

Durban. Green: Black Townships; Red: Mixed Townships; Beige: Indian Townships.

# Distribution of Settlements in Valleys in Guizhou, China: A Regional Perspective

ZHOU ZHENGXU<sup>1</sup>, HU YAQI<sup>2</sup>, LIU SHAN<sup>2</sup>

1. School of Architecture, Tsinghua University, Beijing, China; 2. School of Landscape Architecture, Beijing Forestry University, Beijing, China; email: zhouzx@mail.tsinghua.edu.cn

**Abstract:** Settlements in Valleys are the main type of human settlements in mountainous terrain. In the study of Guizhou, the typical mountainous province in southwestern China, we take valley as a important space unit for studying the formation and evolution of a single settlement and of group of settlements. Taking four typical valley areas within minority group regions as examples, the paper analyzes the existence, the reproduction, the migration of foreign community presence and the interaction among settlements in these valley, and discusses the distribution of rules of settlement groups in the valley for the selected case studies.

**Key words:** Valley, Settlement, Mountain, Guizhou, minority group regions.

## *Valleys, a space unit for studying the evolution of mountainous settlements*

Guizhou, located in the southwest part of China, is in the east of Yunnan-Guizhou Plateau. It is a typical mountainous province with an average altitude of 1100 meters and 92.5% of its area covered by mountains and hills. In the meantime, Guizhou, where many minority groups gather, is among the provinces which are full of ethnic characteristics. Over thousands of years, ancestors of minority groups have been migrated to Guizhou from adjacent areas, engaging in agriculture as well semi-nomadic production and settling down in the form of villages or tribals. Due to diverse land forms, isolation by mountains and rivers, and to the long free time from the central administrative jurisdiction, all the ethnic groups lived together over vast areas while some lived in concentrated communities in small areas. They formed, developed and preserved their unique ethnic culture during the process of migrating and settling. Until now, there exists as many as 17 minority groups in Guizhou, including Miao, Dong, Buyi, Gelao. All the ethnic cultures have different expressions of their own but live together harmoniously.

Previously, the majority of the researches on mountain minority settlements mainly focused on each single village, especially on the characteristics of dwellings such as Diaojiaolou buildings (house on stilts), Stone houses and public buildings (drum towers and the shelter bridges). However, in these studies, we found that the settlement researches lacks a regional view. One of the basic views of “the Science of Human settlements” is to focus on the relationship among different aspects. A particular topic needs to be studied moving from the previous state of knowledge, to

a broader view and to a more overall viewpoint, and to advocate “studying the city with a concept of region”.<sup>1</sup> Settlements tend to have regional characteristics. In most cases, there are similar geographical and natural conditions within a geographical unit as valleys; the traditions and the culture in each settlement of the same region tend to be similar. Therefore, the settlements' space shows often similar characteristics. Thus, the analysis of the characteristics of the distribution of the settlements' groups is also an important part of the research on human settlements.

Since 2003, we have carried out surveys and researches on typical ethnic groups in some typical areas of Guizhou, such as Buyi settlements in Biandan Mountain-Baishui Valleys Area in central Guizhou, Tunpu settlements in central Guizhou, Miao and Dong settlements in Qiandongnan Area in southeast Guizhou, etc. Through the investigation and the research work, we gradually accumulated awareness of the mountain settlements of minority groups in Guizhou, and found that valleys, as a geographical and morphological entity, play an important role in the formation and in evolution of the settlements.

Guizhou is a typical mountainous area with rolling mountains and rugged landform. The communication across mountains is particularly difficult. However, valleys are often formed due to alluvial rivers and the transportation is much easier by rivers. Therefore, each river valley forms a closed and homogeneous geological unit, in which a cultural district is formed. In a region of one or several adjacent valleys, the settlement groups are interrelated and form a “settlement culture community” or a “cultural region”. This is related to their geographical factors as well as to the historical processes. The common and unique characteristics of mountainous minority settlements' space can be understood more thoroughly if the group characteristics of settlements are studied in the space-unit of a valley, providing a rational regional perspective, which is worthy of attention.

#### *Existence and reproduction of settlements in valleys*

The Buyi settlements are located in Biandan Mountain-Baishui Valleys Area (at the junction of Zhenning, Guanling, and Liuzhi counties) in central Guizhou. The overall geomorphology of this area is mainly made up of Karst peaks and valleys forming an alluvial flat of about 30 kilometers in length and 1 kilometer in width from northwest to southeast. There are more than 100 large and small Buyi settlements distributed along the valley. These settlements are the expansion of several earliest Buyi settlements, up to 48 large Buyi settlements, and until now to more than 100 settlements (Fig. 1-2). These villages pay much attention to respect their “living space” in the process of site selection, adhering to the principle of “building in the mountain area instead of cropland preservation area.” The village sites are often located at the bottom edge of the valley, facing the river valley flat, with mountains on the back, in order to maximize the use of valley flat as paddy fields. A village is about 1 km far away from another to maintain its own relatively sufficient development space.

