance as traditional homes do. An urban resident in his 30s pointed out that the traditional components of Bai architecture, such as the roof, mural, and the carved wooden windows, required extensive repair works constantly. However, seniors expressed that they preferred traditional dwellings since it follows a lifestyle that they are more comfortable with. Attempts should be made to retain important components of both traditional and modern lifestyle.

Traditional architecture is bound to change in some ways in order to meet modern standards of living (Meng and Liu, 2013; Yang, 2014; Yang, 2016; Dong, 2017). For example, in order to have more space within a restricted building height, many villagers choose to have flat roofs instead of pitched roofs. **Figure 5.1** shows a modern flat roof which has incorporated traditional grey tiles. Currently, many modern dwellings in Dali have installed this kind of hybrid roof. It maintains some Bai architectural characteristics while also providing additional space for different activities. Although this transformation does signify that some Bai architectural traditions have been lost, it indicates the demands of many locals (Hu, 2018). Residents' demands for modernity and reinterpretations of cultural traditions suggest that, in a constantly changing world, LTK should be open to innovation (Zhang, 2008; Liu, 2010; Liu, 2013; Yang, 2014; Yang, 2016; Dong, 2017).

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[85] Due to the relatively cheap price for the solar panels used for hot water, they were installed widely in Dali, both in the urban and rural areas (Gao, 2016).

Figure 5.1. Modern "pitched roofs"

5.3. Re-thinking culture preservation

As argued by focus group participants, culture conservation is more than just duplicating its traditional forms. To successfully incorporate LTK into urban development, innovation should be encouraged as well as providing young people with cultural education (Liu, 2010; Yang, 2014; Yang, 2016; Dong, 2017). Reinforcing the cultural identity and promoting traditional values would be essential to the promotion of Bai culture in general.

5.3.1. Ritualizing the Bai identity

Wu (1990) suggests that many Bai people's ethnic identity is an expression of subjective sentiment granted to them, rather than a distinct cultural identity guiding their way of life. Focus group participants also regard themselves as living the same way as the Han. They felt like they were being assigned a Bai minority status simply because their fathers had a Bai status. As discussed previously in **5.1**, the Bai people were assimilated into Chinese culture, and have been increasingly absorbing foreign cultures. In order to keep the Bai identity alive in this process, it is important that a strong basis of psychological identification is established (Wu, 1990).

Local ritual practice explains the history of Bai people and why some traditions exist. It seems most young focus group participants did not recognize the LTK that is embedded in the traditional festivals. These young participants all recognized how folk dances and songs are usually performed during festivals. However, very few of them could cite any stories about a festival. Using the Torch Festival[86] as an example, every respondent in the second and third focus group knew it was a traditional festival celebrated by the Bai and the Yi in Dali, but no one could tell what differentiates their rituals from each other's. Only one university student, in his 20s, knew the meaning behind lighting torches. He explained the main objective of this ritual to be a way of performing an exorcism and making sure no wild animals stay near the cropland. However, Fan and Wang (2017) mentioned it as a ritual used to commemorate a historical Bai hero. This explanation works better for building the Bai identity, but whether this history is perceived as an indication of ethnic boundary is subject to debate. In addition to trained instructors and experts, community knowledge is a significant actor in teaching traditional rituals.

Encouraging the younger population to get involved in festival rituals is crucial for enhancing cultural identity. Currently, it is mostly all middle-aged people that take part in these rituals. Very seldom young people know how to sing folk songs or perform traditional dances (Dong, 2017). This lack of knowledge likely comes with a lack of participation. Young people from the second and third focus groups expressed their declining interests in participating in traditional festivals. They preferred spending their holiday doing something else, like relaxing at home or going to Karaoke with friends. This suggests that younger generations perceive traditional festivals and holidays as being the same. They viewed the festival celebration as a stage performance that belongs to their elders. As described by a third-year university student in his 20s, "If we went to the festival celebration, we would only take some photos or videos using our cellphones, we were not interested in joining the performance". Another university student in his fourth year suggested it would be easier to involve the elementary kids than someone in his age. He shared that when he

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[86] The Torch Festival is served as one of the markings of Bai culture, but it is also celebrated by the Yi and many other minorities in Yunnan (Wu, 1990).

was a kid, he would perform folk dances with the elders, but it became embarrassing to do so as he grew older.

The celebration of traditional festivals should be essentially ritualized. Instead of treating traditional clothes as performance costumes or working suite, there should be more efforts made to teach the young generation wearing it in rituals. However, bringing back this tradition appears to be very challenging. Focus group respondents indicated that most Bai people under 60 years of age did not want to wear traditional clothing because it was unusual to do so on a regular day, especially if they are not working in tourist services. As a young working professional, in his early 30s pointed out, "I felt like I was doing a costume play rather than being proud of myself as a Bai in traditional clothes". The survey samples demonstrate that local Bai people are more comfortable wearing cultural apparel during traditional festivals. Theoretically, encouraging people to wear traditional clothes and participate in festival rituals will simultaneously enhance ethnic pride and sense of place through the public's responses. However, how much commitment the young people can make to this remains unknown. Especially these traditional clothing are now expensive and not everyone can afford it.

5.3.2. Promoting traditional values

The perceptions of LTK have been changing, especially among the younger generations. Traditions do not remain static. For example, if a local craftsman adopts a new innovation, then it could possibly become a new traditional know-how (Liu, 2013). When applying new innovations to traditions, it is critical that the values behind cultural traditions are recognized.

Since the 1990s, the municipal government, businesses, and artist groups have realized the importance of ethnic heritage (Gao, 2016; Yang, 2016). However, the main focus is always being placed on the economic value (Yang, 2007). While most survey participants believed that tourism was beneficial to cultural preservation, some of the focus group participants felt that it is done just

to draw in the tourists. Regardless of whether the urban landscape was holding tight to Bai architectural traditions, many survey participants voiced the need to promote traditional values as social bonds among local Bai people are weakening. Zhao (2019) notes that many neighborhoods have begun experiencing an increase in competition and a widened gap between the rich and the poor. A young local entrepreneur in her early 30s deemed capital inflow as the main reason Dali's social environment has been encroached. She appreciated how the urbanization of Dali brought forth a new lifestyle with more urban services, but also recognized how troublesome the inflow of capital has been for the locals. More efforts are suggested to put on maintaining the traditional value system.

