

Investigation and Research on the Construction Process of the Traditional Settlement of the Qiang -- A Case Study of Zengtou Village

Haiyan Zhong^{1, a}, Cheng Chen^{1, b}

¹Southwest Minzu University, Chengdu, China, 610000.

^a1461795789@qq.com, ^b493400843@qq.com

Abstract

Traditional villages refer to ancient villages, and their village space pattern and construction art have a complete system of generation. The settlement of the Qiang people reflects the unique order and cultural and spiritual values. This article explores the location of the village, the wisdom of the village building, the village place and the village spirit, and investigates the village defense system, the village drainage system, the investigation of the traditional Qiang residents' architecture, the traditional door lock investigation, and the human spirit. Explore the regional style and national spirit of the Qiang village.

Keywords

Qiang , Zengtou Village, traditional settlement, village construction.

1. Introduction

The Qiang people are one of the countries with a long history in China. They are now concentrated in Mao County, Wenchuan County, Li County, Heishui County, Songpan County and Beichuan County in the Aba Tibetan and Qiang Autonomous Prefecture on the upper reaches of the Minjiang River in Sichuan Province. Zengtou Village, located in Taoping Township, eastern Li County, is about 2,400 meters above sea level. It belongs to the high mountain area, and its village is the representative of the current Qiang population settlement. The rhythm feels strong outside the village, the centuries-old stone building, the space is rich in thought space, the natural wisdom drainage system, the traditional Qiang door lock, constitutes a unique settlement.

2. Village Site Selection

The Aba Tibetan and Qiang Autonomous Prefecture in the upper reaches of the Minjiang River is the most important settlement of the Qiang people in the country, and it is also the most pure area in the ancient customs. As a material carrier of this kind of civilization, the Qiang villages are the ones that are in harmony with the whole, the ones that are in harmony with the whole, the single building of energy-saving buildings, the production methods that coexist with nature, and the heart of the divinitys who respect the heavens and the earth. The Qiang people are in this land, accumulated two thousand years of experience. The site selection conditions of Zengtou Village are considered from the aspects of sufficient water source safety, good defense situation, suitable local climate and satisfy Qiang spiritual needs. It can be said that it possesses water, land, sunshine, and easy to defend. You can look at the snowy mountains in the distance, so in the later development, the products are rich, the people are thriving, and the villages are expanding (Figure 1).



Figure 1. Schematic diagram of the geographical position of the Qiang

2.1. Adequate Water Supply



Figure 2-3. Zengtou Village Xiazhai Water Supply Pipeline

The people living in the upper reaches of the Minjiang River depend on the Lancang River and its tributaries for their livelihood. Zengtou Village is backed by Dabai Mountain. Dabai Mountain has snow all the year round and is also a source of water. It provides sufficient water for Zengtou Village to meet the demand for domestic water in Zengtou Village. In fact, the original ecological water system does not have a river directly through the Zengtou Village, but for the sake of agricultural production and living needs, the villagers must come up with solutions to the problem. The way for the villagers to solve the problem is to cut the ditches, divert water into the village, and divert water into the fields. Using artificially digging canals, the water is led along the contour line to the highest arable land, and then the water can be cascaded down, followed by watering the farmland. Water is introduced into the field like this, and the farmland has sufficient water to water it, which ensures the normal operation of agricultural production. While the villagers are guiding the water to the cultivated land, they will open another branch channel to bring the water to the village. Then each household will separately drill different water channels to bring the water to their homes according to the location of the main canal that is diverted into the village. The villagers cut through different layers of water channels and led the water to various households in Zengtou Village to meet the villagers' demand for domestic water. At present, the water in the open channel is not used in the village for drinking, but the water that is drained from the mountain in the drinking pipe (Figure 2-Figure 3).

2.2. Ample Land for Agriculture and Animal Husbandry

Zengtou Village is located in the high mountains and has more natural cultivated land. Compared to the neighboring villages of Jia shan and Daxi shan, Zengtou Village has more flat agricultural land. At the same time, research and research found that the various stockades in Zengtou Si zhai were built on steep slopes as much as possible, leaving flat land for cultivation.

In the past, the county has spread this saying: "Hungry Taoping, full of mountains, inflated is Zengtou Village." The reason is that Taoping Qiang zhai is about 1700 meters above sea level, and it is located on the bank of Zagunao River with less cultivated land. Jia shan Village is 2120 meters above sea level and is located in the middle of the mountain. The Zengtou Village is located in the mountains, at an altitude of 2,400 meters. It has a large amount of cultivated land, it can also transform some of the forest land into cultivated land, and it is closer to the pasture, so it is the richest.