1. WU 2001.

*Migrating, settling down and the expanding of settlements*

In a larger range, as the population of a village continue to multiply, part of the branches are used to find another suitable location to establish derivative settlements when the settlement population's limit is close. As this process has been repeated for hundreds of years, a large number of settlement groups with common ancestors have been formed. They often have a clear relationship of origin and inheritance. Therefore, a settlement group can be generated by an original settlement, or by a series of derivative settlements, and even by secondary derivative settlements all occupying a larger area.

Most of the ancestors of the settlements of the Dong minority group, located in South-dong area, migrated from the downstream of Duliujiang River. After the ancestors of the Dong people entered the Duliujiang River basin, they abandoned their boats and went ashore at the docking place (always located in the joint place of a branch of Duliujiang River) leading to various branches, including Gaoan, Baluo, Bingmei etc. They continued to go upstream and looked for new sites with favorable conditions for survival and settlements' reproduction (Fig. 3-4).

Generally speaking, the ancestors of the Dong people entered the area earlier and selected the river valley flats with broad plains, high quality soil and excellent irrigation conditions for their future settlements ("Primary Settlements" shown in Figure 3). These areas also served as the initial strongholds for the ancestors of the Dong minority group to pioneer the Duliujiang River basin. With the stabilization of the settlements, continuous opening up of new land and constant reproduction, some parts of the initial settlement would have leaved the primary settlement to look for further suitable places for settling down thus forming "secondary settlements" and "tertiary settlements", especially when the farmland of the primary settlement was not able to support further development of the previous settlement. Generally, almost all of the broad river plains within the area were occupied. The newly generated secondary settlement would select some narrow river valley flats with unfavorable living conditions and even mountain valleys and mountainside slopes with poor living conditions.

*Army stationing, and the conflict and the integration between primary settlements and immigrant settlements*

Before Ming Dynasty most residents in Guizhou were minority groups. At the beginning of Ming Dynasty, the central government began to pay attention to the Guizhou region. So a large number of Han militaries and civilians had migrated from central and southern China for building and stationing in the garrisons during the early Ming Dynasty. Consequently, the Tunpu village developed both military and agricultural characteristics, which is a obvious destiny of the Chatou Valley (Fig. 5-6).

Starting from the Pingba Wei City (the general command center of Wei<sup>2</sup>), several Pu<sup>3</sup> villeges distributed along the Chatou River Valley, under jurisdiction of Pingba Wei, including Daiguan Pu, Yaolan Pu, Taoguan Pu, Wulitun, Dawangxia Pu, Xiaowangxia Pu, Xuexia Pu, Zhouxia Pu, Haoxia Pu, Linda Pu, Jichang Pu, Chatou Pu, etc. There were several concentrated Tunpu villeges along Chatou River near Pingba Wei, because of its unique natural conditions. For Han soldiers and civilians who needed to garrison and cultivate Chatou River Valley was one of the best flat areas because of the fertile soil and easy irrigation. Besides, the valley was protected by mountains on two sides. Guarding Chatou River protected Pingba Wei to avoid attacks from the southern flat area. Pu, located at both sides of Chatou River and geographic environment, constituted a defense-system-group.

Another interesting case is Taoyao River Valley (Fig. 7). It is located in Leigong Mountain District in the southeastern part of Guizhou. The altitude of the birthplace of Taoyao River is located at about 1500m and the altitude of the intersection with the Bala River at 800m. Within the distance of about 20km from the birthplace of Taoyao River into the Bala River, the altitude falls approximately 700m. Within hundreds of years, local Miao people established a number of settlements from downstream to upstream. These settlements include the earliest Miao villeges, some Miao villeges built by subsequent migration, and a Han military Tunpu villeges which were established to drive away minority groups during the Qing Dynasty, Qianlong period (~1736AD). Even some Dong villeges are included. After hundreds years of conflicts, integration and development, the current pattern of the settlement space in the valley was formed.