Traditional life and ritual practices are impacted by urban developments, but the conventional wisdom and traditional value should prevail through the process of urbanization. In fact, few Bai dwellings in the survey are influenced by the popular Han concept of "South-facing" because Bai culture prioritizes an East-facing building orientation to receive enough sunlight in Dali (Yang, 2014; Sun, 2016). This kind of knowledge should be passed down to future generations. Moreover, promoting the Bai culture creatively may allow all stakeholders to participant in decision-making.

Figure 5.2 depicts a simple model of current culture preservation. As Dali become a well-known city internationally, LTK plays a potentially significant role in creating the city's image through culture preservation. Instead of merely regulating the process based on market principles or cultural consciousness, government intervention has provided funding for place-based preservation. This motivates some residents to get involved, and they develop a sense of place through participating in decision-making. However, there is a voice of dissent that requires negotiation between the municipal government and residents. Without continued communication among policy makers and the public, policy outcomes would be superficial (Hayer, Laws, and Versteeg, 2009).
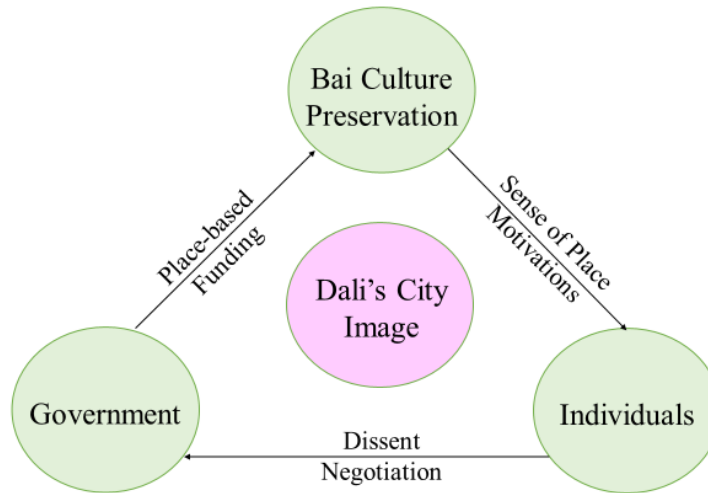
Figure 5.2. Bai culture preservation in Dali

5.4. Moving forward to people-centred urbanization

Top-down thinking is common in China. The questionnaire results suggest that the general public is relying very heavily on the government to preserve Bai culture as the investment costs are too expensive for citizens. The traditional definition of heritage preservation views it as being a public good that assigns responsibility for such expenses to governments (Dubini, Leone, and Forty, 2012). This is found to be challenging to Dali's municipal government since it requires funding, expertise, and stewardship (Zhao, 2015). Over time, however, more and more local people should be getting involved (Dubini *et al*., 2012). As the young focus group participants suggested, "Bai people should share the responsibility since Bai culture was the culture of its people".

5.4.1. Adopting a hybrid approach

The inconsistent decision-making between different levels of governments has led to various problems when revitalizing Bai architecture. This has sparked a debate in regard to what extent culture preservation policies can justify disadvantaging residents' interests (Zhao, 2015). Usually, the participants who were able to make profits from the preservation-related activities were more

welcoming towards the preservation policy. For example, respondents from the first focus group showed more interest than other participants in conserving Bai architectural traditions. This was mostly because they had properties near tourist spots. Meanwhile, participants of lower socioeconomic status and those who live far away from the major road network or scenic areas, have much less incentives to conserve traditional Bai dwellings. As one villager in her 30s stated, "our house was in the middle of nowhere, rather than culture preservation, the improvement of public infrastructures would be more meaningful to us". It appears that not many local people are very interested in culture preservation, as only 14% of questionnaire participants gave a specific suggestion for conserving Bai culture. It suggests that gaining the general public's support and involvement is essential for the enhancement and execution of any culture preservation policy.

Government bodies are still essential as they work as the link between different stakeholders, provide guidance to residents, and take the leading role in terms of development direction and scales (Gao, 2016). Indeed, amongst the 46% of participants who gave suggestions in the questionnaire survey, almost all of them highlighted the role of government. However, the focus group discussions revealed that sometimes the execution of government policy obscures the real purpose of preservation and failed to gain public support. Some institutional limitations were found within the government, which included the miscommunication amongst government departments, and between upper levels of government and the executive agency. Participants from the second focus group suspected that the government departments never communicate with each other before conducting any work. One rural informant in her early 30s portrayed the executive agency as being "a labour contractor". She was disappointed that the village office does not make an effort to properly explain the policy to villagers. Feedback from survey participants suggests that Bai people expect more direct communication between the general public and municipal government. Information sessions are suggested to be necessary to gain support from the local Bai people.

A bottom-up approach could potentially be integrated to the top-down policy-making process. The results from focus group discussions indicate that when creating an action plan, residents'

opinions should be seriously considered. An efficient way of making this more doable would be building a platform for public discussion. For example, a public poll could fuel the residents' involvement at the beginning of conservation, solicit their recognition as to what needs to be conserved, and stimulate a sense of belonging and identity (Dubini *et al*., 2012). By applying the Right to the City theory in China, it is expected that all residents could positively influence urban governance and empower the voices of the minorities (Weiler, 2015). The involvement of local Bai people would lead to better policy outcomes, and a hybrid approach would help to achieve the goal of people-centred urbanization.