2.3. Good Form of Defense

The Qiang people have been in a dilemma for wars and turbulence for a long time. In the Da Nationality's Great Record, it recorded the thousands of anti-oppression and anti-slavery uprisings and wars that the Qiang people experienced through the Shang Dynasty in the 12th century BC and the 3,000 years since the founding of New China in 1949. Zengtou Village is located in the high mountains and has a good form of defense in the high ground. It has a great defense advantage over the river dam area where Taoping Village is located. The mountain is easy to defend, and has extended the enemy's attack time for the defensive increase, because the enemy spends a lot of time and energy on climbing. At the same time, because of the high terrain, it is easy to find the enemy's offensive line and then organize a counterattack. The first four villages are closely linked to form a defensive group. Xiazhai became an outpost and was the first level to defend the enemy. Therefore, Xiazhai built a tower and the houses were built closely, and there were connected passages between the households. When the soldiers on the squatter find the enemy, the connected passages can quickly bring together the people in the stockade. In particular, the house in Xiazhai was built like a labyrinth, but the house near the age has broken this rule. Zengtou Xiaozhai is on the side of the lower wall and plays a role in supporting the village in time. Zengtou Xiaozhai is on the side of the Xiazhai and plays a role in supporting the village in time. Zhongzhai and Shangzhai are the base camps of Zengtou Village, compared with Xiazhai, the houses in Shangzhai and Zhongzhai are relatively loose and relatively independent. Shangzhai is the last retreat of the extension, and Shangzhai also built a large number of towers, one for the whistle and the other for the hiding place in a dangerous situation.

2.4. Suitable Climate

Zengtou Village is located in Sunward Mountain, where the illumination time is long and the light intensity is suitable, which is suitable for the growth of crops. At the same time, the Zengtou is in the mountains and the climate is warm and suitable for plant growth. The villagers used flat land and partially reclaimed land as cultivated land, and planted crops such as corn and pepper for a long time and some fruit trees such as plums, apples and cherries. Among them, the high-quality pepper is called "Dahongpao", and the villagers benefit from planting this kind of pepper (Figure 4-Figure 5- Figure 6).



Figure 4. Panorama of Zengtou Village



Figure 5. Top view of Zengtou Village



Figure 6. Xiaozhai Panorama

2.5. Satisfying Religious Beliefs and Spiritual Pursuits

The Qiang people worship nature and believe that everything is alive. The Qiang people have experienced many migrations in history and have been able to settle in the upper reaches of the Minjiang River, they verify believe that this is a gift from nature. The monks were chased by the enemy while fleeing the Qinghai-Tibet Plateau, fortunately, the divinity tree released the snow-capped mountains to block the enemies of the pursuit, and successfully came to the upper reaches of the Minjiang River and survived, so the monks are extremely adored by the divinity for the snowy mountains. The location of Zengtou Village just confirms the religious beliefs of the Qiang people, It is located on the sunny slope, it can also see the snow-capped mountains standing on the opposite side.

3. Village Building Wisdom

3.1. Traditional Architecture

In the war years, when the Yi nationality buildings retired, they were mainly used to live in the towers. Most of them were built on the high mountainside terraces. They were made of natural materials such as natural stone, yellow mud, wood, fur, branches, etc., and the whole shape was a quadrilateral hexagon. The division of labor in each layer of the building is clear. There are special functional divisions of the Yi people's buildings such as fire pit and Watchtower. It is the historical development of the Yi people, and the concentrated expression of the national spirit and national customs (Figure 7).