Zhi'an village, located in the valley downstream, was set up in early Qing Dynasty (1740s AD). Before that, this place was occupied by Miao minority groups. To consolidate its rule, the Qing government set up military camp in Zhi'an village to strengthen the defense. The settlement located in the middle part of the downstream alluvial plain of the Taoyao River Valley, where best farming condition were present, holds the critical position of the course at which the river entered the county and is a place of prominent strategic position. Taoyao villeges, another group of villeges in the downstream of the valley, is one of the most ancient group of Miao minority settlements. It was eestablished before Zhian villeges and experiences also a relatively good farming condition. Zhianpu was established in Qing Dynasty, when most of the migrant Miao villegers were forced to migrate to this area and gradually developed into one of the largest local Miao village. Paika, Yanggou, Baiyan villeges are located in the middle stream of the valley, and were established later than Taoyao village. When the population grew and living space became tense, Miao ancestors living in downstream fled upstream to settled down. The terrain in this area is steeper, so most farmlands are terraced fields. It is noteworthy that Yanggou, a Dong village, migrated

2. WEI: Military and administration cities in Ming Dynasty and Qing Dynasty, usually command 50 Pus with 5600 soldiers in total.

3. PU, or TUNPU: Military and agricultural villeges in Ming Dynasty and Qing Dynasty under the command of Wei, usually hold 112 soldiers each.

also from downstream. Wudong village, located in the upstream of the valley, at the highest altitude, has the most steep and disintegrated terrain and the worst farming conditions. They needed several efforts to settle down considering the limitations of climatic and terrain conditions. Therefore, Wudong village, which was set up late, was formed because of the several migrations from the downstream of the valley.

Hundreds years have passed, once the war and migrations had subsided. The six villages located in the valley, despite the presence of different ethnic groups, size and construction time, have survived and developed so far, occupying the different positions of the upper, middle and lower reaches of the valley, forming a harmonious spatial pattern of living in mountainous area with certain characteristics. The ethnic groups have long been harmonious to live together in this valley.

In conclusion, the valley is the main farming and living space in mountainous areas of Guizhou and is the primary location of settlements for mountain minorities groups. which revealed the historical process of the formation and evolution of mountain settlements and their urban form. Besides, many intact ethnic cultural communities settled in those valleys. Thus, the protection and sustainable development of the valley is a very important issue within the in current and most recent urbanization and industrialization processes.

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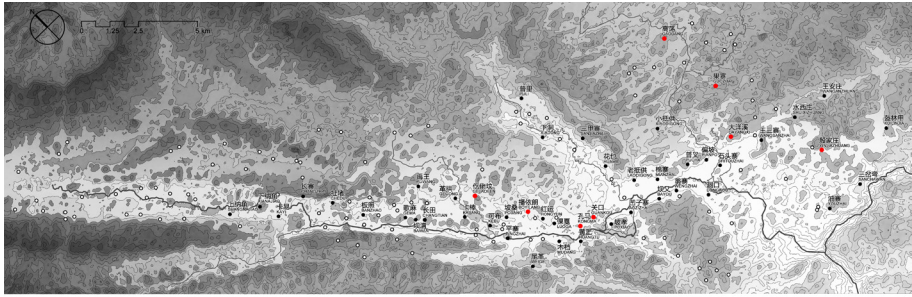


Fig. 1. Distribution of Buyi settlements in Baishui Valleys in central Guizhou

- 8个调研村落 | 8 VILLAGES SURVEYED AND MAPPED
- 48个大寨 | 48 BIG BUYI VILLAGES
- 其他村落 | OTHER BUYI VILLAGES



Fig. 2. Buyi settlements in Baishui Valleys.

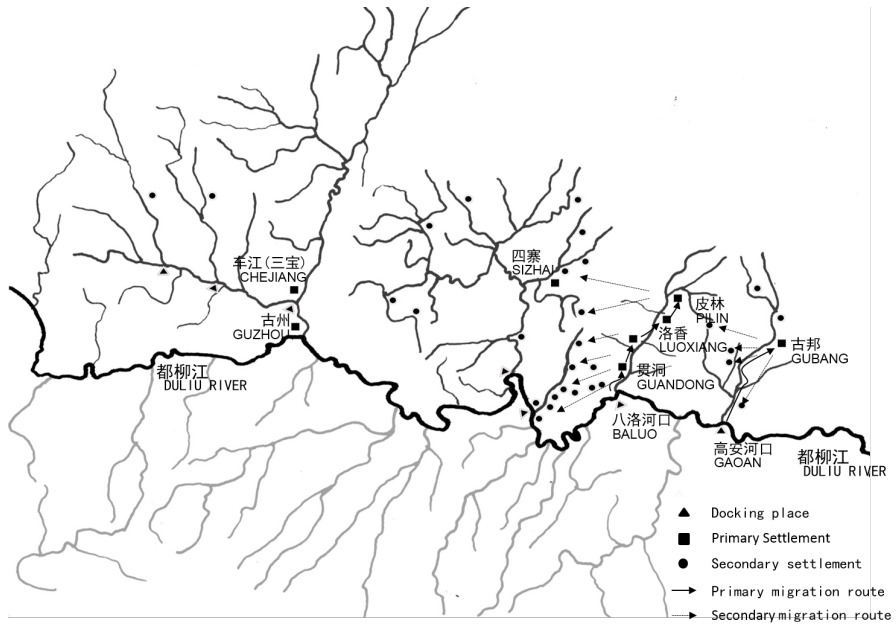


Fig. 3. Dong settlements in several river valleys of Duliujiang River in Southeast Guizhou



Fig. 4. Dong settlements along with Duliujiang River in Southeast Guizhou.