5.4.2. Building a deliberative decision-making process

The decision-making process for Bai culture preservation is highly complicated. This is especially due to the essentiality of making a benefit equilibrium for every stakeholder. While the government is expected to lead the incorporation of LTK, the planners, architects, and other cultural experts who are also involved in local development also influence the built environment. Gao (2016) suggests that all these players in the top-down process should adopt a long-term interest of the stakeholders rather than simply transferring their own preconceptions to the development projects. From the survey participants' point of view, policy-making should not affect people's livelihood and property rights. Western-style buildings that conflict with cultural traditions should ideally be avoided. However, it would also be unfair to ask villagers to keep living in the traditional dwelling that lacks of modern facilities when it is just to attract tourists (Yang, 2016). On the other hand, the funding that was supposed to support architectural revitalization ended up not being consistent when the renovation projects finished, and the residents had to rely on their own finances to complete the maintenances afterward (Gao, 2016).

One drawback of top-down planning is that it may not meet the needs of local citizens. As discussed in the previous section, moving towards an inclusive urban governance requires a more participative hybrid approach. This suggests that constructing a deliberative decision-making

process is important. **Figure 5.3** illustrates this process in policymaking. Hayer *et al*. (2009) emphasize that it requires a multifaceted endeavor to improve the policy outcome. On one hand, the municipal government should introduce policies and regulations to the general public. Financial support and technical guidance are also provided to create incentives to residents. By encouraging the general public to get involved in policy-making, many people developed a sense of place and they take action to preserve LTK. Continued communication among policymakers and the public will eventually lead to better policy outcomes (Hayer *et al*., 2009).
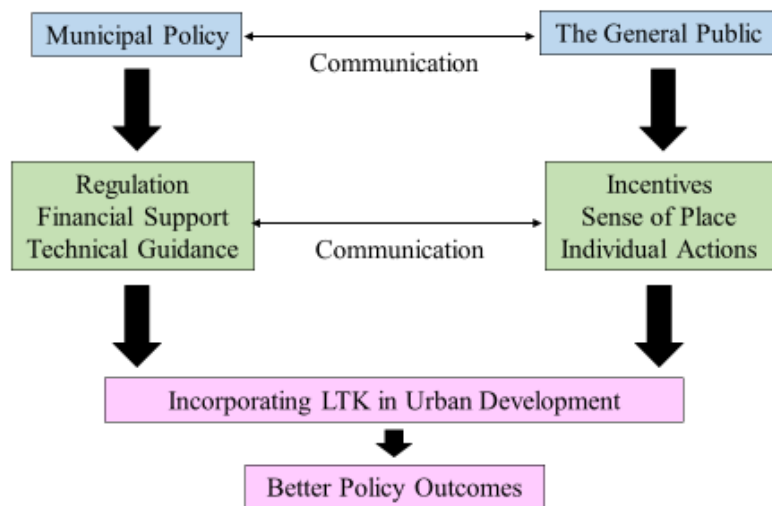
Figure 5.3. Deliberative decision process

A deliberative process would encourage public participation to provide a range of possible perceptions on policy issues, and increase transparency to show how policy decisions are made (Hayer *et al*., 2009). This kind of decision-making on public affairs follows the tradition in the Bai communities, which is based on collective interest (Cai *et al*., 2007). That being said, the municipal government can innovatively consult with the ordinary citizens' points of views. The main issue of making decisions collaboratively is that it requires common interests, but there are often conflicting values and motivations (Dubini, 2012). The survey findings revealed that the younger generation prefers decision-making based on self-interest. As a young villager in her early 30s stated, "If there was no policy regulating the buildings in my village, I would like to build a

Western-style home". To ensure better policy outcomes, adopting a long-term interest turns out to be a crucial part of the deliberative decision-making both in the top-down and bottom-up processes.

5.5. Role of LTK in urbanization

Recall that LTK represents both the tangible and intangible traditional culture. It refers to the Bai language, traditional architecture, ritual practice, traditional festivals, and Bai costume in Dali. In conclusion, LTK is essential to a sustainable development which includes preserving the cultural landscape and developing a sense of place for residents.

5.5.1. Preservation of traditional cultural landscape

Data presented in the previous chapter highlights local Bai people's perceptions of LTK. In particular, questionnaire participants shared their personal understandings of LTK by discussing what they thought of their neighbourhoods, homes, and the landscaping in public areas. Adding to their understanding of the transformed built environment in Dali, focus group participants also shared their experiences of rapid urbanization and increased tourism development. Analysis results indicate that LTK has been well incorporated in Dali's built environment, as 35% of houses followed the traditional style and 45% had integrated with some cultural elements. However, the levels of Bai culture preservation amongst urban versus rural areas are distinctly different. The results of the field research suggest that there are more challenges to preserve the traditional cultural landscape in urban areas. Urbanization has brought in massive intra-province and inter-province migrations. These migration patterns have diversified Dali's urban space and brought forth more innovative ideas that lead to a more modern lifestyle. Furthermore, urban dwellers have higher family incomes from commercial business which potentially affects the traditional lifestyle and the historical built environment (Gao, 2016). Indeed, there were fewer visible Bai architectural traditions in the urban area. 48% (10 out of 21) of urban questionnaire participants, in comparison

to 68% (40 out of 59) of rural respondents, confirmed that the homes in their neighbourhoods had restored some traditional Bai features.

Since it draws in more tourists, government authorities show an obvious appreciation towards LTK in rural areas of more ethnic minorities. Formerly noted, in an attempt to maintain rich local characteristics and to promote folklife, different levels of governments have released several crucial culture preservation policies. Additionally, there have been official guidebooks published, like the *Guidebook of the Improvement and Transformation of the Residential Dwellings in Yunnan Province* (UPDY, 2018), that are designed to educate citizens and guide local builders. For the most part, these guidebooks do not apply to ordinary urban residential buildings, but rather work towards enhancing the cultural landscape and traditional dwellings in long-established villages. As the New Urbanization Plan (2014-2020) regards the conservation of traditional villages as important for maintaining the diversity of Chinese culture, urbanization should not lead to the decline of these villages (NPC, 2020). In Dali, however, local villagers are often found building new houses with more modern features (Liu, 2010). In order to encourage homeowners to restore Bai architectural traditions[87], the municipal government may provide more financial support for Bai home renovation.

