

Research on the Architectural Landscape Design Strategy of Chongqing Historical and Cultural District - Take the Eighteen Ladder as an Example

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Abstract:

At present, it is the period of rapid urbanization in China. The pressure of population growth and the promotion of economic globalization have made our cities unfamiliar and cold under the high-intensity development model. Some old blocks that originally carried the memory of the city are gradually disappearing in the modernization of the city. The backward industrial model and lack of facilities resources have made the original lively neighborhoods gradually lose their competitiveness. How to protect and update the architectural landscape in the context of urbanization using a gentle approach has become an urgent problem to be solved. This article aims to find an effective way to inherit and regenerate the architectural landscape culture of Chongqing's historical and cultural districts through the relevant research on the architectural landscape design of the Eighteen Ladder Traditional Scenery District. To provide a theoretical basis for the design, it is necessary to actively explore the current situation and performance of architectural landscape design, and deeply dig into the design expression methods of the architectural landscape of the traditional style of the eighteen ladders. On this basis, the analysis of the current situation of architectural landscape design provides a theoretical basis and design strategy for the design and construction of a modern architectural landscape with Chongqing's regional characteristics and regional cultural connotations. Not only to promote the protection of historical and cultural blocks, but also to improve the aesthetics of the architectural landscape design of historical and cultural blocks.

Keywords:

Historical and Cultural Blocks, Architectural Landscape Design, the Eighteen Ladder Traditional Scenery District

1. Introduction

The historical and cultural block embodies the natural and cultural landscapes of a city or region, and reflects the regional cultural characteristics such as the historical

stories, customs, and eating habits of the region. As the soul and core of a city’s culture, it is the knowledge summary and historical accumulation produced by the people of a region in the process of long-term interaction with the environment in which they are located, reflecting the collective culture and aesthetic psychological structure of the residents of a region. [1] The historical and cultural district of Chongqing is not only the historical and cultural heritage of the city, but also an important carrier of Bayu culture, which can show the visitors the local characteristics and aesthetic taste of Chongqing. In recent years, with the acceleration of Chongqing’s urbanization process, architectural landscape design is also developing rapidly. It is an important proposition that how to express Chongqing’s unique geographical environment, cultural genes, folk customs, cultural information, ecological characteristics and other elements in the architectural landscape design of historical and cultural blocks . The Eighteen Ladder Traditional Scenery District has inherited and developed the traditional Bayu style and features. The creation of an architectural landscape with “locality” characteristics has played a vital role in inheriting the historical context and telling Chongqing stories well.

2. Research on Related Concepts

2.1. Overview of the Historical and Cultural District

In China, historical and cultural districts refer to areas that have been approved and announced by the people’s governments of provinces, autonomous regions, and municipalities, which are particularly rich in preserved cultural relics and concentrated in historical buildings, which can more completely and truly reflect traditional patterns and historical features, and have a certain scale. As a cultural relic that records the memory of a city, a specimen that condenses the development of a city, and a special card that embodies the characteristics of the city, historical and cultural blocks have become a precious resource that cannot be replicated in each city by virtue of their traditional characteristics, historical information and cultural atmosphere. Therefore, understanding and protecting historical and cultural blocks is of great significance to the reappearance of the urban structure and the continuation of the cultural heritage. [2] However, each city and country has a slightly different definition of its concept, which is reflected in the following Table 1, Table 2.

Table 1. Definition of the Traditional Scenery District in Some Famous Historical and Cultural Cities in China.

