

Research on the Design of Non Material Cultural Heritage in Urban Public Space

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Abstract

Nowadays, urban construction in our country is in full swing, and the development of urban landscape design is changing with each passing day. Under the undesirable trend of the homogenization of the urban landscape character in every city, the purpose of the designer's general concern is how to continue the urban context, protect the history and culture of the city, and highlight the regional characteristics. The research uses the comparative analysis method, literature research method, case analysis method and summarized method. Through the study of the interconnectedness of intangible cultural heritage and urban landscape design, it explores the manifestations and ways of the regional culture of urban landscape design. The conclusion is that the urban landscape design is also a rare material carrier and cultural space platform for the intangible cultural heritage in the new period, and it is a new way of inheritance and protection. The research combined with the actual case as the foundation, from the perspective of city landscape design in Neijiang's main intangible cultural heritage of Sichuan. The traditional craft, folk custom and folk art in the intangible cultural heritage are systematic and effective reflected in the urban landscape design; Through modern methods, techniques and materials, it is made to conform to the times culture, suitable for use in landscape design element; Application and Research on intangible cultural heritage in the landscape design of the artistic conception, design methods, considerations and principles.

Keywords

intangible cultural heritage
urban landscape design
public space

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1. Introduction

Currently, under the adverse trend of rapid development and homogenization of urban features in various cities, how to continue the cultural context of cities and protect their historical and cultural heritage has become a

common concern in the design field. And the intangible cultural heritage that is currently emerging all over the world

In the tide of product protection, the protection of intangible cultural heritage presents a variety of possible

approaches. Intangible cultural heritage not only emphasizes the skills, experiences and spirits centered on people, but also has its material carriers and materiality. If urban landscape design can be organically combined with the protection of intangible cultural heritage, there are rich forms and methods of expression of intangible cultural heritage in urban landscape design that can be studied.

2. Literature Review

Adobe Acrobat compares the definitions, manifestations and characteristics of material and intangible cultural heritage, analyzes the similarities and differences between the two, and puts forward the issues that should be noted in the protection process. Harriet Deacon introduced the importance of protecting intangible cultural heritage, believing that just like material heritage, intangible heritage must also have corresponding protection and management plans formulated and strictly adhered to. From these studies, it can be found that the research vision of foreign scholars mainly focuses on clarifying the concept of intangible cultural heritage, the management and protection measures of intangible cultural heritage, research on intangible cultural heritage tourism, and research on certain specific intangible cultural heritages. However, relevant research on the display and design of intangible cultural heritage in cities still needs to be carried out^[1].

Wang Ning believes that the characteristics of intangible cultural heritage include: high personalization, experiential inheritance, and concentrated national character. There are numerous and in-depth studies on the interconnection between intangible cultural heritage and planning and architecture, and the actual design cases on which the research is based are also very rich^[2]. Xiong Ying analyzed the background of different villages, the cultural characteristics of traditional architectural environments, the current situation of intangible cultural heritage, and the carrying space, and proposed specific methods for the protection and inheritance of rural architectural environments and intangible cultural heritage^[3]. Chen Xing and Yang Haozhong hold that intangible cultural heritage is an important component of historical cultural heritage and holds significant

importance for regional development. It can largely promote the formation of regional individuality and sustainable development. Therefore, it is necessary to conduct research on how to protect, continue and develop historical and cultural blocks from the perspective of intangible cultural heritage protection^[4,5]. Research on the interconnection between intangible cultural heritage and tourism planning and design as well as scenic area planning. The research on the planning and design of intangible cultural tourism by Yao Li and Kan Ruliang. To seek better ways of inheritance to safeguard intangible culture^[6,7]. To sum up. At present, there are already many research achievements on the self-protection and inheritance of intangible cultural heritage, and the research results on the interconnection between intangible cultural heritage and planning and architecture are also relatively abundant. However, research on the interconnection between intangible cultural heritage and landscape architecture is relatively scarce, and studies on the carriers of intangible cultural heritage in urban landscape design are even fewer. Currently, museums, expo parks, and various exhibitions, displays, and performance activities are generally adopted to protect and showcase intangible cultural heritage. As for urban landscape design, there are already many examples of showcasing intangible cultural heritage in actual design cases, but there are few systematic theoretical summaries and studies. Therefore, there are rich forms and methods of expression of intangible cultural heritage in urban landscape design that need to be studied.