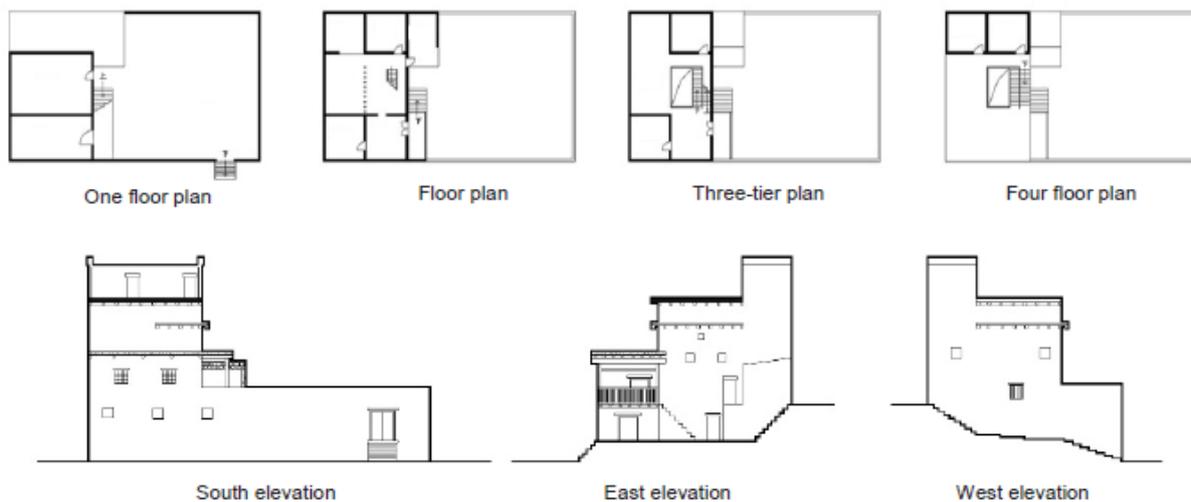


Figure 7. Wang Yongsheng residential mapping

3.2. Street Space

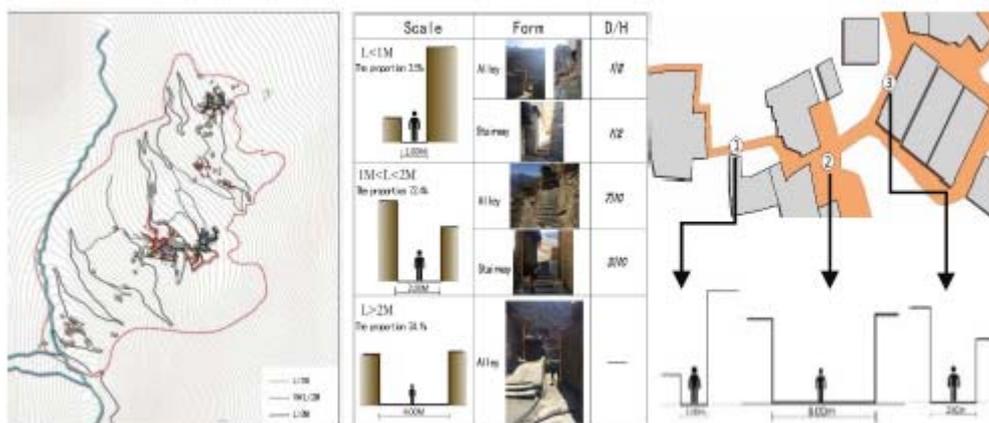


Figure 8. Schematic diagram of street space

There are various scale changes in the streets and lanes of Zengtou Village, which are wide or narrow, and there are various forms and combinations of streets and lanes, there is no specific rules. All the roadways are naturally developed according to the layout of the building. People can experience the fun of walking. Most of the streets have a width of 1-2m; the street D/H is less than 1, accounting for about 76%. There are mainly two types of roadways and stairways, and the space of the stairway is narrower. Zengtou Village is located in the alpine plateau area, the construction of the village is restricted by the terrain. The building is built on terraces with different height differences, the residential houses in the village have different ways of handling the difference. According to local conditions, the treatment of some residential heights needs to occupy the street space that is not adequate, and enhance the sense of closeness of the space (Figure 8).

3.3. Drainage Ditch

There are some open ditch is reserved In Xiazhai and Xiaozhai of Zengtou Village. Before the installation of the water pipe, those open ditch bears the function of drink water for the residents of Xiazhai and Xiaozhai. The upper end of the open ditch is connected with the reservoir in the upper part of Xiaozhai, and the mountain spring water in the reservoir is drained to Xiaozhai and Xiazhai for residents to take water. However, due to the narrow open ditch, the amount of catchment is small, and at the same time, it is impossible to store water,

and it is specifically unable to meet the water demand of the village residents. In order to make it more convenient for residents to use water, the residents of Xiazhai and Xiaozhai spontaneously use rubber pipes as the water supply pipes to connect with the water storage pipes. The water supply pipes and the open ditch are connected to each household to supply water. The open ditch is gradually taking over the function of discharging rainwater. Nowadays, the villages of Zengzhai and Xiaozhai in Zengtou Village adopt the open ditch drainage system. The system basically uses the concept of "water to low flow" to the fullest. The open ditch combines the height difference of the village buildings and following the steps between the villages. Going down the trend, the groundwater and rainwater are collected and confluent, and then injected into the fields along the stockade through the open ditch. Among them, there are still two complete cross-streets with unique characteristics of the Qiang people in Xiazhai (Figure 9).

3.4. Qiang Door Lock

The Qiang people's door locks come from the forests of the living areas of the Qiang people. They are generally made of iron sand, iron, cypress, and eucalyptus. The wooden locks are called "millennial wood locks" because of their hard texture, non-perishable, and long-lasting use. It can be installed not only in ordinary houses, but also on the towers. The service life of wooden locks is equivalent to that of Qiang people. The Qiang people can stand for thousands of years, so the use of wooden locks not only reflects the wisdom of the cottage locks. Of the Qiang people, but also reflects the simple folk customs of the Qiang people. One of the outstanding features of the Qiang wooden lock is its integrity. The whole wooden lock is carved from a whole piece of wood. A complete wooden lock generally includes a door lock hole, a lock pier, a wooden button, a door latch, and a key (Figure 9).

