

# Revitalization and Renovation: Design Practices of Qingchuan Qingxi Ancient Town

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## Abstract

Located in Qingchuan County, Guangyuan City, Sichuan Province, the ancient town of Qingxi has a history of over 1700 years. Originally constructed for military purposes due to its strategic location, the town's historical significance remains relatively unknown today. Throughout the changing times and multiple earthquakes that have struck Sichuan, this thousand-year-old town has been left nearly paralyzed. However, in recent years, with the support of the Chinese government's "Rural Revitalization Strategy," a comprehensive restoration plan has been devised to revive the old town, utilizing its rich historical heritage as a foundation for spatial and aesthetic renewal. The ultimate goal is to revive the town, boost the local economy through cultural and tourism industries, and preserve its historical and cultural legacy. This paper presents a real-life case study, introducing the prototype theory and examining three key aspects: the initial analysis at the outset of the renovation, the design strategies employed during the restoration process, and a reflection on the design choices made post-renovation. The aim is to merge the town's historical heritage with the aesthetic characteristics of the present era, resulting in a rejuvenated ancient town that embodies the local essence of Beichuan. Additionally, this case study seeks to share valuable design experiences and ideas, providing a realistic example for reference in the restoration and design of traditional towns.

## Keywords

Qingxi Ancient Town, Restoration and Renovation, Prototype, Design Strategy, Design Experience