Name	City	Definition
Historical and cultural district	Shanghai	The historical buildings are concentrated in one piece, and the areas where the architectural style, spatial pattern and block landscape more completely reflect the regional and cultural characteristics of a certain historical period in Shanghai can be identified as historical and cultural blocks.
Historical and cultural district	Chongqing	The areas in Chongqing that can reflect the connotation of historical and cultural cities, that is, the historical buildings are concentrated in a single area, and the architectural style, spatial pattern and block landscape more completely reflect the regional cultural characteristics of a certain historical period in Chongqing, which can be identified as historical and cultural blocks.
Historical and cultural district	Beijing	Blocks, buildings, villages and towns with traditional features or ethnic local characteristics in a specific historical period

		shall be recognized as historical and cultural blocks.
Historical and cultural district	Hangzhou	It refers to the concentration of cultural relics protection units, historical buildings, and ancient buildings into a single piece. The architectural style, spatial pattern and external landscape more completely reflect the traditional style and regional cultural characteristics of a certain historical period in Hangzhou, and streets, villages or buildings with high historical and cultural value.
Historical and cultural district	Guangzhou	Refers to the area where cultural relics and historical sites are concentrated in the famous city. It can also be said to be a block, a group of buildings, a town, a village, and a scenic spot that fully embodies the traditional style and features of a certain historical period or ethnic local characteristics.

Table 2. Definitions of Traditional Scenery District in some countries.

Name	Country	Definition
Protected area	UK	Areas with special architectural art and historical characteristics that are worthy of protection or emphasis on their characteristics or appearance.
Country registration lot	America	A group of ruins, buildings, structures, or environmental objects gathered together by historical or aesthetic significance.
Traditional building Group preservation area	Japan	Refers to the area delineated to protect the group of traditional buildings and the environment that integrates with these buildings and constitutes their overall value.
Historical and cultural district	China	Towns, streets, and villages that are particularly rich in cultural relics and have significant historical value or revolutionary commemorative significance shall be approved and announced as historical and cultural blocks by the people's governments of provinces, autonomous regions, and municipalities directly under the Central Government.

2.2. Overview of the Eighteen Ladder Traditional Scenery District

Located in Yuzhong District, Chongqing City, the Eighteen Ladder Traditional Scenery District is located at a key node of the upper and lower half of old Chongqing. In the north is the Liberation Monument and in the south is the Yangtze River. The Liberation Monument Business District is only about 1000 meters away the Eighteen Ladder Traditional Scenery District (Figure 1). And Jiaochangkou is next to the Eighteen Ladder. It is the area where Chongqing metro lines 1 and 2 pass through, and the transportation is very convenient. The Eighteen Ladder Traditional Scenery District, with the famous scenic spots along the Yangtze River, such as Shibampo, Hongya cave and Wanglongmen, form a link of Bayu style tourism belt, highlighting rich cultural value of Chongqing. Due to its superior geographical location, the Eighteen Ladder Traditional Scenery District has become a transportation hub connecting the city with the previous and the next, enabling it to play an important role in the city in terms of politics, economy, military, and culture since ancient times.

The Eighteen Ladder were shaped in the Southern Song Dynasty. Zhao Dun, the Emperor Guangzong of Song, set up a military camp in the city to facilitate military exercises and build Stone ladder was connected to the Xiaochang Dam (now is Jiaochangkou). This official road is now the Eighteen Ladder. The ladder has a history of more than 800 years. The Eighteen Ladder area gradually became the commercial

center of ancient Chongqing during the Ming and Qing dynasties, and a considerable population of people had settled here. Since modern times, the Eighteen Ladder has witnessed the opening of ports and trade, the War of Resistance against Japan, the War of Liberation, the reform and opening up to today's changes in cities and the changes in people's lifestyles.



Figure 1. The location of the Eighteen Ladder Traditional Scenery District.

In 2008, the Chongqing Municipal Government planned the Eighteen Ladder area as a traditional scenery district, aiming to create a comprehensive historical district integrating tourism and leisure, commercial shopping, homestays and boutique hotels. According to the positioning of the overall plan, the Eighteen Ladder area should be built into a space where visitors can experience the streets and lanes of this mountain city, so as to show the traditional Bayu culture and the historical and cultural features of the Anti-Japanese War. After the renovation project was launched, due to its location in the center of Chongqing, how to carry out construction and renovation, how to resettle the aborigines, and how to preserve the style and features of the Eighteen Ladder area to the utmost extent became a major problem in the block renovation. Various problems caused the project to extend. It was not until this year that the construction was completed and the streets were reopened. After the completion of the Eighteen Ladder Traditional Scenery District, it will be constructed together with the Chaotianmen area, the Huguang Guild Hall, and the Baixiang Street traditional style district to become an important cultural tourism route in the lower half of Chongqing.

