

Application of Intangible Cultural Heritage Elements in The Interactive Space

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Abstract: This paper explores the application of intangible cultural heritage elements in the design of an interactive space. Through the extraction, transformation and integration of intangible cultural heritage elements, the paper analyzes their positive role in creating spatial atmosphere, enhancing interactive experience, and promoting cultural inheritance. The article underscores the significance of incorporating intangible cultural heritage elements into various interactive spaces. This practice not only enhances the visual and sensory experience for visitors, but also serves to enrich the cultural depth and uniqueness of these spaces. By integrating traditional arts, crafts, music, or other forms of intangible cultural heritage, the interactive spaces become more immersive and engaging, offering a more meaningful and memorable experience. Additionally, this approach provides a novel avenue for the preservation and promotion of intangible cultural heritage, ensuring that these valuable traditions are not lost to the ages. In essence, the application of intangible cultural heritage elements in interactive spaces offers a win-win scenario, benefiting both the spaces themselves and the continued existence and appreciation of our cultural heritage.

Keywords: Intangible cultural heritage; interactive space; space design; cultural heritage; interactive experience.

1. Introduction

With the rapid development of society, people's demand for cultural life is increasing day by day. As an important bridge connecting people and culture, the innovation and development of interactive space design are particularly critical. As a treasure of national culture, the intangible cultural heritage contains rich historical information and artistic value. Integrating the intangible cultural heritage elements into the interactive space design can not only improve the cultural quality of the space, but also promote the inheritance and popularization of the intangible cultural heritage. Therefore, it is of great theoretical value and practical significance to study the application of intangible cultural heritage elements in the interactive space.

This paper aims to explore the specific application methods and effects in interactive space design through in-depth excavation and analysis of intangible cultural heritage elements. Through the combination of case analysis and theoretical discussion, the article tries to provide useful reference and inspiration for the integration of intangible cultural heritage and interactive space design. At the same time, the article also hopes to promote the innovative development and inheritance of intangible cultural heritage in modern society through this research.

2. Overview of the Intangible Cultural Heritage Elements

2.1. Definition and classification of intangible cultural Heritage

Intangible cultural heritage, as an important part of human culture, carries the historical memory, life experience and spiritual value of a nation or group. It refers to the traditional cultural expressions that exist in non-material forms and are closely related to the people's lives and inherit from generation to generation. These forms of expression include

but are not limited to oral traditions and expressions, performing arts, social customs, etiquette, festivals, knowledge and practice about nature and the universe, and traditional handicraft skills.

From the perspective of classification, the intangible cultural heritage can be roughly divided into five categories. The first is the oral tradition and expression, which include the language as a cultural carrier, as well as the traditional oral literary works such as poetry, stories and proverbs. The second is the performing arts, such as music, dance, drama, quyi, etc. These art forms vividly present the traditional culture to the audience through the performers' skills and creativity. The third category is social customs, etiquette and festivals, which are the most living parts of the intangible cultural heritage, which reflect people's behavior norms and emotional expression on different occasions. The fourth category is the knowledge and practice of nature and the universe, which includes the traditional agricultural knowledge, astronomical calendar, medicine knowledge, etc. They are the crystallization of human wisdom accumulated in the long-term production and life. The last category is traditional handicraft skills, such as ceramic making, embroidery, weaving, etc., which are not only of practical value, but also important carriers of cultural inheritance.

2.2. The value and significance of the intangible cultural heritage

The value and significance of intangible cultural heritage lies in its contribution to cultural diversity, the embodiment of human creativity, and its promotion of social harmony and sustainable development.

First of all, the intangible cultural heritage is an important embodiment of cultural diversity. In today's accelerating globalization, various cultures blend and collide with each other. Intangible cultural heritage, as the unique form of expression of various ethnic cultures, has enriched the treasure house of human culture and made the world culture

more diversified and colorful[1].

Second, the intangible cultural heritage is a vivid display of human creativity. Whether it is oral traditions, performing arts, social customs, handicraft skills, all condensed people's wisdom and creativity. These intangible cultural heritages are not only the treasures of national culture, but also the common wealth of human civilization.

Finally, the intangible cultural heritage is of great significance to the social harmony and the sustainable development. It helps to enhance national identity and cultural confidence, and promote social harmony and stability. At the same time, through the protection and inheritance of intangible cultural heritage, it can promote the development of cultural industry, promote economic prosperity and sustainable social progress.