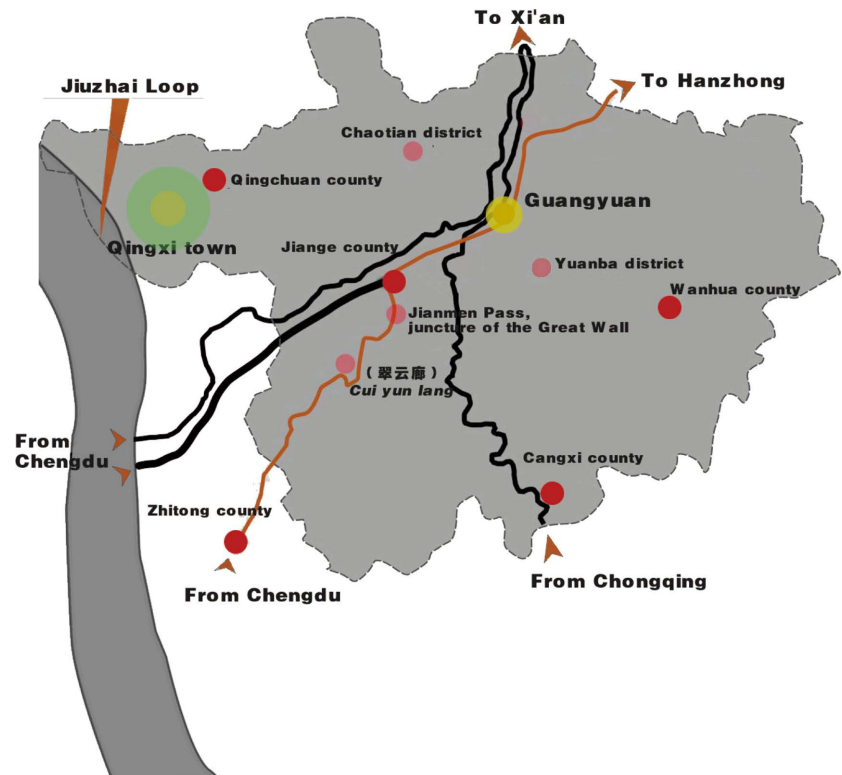
## 1. Introduction

Ancient towns in Sichuan are often referred to as "field towns" (场镇), ac-

According to the “Anyue County Magazine” (安岳县志). The magazine states, “where the benefits of the field town are, people will tend to be there, convenient for the people and the country” (He, 2010). Field towns are unique spaces that comprise both internal and external areas, architectural interfaces, and the aggregation of traditional Chinese houses, halls, and ancestral halls (Bai & Wang, 2000). Throughout history, like a biological evolution, they have played different spatial roles, such as border garrisons during the Tang Dynasty, administrative establishments during the Song Dynasty, merchant markets during the Ming and Qing Dynasties, and even tourist destinations in modern consumer society (Chengdu Local History Compilation Committee Office, 2016). In other words, this physical space, deeply rooted in the rural areas of China, has evolved alongside the temporal and spatial evolution of our history. However, the dualistic development pattern between urban and rural areas in China has often led to the neglect and oblivion of village constructions, resembling relics. This situation has only recently begun to change comprehensively with the continued implementation of the rural revitalization strategy. As a crucial aspect of the rural construction process, the preservation and revitalization of historic towns serve special functions, such as continuing historical heritage, transmitting regional culture, and conveying a sense of place. These topics are fundamental considerations in today’s academic exploration of this research subject. Particularly in the specific design and renovation practices, issues and contradictions arise, such as the choice between continuity and abandonment, the synergy between material and spiritual aspects, and the integration of history and reality. These challenges require the wisdom of design. This paper delves into design strategies and practical approaches for the restoration of historic towns, taking the design of the ancient town of Qingxi as a case study.

## 2. Status of Qingxi Old Town Prior to Renovation

The ancient town of Qingxi (清溪) was an important pass on China’s ancient Yinping Road, often the site of endless battles between the imperial family and local power in the late Eastern Han Dynasty. According to the “Huayang Guo Zhi” (华阳国志), a new Guangwu County was established in Qingxi in the seventh years of Jianxing, and Liao Hua (廖化, 210BCE-264CE), a counsellor of Zhuge Kongming (诸葛孔明, 181BCE-234CE), was appointed to guard the area. Undoubtedly, this place had an important strategic and frontier role in history (Chang, 2010). The town is located in the northern part of the Min Mountains (岷山), at the foot of the southern part of the Yinping Mountains (阴平山), covering an area of about 2 km. After 1951, the area was reorganised and the Qingchuan county seat was moved elsewhere, resulting in the gradual decline of Qingxi. Several major earthquakes in Sichuan brought heavy havoc to the otherwise withered but peaceful settlement of the ancient town, and the whole space tended to be paralysed (Figure 1).



**Figure 1.** Location map of Qingxi ancient town. Source: plotted by the author.

### 3. Survey and Analysis of Qingxi Ancient Town

#### 3.1. Status and Distribution of Street System in Qingxi Ancient Town

The old town is divided by the East, South, West, and North streets, forming a grid-like layout. Additionally, there are two horizontal streets and four alleys. Although the streets are short, the overall arrangement is compact and well-organized. Outside the town, the four main streets extend into Little East Street, Little South Street, Little West Street, Little North Street, and Word Street in the northwest corner, as well as Temple Street in the northeast corner.

Historically, due to the city walls, urn city, and bell and drum towers, only horse-drawn carriages and pedestrians were allowed to pass through. In recent years, with the development of tourism in the Tangjiahe National Nature Reserve and the construction of surrounding farmhouses, the area has become an important hub in the northern part of the Great Jiuzhai Circuit. The improved transportation and shifting consumer demands have led to an increasing number of visitors.

However, due to the lack of systematic planning and effective management, the roads have expanded haphazardly into the core of the old city. This has resulted in cramped streets and traffic congestion, which negatively impacts the scenic beauty of the old town and the lives of its residents. This design proposal focuses on addressing the issues faced by the east and west streets of Cross Street (**Figure 2**).

