

Research on the Development Strategy of Experiential Intangible Cultural Heritage in Macau under the Background of Cultural and Tourism Integration

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Abstract: This study takes the intangible cultural heritage tourism of the Macao Special Administrative Region as the research object. Through literature integration and analysis combined with comparative research methods, it investigates the cultural and tourism development paths of intangible cultural heritage resources of performance, skills, and festivals in the Macao region. The research suggests that there are still some contradictions in the cultural and tourism development model of the Macao region. The technological empowerment is insufficient, the in-depth exploration of culture is inadequate, and there is a mutual dissolution between the improvement of participation and commercialization. Therefore, in the future, the Macao region should enhance the integrated development of cultural and tourism products, strengthen the independent design of intangible cultural heritage tourism products, and increase the extension of cultural value and the nesting of economic benefits. It is necessary to innovatively incorporate intangible cultural heritage inheritors into the product design chain, create city IPs, develop the night economy, and reflect the urban characteristics of cultural and tourism products. This research is helpful in providing certain references for cultural tourism in high-density cities.

Keywords: Inheritance of intangible cultural heritage; Macao Special Administrative Region; High-density city; Integration of culture and tourism

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1. Introduction

1.1. Research background and significance

1.1.1. Global trends in cultural and tourism integration and the demand for intangible cultural heritage protection

At present, cultural tourism has become an important demand of tourists all over the world. The integration of culture and tourism can not only promote the development of the regional economy, but also meet the multi-level consumption demand of consumers. Currently, UNESCO has put the protection of intangible cultural heritage and tourism development on the agenda of sustainable development, which also indicates that the integration of culture and tourism industry has become an international consensus. The integration of culture and tourism industry is a reflection of the industrialized tourism mode, a response to tourists' psychological needs and emotional values, and helps to reconstruct the value chain of tourism. This kind of integration can go beyond the simple level of landscape display, but deeply integrate tourists with local culture,

and enhance tourists' sense of interaction and experience during the tourism process. When promoting the development of cultural and tourism integration industries, various regions need to pay attention to the advantages of cultural and tourism products and transform natural resources into sustainable product attractions ^[1].

1.1.2. Positioning of Macao as a world tourism and leisure center and the uniqueness of intangible cultural heritage resources

Macao is a special administrative region of China. It is a city built and developed with European culture as the background, and its history is a rare cross-civilization mixing process. Macao's urban strategy, taking leisure tourism as the core of the cultural tourism industry. This requires Macao to go beyond the traditional gambling tourism mode and seek a deeper cultural identity when developing its cultural industry, highlighting the uniqueness of Macao's cultural assets. At present, Macao has rich cultural blending achievements, such as servant cuisine, midway folk art, etc., all carry the practical achievements of cross-cultural exchanges. At the same time, Macao is also a city with high spatial density, there are 22 national intangible cultural heritages in the 30 square kilometers urban area, forming a vast open-air cultural museum with the city as the carrier. Macao is also rich in land and worship culture, and photovoltaic ancestral hall beliefs. These cultural resource characteristics can bring tourists a rich cultural experience, so the government needs to strengthen the in-depth development of cultural and tourism integration industries to avoid the problem of homogenization of tourism development. Based on the excavation of local resources, to further realize a diversified cultural tourism industry. Exploring the cultural and tourism transformation path of Macao's intangible cultural heritage is not only related to the protection of local cultural ecology, but also provides a reference for the sustainable development of global multicultural cities ^[2].

1.2. Literature review

In the field of tourism transformation research of intangible cultural heritage, Smith was the first to propose the theory of living heritage, emphasizing that the protection of intangible cultural heritage must achieve dynamic inheritance through community participation. This viewpoint was developed by Richards into the experiential cultural capital theory, pointing out that the core of the tourism of intangible cultural heritage is to transform cultural practices into consumable experiential value. Among domestic scholars, Wan constructed a three-dimensional model of intangible cultural heritage tourism development and proposed a balanced framework of authenticity, participation, and sustainability. Yuan found that, under the background of the integration of culture and tourism, the display of intangible cultural heritage faces a real predicament of being staged, that is, the alienation of cultural performance caused by tourism demand. Regarding the integration mechanism of culture and tourism, Yuan proposed a symbiotic model of culture and tourism, arguing that successful intangible cultural heritage tourism should form a positive feedback loop between cultural inheritance and tourism development. Song pointed out through empirical research that excessive commercialization would sever the relationship between intangible cultural heritage and its original context, and suggested establishing a cultural buffer zone mechanism. In terms of technological empowerment, Wu demonstrated the role of VR/AR technology in addressing the temporal and spatial limitations of intangible cultural heritage experiences, but also warned of the potential risks of sensory substitution that technology might bring ^[3].