3. The coupling between urban public space design and intangible cultural heritage carriers and the principles of design methods

3.1. Methodological principles for the design of material carriers

The first is the uniformity of the design of material carriers. The style and expression techniques of all material carriers should be unified and not appear chaotic. The second is the principle of diversity in the design of material carriers. On the basis of a unified style, the expression techniques should also be as rich and diverse as possible. The third is the public participation

of material carriers. Since the theme is a display of culture, public participation is an important criterion for the success of the design. The fourth principle is the organic combination of modern techniques and traditional elements. Functionally, it should meet the demands of The Times. The design methods and techniques should be modern, while the content should be traditional. It is necessary to organically combine the two during the design process to avoid the emergence of “fake antiques”.

The above content analyzes and organizes the specific techniques for transforming intangible cultural heritage into urban landscape design as well as several major types of intangible cultural heritage carriers in urban public Spaces. The summary of these theories can not only provide certain references for related research, but also directly guide the relevant design practices and complete the implementation of actual projects in this research field. When dealing with actual design projects, one should first conduct an in-depth analysis and understanding of the natural and historical cultural background of the design project. At the same time, a scientific analysis of local intangible cultural heritage should be made, and the types of carriers for spatial transformation should be considered. Modern techniques and technical means should be rationally utilized to organically combine intangible cultural heritage with material carriers. Of course, the natural, historical, cultural and social backgrounds vary from place to place.

We need to analyze the specific problems based on the different regional characteristics. To rationally select the corresponding material carriers, theoretical preparations and technical support should be made for the urban public space themed on intangible cultural heritage. The research of design studies has its own laws and characteristics. A very important point is its contemporaneity, practicality and creativity. We can verify the feasibility and value of this research through the actual effect after the project is completed and the feedback from the public.

4. Case Studies on Intangible Cultural Heritage and Urban Public Space Landscape Design

4.1. Case Background

Neijiang City (also known as Sweet City) is located in the southeast of the Land of Abundance, on the banks of the beautiful and fertile Tuojiang River. This project is located in the Neijiang Economic Development Zone in the west of Neijiang City. “Sweet City Avenue” is a new city welcome avenue in Neijiang. It is an image window for Neijiang City to strive to create a new urban look and is of great significance.

The two major city calling cards of Neijiang. First, it enjoys the reputation of “Sweet City”, and second, it is known as “the Hometown of the Great Thousand, Cultural Neijiang”. For nearly three hundred years,