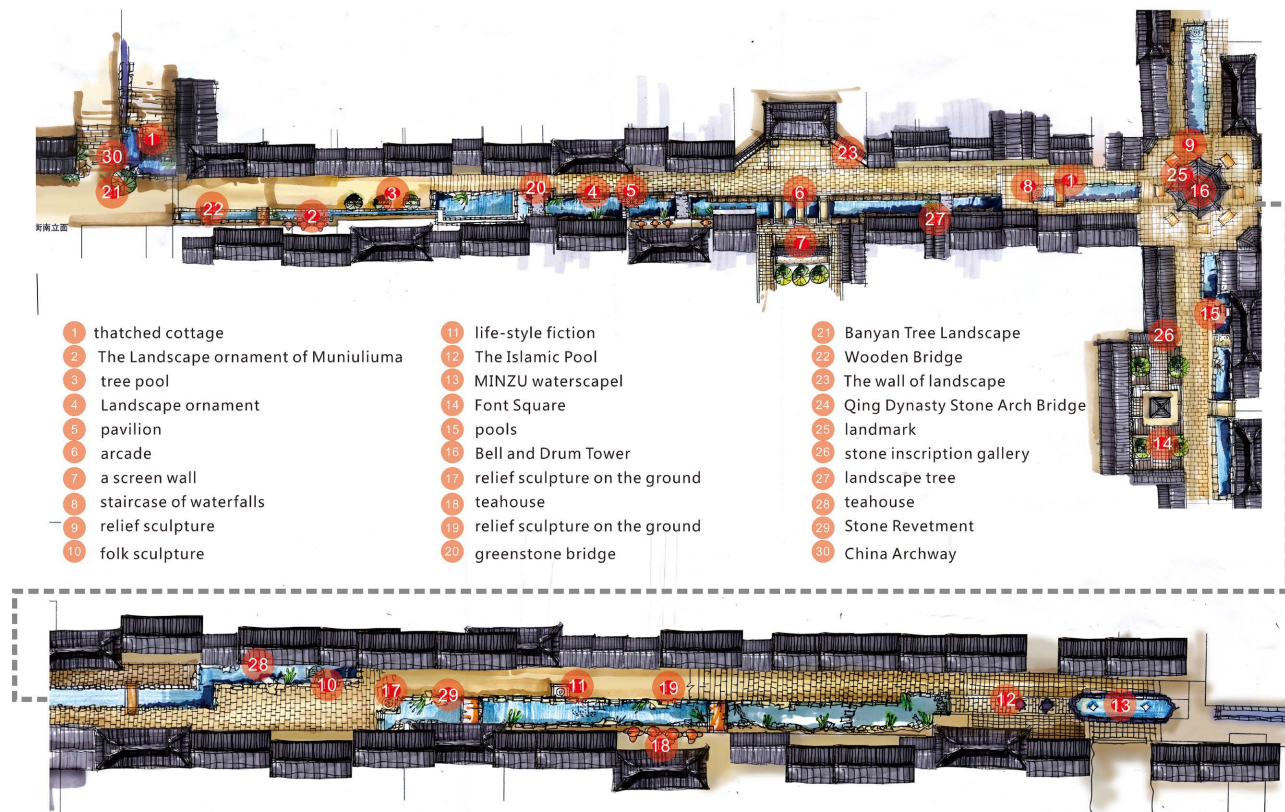


Figure 2. Crossroads plan. Source: Compiled for the present study.

### 3.2. Survey and Assessment of Building Retention

The buildings were surrounded by the ancient city walls and stretched inwards by the four gates on the periphery, and in modern times developed into the present form of an ancient town with a combination of commercial and residential buildings. The scale of the town began to expand in a disorderly manner. The first impression of the town is one of chaos, dilapidation and decay. In order to clarify the realistic design conditions of the design object, the existing buildings in the town were first investigated and sorted out (Table 1).

## 4. Strategy for the Transformation of Qingxi Ancient Town Style

### 4.1. Strategy 1: Sort out the Culture and Fully Respect the Historical Heritage of the Region

The existing dwellings in Qingxi do not possess distinctive architectural features, and their form and spatial arrangement fail to harmonize well with the surrounding environment and atmosphere. This can be attributed to the town's age and the damage incurred from several significant earthquakes, as well as the lack of coordinated planning due to the autonomy of the villagers and excessive construction. As a result, the town is in a state of disarray. In order to revive the town's historical charm and reignite its original spirit of history and culture, it is crucial to comprehend and organize its cultural elements.