The Eighteen Ladder carries nearly a thousand of years of history and has a very wonderful historical and cultural background. It is the origin of Chongqing's Kaibu culture, the Dock culture, and the Peidu culture. In addition to the advantageous geographical location and profound historical and cultural heritage, it also presents relatively rich human resources and landscape resources. Reshaping the traditional style of the Eighteenth ladder area can not only show the traditional style of Bayu and reflect the culture of Chongqing's mother city, but also allow The viewer felt the life style of the native and the unique lifestyle of this city.

2.3. Overview of Locality

Locality originally meant to in-site, and emphasized "here and now". The concept of locality originated from the new wave of anti-globalization and is a brand new concept of globalization. This concept of globalization emphasizes the changes caused

by differences in location and environment, and pays attention to the value of multiculturalism in the era of globalization. However, locality is different from regionality. The former contains multiple considerations: First, locality has the meaning of localization, that is, it is hoped that in the current informatization and internationalization. Under the background of the era, it highlights the different positioning of the nation, place, and region in design research. In addition, compared with localization and regionality, locality is more microscopic and more daily in terms of expression of meaning, conveying a kind of Bottom-up cultural stance and attitude. Finally, the Chinese expression of locality also has the implicit meaning of design and research rooted in the earth and theoretical thinking based on practice. The expression purpose of landscape architecture design is to capture the changing social and historical context, material practice activities and the essence of social relations between human beings behind the field space, extract various characterization characteristics from them and fix them in the construction of spatial formal context. Locality is not only a flexible concept, but also a design method.

The landscape architecture design of architectural landscape emphasizes adjusting measures to local conditions, using local materials, using local unique building materials, building techniques, architectural characteristics, cultural customs and other elements to build an architectural landscape design that expresses local cultural characteristics and continues the context.

3. The Source of Inspiration for the Architectural Landscape Design of the Eighteen Ladder Traditional Scenery District

3.1. Topographic Features of the Eighteen Ladder Traditional Scenery District

Chongqing is located on the southeastern edge of the Sichuan Basin, a fold belt of hills in eastern Sichuan and mountains in the south. It is a typical mountain city with many river valleys and mountains. Located in the Eighteen Ladder area of Chongqing's Yuzhong Peninsula, it has a typical mountain environment in the Bayu area and the Three Gorges. Regional characteristics of the water system. Due to the complex terrain and large undulations, the streets and lanes in the block are arranged in an irregular fishbone pattern (Figure 2). Eighteenth ladder Old Street is the main axis of the district, and the other horizontal streets grow like branches and parallel, which are well adapted to the undulating mountain topography. Residential houses are distributed according to the layout of streets and lanes (Figure 3). The topography and landforms, housing constructions and natural vegetation are integrated with each other, reflecting the close relationship between the aboriginal people of Eighteenth ladder and the natural environment of the mountain city. Stairs, mountains, and buildings are uneven but orderly, complicated and not chaotic, and they give people a distinct and breathtaking visual experience. In addition to being a mountain city, Chongqing is also a river city. The water system in Chongqing is well developed, with river valleys crisscrossing. The Yangtze River, the Jialing River and the Wujiang River are the main rivers, and some minor tributaries are distributed in trees in various regions. The retreatable architectural landscape makes the area echo the surrounding water system landscape, reflecting a good river landscape.



Figure 2. Block form.

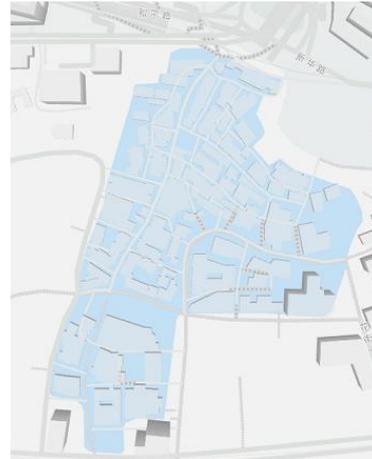


Figure 3. Architectural form.