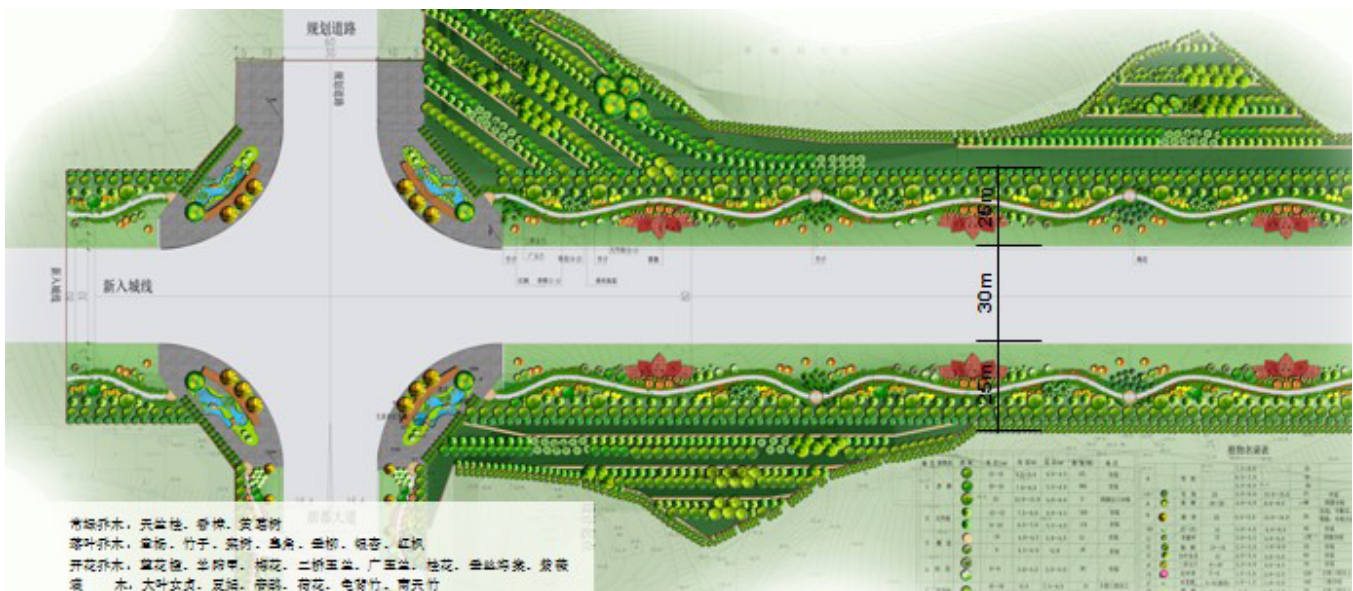


Figure 1. Tiancheng road plane map of local (Source: original)

Neijiang has been renowned as the “Sweet City of China” and the “Hometown of Preserved Fruits in China” for its abundant production of sugarcane, white sugar and preserved fruits. The term “Sweet City” has been included in the “Cihai” dictionary. Neijiang has a glorious history in the sugar industry. However, since the 1990s, due to various reasons, the sugar industry in Neijiang has gradually declined. The “Sweet City”, once covered with sugarcane fields all over the mountains and fields, now only has a few small workshops to support it. The 300-year-old sweet City preserved fruit craftsmanship has become a provincial intangible cultural heritage. What remains is only the sweet memory that the people of Neijiang cannot let go of. Academician Zou Deci of the Chinese Academy of Engineering suggested, “Neijiang should not give up the city’s calling card of ‘Sweet City’. The meaning of ‘sweet’ is very broad. It not only includes Neijiang’s preserved fruit delicacies but also refers to a happy life, close relationships, and social harmony. It is a very good theme for the city.” Neijiang wants to promote its city brand as “Sweet City”. The name of this welcoming avenue is also “Sweet City

Avenue”. Therefore, the historical and cultural heritage of Neijiang’s sugar industry should be taken as the starting point and the core of the cultural concept.

4.2. Expression of Design Concept

4.2.1. Analysis of Neijiang’s Intangible Cultural Heritage

The elements of sugar industry culture can be summarized as follows: sugarcane, white sugar, rock sugar, and preserved fruits. The production process of preserved fruits, an intangible cultural heritage, is the main thread of the cultural concept of our plan, while sugarcane, white sugar and rock sugar are also reflected. The landscape design of “Sweet City Avenue” will fully reflect the historical and cultural background of Neijiang’s “Sweet City” from its overall style to the details of the landscape. The production technique of preserved fruits, an intangible cultural heritage of Neijiang, is a by-product of the sugar production process in Neijiang. Preserved fruits are unique

Its production process has long been renowned. There are a wide variety of preserved fruits and