2.3. Extraction and transformation of intangible cultural heritage elements

When applying the intangible cultural heritage elements to the design of interactive space, it is necessary to extract and transform them first. Extraction refers to the selection of representative, unique and operable elements from the rich intangible cultural heritage[2]. These elements can reflect the essence and characteristics of the culture, and can adapt to the modern aesthetic and practical needs. Transformation refers to the combination of these traditional elements with modern design concepts, and transforming them into modern and practical design elements and symbols through innovative techniques and technical means.

When extracting the elements of intangible cultural heritage, we need to pay attention to its historical and cultural nature. These elements often carry the profound historical and cultural connotation, and are an important part of the national culture. Therefore, in the process of extraction, it is necessary to deeply study its historical origin, cultural connotation and artistic characteristics, to ensure that the extracted elements can truly reflect the essence and characteristics of the culture.

In the transformation of intangible cultural heritage elements, we need to pay attention to their innovation and practicality. The combination of traditional elements and modern design concept needs clever and natural, which should not only retain the essence and characteristics of traditional culture, but also meet the modern aesthetic and practical needs. At the same time, it also needs to consider how to effectively integrate these elements into the interactive space design, so that they can coordinate and set off with the space environment, so as to achieve the effect of beautifying the space and improving the cultural connotation[3].

By extracting and transforming the intangible cultural heritage elements, we can integrate their unique cultural charm and artistic value into the interactive space design, so that the space can not only have practical functions, but also become an important carrier for inheriting and carrying forward the national culture.

3. Basic Principles and Requirements of Interactive Space Design

3.1. Definition and characteristics of interactive space design

Interactive space design, as a new design concept, aims to break the static boundary of traditional space, closely integrate people and environment, people and culture, people and science and technology, and create a dynamic and

charming space environment. Interactive space design emphasizes the communication and interaction between the space and people. Through innovative design techniques and technical means, the space becomes a place that can stimulate people's emotional resonance and inspire their thinking[4].

The characteristics of interactive space design are mainly reflected in the following aspects:

First, interactivity is its most salient feature. The design of interactive space focuses on the interaction between people and space. By setting up various interactive devices and facilities, people are encouraged to actively participate and experience it personally, so as to enhance the attractiveness and interest of the space.

Secondly, dynamics is also an important feature of interactive space design. Traditional space design often pays attention to the static effect of space, while interactive space design emphasizes the dynamic change of space. Through the use of advanced technology and intelligent devices, the interactive space can be flexibly adjusted according to different use scenarios and needs, creating a diversified space atmosphere[5].

In addition, culture is also a feature that interactive space design cannot be ignored. Interactive space design focuses on the integration of regional culture, historical culture and other elements into the space design. Through the unique artistic expression form and symbolic language, the connotation and value of culture are transmitted, so that the space becomes the carrier and inheritor of culture.

Finally, sustainability is also one of the important features of interactive space design. In the interactive space design, we pay attention to the application of environmental protection, energy saving and recycling concepts, adopt environmental protection materials and energy saving technology to reduce the energy consumption and pollution of space, and realize the sustainable development of space[6].

3.2. Basic principles of interactive space design

First, the principle of humanization. The core of interactive space design is people-oriented and pay attention to people's needs and experience. In the design, people's behavior habits, psychological characteristics and other factors should be fully considered to create a comfortable, convenient and safe space environment.

Secondly, the principle of wholeness. Interactive space design should pay attention to the integrity and coordination of the space, to avoid the fragmentation and clutter of the space. In the design, the relationship between the space and the surrounding environment should be fully considered, so that the space and the surrounding environment can integrate and echo each other[7].

Again, the principle of flexibility. Interactive space should be designed with some flexibility and variability to adapt to different usage scenarios and requirements. The versatility and scalability of the space should be fully considered in the design, so that the space can flexibly respond to various challenges and changes.

In addition, the principle of innovation is also one of the principles that cannot be ignored in interactive space design. In the design, we should actively explore new design concepts, technical means and artistic expression forms, and promote the continuous innovation and development of interactive space design.

Finally, the cultural principle is also an important principle of interactive space design. In the design, regional culture,

historical culture and other elements should be deeply excavated, and integrated into the space design, so that the space has unique cultural connotation and charm.

3.3. Innovative trend of interactive space design

With the continuous development of science and technology and the continuous progress of the society, the interactive space design also presents some new innovation trends.

First of all, intelligence is one of the important innovative trends of interactive space design. Through the use of advanced Internet of Things, big data, artificial intelligence and other technical means, the intelligent management and control of space, improve the convenience and comfort of space[8].

Secondly, individuation is also an important innovation trend of interactive space design. In the design, we focus on how to meet the personalized needs of different users, through customized design and service, to create a unique space environment.