LTK is significant to the preservation of a traditional cultural landscape in urban development, but perfect restoration of it is almost unfeasible and not even desirable for most young people. This suggests that many components of LTK should be sustained through other forms as a response to urbanization. Although colourful murals, white walls, and grey roofs are still commonly seen in the city, Bai architecture has been developed over time by adopting other cultures and new technology (Liu, 2010; Tian, Hu and Yao, 2011; Guo, 2017; Hu, 2018). Like Dali, many other cities in ethnic minority regions are experiencing urbanization. Dali could be a good example for these cities.

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[87] These Bai architectural traditions include "White walls and grey roofs", floral patterns, and other colourful mural art.

5.5.2. Development of a sense of place

Chapter 4 shows that the Bai minority has a deep cultural awareness and appreciate the cultural resurgence in Dali. For example, the focus group participants were all proud of the city's current image that contains rich local traditional characteristics. LTK is viewed as signifying the root of Bai people in Dali. Overall, many local people agree with the municipal government on integrating more LTK with urban development. There was a consensual feeling amongst all research participants that LTK had created a unique cultural landscape and developed a sense of place for local residents. However, there is still lack of a participative platform that allows more direct communication between residents and the municipal government. This calls for the need for the municipal government to re-envisioning Bai people's expectations for the future development of Dali. A continuous communication between the two parties may encourage more residents to get involved in culture preservation. Also, feedback from the general public should be also helpful to resolve some policy issues. Furthermore, incorporating LTK in urban development does not mean to duplicate the traditional way of living. Instead, it determines how modern generations are able to make a livable city by incorporating conventional Bai wisdom into their new lifestyle.

Chapter 6. Conclusion

This chapter first reviews the research context and its objectives. It then provides general conclusions drawn from the study findings. Following this, empirical contributions and research limitations are outlined alongside an assessment of future research directions.

6.1. Research review

This dissertation has examined how urbanization has become integrated with local traditional knowledge (LTK) through the perspective of Bai people in Dali City, China. The residents' perceptions of culture preservation are captured by the application of questionnaire surveys, focus group discussions, and daily field observations. The information retrieved from these sources reveal both what opportunities and challenges urbanization in Dali creates, and provides additional understanding to determine better strategies to incorporate LTK in urban development.

Since China entered the market-oriented economy in the early 1980s, urbanization rates have dramatically increased. As the built environment expands quickly, a significant recognition of local traditional knowledge (LTK) has been lacking in urban planning (Chen, 2011; Yang, 2016). Therefore, to address this, the New Urbanization Plan (2014-2020) was proposed by the central government to support the preservation of local culture and traditional villages while facilitating a significant number of rural-urban migrants (NPC, 2020). Previous studies have testified the transformation of the built environment and social landscape in ethnic minority regions, and revealed various challenges of culture preservation (Zhang, 2008; Liu, 2010; Liu, 2013; Yang, 2014; Yang, 2016). Further research justifies the role of innovation and institutional supports in integrating LTK and urbanization (Zhao, 2015; Gao, 2016; Dong, 2017).

Local culture has been commoditized and used as an important resource for economic growth in Dali since the 1980s (Wu, 1990). The marketization of Bai culture has stimulated residents to rediscover and adopt many traditional practices in their everyday life. For instance, more and more

individuals have initiatives to preserve some architectural traditions that contributed to today's city image. Additionally, an "anti-modern" trend that recently emerged in ethnic tourism has begun influencing the design process for local buildings (Liu, 2013; Hu, 2018). The result of questionnaire surveys indicates that Dali's built environment has progressively incorporated LTK through the application of traditional handicrafts, gate towers, screen walls, and water streams. After three decades of urbanization, local Bai people are now experiencing more cultural exchanges and having greater access to higher education. Focus group discussions demonstrate that many of them rethink the meaning of culture preservation in modern Dali. This empirical research provides a comprehensive overview of the important role of LTK in an ethnic-minority city. Several major findings of the research are summarized in the next section.

6.2. Research findings

First, the LTK expressed in the built environment of Dali represents a fruitful outcome of culture preservation. The economic returns of ethnic tourism have motivated many homeowners to restore the Bai architectural tradition. Local dwellings generally retain white as the main colour. Also, murals and "white walls and grey roofs" have become the mainstream aesthetics in both traditional homes and modern architecture. These features of LTK enhance the cultural identity of Bai people and established a sense of place for Dali's residents. However, urbanization does challenge the conservation of traditional dwellings. The surveys show that ethnic cultural characteristics decline in the urban area. This includes traditional productive activities as well as practices like consumption, language, and rituals. Historically, building a quality dwelling was a lifelong input for many Bai households in Dali (Cai *et al.*, 2007; Zhao, 2015). However, this goal has recently changed since people have different consumption patterns and other housing options. Bai culture is now more selectively preserved. Research participants viewed these changes as unavoidable. Urbanization has led to higher population density and surging land value; it makes the conservation of traditional Bai houses a high cost (Liu, 2010). Therefore, buildings retain much

less architectural traditions when closer to the urban area. Local Bai people believe that the number of traditional dwellings will continue to decrease in Dali. With the ongoing support of the municipal government, local architects and artist groups, rural areas will probably maintain a better-preserved Bai cultural landscape.

Second, urban dwellers have significantly different outlooks on LTK than rural villagers do. Over the course of maintaining local Bai characteristics, the research sample demonstrates concern more and more about the improvement of their living conditions. Due to economic development, many urban Bai people are pursuing a modern lifestyle and wanting to try something new (Dong, 2017). In addition to the fact that they receive more Western influence, there are indeed now more options for urban dwellers that will allow them to express their own individuality through housing decorations at an acceptable cost (Liu, 2010). Most urban residents prefer cost-effective modern products. Focus group discussions indicate that urban residents are living in a fast-paced environment which leads to many of them wanting to make life simple and convenient. Therefore, urban dwellers tend to prefer Western-inspired homes and modern clothing over the traditional ones. In contrast, rural residents are still living in a more traditional environment. There are less commercial businesses disrupting the traditional lifestyle in rural areas. It seems that rural dwellers are less interested in emphasizing their individuality through housing construction. According to questionnaire surveys, most villagers are living in similar Bai houses in the same neighbourhood. Up to 63% of rural homes have applied the same architectural traditions. As the example, the first focus group reported that traditional Bai dwellings had become the mainstream aesthetic appreciation in the rural area, so every household was pursuing more architectural traditions. The questionnaire data reveals that the application of traditional construction materials did not correlate to participants' incomes in the rural area. Even though traditional materials like marble are expensive, many farmers strive to have them for their houses.