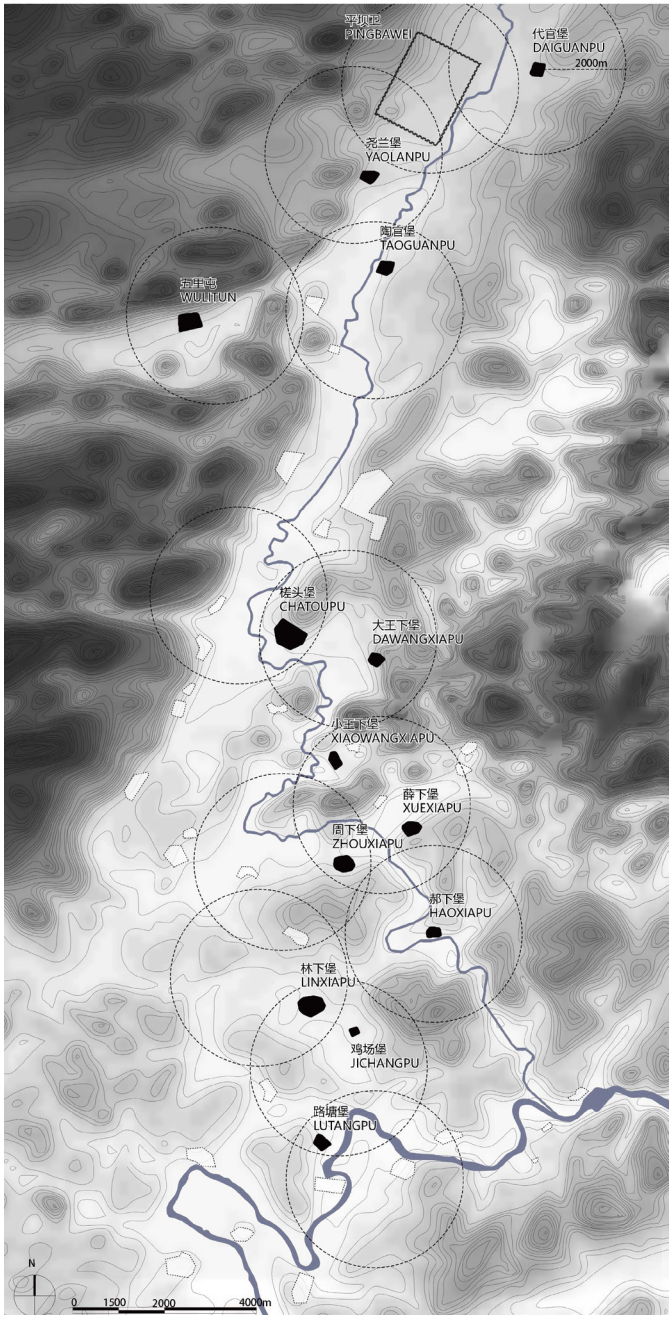


Fig. 5. Distribution of Tunpu villages in Chatou River Valley in Central Guizhou.



Fig. 6. Aerial Views of Tunpu villages in Central Guizhou.

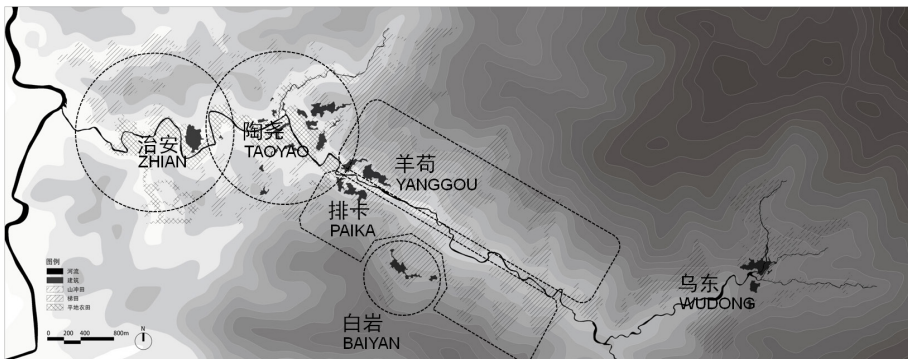


Fig. 7. Miao settlements, Han settlements (posterity of Tunpu) and Dong settlements in Taoyao River Valley in southeast Guizhou.