In addition, green environmental protection is also one of the important innovative trends of interactive space design. In the design, attention is paid to the application of environmental protection concept and sustainable development principle, and environmental protection materials and energy saving technology are adopted to reduce the energy consumption and pollution of space.

Finally, diversification is also one of the innovative trends of interactive space design. Through the integration of various art forms and technical means, a rich and diverse variety of spatial experience is created to meet the aesthetic and cultural needs of different users.

4. Application Strategy of Intangible Cultural Heritage Elements in The Interactive Space

4.1. Element fusion and spatial layout

In the interactive space design, it is a crucial strategy to integrate the spatial layout. This strategy aims to create a spatial environment that is both cultural heritage and in line with modern aesthetic needs through the ingenious use of traditional elements[9].

First of all, we need to deeply study and understand the connotation and characteristics of the intangible cultural heritage elements, including their form, color, material and so on. These elements often contain rich historical and cultural information, and are the unique embodiment of national culture. By integrating these elements into the space design, we can make the space more culturally characteristic and recognizable.

In the process of fusion elements, we need to consider its relationship with the spatial layout. Spatial layout is the basis of interactive space design, which determines the form and functional partition of space. By combining the intangible cultural heritage elements with the spatial layout, we can create a spatial environment that both meets the functional needs and has the cultural charm. For example, in the exhibition space of the museum, we can use traditional architectural elements and decorative techniques to create a simple and elegant atmosphere, so that the audience can deeply feel the charm of traditional culture during the visit.

In addition, we also need to pay attention to the coordination of the elements of the fusion. In the design, to avoid the piling up and disorderly elements, but through clever combination and collocation, so that the elements form a harmonious and unified whole. This requires us to have a high aesthetic ability and design ability, to be able to flexibly use various elements in the design, to create a suitable design requirements and have a unique charm of the space environment.

4.2. Interactive experience and cultural inheritance

In interactive space design, it is an important strategy to realize the application of intangible cultural heritage elements by enhancing interactive experience. This strategy aims to enable participants to personally participate in, experience and understand the charm of traditional culture through innovative design techniques and technical means, so as to realize the effective inheritance of traditional culture.

First, in the design of interactive experiences, we need to fully consider the needs and interests of the participants. Creative and interesting interactive devices and facilities are used to attract participants to participate and immerse themselves. For example, in the folk museum, an interactive experience area can be set up, so that visitors can experience the production process of traditional crafts and feel the unique charm of traditional culture[10].

Secondly, the design of interactive experience should focus on the in-depth excavation and presentation of intangible cultural heritage elements. By refining the essence and characteristics of traditional culture and integrating it into the interactive experience, participants can deeply understand the connotation and value of traditional culture in the experience process. For example, in the opera performance space, modern technology can be used to combine traditional opera performance with virtual reality technology to bring immersive viewing experience to the audience and convey the unique charm of opera culture.

4.3. Artistic Performance and Sensory Experience

In the interactive space design, artistic expression and sensory experience are another important strategy for the application of intangible cultural heritage elements. Through the artistic expression technique and the design technique of sensory stimulation, we can fully display the essence and charm of the intangible cultural heritage, bringing the profound and unforgettable experience to the participants.

First of all, artistic expression is an important means in interactive space design. We can learn from the forms and techniques of traditional art, such as painting, sculpture, paper-cutting, etc., and integrate them into the space design to create a unique artistic atmosphere. At the same time, we can also re-create and interpret the traditional cultural elements through modern artistic techniques, such as installation art and digital media art, so that they can glow with new vitality and charm.

Secondly, the sensory experience is an integral part of the design of an interactive space. We can make the participants feel the charm of traditional culture more deeply through the stimulation of vision, hearing, touch and other senses. For example, using specific colors, lights and materials in the space to create a visual environment in line with the traditional culture atmosphere; through the performance of

traditional instruments or traditional songs, the participants through the touch and experience of traditional handicrafts, the participants feel the unique texture of traditional culture.

5. Conclusion

The application of intangible cultural heritage elements in the interactive space not only enriches the cultural connotation of the space, but also enhances the interactivity and experience sense of the space. By integrating traditional elements with modern design concepts, we create a space environment that has both traditional charm and meets modern aesthetic needs. This application strategy not only helps to inherit and promote the traditional culture, but also promotes people's cognition and respect for the intangible cultural heritage. At the same time, the design of the interactive space allows participants to personally participate in and experience the charm of traditional culture, which deepens the effect of cultural inheritance. Therefore, the application of intangible cultural heritage elements in the interactive space has profound significance, and is worth our further exploration and practice.

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