Third, the nature of the urban setting is apparently obstructive to the conservation of cultural traditions. Many traditional practices have been simplified and transformed, such as religious

rituals and festival celebrations. According to focus groups, there are fewer urban households who place ancestry tablets at home in comparison to rural households. Due to the restrictions in the urban management system, many residents do not burn incense at home. These rituals for ancestor worship have been transformed. Many urban households would visit a cemetery instead. Now, more and more Bai people do not want to follow the traditional practices exactly. As residents were adapting to modern life, cultural traditions should be transformed to adapt to the new environment. The survey sample demonstrates that the celebration of traditional festivals is much simpler in the urban area, and 6% of urban neighbourhoods do not celebrate festivals at all. In comparison to rural areas where all villagers celebrate festivals together, urban residents usually celebrate with their families at home.

Local Bai people seem to be too optimistic about how urbanization is challenging the native language environment. Even though most Bai people are still speaking their language in daily conversation, urban residents tend to speak more Mandarin than Bai since urban neighbourhoods have much more immigrants. Many of them just perceive Bai language as one of the local dialects. Bilingualism has become the trend of Dali's language environment. Bai language is important for local social life while Mandarin is essential for the urban labour market. It is suggested that schools should try to teach and promote the native language by integrating it into a formal programme.

Forth, given the fact that many ethnic minorities have more choices on their lifestyle, integrating LTK should be innovative (Liu, 2010; Yang, 2014; Yang, 2016). Since LTK is not static, innovation is always adopted to improve local living condition and meet the market needs (Liu, 2013). Innovation will boost the vitality of LTK. Most survey respondents expressed that duplicating all traditions of the past would be meaningless because more and more ethnic minorities were no longer satisfied with the traditional lifestyle (Zhao, 2019). By incorporating some more inventive approaches, culture preservation becomes more practical and authentic to its people (Yang, 2007). It is important to note that integrating LTK with urbanization should not only aim to pull in tourists. The goal is to make cities more livable and inclusive to its citizens!

Urban governance should also be improved. The common method of top-down planning in Chinese culture presents itself as an inadequate decision-making process. Culture preservation is an ongoing process, integrating LTK in urban development obligates decision makers to keep in mind the long-term interests of the inhabitants, especially in minority regions (Gao, 2016). This study suggests that an inclusive urban governance is significant. Getting residents involved would allow them to recognize their right to the city and improve the policy outcomes (Weiler, 2015; Hayer et *al*., 2009).

6.3.   Empirical contributions

By using a case study approach, this research explores the role of LTK in urban development in China. Previous studies regarding LTK usually focus on farmer's knowledge and traditional science. Many researches concerning the cultural aspect of LTK investigate the strategy of cultural preservation and heritage management from an economic and ethnographic perspective. Most of these studies were carried out at the community level and targeted on a single component of LTK, few of them are conducted from a geographic perspective and studied LTK comprehensively. This research investigates residents' perceptions of LTK in an entire ethnic city with urbanization in mind. Also, multiple research methods are employed to ensure the reliability and validity of research results. It supplies empirical evidence to the cultural process that is reshaping an ethnic city in China. Moreover, the dynamics and complexities of integrating LTK with urbanization are captured by delineating the urban-rural difference. It should help provide a better understanding of how urbanization influences minorities' perceptions of cultural traditions. Additionally, it justifies how the built environment of the ethnic minority areas is being transformed.

This study also explores potential solutions to the challenges of culture preservation and discusses how to move forward to an inclusive urban governance. The findings provide some new knowledge beneficial to practitioners. It also provides a good reference for similar cities looking to integrate LTK during rapid urban development. In addition, since most previous studies on Bai

LTK have been carried out in Chinese, conducting this research in English contributes to additional available resources for Western scholarship.

6.4. Limitations and future directions

This study merely focuses on local Bai people. Its research scope is limited as it does not include the other native ethnic groups who have adopted Bai LTK in Dali, such as the Han and the Hui. Future research might stem from this study to include other ethnic groups in Dali to get a better understanding on the topic study from more perspectives. Furthermore, this study only focuses on residents who are involved in the bottom-up process of policy making. To fully illustrate culture preservation and move towards an inclusive urban governance, future studies may include government officials, architects, and planners who are involved in the top-down decision process.

Another limitation that must be addressed is the representativeness of the sample. While making urban-rural comparison, the questionnaire sample has an inequal amount of urban and rural respondents. As described in Chapter 4.1, 74% of the questionnaire samples were recruited from rural neighbourhoods. These participants were unevenly distributed in different townships which makes it somehow biased to compare the results amongst different administrative boundaries. Moreover, although the focus group discussions were based on the key questionnaire results, only two of these participants had participated in the previous questionnaire survey. The relatively small sample size of the focus group is a drawback in this research. Future studies may incorporate census data, remote sensing, and social media to capture more and deep transformation in social landscape. These data resources will make it easier to visualize changes in the built environment and the urban-rural difference in culture preservation.

It is more likely that ethnic minority regions, especially the provincial capitals in Western China, will continue to experience ethnic urban population growth (Li, 2017). This research explores the conservation of local culture under the New Urbanization Plan Policy. The restoration

of local culture and the rural transformation in Dali are relatively successful. It is also possible that future research might include other similar cities, particularly ethnic cities to investigate LTK in other dimensions or in other contexts. Considering the similarities and different development stages of these cities, it may be interesting for scholars to undertake a comparative study on the effectiveness of culture preservation policy.