**Table 1.** Survey and assessment of surviving buildings in the old town. Source: Chart by the author.

	Building Type I	Building Type II	Building Type III	Building Type IV
Classification of building types in the old town	The traditional dwellings, rich in the regional characteristics of northern Sichuan, have not been renovated and the original structure of brick and wood is well preserved.	The traditional architecture of the dwellings, with sloping roofs and brick and timber composition, shows signs of renovation, the original architectural appearance is largely preserved and is basically in harmony with the class 1 buildings.	Modern architectural forms of new dwellings, traditional structures are not preserved, losing the characteristics of the original ancient town architecture, due to the small volume and small number, the overall spatial image of the ancient town is less affected.	The large volume of the new dwellings, interspersed with the architectural space of the old town, clashes with the original old town architecture in terms of façade material, architectural structure and building volume, creating visual disharmony.
	Building Classification I:	Building Classification II:	Building Classification III:	Building Classification IV:
	Good quality	Partially damaged	Average quality	Earthquake-damaged houses
Old Town Building quality classification	Constructed in the recent past, the structure is well preserved, with brick and frame construction, newer building elevations and predominantly low-rise dwellings.	The building was built between the late liberation period and the early 1990s, with most of the structure intact, the interior intact, the facade somewhat dated, and some of the windows and doors deteriorating, the original appearance has been largely preserved.	From the late Ming and early Qing dynasties to the 1960s and 1970s, only the original architectural form remains, with some deterioration of the building fabric or the absence of building components. The building façade and roof are damaged in various ways.	The structure is damaged, the house is in a state of collapse, the walls are leaning and the building façade is more seriously damaged.

Culture, as the embodiment of a community’s way of life, manifests itself first in material form and then extends to the spiritual realm. In the context of ancient towns, the culture is reflected in the physical expressions of traditional residential architecture (Wei, Cheng, Zhong, & Xiao, 2022). The culture of a settlement community shapes its architectural culture, and, in turn, the architectural culture influences the settlement community (Ju, 2014). Therefore, it is crucial to examine the chronological and contemporary perspectives in order to identify the cultural characteristics inherent in local residential architecture. By organizing and categorizing architectural elements, we can establish a comprehensive cultural framework for the residential architecture of northern Sichuan. This approach allows the integration of residential buildings within the broader spatial and temporal context of the town’s historical culture, which is shaped by the interaction of street spaces and the natural environment.

#### 4.2. Strategy 2: Respect the Prototype and Take Full Account of the Different Types of Styles

In terms of historical timeline, apart from a few sections of the old city wall in Qingxi Ancient Town that show evidence of renovation during the Song Dynasty, the existing traditional dwellings in the town primarily date back to the late Qing Dynasty and early Republican period, as determined from previous re-

search. Therefore, the architectural style and dwellings in the town will be based on the architectural forms prevalent in northern Sichuan during this specific time period. Additionally, emphasis will be placed on incorporating a diverse range of architectural types to create a rich variety of spatial levels.

“The eaves are long, the walls are latticed, the cliff is covered with hanging feet, and the corridor is a running corridor.” (青瓦出檐长, 穿斗格子墙, 悬崖伸吊脚, 外挑跑马廊). This northern Sichuan folk proverb illustrates the distinctive architectural characteristics of the region (Zheng, 2018). However, even though traditional northern Sichuan dwellings have their own unique language of form, it is important to understand how they are connected to the broader architectural context of Sichuan. In this regard, we can draw upon the theory of historical archetypes. This theory, developed by Swiss psychologist Carl Gustav Jung, suggests that individual consciousness is derived from the collective subconscious and evolves over time (Wang, et al., 2022; Hall & Nordby, 1999; Huang & Yang, 2023). Applying this theory to architecture, we can view buildings as the material manifestation of the collective subconscious, representing the region’s architectural prototypes. This includes not only the physical aspects such as space, materials, components, and colors, but also the contextual and spiritual elements associated with the building.