3.2. Cultural characteristics of the Eighteen Ladder Traditional Scenery District

Each cultural type has its own specific meaning and spirit, and it also embodies its own connotation in the architectural landscape. The Eighteenth ladder area has Chongqing's unique regional, historical and cultural characteristics, such as the Bayu culture, the Immigration culture, the Tikan culture, the Wharf culture, the Fuya culture, the Kaibu culture, the anti-Japanese war culture, the Guild Hall culture, and the Hot Pot culture. Similar cultures coexist harmoniously here. Therefore, the culture of this area near the Stone ladder, which connects the upper and lower half of the city, present unique, diverse, inclusive and rich characteristics.

As a mountain trail that connects the upper and lower half of the Yuzhong Peninsula, the Eighteenth ladder is a natural walking infrastructure that has nurtured the unique Tikan culture in Chongqing. According to textual research, the name of the Eighteenth Ladder originated from the Ming Dynasty. Residents who lived there generally agree that there are two theories: One is that there is a well near the Guanyin Rock, and there are eighteen stone staircases walking from the residential area to the well, so it is named the Eighteenth Ladder, another way of saying it is that in the Qing Dynasty, the feldspar ladder had a total of 200 steps, divided into 18 sections, and each section had a small platform for people to rest, hence the name is "Eighteen Ladder". At the end of the Qing Dynasty, Chongqing became one of the earliest open trade ports in the inland. The Eighteenth Ladder is located not far from the wharf on the riverside. It has a natural geographical advantage. The constant flow of people promoted the development of the blocks around the wharf into a commercial block. In addition, the Eighteen Ladder is the "Vegetable Dock" that supplies the city's vegetables, and at the same time, it is also known as the "Dung Dock", which also undertakes the function of urban sewage discharge. Many porters and other working people at the bottom of society at the pier took root and settled in the Eighteenth Ladder in order to facilitate work. In addition, some immigrants also settled here, which formed a large scale at the time. Residents have spontaneously started to build houses on both sides of the Eighteenth Ladder block. Due to the characteristics of the terrain, they built a building with the characteristics of a mountain town—the Stilt Building, which embodies the inclusive and adventurous spiritual characteristics of the Immigrant culture.

After the Reform and Opening up, Chongqing ushered in the first economic golden period, since the founding of the People's Republic of China. The prosperity and development of the economy and changes in transportation methods have gradually eliminated the port functions carried by the Eighteenth Ladder. Ferry is no longer a necessary transportation link between the two sides of the strait. In this way, the Eighteenth Ladder was no longer the traffic arteries connecting the wharf and the upper half of the city and not the most frequent only way for working people to shuttle, but there were still large-scale Chongqing aborigines living here. Before the renovation, the block was filled with many small shops such as barber shops, cheap rental houses, shoe repair shops, hot pot stone wholesale markets, etc. The walls were covered with business advertisements, and the whole block was filled with a strong atmosphere of market life and rich market businesses.

3.3. Architectural Style of the Eighteen Ladder Traditional Scenery District

The Eighteenth Ladder witnessed the process of historical changes in Chongqing. A large number of people thrived here. In addition to the above-mentioned working people living in the Eighteenth Ladder, there were also a large number of public buildings and former residences of historical celebrities, forming a very diverse architecture features.

The unique topography and climate characteristics of Chongqing have created unique stilted buildings. The Eighteenth Ladder's buildings form are mostly wooden pierced stilted buildings, with blue tile roofs and the perfect combination of dry fence buildings and mountain topography. During the opening of the port, with the opening of the trade port, Chongqing's business economy was prosperous, and various industries and commerce entered Chongqing from the docks, which greatly promoted the cultural exchange and ideological prosperity of the Eighteenth Ladder area. In terms of architecture, there are many buildings that integrate Chinese and Western cultural characteristics and styles. There are many buildings, such as arches, curved doors and windows, roman columns and complex European-style decorative moldings commonly used in the West. At the same time, they have absorbed and learned the methods of Chinese stilted buildings in handling steep mountain slopes during the construction process. [3] Constrained by building materials and construction costs, in actual construction In the process, Chongqing's traditional residential building materials were selected, and a style of combining chinese and western styles was formed.

