

Inheritance and Innovation Path of Historical Culture in Contemporary Environmental Design

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ABSTRACT

With the title of "Inheritance and Innovation Path of Historical Culture in Contemporary Environmental Design", this paper discusses how to preserve and develop historical and cultural elements in modern environment, and puts forward specific inheritance and innovation path. The research background is that with the acceleration of urbanization, the protection and utilization of historical and cultural resources have become the key to improve the quality of cities and promote sustainable development. Historical culture is not only an important source of inspiration for environmental design, but also a core element to enhance local identity and cultural identity. The purpose of this study is to explore the effective application of historical and cultural heritage in contemporary environmental design through literature review and case analysis.

KEYWORDS

History and Culture; Environmental Design; Inheritance Paths; Innovation Paths; Case Studies.

1. INTRODUCTION

1.1. Research Background and Significance

With the acceleration of globalization and the rapid development of urbanization, urban and rural landscapes around the world are undergoing unprecedented changes. In this context, how to preserve and inherit the history and culture in the environment of rapid development has become a widespread concern of all sectors of society. History and culture are not only the identity of a region or a nation, but also an important part of human civilization. It carries the experience, wisdom and emotions of the past and is a bridge between the past and the future. In the field of environmental design, the introduction of historical and cultural elements can not only add unique charm to modern space, but also enhance local characteristics and cultural identity, and improve the quality of life of residents [1]. Therefore, it is of great practical significance and social value to study the inheritance and innovation path of historical culture in contemporary environmental design. This research will help to protect and utilize the rich historical and cultural heritage, while also promoting sustainable urban development and satisfying people's aspirations for a better life.

1.2. The Importance of History and Culture in Environmental Design

The integration of history and culture makes the environmental design go beyond the simple aesthetic pursuit and become a profound expression of the time dimension. By skillfully integrating elements such as traditional architectural styles, historical landscapes, and intangible cultural heritage into modern design, designers are able to create a spatial environment that is both historic and epochal. Such a design can not only stimulate people's nostalgia, but also make people feel the regional culture

and historical context more directly, thus deepening their awareness of their own identity and sense of belonging [2]. In addition, the application of historical and cultural elements can also promote the development of tourism resources, attract more tourists to visit and experience, thus driving the development of the local economy. In short, the application of history and culture in environmental design is one of the important ways to realize humanistic care, social harmony and economic prosperity.

1.3. The Purpose and Method of the Study

The purpose of this study is to explore the inheritance and innovation path of historical culture in contemporary environmental design. The specific goals include: to explore the internal relationship between historical culture and environmental design, and analyze the ways of interaction between the two; Study the various forms of historical culture in environmental design, such as traditional architecture, historical landscape and intangible cultural heritage, and summarize their characteristics and values; Put forward a set of cultural inheritance and innovation strategies suitable for contemporary environmental design to guide practical operation; Through the study of successful cases at home and abroad, the experience and lessons that can be used for reference are extracted to provide reference for further exploration in related fields [3].

In order to achieve the above goals, this study will adopt a combination of literature review, case analysis and field research methods. First, to establish a solid theoretical foundation by consulting a large number of books, papers and other materials on historical and cultural conservation and environmental design; Secondly, select a number of representative projects as cases for in-depth analysis, from which to find the common and differences; Finally, combined with the actual situation, some specific areas to carry out field investigation, obtain first-hand data to ensure the authenticity and reliability of the research results.

2. THE RELATIONSHIP BETWEEN HISTORICAL CULTURE AND ENVIRONMENTAL DESIGN

2.1. Definition and Characteristics of Historical Culture

History and culture is a broad concept, which covers the material and intangible heritage accumulated in the long-term development of human society. In a broad sense, history and culture include architecture, art, customs, language, literature, music, dance and other aspects [4]. Specific to the field of environmental design, historical culture is mainly reflected in the following aspects: Material cultural heritage refers to those buildings, monuments, sites and other physical remains with historical, artistic or scientific value. They bear witness to the development of human civilization in a particular period; Intangible cultural heritage refers to the knowledge and practice of various forms of traditional skills, festival activities, folk stories, performing arts, etc. These intangible assets also carry rich cultural information; Cultural landscape is a landscape formed by the interaction of natural and human factors, such as city blocks, gardens, farmland water conservancy facilities, etc., reflecting the interaction between human and natural environment[5].