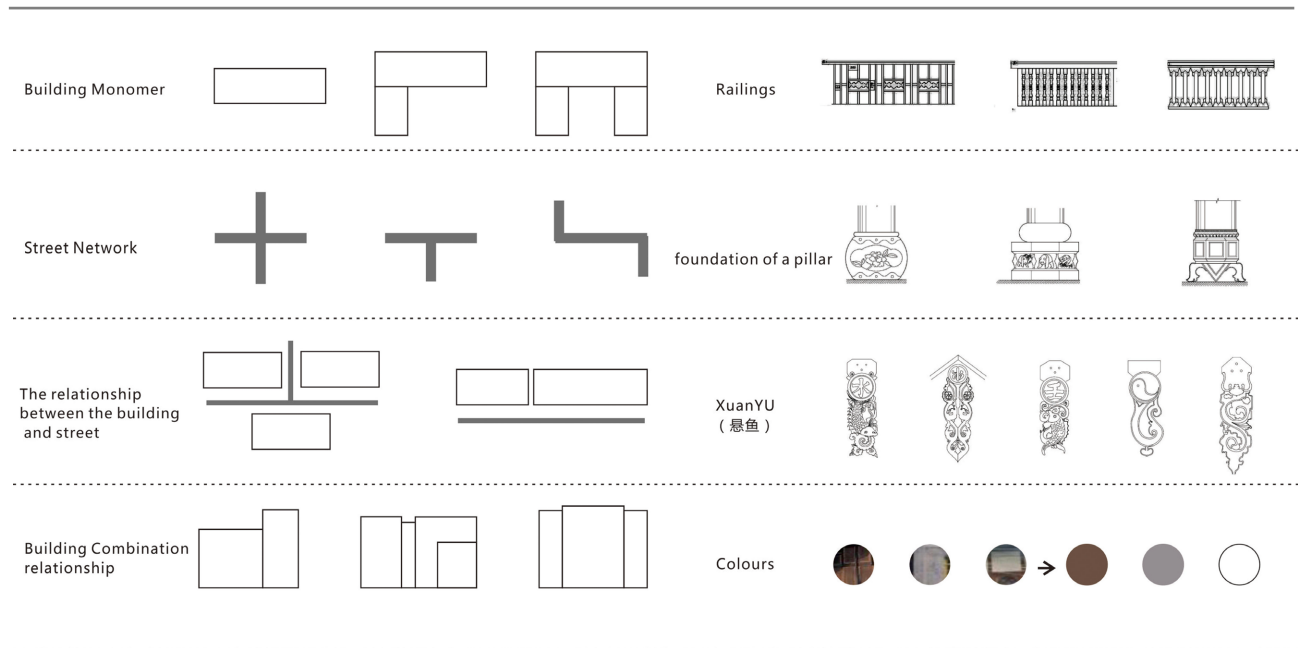
Through our research on traditional houses in Qingxi Ancient Town and the surrounding area, we have summarized and concluded the general prototypical features of northern Sichuan houses, such as: the floating overhanging mountain style on the roofs; the “pierced latticework” on the roof frames; the “one light and two dark” spatial form; the choice of materials. These rich architectural prototypes provide an objective basis for our next design, and also lay the foundation for the transformation of the residential houses in Qingxi Ancient Town (Figure 3, Figure 4).

At the level of implementing the prototype, the main means or approaches, based on realistic conditions, are as follows:

**1) Facades:** The modern building is restored and transformed, while retaining the original structure. The sloping roof is increased and the walls are finished,



**Figure 3.** Architectural prototypes of residential buildings in northern Sichuan. Source: Compiled for the present study.



**Figure 4.** Prototype schematic. Source: Compiled for the present study.

translating the traditional dwelling's decorative elements into the old building. The building facade emphasizes vertical division along the street, with a moderate increase in the number of pilaster walls and fire-blocking walls, maintaining a proportional relationship with the building. Considering the horizontal street surface, a differential transition needs to be taken into account while maintaining a unified style. This is achieved by systematically adding gables, ridges, hanging towers, and heavy eaves based on the overall relationship of the building facade.

**2) Colour:** The three main hues, red-brown, white and grey, are extracted from the prototype, interweaving together to present a simple, tranquil atmosphere and maintaining mutual harmony with the surrounding natural environment.

**3) Materials:** local materials are used to design the material of the building with whitewashed walls (白粉墙), tung wood (桐木) paving slabs, limestone and small green bricks. At the same time, in order to pursue economy, some new modern materials are used, such as inorganic polymer imitation wood as a substitute for solid wood and GRC to imitate stone carving. On this basis, in order to present the interest of the form, the design is optimised according to the pattern of the traditional residential façade, so that the building façade is as diverse and rich as possible in terms of heterogeneity and homogeneity.