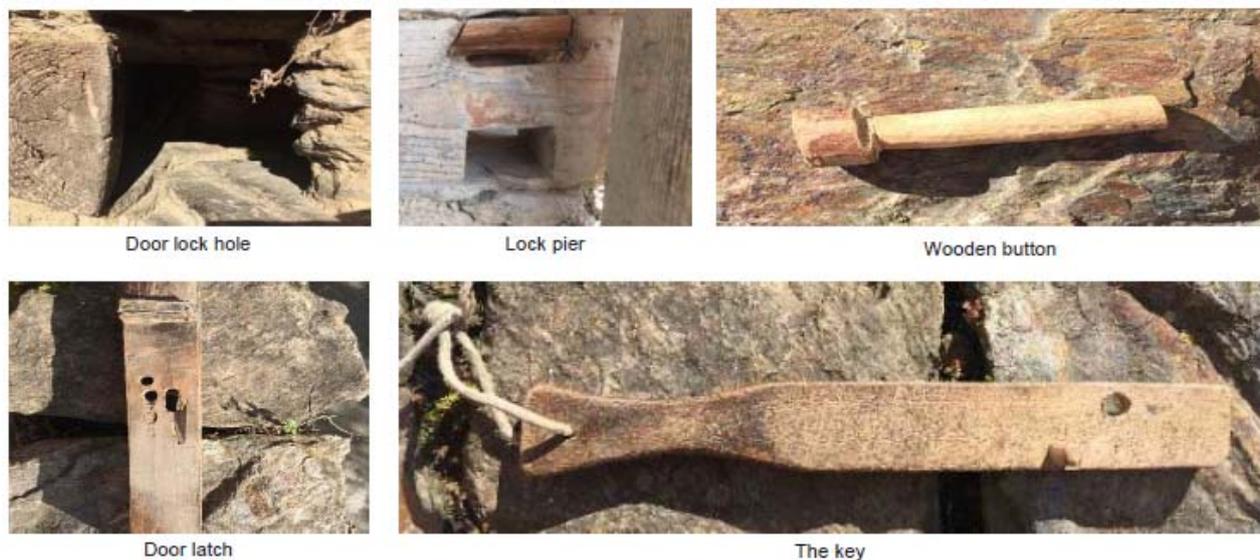


Figure 9. Schematic diagram of the drainage system

4. Village Places and Village Spirit

The Qiang people's sacrifices are different due to the different totems. They can be divided into three types: "Divinity sheep sacrifice mountain", "Divinity cow sacrifice mountain" and "Divinity dog sacrifice mountain". The villagers of Zengtou Village pointed out that there is a branch of the divinity tree that looks like a horn. Because of the worship of the sheep itself, the villagers regard this tree as the stockade's divinity tree. Not far from the tree, another tree is about 10 meters high and the trunk is about 6 meters long, it is located in the center of the platform of the new semicircular sacred tree. According to the villagers, the tree trunks are like

a toad, so the villagers used this big tree as a divinity tree. Divinity platform and divinity tree at the entrance of Shangzhai Village in Zengtou Village is undoubtedly the spiritual sustenance of the entire Zengtou Village. It is the spiritual center of Zengtou Village, reflecting the love and respect of the Qiang people for nature (Figure 10).



Figure 10. Divinity platform and divinity tree

5. Conclusion

Traditional settlements are the historical changes of human beings and the formation of cultural accumulation. The settlement and construction process of Zengtou Village can be summarized as follows: Qiangshan site selection, built according to the trend, forming a good defense group, the building uses natural stone, highlighting National consciousness; the advantage of terrain height difference makes full use of the rich space and system water supply system, The clever wooden door locks reflect people's ingenuity, and the organic combination of various construction materials and the whole living environment reflects the simple and wise creation concept of the residents of Zengtou Village. However, the development of modern society has caused most young people to go the residents have lost their development direction in traditional villages. The culture that has been passed down from generation to generation has gradually lost, If traditional settlement lose their human feelings, the long-awaited towers are also energetic, then only leave the empty shell in the mountains.

Acknowledgments

This research was financially supported by Key project of Southwest Minzu University 2017 Post graduate Student Innovative Research Projects (CX2017SZ003).

References

- [1] Li, X. K. Chinese National Architecture Series - Sichuan residential [M]. China Architecture & Building Press, 2009.
- [2] Xiong, M. The spatial distribution of Chinese traditional villages and its influencing factors [J]. Journal of Beijing Institute of Technology (Social Sciences Edition), 2014, 16 (05): 153-158.
- [3] Zhang, B. The Characteristics of the Creation and Cultural Causes of the Yi People's Door Locks [J]. Hundred Schools in Arts, 2008, 24 (S1): 11-13.