The characteristics of historical culture mainly include historicity, regionalism, diversity and inheritance. Each culture has its unique historical background and development context, forming its own distinctive regional culture. The cultural exchange and integration of different regions promote cultural diversity[6]. In addition, history and culture continue and develop through intergenerational transmission.

2.2. The Role of History and Culture in Environmental Design

History and culture play a crucial role in environmental design: enhancing local characteristics and integrating local historical and cultural elements into the design can significantly improve the uniqueness and recognition of space, so that each place has its own distinctive character; Promote cultural identity. Through the application of traditional cultural symbols, it can arouse people's emotional resonance, enhance residents' love for their hometown, and help outsiders to quickly understand and accept local culture[7]; The improvement of environmental quality and rational use of historical and cultural resources can create a charming and functional public space and improve people's living conditions and quality of life. Supporting sustainable development and attaching importance to historical and cultural protection will help realize the goal of harmonious coexistence between man and nature and promote the implementation of the concept of green development [8].

2.3. Case Study: Successful Cultural Heritage Projects

In order to better understand how history and culture are effectively applied to environmental design, this section selects some successful cases at home and abroad for detailed analysis.

Modernization of the Palace Museum (Beijing)

As an outstanding representative of ancient Chinese palace architecture, the Forbidden City is not only a symbol of imperial power in ancient China, but also one of the important symbols of Chinese civilization[9]. In recent years, the Palace Museum has implemented a series of carefully planned restoration and modernization work, aiming to retain the original style while carrying out necessary innovations: First, the infrastructure upgrade, the lighting, ventilation, fire protection and other systems in the museum have been comprehensively upgraded to ensure the safe preservation of cultural relics[10]. For example, the use of LED lamps instead of traditional incandescent lamps both reduces heat generation and reduces energy consumption. The second is the application of digital technology, the establishment of a high-precision three-dimensional digital archive, the use of laser scanning and photogrammetry technology to record ancient buildings in an all-round way, the development of a virtual tour platform, so that visitors can "cloud tour" the Forbidden City anytime and anywhere through the Internet or mobile devices. The third is to optimize the exhibition space, re-plan the exhibition hall layout, add interactive experience area and multimedia display equipment, such as touch screen guide, animated short films, etc., to make the visiting process more lively and interesting. In addition, a special area for children's education has been set up to cultivate the cultural interests of the younger generation through edutainment. Cultural and creative product development, in cooperation with a number of well-known enterprises and designers, launched a range of cultural and creative products covering clothing, stationery, food and other fields, skillfully integrating traditional cultural elements into modern daily necessities, enhancing the public's awareness and love of the Forbidden City culture. Through the above measures, the Forbidden City has realized innovation on the basis of respecting history, which not only ensures the safe preservation of cultural relics, but also improves the quality of visitors' visiting experience, becoming a successful model of cultural inheritance and innovation.

Conservation and development of Ponte Vecchio, Florence, Italy

The Italian government has adopted a series of innovative measures for the Old Bridge of Florence, in addition to restricting vehicle traffic to reduce pollution and encourage businesses to maintain traditional business models, including the following: Heritage management plan, the development of a detailed heritage management plan, clear the functional positioning and development direction of different areas, to ensure that every inch of land can be used rationally. For example, a special art sales area has been set up on the bridge to promote the promotion and sale of works by local artists; Community participation mechanisms, including the establishment of an advisory committee composed of residents' representatives, which meets regularly to hear their views and invites

professionals to provide training courses to residents to enhance their sense of responsibility and skills in the protection of cultural heritage; Environmental protection measures have strengthened the monitoring and treatment of the water quality of the Anor River, improved the ecological environment of the river through the construction of sewage treatment facilities, and ensured the sustainable development of the old bridge and its surrounding areas; Cultural tourism integration, combined with local characteristics to create a series of cultural tourism routes, such as "Romantic Florence Tour", linking the old bridge with other famous scenic spots, attracting more international tourists to travel and tourism, driving the growth of local economy.