**4) On the architectural components:** the main focus is on the addition of subordinate architectural decorations. For instance, the discordant doors were replaced with panel doors and waist doors were added. The hanging piers under the eaves were primarily adorned with pomegranate heads and longevity peach motifs in a round shape, as well as lotus flower carvings in a square shape. The plinths under the columns were predominantly decorated with pumpkin-shaped

motifs on the ground floor, round motifs on the first floor, and eight-sided motifs on the base, featuring floral and bird embellishments on the surface. The window panes were selected mainly in the form of turtle-back brocade and step brocade. Additionally, wind and tiger windows were added as decorative elements according to the requirements.

**5) Spatially:** the ground floor of the existing building is topologically altered, topologically in the form of traditional residential space, and altered in the specific division and arrangement of space to make it more suitable for modern commercial needs, to facilitate future rental or self-use, and to create certain economic benefits for the indigenous people.

It is important to note that the restorative construction discussed in this article is in no way a reversal or an absolute copy of the prototype. Rather, the aim is to both “repair” and “build”. In accordance with the principle of proportionality, we have sorted the existing buildings in Qingxi into four classes, and then repaired, built or demolished them according to their classification (**Table 2**).

#### 4.3. Strategy 3: Order the Mains and the Secondaries to Create a Comfortable and Pleasant Street Space

In order to enrich the visual and psychological spatial experience of the street tour, it is divided into primary node spaces. These spaces have a width of 5 - 8 metres and a height-to-width ratio of 0.8 - 1.6 metres on both sides of the buildings, aiming to create a comfortable activity space. Additionally, there are secondary node spaces with a width of 2.5 - 5 metres and a height-to-width ratio of 0.8 - 2.6 metres, providing pleasant spaces for people to rest and stay. Furthermore, transitional spaces with a width of 1 - 2.5 metres and a height-to-width ratio of over 2.5 metres are included to allow for quick passage, creating a temporal contrast between fast and slow, movement and stillness in relation to the main spaces. The individual buildings on the street are combined to form small square enclosures and intersections, which possess a strong sense of domain. They are designed based on the rhythmic relationship between the key and secondary elements, with an emphasis on controlling the contour line of the roof and ridge, highlighting the rhythm of the overall buildings against the background of the street’s skyline. By incorporating pagodas and corridors, the street space embodies

**Table 2.** Classification of the current building status of ancient towns. Source: Chart by the author.

Grade1	Grade2	Grade3	Grade4
Fully preserved	Detail of mutilated	Partial repairs	Reconstructed
The architectural style is in line with the positioning of the idea of creating a clear stream and the architectural quality is all preserved intact.	If the architectural style is in line with the design orientation but the details of the building are damaged, the original architectural style will be maintained on the basis of improvement, and the finished effect will be in harmony with the original building.	This refers to buildings where the partial windows and doors are badly damaged or incompatible with the renovated buildings, or to complement the overall renovation of the old town area.	This refers to the demolition and design reconstruction of buildings that have been destroyed or whose prototypes are completely incompatible with the idea of creating an ancient town.





Figure 5. Effect of single building and street renovation. Source: Compiled for the present study.



Figure 6. Building and Street Anticipation. Source: Compiled for the present study.

a relationship between reality and fiction. Lastly, there is a strong and weak relationship between the street architecture and the soft landscape, such as the design of the street's water landscape and signage vignettes (**Figure 5, Figure 6**).

## 5. Conclusion

In the construction of traditional towns today, the effective transmission of their historical heritage remains the core purpose and focus of renovation. However, on a practical level, it is also crucial for the construction of ancient towns to convey a sense of continuity for the future. In other words, it should offer the villagers the potential for replication, the potential for universality, and provide the basis for subsequent imitation. After all, the primary act of cultural inheritance and transmission is imitation. While the project has been built, there are still several limitations to consider. For instance, the standardized design chosen to save costs has resulted in a lack of architectural richness, falling short of the intended design. Moreover, the opposition from various forces against the demolition of individual newly renovated buildings necessitated patchwork solutions, which led to excessive height and density of floors, compromising the architectural scale and habitability. Additionally, the repetitive use of decorative language in a few typical representative styles has resulted in visual and aesthetic fatigue. It is important to note that this paper represents solely my personal opinion, aimed at stimulating a broader and more in-depth discussion on the renovation of historic towns in the industry. However, I hope it can provide some useful references for related projects in the field.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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