Figure 2. Neijiang preserved vegetable
(Source: Network)



vegetables, such as money oranges, pear preserves, cucumber peels, eggplants, apricots, longevity oranges, jujubes, safflower, loofahs, bitter gourds, peaches, winter melons, green beans, tomatoes, bananas, radishes, ginger, winter melons, lotus roots, garlic, bell peppers, etc. There are over 40 varieties and more than 80 colors in total. The production process is as follows: peel and remove the pits from the raw materials, make the skins, soak and soften them, then boil them in boiling water to reduce the astringency. Then, put the blanched dough into sugar and simmer it. Once the dough acquires the sugar flavor, take it out of the pot and store it in a jar. A few days later, heat the dough to create threads, let it cool down, and then coat it with white sugar to complete. Preserved fruits are high-sugar foods and have functions such as relieving cough, moistening the lungs and nourishing the stomach. Because of its pure taste, rich sugar and juice content, abundant nutrition, bright color, crystal red luster, melting in the mouth, fragrant and delicious flavor, it has special functions for medicinal treatment and assisting in medicinal treatment.

4.2.2. Expression of Design Concept

Based on our interpretation of sugar industry culture and our understanding of preserved fruit production techniques, we are considering our design plan, especially how to organically integrate this intangible cultural heritage into the design of such a landscape avenue? Firstly, in terms of design scope, the landscape avenue is relatively simple. It mainly includes the green belts on both sides of the road, or the wider road control range on both sides, as well as the node squares at the road intersections. Secondly, the design of landscape boulevards should mainly focus on greening, with hard landscapes as a supplement. To represent intangible cultural heritage through hard landscapes, one can consider landscape walls and sculptures, etc., to create a space with cultural spirit. And how does greening relate to our theme? After much deliberation, we found that a very coincidental point is that the raw materials for preserved fruits are a wide variety of vegetables and fruits. For instance, there are more than ten or twenty kinds of fruit trees, such as peach trees, pear trees, citrus trees, apples, etc. If we use these rich fruit trees as our greening tree species, it would be very appropriate.

Moreover, these greening tree species will form a completely different style from the greening landscape of the scenic boulevards in other regions. At the same time, corresponding plant introductions and the production process of preserved fruits should be placed on the scenic wall to visually and vividly display the intangible cultural heritage. Both hard and green landscapes can well reflect the cultural connotation of the entire landscape avenue.

5. Design and Techniques of Intangible Cultural Heritage Carriers

5.1. Demonstration of the production process of preserved fruits

The pedestrian path of the scenic Avenue is streamlined, and it is also a sightseeing route. The production process of preserved fruits is composed of many procedures, which is a common point of the two. The walking route can be designed as a flow line for introducing and demonstrating the production process of preserved fruits. The “Sweet City Avenue” is over two kilometers long, with eight lanes in both directions and a width of 30 meters. There are 25 meters of green belts on each side of the road. There is a node square at the road intersection. In the road green belt, there are streamlined landscape walkways that connect dozens of small rest platforms. In the rest and small platform area, the main carriers for display are sculptures, landscape walls and plants. At the nodes, plants for producing preserved fruits, such as peach trees and pear trees, are planted in neat and orderly clusters. Meanwhile, sculptures are used to display the scenes of each step of the preserved fruit production process. The text on the landscape walls introduces the production process and the planted plants. When the entire landscape avenue is completed, it is like enjoying a panoramic view of the preserved fruit production process. The display effects of various carriers are intuitive, easy to understand, vivid and interesting. Suitable for audiences of all ages.

5.2. The Sweet Road

A large number of crabapple trees are planted along the pedestrian path, and the ground is paved with sugarcane, a raw material for sugar production. The crabapple symbolizes spring, sweetness and happiness. This road

implies the “sweet road”. The background forest selects poplar and paulownia as the main tree species, and other evergreen and deciduous trees are planted in groups or in spots. Flowering trees and shrubs are planted in spots or patches in front of the background forest. It creates a green landscape effect of “evergreen all year round, flowers in all year round, fruits in all year round and leaves for viewing all year round.”