These comprehensive conservation and development strategies have ensured that the Ponte Olte Florence has not only been well preserved as an important historical site, but has also become one of the most important attractions for tourists from all over the world.

Cultural inheritance and innovation of Gion Festival in Kyoto, Japan

The Gion Festival in Kyoto, Japan, is one of the most famous festivals in the country, drawing thousands of spectators to watch the grand parade every year. In order to ensure that this traditional festival can continue to be held and continue to glow with new vitality, the specific measures taken by the Kyoto government are: policy support and financial investment, formulate relevant policies and regulations, and clearly protect the traditional form of Gion Festival from commercialization; At the same time, a special fund will be set up to support the preparation of the event, the layout of the venue and the construction of related facilities. Talent cultivation and skill inheritance, the establishment of a special training center, hiring senior artists to teach traditional performance skills to young people, to ensure that these precious cultural heritage can be passed on from generation to generation. In addition, workshops for the public have been set up, so that more people have the opportunity to experience and learn the charm of traditional art; Cultural facilities construction, around the core area of Gion Festival, create a series of cultural facilities and service places with strong Japanese style, such as traditional arts and crafts shops, teahouses, theaters, etc., to form a complete cultural tourism industry chain, providing tourists with in-depth understanding of traditional Japanese culture opportunities; Digital communication and marketing, using social media platforms, online live broadcasting and other means to widely publicize the activities of Gion Festival to expand its influence; At the same time, the official application is launched to provide real-time information push, navigation services and other functions to facilitate visitors to get the latest information and participate in the event. Through these meticulous efforts, the Kyoto Gion Festival has not only succeeded in preserving the ancient tradition, but also adapted to the needs of modern society, becoming a comprehensive event integrating culture, entertainment and education, demonstrating the new vitality of traditional culture in contemporary society.

To sum up, through the in-depth analysis of the three typical projects of the Palace Museum, the Old Bridge in Florence and the Gion Festival in Kyoto, we can see that successful cultural heritage projects are not only to simply protect the old things, but more importantly, to find a development model suitable for contemporary needs, so that the ancient culture can breathe new life. This requires designers to dig deep into local characteristics, combine modern technology and market demand, and create works that respect history and conform to the spirit of The Times.

3. HISTORICAL AND CULTURAL INHERITANCE PATH IN CONTEMPORARY ENVIRONMENTAL DESIGN

3.1. Preservation and Restoration of Traditional Buildings

As the material carrier of history and culture, traditional architecture carries rich information and value. In contemporary environmental design, protecting and restoring traditional architecture is one of the important ways to inherit historical culture. This includes not only the maintenance and repair

of the ancient buildings themselves, but also the overall protection of their surrounding environment. Specific measures are as follows: First, scientific assessment and planning: the use of advanced technical means, such as three-dimensional laser scanning, UAV aerial photography, etc., to carry out a comprehensive health assessment of traditional buildings, and formulate a reasonable restoration plan according to the assessment results. The second is to follow the principle of authenticity: in the restoration process, original materials and technical processes are used as much as possible to maintain the historical authenticity of the building. For the parts that must be replaced, materials that match the original should be selected to ensure that the repaired effect is close to the original appearance. The third is to strengthen legal and regulatory protection: establish and improve relevant laws and regulations, clarify the scope of protection objects, regulate development behaviors, increase penalties for destructive behaviors, and provide legal support for traditional buildings.

3.2. Restore and Reproduce Historical Landscapes

Historical landscape refers to the space environment composed of natural elements and human elements, which reflects the life style and development level of human society in a specific period. Restoring and reproducing historical landscapes helps to recreate the scenes of the past and make people feel the presence of history more intuitively[11]. The main methods to achieve this goal are as follows: excavating the relics buried in the ground by archeological methods, combining with the comprehensive analysis of documents, and accurately restoring the real face of the historical landscape; Modern information technologies such as computer-aided design (CAD), virtual reality (VR) and augmented reality (AR) are used to build digital historical landscape models, so that people can experience the ancient space atmosphere in an immersive way. Local residents are encouraged to participate in the restoration of historical landscapes, while various forms of social education activities are carried out to raise public awareness and protection of historical and cultural heritage.