Moreover, Chongqing, which is known to have the characteristics of the Immigration culture, its architectural style has also been greatly influenced by the immigration culture. Judging from the several large-scale migration activities in the course of history, the migrant population developed symbiotically in cultural collisions and commercial exchanges. In a special period, migration has become a way for different ethnic groups to communicate. Although immigrants rush to other places due to disasters, they do not give up the hope of rebuilding their homes because of suffering. [4] People of different ethnic groups came here to build houses, forming different architectural styles and forms. After the Anti-Japanese War, France set up a consulate here. This is the reason why there are architectural landscapes with different style buildings in the Eighteenth Ladder area.

4. Architectural Landscape Design Principles

4.1. *Respect the Original Environment of the Site*

The traditional houses and buildings in the traditional style area of the Eighteen Ladder area vividly reflect the life style of the old Chongqing people. It preserve the 7 streets inherited from the ancient times, including the Xiangshuiqiao Street, the Shoubi Street and so on, as well as 6 lanes contained the Shanguo Lane, the Qujiagou Lane and so on. The streets and lanes formed the spatial pattern of seven streets and six alleys. From the perspective of courtyard layout, the courtyard space of the Eighteen Ladder area reflected the obvious characteristics of mountainous city of courtyards. The construction method such as staggered, staggered, and suspended floors is adopted to make the building more adaptable. In the mountainous environment with large height difference, the buildings are distributed according to the spatial form, resulting in a unique texture. Next to the original traditional main street, the ratio of the height of the street side building to the width of the street is within 2, and the scale is more comfortable. The transformed block maintains the original scale relationship of the street space and continues the space atmosphere and historical context of the Eighteen Ladder area. In the layout of the courtyard, from public space to residential space, you need to pass through the streets to the street space, then enter the lobby and the residential space. It has experienced four different spatial levels: public, semi-public, semi-private, and private. This spatial level and The theory of from yin to yang in ancient Chinese traditional space fits well. During the reconstruction of the Eighteen Ladder area, the cliff body in the mountain city was preserved to the maximum extent, and the stilted building stood on the mountain, forming a sprinkled and stepped architectural style.

In architectural landscape design, respecting nature and adapting measures to local conditions are the most important principles. Buildings should adapt to the environment in which they are located, conform to the original spatial form and layout, and make full use of the spatial characteristics of buildings and materials in the area to maximize the original spatial environment.

4.2. *Deeply Cultivate Historical and Cultural Resources*

The Eighteen Ladder Traditional Scenery District has a history of nearly a thousand years, and has formed rich historical and cultural resources from the Southern Song Dynasty to the present. During the Ming and Qing Dynasties, the Eighteen Ladder were close to the then political center—the Huguang Guild Hall. During the opening of the port, the Eighteen Ladder block form initially took shape. And in the Anti-Japanese War, the air-raid shelters of the the Eighteen Ladder were the site of the Jun.5th tragedy and witnessed the Chongqing Bombing. After the reform and opening up, the Eighteen Ladder area became the largest second-hand goods market in Chongqing. By the end of the 20th century, many old houses were demolished and rebuilt, there became the most abundant place in the bustling city. There was not only a residential area where a large number of old Chongqing people lived, but also the history of changes in Chongqing. When building the landscape of the Eighteen Ladder Traditional Scenery District, it selects representative historical information and culture to create the eighteen scenes landscape, integrates the architectural entities, historical culture, and folk traditions, and shapes what can be felt and touched by the viewers.

In the process of building the architectural landscape, the historical and cultural buildings should be preserved, and modern architectural technology is combined with traditional culture. Important landscape nodes such as the Yuetai Dam, the ancient well, the Great Bombing Memorial Hall, the Jiaochangkou Cultural Square and other important landscape nodes are selected for reconstruction to incorporate historical culture. The historical story is in the landscape, so that the viewer can feel the style and features of the mother city of Chongqing during the sightseeing tour.