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Appendix i: Questionnaire

问卷编号：
日　期：
受访者所在社区：

调查员：
受访者：

联系方式：
联系方式：

城市化进程中大理市白族文化保护调查问卷

您好，感谢您在百忙之中抽出时间，参与我们关于大理白族文化传承与保护的问卷调查。

本次调查旨在了解云南大理城市居民参与社区共建的情况以及白族文化在城市发展中的传承与保护情况，此问卷仅作为学术研究所用，不做任何商业所用；本次调查严格遵守保密自愿原则，我们不会将您的隐私泄露，希望您可以提供真实准确信息。问卷全部为单项选择，答案没有正误之分。衷心感谢您的参与！

本课题组　2017 年 8 月

一、基本信息

Q1.1 您的性别：　A.男　　B.女

Q1.2 您的年龄：　A.18-25 岁　B.26-35 岁　C.36-55 岁　D.56 岁或以上

Q1.3 您的民族：　A.汉族　　B.白族　　C.其他：_____

Q1.4 您是否会说白语？　A.是　　B.否

Q1.5 您家庭交流对话以何种语言为主？　A.白语　　B.汉语　　C 其他

Q1.6 您在大理市居住时间？

A.小于 5 年　B.5-10 年　C.10 年以上 20 年以下　D.20 年或者 20 年以上

Q1.7 您是否全年都居住在大理市？　A.是　　B.否

Q1.8 您是否为城镇户口？　A.是　　B.否

Q1.9 您的学历：A.小学及以下　B.初中　C.高中或中专　D.大专　E.本科　F 研究生

Q1.10 您的职业：

A.产业工人　　B.农民　　C.商人　　D.教师　　E.学生

F.行政人员或机关干部　　G.退休　　H.待业　　I.其他

Q1.11 您的月收入（元）：

A.2000或以下　　B.2001-4000　　C.4001-6000

D.6001-8000　　E.8001 或以上

Q1.12 您的宗教信仰

A.本主　　B.道教　　C.佛教　　D.伊斯兰教

E.基督或天主教　　F.无宗教信仰　　G.其他/不方便说_____

二、请您对您所住社区内及附近的公共活动场所进行评价。

Q2.1 您所居住房屋的朝向主要影响因素是什么？

A.风向　　B.光照　　C.水源　　D 街道　　E.其他

Q2.2 您所居住房屋的朝向？

A.坐东朝西　　B.坐西朝东　　C.坐北朝南　　D.坐南朝北　　E.其他

Q2.3 您生活的社区体现出"白墙青瓦"的建筑风格。

A.非常不同意　　B.不同意　　C.一般　　D.同意　　E.非常同意

Q2.4 您所居住的社区采用了"三坊一照壁"、"四合五井天"等相关白族传统建筑风格居住房屋。

A.是　　B.否

Q2.5 您所居住的社区有采用彩绘、木雕、石雕、泥塑。

A.非常不同意　　B.不同意　　C.一般　　D.同意　　E.非常同意

Q2.6 您所居住的社区使用了大理石、青石、鹅卵石等石材。

A.非常不同意　　B.不同意　　C.一般　　D.同意　　E.非常同意

Q2.7 您所居住的社区种植了树木花卉（比如茶花、兰花、杜鹃花、竹等）。

A.非常不同意　　B.不同意　　C.一般　　D.同意　　E.非常同意

Q2.8 您所居住的社区是否有水流经过。

A.是　　B.否

Q2.9. 您所居住的社区有本主庙吗？

A.是　　B.否

Q2.10 您所在社区（村子）是否种植了"大青树"（古榕树）？

A.是　　B.否

Q2.11 "大青树"位于您所在社区的_____位置？

A.社区入口（村口）　B.社区中心（村中心）　C.其他

Q2.12 您认为大理民居保留在墙体、门楼、照壁以及屋面装饰等方面传承和保留了大理白族的地方特色?
A.非常不同意 B.不同意 C.一般 D.同意 E.非常同意

Q2.13 您是否置过家?
A.是 B.否

Q2.14 (回答 A.是) 您搬前居住的房屋与现在居住的房屋建筑风格相比较变化如何?
A.非常大 B.比较大 C.一般 D.变化不大 E.没有变化

Q2.15 (回答 A.是) 您现在居住的房屋建筑风格?
A.具有白族建筑风格 B.现代民居楼 C.无民族建筑风格

Q2.16 您所在的社区是否保留了白族的传统节庆?
A.是 B.否

Q2.17 您所在的社区居民装饰是否保留有传统的白族元素?
A.是 B.否

Q2.18 您是否去过北京、上海、广州等城市?
A.是 B.否

三、请您对您居住的室内空间进行评价。

Q3.1 白色是否是您所居住民居的主要色调?
A.是 B.否

Q3.2 您所居住的民居是否会将花鸟、山水画、诗词等作为建筑装饰的素材?
A.是 B.否

Q3.3 您所在的家庭是否是一大家子住在一个合院中?
A.是 B.否

Q3.4 您家中是否供奉"天地君亲师位"和祖先牌位?
A.是 B.否

Q3.5 您家中门窗、照壁等是否会用木雕以及大理石?
A.是 B.否

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Q3.6 您的房屋建材主要选择 _____
A.砖、木 B.钢筋水泥 C.其他

Q3.7 您的房屋外墙装饰采用了 _____
A.白灰粉刷 B.粘贴瓷砖 C.其他

四、请您对大理白族文化传承与城市建设进行评价。

Q4.1 城市人工景观设计中突出了木雕、石雕、彩绘、泥塑、扎染蜡染等工艺。
A.非常不同意 B.不同意 C.一般 D.同意 E.非常同意

Q4.2 城市人工景观设计广泛采用门楼、照壁。
A.非常不同意 B.不同意 C.一般 D.同意 E.非常同意

Q4.3 城市人工景观设计中考虑到了水流。
A.非常不同意 B.不同意 C.一般 D.同意 E.非常同意

Q4.4 城市自然景观中种植了大量花卉(如茶花、兰花、杜鹃花等)和树木。
A.非常不同意 B.不同意 C.一般 D.同意 E.非常同意

Q4.5 您认为大理民居在墙体、门楼、照壁以及屋面装饰等方面传承和保留了大理白族的地方特色?
A.非常不同意 B.不同意 C.一般 D.同意 E.非常同意

Q4.6 随着旅游业的兴起,大理白族文化得到了很好的传承和保护。
A.非常不同意 B.不同意 C.一般 D.同意 E.非常同意

Q4.7 随着旅游业的兴起,您认为旅游产业对大理白族文化的影响是怎样的?
A.积极影响 B.消极影响 C.没有大影响 D.不清楚

五、开放式建议
您认为如何更好地在城市化中传承和保护白族文化?请写下您的建议。

问卷到此结束,再次衷心感谢您的支持和参与!