3.3. Inheriting Intangible Cultural Heritage

Intangible cultural heritage refers to those cultural heritage that cannot be preserved in physical form, such as traditional skills, festival customs, oral literature and so on. These intangible assets also have high historical, cultural and artistic value. In order to better inherit intangible cultural heritage, the following strategies can be adopted in environmental design: First, establish a study hall or studio to provide a special workplace for traditional artists, so that they can teach their skills in practical operation and cultivate a new generation of successors. The second is to hold cultural festivals, regularly organize various folk festival celebrations, display colorful folk art performances, and attract more people's attention and support for the protection of intangible cultural heritage. The third is to develop cultural creative products, integrate traditional patterns, symbols, stories and other contents into the design of modern commodities, and create products that have cultural connotations and meet market demand, so as to expand the social influence of intangible cultural heritage.

4. HISTORICAL AND CULTURAL INNOVATION PATH IN CONTEMPORARY ENVIRONMENTAL DESIGN

4.1. A Combination of Modern Technology and Traditional Elements

In contemporary environmental design, the combination of modern technology and traditional elements can not only preserve the essence of history and culture, but also create a new spatial experience. This process involves the integration of technologies at multiple levels: on the one hand, material innovation, the use of new environmentally friendly materials or high-tech composite materials to replace traditional building materials, not only to maintain the historical appearance of the building, but also to enhance its durability and functionality. For example, the use of carbon fiber to strengthen the structure in the restoration of ancient buildings does not affect the beauty but can

significantly enhance the safety of the building. The second is the application of intelligent technology, the introduction of intelligent technology such as the Internet of things and artificial intelligence, to inject wisdom elements into the traditional space. For example, through the intelligent lighting system to control the change of light, create a different atmosphere; Or develop apps based on mobile devices that provide guided Tours and interactive experiences that allow visitors to gain a deeper understanding of the cultural stories behind them.

There is also digital modeling and 3D printing, the use of computer-aided design (CAD), building information modeling (BIM) and 3D printing technology, to achieve the accurate reproduction of complex traditional components and customized production, greatly shortening the construction cycle and reducing costs.

4.2. Modern Interpretation of Cultural Symbols

Cultural symbols are important media carrying specific meaning and emotional expression, and reinterpreting them in the contemporary environment helps to narrow the distance between traditional culture and modern society. Specific methods include: abstract processing, extracting core elements from traditional patterns and patterns, and applying them to modern design after simplification and deformation[12]. This method can give the work a new visual impact while retaining the original charm, such as transforming traditional window mullions into part of the facade decoration of modern buildings; Cross-disciplinary integration, breaking the boundaries between different art forms, and integrating intangible cultural heritage such as music, dance and drama into environmental design. For example, multimedia installations are installed in public squares to reproduce traditional opera performances with light and shadow effects, forming a unique urban night scene; Functional transformation, redefining the functional attributes of traditional elements according to the needs of modern life. For example, the ancient courtyard-style living layout concept is introduced into modern residential design to create a more open and communicative living space; Or to transform the traditional teahouse culture into an urban leisure place with social attributes.

4.3. Community Participation and Cultural Identity

As the direct inheritors and users of local culture, community residents' active participation is very important to realize the effective inheritance of history and culture. Therefore, the role of community should be paid full attention in the process of environmental design. It is necessary to establish an effective communication mechanism, invite local residents to participate in the planning and design phase of the project, listen to their opinions and suggestions, and ensure that the design plan reflects the real needs and cultural characteristics of the community. At the same time, various forms of cultural and educational activities, such as lectures, workshops and exhibitions, should be carried out to enhance residents' awareness of local history and culture and impart relevant conservation skills. At the same time, young people are encouraged to learn traditional skills and cultivate a new generation of cultural guardians. Build a cooperation platform with the participation of the government, enterprises, social organizations and individuals, promote the effective integration of resources of all parties, and form a good situation of jointly promoting cultural inheritance. In addition, a reward system can be set up to recognize those units and individuals who have made outstanding contributions to the preservation and promotion of history and culture.