4.3. Combination of Tradition and Modernity

The application of the concept of locality to the architectural landscape design emphasizes not only the design of architectural landscapes that reflect the regional and national characteristics, but also the concept of “here and now”, which refers to the implantation of the concept of locality in the language of globalization. In the context, based on the use of local traditional architectural techniques, architectural styles and foundations, the tradition is combined with modernity, and modern architectural media are used to express the cultural concept of locality. This is also another important principle that reflects the local architectural landscape design. And the use of old materials and the interpretation of traditional forms are a way for buildings to respond to locality, but local construction should not only emphasize the inheritance of existing forms, but also will encourage the use of advanced technologies and new forms to respond to locality from different angles. [5]

The local building materials and techniques combined with modern technology forms are applied to contemporary local architectural landscape design. In the process of building the Eighteen Ladder, the modern building material fair-faced concrete is combined with the remaining traditional blue bricks, gray clay tiles, rammed earth, wood and other traditional materials to rebuild.

In terms of architectural form, the traditional construction style of wearing buckets is retained. And in terms of building materials for stilts, Chongqing’s unique fir, phoebe bamboo and other wood materials are selected. In construction techniques, traditional construction methods such as misplacement, staggered floors, and suspended floors are cleverly used. Ingenious use of traditional architectural methods such as dislocation, staggered floors, suspended floors and more. In the application of technology, the advanced four-primary-color lamps and intelligent lighting control system are used to create a unique night scene mode of the Eighteen Ladder. In addition, modern technology such as multimedia projection, sound-light interaction and other modern technologies are used in the Eighteen Ladder Great Tunnel Site Memorial Hall to make viewers experience the historical events of the bombing and the urban spirit of Chongqing people who are not afraid of hardships and getting stronger. The Eighteen Ladder Traditional Scenery District is reconstructed and innovated on the basis of inheriting the original traditional architectural style, which not only saves economic costs, but also reflects the traditional and classic Chongqing lifestyle.

5. Conclusions

In the information age, the influence of media communication is becoming stronger and stronger. Chongqing has appeared in major media for many times and has become an “online red city” with high popularity. In recent years, the culture and tourism industry has developed rapidly, and many historical and cultural blocks have been transformed or upgraded. However, in the process of shaping the architectural

landscape, there are some unhealthy phenomena, such as homogenization, lack of new ideas in design, neglect of historical context and so on. Studying the application and performance of major factors affecting architectural landscape design such as topographical features, cultural features, and architectural styles in the architectural landscape design of historical and cultural blocks can further promote the architectural landscape design of historical and cultural blocks in Bayu area. Not only that, it provides an important source of inspiration for the gradual formation of architectural landscape design containing Chongqing culture. And the most important thing is that it is of great significance to express Chongqing's regional characteristics and unique cultural and artistic charm.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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References

- [1] Wang, Y.; Liu, Y.H. Thoughts on the Planning and Design of the Historical and Cultural Districts of the Republic of China in Shenyang Based on the Concept of Cultural Genes. *Art Panorama*, 2021, 7, 135-137, DOI: CNKI:SUN:MSDG.0.2021-07-024.
- [2] Lian, M. Study of Modern Adaptative Update of Historical and Cultural Streets in the city zone of Chongqing. Degree of Master. Chongqing University, Chongqing, China, May, 2010.
- [3] Hu, W.T.; Song, S.M. Analysis of Chongqing Architecture in the Light of City Planning. *Architectural Journal*, 2011, 12(7), 11, DOI: CNKI:SUN:JZXB.0.2011-12-004.
- [4] Wang, C. On the Heritage Value Study of the Eighteen Steps in Chongqing from the Perspective of Cultural Memory .Degree of Master. Sichuan Fine Arts Institute, Chongqing, China, May 2, 2018.
- [5] Long, H.; Xue, K. An Exploration of the Future Local Construction Towards Globalisation. *World Architecture*, 2021, 6, 10-13+126, DOI: 10.16414/j.wa.2021.06.001.



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