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The questionnaire in English (translated by the author):

Traditional Bai Culture Conservation during the Processes of Urbanization

in Dali City

Hello, thank you for spending time to participate in this questionnaire survey regarding the inheritance and protection of traditional culture in Dali City. The goals of this survey are to study the condition of public participation in local community planning, and the inheritance of Bai's traditional culture during the processes of urbanization. This survey will be only used for academic research, none of the data would be sold to a third party; this survey will be confidential, and your privacy will be fully protected with commitment, please feel comfortable to provide the most accurate information. The questionnaire contains all multiple-choice questions, no right or wrong answer. Thank you very much for participating in this survey!

The project team August 2017

l. Basic information

Q1.1 Your gender: A. male   B. female

Q1.2 Your age: A. 18-25   B. 26-35   C. 36-35   D. 56 and above

Q1.3 Which cultural group do you belong to: A. Han Chinese   B. Bai   C. Other:_____

Q1.4 Can you speak Bai language?   A. Yes   B. No

Q1.5 Which language do you speak at home? A. Bai language   B. Mandarin C. Other:_____

Q1.6 How long have you been living in Dali City?

    A.   Less than 5 years   B. 5-10 years

   C. More than 10 years and less than 20 years   D. 20 years and above

Q1.7 Do you live in Dali City all year round?   A. Yea   B. No

Q1.8 Do you have an urban Hukou (do not enjoy the right to the rural collective land)?

   A. Yes   B. No

Q1.10 Your career:

   A. factory worker/company employee   B. farmer   C. merchant   D. teacher   E. student   F. government official/employee   G. retired H. unemployed   I. other:_____

Q1.11 Your monthly salary (Chinese yuan):

A.   2000 and below   B. 2001-4000   C. 4001-6000

D.   6001-8000   E. 8001 and above

Q1.12 Your religion:

A.   Benzhu (the Bai village gods)   B. Taoism   C. Buddhism   D. Islam

E. Christianity/ Catholicism   F. no religion   G. Other/ prefer not to answer:_____

ll. Please comment on the neighbourhood that you are living in and its surrounding public spaces.

Q2.1 What is the major factor of the building orientation of your current residence?

A. Wind direction   B. sunlight   C. source of water   D.   street   E. other:_____

Q2.2 What is the orientation of your current residence?

A.   West-facing   B. east-facing   C. south-facing

D. north-facing   E. other:_____

Q2.3 The housing developments in your neighbourhood have reflected the "white wall and grey roof" architectural style.

A.   Strongly disagree   B. disagree   C. neutral   D. agree   E. Strongly agree

Q2.4 The housing developments in your neighbourhood have used the traditional architectural layout of "three buildings with a screen wall" and "four buildings and five courtyards".

A.   Yes   B. No

Q2.5 The housing in your neighbourhood has decorative wall painting, stonework and clay sculpture.

A.   Strongly disagree   B. disagree   C. neutral   D. agree   E. Strongly agree

Q2.6 Marble, bluestone, and cobblestone were used for housing construction in your neighbourhood.

A.   Strongly disagree   B. disagree   C. neutral   D. agree   E. Strongly agree

Q2.7 There are trees and flowers in your neighbourhood (such as camellia, orchid, azalea, bamboo, etc).

A. Strongly disagree   B. disagree   C. neutral   D. agree   E. Strongly agree

Q2.8 Is there any stream flows through your neighbourhood?

A. Yes   B. No

Q2.9 Is there a Benzhu temple in your neighbourhood?

A. Yes   B. No

Q2.10 Is there any "big green tree" (Ficus hookeriana) in your neighbourhood (or in your village)?

A. Yes   B. No

Q2.11 Where is the "big green tree" (Ficus hookeriana) in your neighbourhood?

A. At the edge of the neighbourhood boundary   B. at the centre of the neighbourhood   C. other

Q2.12 Do you think that the decorations on wall, entrance and roof of residential housing in Dali City reflect the local culture of the Bai ethnic group?

A. Completely disagree   B. disagree   C. neutral   D. agree   E. completely agree

Q2.13 Have you ever moved?

A. Yes   B. No

Q2.14 (Answer if you choose A. Yes in last question) How does the architectural style of your former residence differ from your current residence?

A. Completely different style   B. relatively different style   C. neutral

D. somewhat different style   E. the same style.

Q2.15 (Answer if you choose A. Yes in last question) what is the architectural style of your current residence?

A. Has architectural elements of the Bai's traditional housing
B. modern residential housing   C. Do not have the element of any ethnic culture

Q2.16 Does your neighbourhood celebrate local traditional festivals?

A. Yes   B. No

Q2.17 Do people in your neighbourhood wear the traditional costume?

A. Yes   B. No

Q2.18 Have you been to another city such as Beijing, Shanghai and Guangzhou?

A. Yes   B. No

III. Please describe the characteristic of your current residence.

Q3.1 Is the main colour of your house white?

A. Yes   B. No

Q3.2 Does your house have any kind of the following decorative features:flower, bird, landscape painting, and poem?

A. Yes   B. No

Q3.3 Do you live with extended family in the same courtyard house?

A. Yes   B. No

Q3.4 Do you have an ancestral tablet that you worship at home?

A. Yes   B. No

Q3.5 Do you have any wooden sculpture or marble material for your screen wall and door frame?
A. Yes   B. No

Q3.6 What kind of construction materials do you use for your house?

A. Brick and wood   B. steel and concrete   C. other

Q3.7 What material do you use for decoration for the exterior wall of your house?