5. CASE STUDY

5.1. Analysis of Typical Cases at Home and Abroad

Hangzhou West Lake Cultural Landscape Comprehensive Protection Project: As one of the first World cultural Heritage sites in China, Hangzhou West Lake is famous for its unique natural scenery

and rich cultural heritage. However, with the acceleration of urbanization, the surrounding environment of the West Lake is facing many challenges. The Hangzhou government has taken a series of protection measures, including demarcating the scope of protected areas, limiting the intensity of development, and restoring historical water systems. In particular, it is worth mentioning that the planning concept of "three cloud mountains and one city" has been implemented in the lakeside area, and the urban spatial pattern of the ancient West Lake has been reproduced by optimizing the traffic organization and improving the ecological environment. The introduction of virtual reality (VR), augmented reality (AR) and other modern technological means to provide tourists with an immersive tour experience. Local residents are encouraged to participate in the protection work of the West Lake, forming a good situation of government-led and social participation.

Urban renewal in Le Marais, Paris, France: Located in the heart of Paris, the Marais is a historic cultural district with a rich architectural heritage from the 16th to 18th centuries. In recent years, the area has undergone extensive urban renewal and has become a vibrant centre for art and fashion. The French government attaches great importance to the historical value of the Marais and has enacted strict conservation regulations to ensure that the buildings in the area are properly maintained. At the same time, through the introduction of cultural and creative industries, to give new life to the old house, so that it can maintain the original style and adapt to the needs of modern life. The transformation of some old factories or warehouses into new forms of business such as galleries, studios and cafes has promoted the development of the cultural industry. Establish a citizen committee, hold regular public meetings, listen to the opinions of residents, and jointly decide the direction of development of the block.

5.2. Successful Experience and Innovation

Through the study of the above cases, we can sum up the following successful experiences and innovations: First, both domestic and foreign successful cases are inseparable from scientific and reasonable planning guidance and strict management system. Only in this way can we achieve sustainable development while preserving our history and culture. Second, the application of modern information technology has brought new possibilities for historical and cultural protection. Through digital modeling, intelligent monitoring and other means, it can not only improve work efficiency, but also create a richer and more diverse experience. Third, successful projects often involve the cooperation of multiple stakeholders, including government departments, business organizations, and ordinary people. Extensive mobilization of all sectors of society can form a strong joint force and promote the smooth development of the work. Fourth, the integration of cultural connotation and modern life: on the basis of retaining traditional characteristics, actively explore new forms that fit with modern society, such as cultural tourism, creative industries, etc., so that the ancient culture can be revitalized and better integrated into People's Daily life.

5.3. Challenges and Solutions

Despite many successful practices, there are still many challenges in the process of historical and cultural inheritance and innovation:

The first is the problem of funding shortage, large conservation projects usually require huge investment, and a single source of funding is difficult to meet the actual needs. To this end, we should explore diversified financing channels, such as setting up special funds and attracting social capital participation. The second problem is the shortage of talents. The lack of professional and technical personnel and management personnel restricts the speed and quality of the project. Therefore, it is necessary to strengthen the construction of personnel training system, encourage colleges and universities to set up relevant courses, and provide internship opportunities to accumulate practical experience. There is also the problem of balancing the relationship between protection and

development. While pursuing economic benefits, we must deal with the relationship between protection and development to avoid the damage of authenticity caused by excessive commercialization. Detailed standards and specifications can be developed to guide specific operations and ensure coordination between the two.

6. CONCLUSION

This paper discusses the inheritance and Innovation Path of historical culture in contemporary environmental design, emphasizing historical culture as a source of inspiration for environmental design and its central role in enhancing local characteristics, cultural identity and promoting sustainable development. The importance of protecting and restoring traditional buildings has been clarified. The research results build a complete theoretical framework, provide systematic support for academic research, and propose strategies with practical application value to improve urban quality and social and economic benefits. Looking ahead, it is necessary to deepen interdisciplinary research, focus on cultural exchanges in the context of globalization, establish continuous monitoring and feedback mechanisms, and explore the application potential of new technologies. This study aims to promote the effective inheritance and innovation of historical culture in environmental design, and expects more scholars and practitioners to work together for the progress and development of human civilization.

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