Figure 3. Sculpture on the Avenue of “Sweet City” (Source: original)

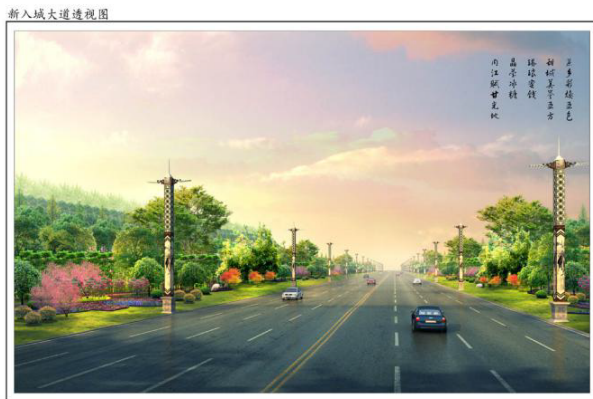


Figure 4. Sichuan Neijiang “sweet” Avenue (Image source: Original)

6. Conclusion

Intangible cultural heritage not only emphasizes the skills, experiences and spirits centered on people, but also has its material carriers and materiality. Intangible cultural heritage will endow urban landscape design with stronger spiritual and cultural connotations, regional characteristics and recognizability. Urban landscape design is also an invaluable materialized carrier and cultural space platform for intangible cultural heritage in the new era, and it is a new way of inheritance and protection. Therefore, the research on urban landscape design with intangible cultural heritage as the theme has very new theoretical significance and strong practical significance. Urban landscape design, from the macro to the micro level, can be said to have a comprehensive impact on the appearance of our cities. We don’t want to live in a city that has no memory, lacks historical culture and seems tasteless. Landscape design should possess the unique cultural genes, cultural traditions and national memories accumulated in the local historical development, so as to present its own characteristics and gain the impetus for sustainable development. Displaying and promoting intangible cultural heritage in landscape design enables people to understand it and enhance their awareness of protecting it, thereby stimulating more behaviors to protect and inherit intangible cultural heritage, and inspiring us to explore more ideas for the inheritance and protection of intangible cultural heritage. Through the research and practice of the expression and methods of regional culture in urban landscape design, it is hoped that a beautiful and harmonious home where the city and culture coexist can be created for us.

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References

- [1] Song Lizhong. Review and Implications of Foreign Intangible Cultural Heritage Tourism Research: Based on the Investigation of ATR and TM Literature in the Past 20 Years [J]. *World Geographical Research*,2014,23(04):136-147.
- [2] Wang Ning. Definition: The First Step in the Protection of Intangible Cultural Heritage [J]. *Chinese Nationalities*,2003(03):12-13.
- [3] Xiong Ying. Research on Rural Architectural Environment Based on the Inheritance of Intangible Culture in Meishan [D] Hunan University,2014.
- [4] Chen Xing. Research on the Revival and Development of Historical and Cultural Blocks in Jiangsu Region from the Perspective of Intangible Cultural Heritage Protection [D] Xi 'an University of Architecture and Technology,2016.
- [5] Chen Xing, Yang Haozhong. Research on the Space Related to Intangible Cultural Heritage in Dongguan Street Historical District of Yangzhou [J]. *Industrial Building*,2016,46(03):38-45.
- [6] Yao Li. Research on the Planning and Design of Intangible Cultural Tourism of “Zhang Daqian and Jiajiang Paper” [J]. *Industrial Design*,2017(06):104-105.
- [7] Kan Ruliang, Wang Guiqin, Zhou Jun,Hsiang-te Kung. Thematic Village Reconstruction: Research on Tourism Development Model of Intangible Cultural Heritage [J]. *Regional Research and Development*,2014,33(06):108-112.

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