A. Limewash paint   B. put decorative tile   C. other

IV. Please describe the city development and local cultural protection in Dali City.

Q4.1 The artificial landscape design in Dali has reflected the cultural elements of wood carving, stonework, wall painting, clay arts, the art of tie-dyed fabric.

A. Strongly disagree   B. disagree   C. neutral   D. agree   E. strongly agree

Q4.2 The overall artificial landscape design in Dali has applied the concept of screen wall and gate tower.

A. Strongly disagree   B. disagree   C. neutral   D. agree   E. strongly agree

Q.4.3 The overall artificial design in the city has considered water streams.

Q 4.4 The landscape design in Dali has made use of plenty of flowers (such as such as camellia, orchid, azalea, etc.) and trees.

A. Strongly disagree　　B. disagree　　C. neutral　　D. agree　　E. strongly agree

Q4.5 Duplicated with Q2.12

Q4.6 The culture of the Bai ethnicity is well protected even with the increase of tourism.

A. Strongly disagree　　B. disagree　　C. neutral　　D. agree　　E. strongly agree

Q4.7 With the increased development of the tourist industry, how do you think tourism has affected the local culture?

A. Positive impact　　B. negative impact　　C. not much impact　　D. not sure

V. Open-ended question.

How can we better protect the local culture during urbanization? Please write down your suggestions.

Here is the end of the questionnaire, thank you very much for completing the survey!

Appendix ii: Summary information of questionnaire survey participants

Number of Participants	Community	Status	Township/District	Total Participants
1	Lvtao village	rural	Dali	7
4	Sanwenbi village			
2	Guanyintang community			
1	Jinsudao village		Haidong	1
1	Dacheng villege		Wase	16
15	Wase village			
15	Gusheng village		Wanqiao	15
1	Xizhou village		Xizhou	19
18	Zhoucheng village			
1	North Wuliqiao village		Yinqiao	1
1	Hexi Gongzufang community	suburb	Fengyi	1
1	Upper Eryang community		Manjiang	5
4	Manjiang village	urban		
7	Xiazhuang village		Xiaguan	14
1	Fuhai community			
1	Hepan village			
1	Longxiang community			
1	Wanhua community			
1	West Dajie community			
1	Xiaguan town			
1	Ziyun community			
1	Yunling community		Tianjing	1

*The urban-rural division here were based on CNBS's Urban-rural Division Code for the Year 2017 (NBSC, 2009; NBSC, 2018). Source: Gao, *et al* (2017).

Categories		Count	Percentage
Gender	Male	40	50%
	Female	40	50%
	Total	80	100%
Age	18-25	25	31%
	26-35	19	24%

	36-55	25	31%
	over 56	11	14%
Knowledge of Bai language	Yes	72	90%
	No	8	10%
Language spoken most often at home	Bai	66	83%
	Mandarin	12	15%
	Both	2	2%
Years living in Dali	10<year<20	16	20%
	20 or over 20	64	80%
Reside in Dali all year round	Yes	78	98%
	No	2	2%
Registered in urban household status	Yes	32	40%
	No	48	60%
Education	primary school or less	7	9%
	junior high school	19	24%
	senior high school	22	28%
	undergraduate/college	11	14%
	graduate	21	26%
Occupation	factory worker	2	3%
	farmer	24	30%
	merchant	6	8%
	teacher	4	5%
	student	12	15%
	government employee	10	13%
	retired	2	3%
	unemployed	1	1%
	other	19	24%
Monthly income (RMB)	2000 or less	37	46%
	2001-4000	22	28%
	4001-6000	13	16%
	6001-8000	6	8%
	8001 or more	2	3%
Religion	Benzhu (village gods)	36	45%
	Taoism	2	3%
	Buddhism	6	8%
	Islam	1	1%
	Christianity/ Catholicism	2	3%
	no religion	25	31%
	other/prefer not to answer	8	10%

Appendix iii: Summary information of focus groups participants

Group Number	Number of Participants	Gender	Age	Occupation	Township	Status
1	3	Female	36-55	Maintenance, landlord	Dali	Rural
		Male		Security, landlord		
		Male		Landlord		
2	3	Female	26-35	Sales representative	Dali	
		Male		IT technician	Xiaguan	Urban
		Male		IT technician	Manjiang	
3	5	Female	18-25	Student/ kindergarten teacher (co-op)		
		Female		Student/ unknown summer job		
		Male				
		Male				
		Male				

*The urban-rural division here were based on CNBS's Urban-rural Division Code for the Year 2018 (NBSC, 2009; NBSC, 2019).

Sample focus group discussion guide:

Topic	Sample questions
Perceptions of Dali's built environment and the awareness of urbanization's impacts on LTK.	Given the results from the questionnaire survey, how do you think of traditional Bai dwellings? Why more and more people are living in modern houses? How do you think of the current Bai architecture revitalization?
Traditional pracitce	Do people still place ancestry tablet at home? Can you give an example of what is changing recently?
Tensions between 'modern' and 'traditional'	The questionnaire results demonstrate that not many people are interested in culture preservation, why? How do you like the culture preservation policy and regulations in Dali? Do you have any suggestion?

Appendix iv: Satellite images of two traditional villages

Gusheng Village (2011)

Gusheng Village (2019)

Zhoucheng Village (2011)

Zhoucheng Village (2019)

Appendix v: Ethics approval

Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

CERTIFICAT D'APPROBATION ÉTHIQUE | CERTIFICATE OF ETHICS APPROVAL

Numéro du dossier / Ethics File Number	S-04-19-3391
Titre du projet / Project Title	Local traditional knowledge and its urban context: a case study of Bai ethnic minority in Dali, China
Type de projet / Project Type	Thèse de maîtrise / Master's thesis
Statut du projet / Project Status	Approuvé / Approved
Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)	14/05/2019
Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)	13/05/2020

Équipe de recherche / Research Team

Chercheur / Researcher	Affiliation	Role
Huier MA	Département de géographie / Department of Geography	Chercheur Principal / Principal Investigator
Huhua CAO	Département de géographie / Department of Geography	Superviseur / Supervisor

Conditions spéciales ou commentaires / Special conditions or comments