Judging from the results of the literature research, current researchers have formed relatively systematic viewpoints on the study of cultural heritage, but the research on Macao, as the convergence of Chinese and Western cultures, is significantly insufficient. Most studies have followed the traditional theories of cultural heritage protection and failed to fully integrate the characteristics of cultural heritage manifestations in Macao. Moreover, there is a lack of argumentation for the balance mechanism between commercialization and living inheritance at the micro level. Based on this, this paper proposes a path for the development of intangible cultural heritage products in the high-density urban environment of Macao, which can enrich the research results to a certain extent and provide an innovative perspective.

2. Analysis of the current situation of experiential intangible cultural heritage resources in Macao

2.1. Resource classification and characteristics

The intangible cultural heritage of performing arts in Macao shows a dual-track development trend of traditional interpretation and modern innovation. Take Cantonese opera as an example: In addition to maintaining traditional performances at Yongle Theatre, the cultural and tourism department and other business entities have also developed an immersive experience theater that combines VR technology. Tourists can understand the cultural codes of singing and body movements through digital interaction. The traditional Portuguese dance breaks through the limitations of the stage, setting up impromptu performance areas at tourist attractions such as the front of the Legislative Assembly, and designing tourist participation sections, transforming the traditional Portuguese dance into an experiential tourist attraction. The core of this type of development model lies in maintaining the authenticity of art while lowering the threshold for appreciation through spatial reconstruction. There are still a large number of inheritors of intangible cultural heritage handicrafts in Macao^[4]. While passing on their skills, these inheritors are constantly developing and innovating, transforming from workshop production to an experience economy. For instance, the intangible cultural heritage technique of making almond cakes has developed into an experience workshop model with a front store and a back factory. Tourists can participate in the entire process from raw material grinding to mold forming, and ultimately receive personalized, customized food souvenirs. The Portuguese tile painting technique has given rise to micro-workshops. Under the guidance of professional artisans, tourists can complete tile painting creations using simplified materials. This participatory experience not only spreads Portuguese aesthetics but also creates unique travel memory points. Many inheritors of handicrafts have broken down the complex chain of handicrafts, designed modules that are convenient for tourists to participate in, and gradually formed a standard system during the development process. For instance, the Drunken Dragon Festival breaks through the limitation of single-day worship and extends a week-long series of activities, including dragon dance teaching, rice wine tasting, and other derivative experiences, enabling tourists to deeply understand the fishery cultural connotation behind the festival. The Nangma Dan festival creates a three-dimensional cultural landscape through the linkage of sea parades and land celebrations, and develops a series of souvenirs such as blessing boat models. The innovation of this type of development lies in breaking through the time constraints of the festival itself and building sustainable cultural consumption scenarios^[5].

2.2. Development status assessment

Macao's intangible cultural heritage tourism products present a composite development feature of technological empowerment and scene recreation. For instance, the Grand Prix Museum reconstructs historical event scenes through body-sensing simulation devices. Visitors can wear VR devices to experience the Grand Prix circuit races, transforming static exhibitions into dynamic and participatory memories. Similarly, the AR tour guide system of the Zheng Family House, through the superimposition of digital layers, enables visitors to see the evolution process of architectural patterns on their mobile devices, achieving a linked display of material heritage and intangible skills^[6]. The core of the development of such products lies in using digital technology to deconstruct the temporal and spatial limitations of intangible cultural heritage. However, some tourists who were surveyed also indicated that the updates of these facilities were relatively lagging, and the interactive devices were not updated in a timely manner, thus lacking the ability to continuously attract tourists. Some tourists also said that Macao has a wide variety of cultural and tourism products, but some of them lack cultural depth and show the feature of superficial consumption. Take the egg tart-making experience workshop as an example: To meet the immediate sense of gain of the general tourists, the workshop has simplified the process to the assembly of prefabricated raw materials and abandoned the traditional charcoal roasting technique. Some tourists think this is a kind of fast food-style consumption. On the contrary, the Cantonese Opera facial mask painting workshop adheres to the teaching of traditional mineral pigment techniques. Although it ensures the authenticity of the skills, the two-hour production time has deterred leisure tourists and led to a situation where it is well-received but not popular. This contradiction reflects the fundamental challenge in the revitalization of intangible cultural heritage: how

to ensure the convenience of participation while safeguarding the essence of the skills is a question that all inheritors need to consider. At present, the solutions for intangible cultural heritage (ICH) business entities in Macao mostly adopt a hybrid model of front store and back workshop. For instance, the Luhuan Shipbuilding Exhibition Hall not only has a quick photo area but also retains the traditional mortise and tenon craftsmanship study by appointment system, attempting to build a gradient experience system. However, the overall cost of this plan is relatively high, and its implementation is rather difficult. Some organizational structures have also begun to attempt to establish a symbiotic mechanism between commercialization and cultural inheritance. For instance, the intangible cultural heritage digital IP project launched by the Macao Science Museum is quite representative. It transforms the dynamic capture data of folk dances into virtual idol performances, which not only expands the channels for cultural dissemination but also nurtures the cultivation of inheritors through the sale of derivative products ^[7]. During the Drunken Dragon Festival, in addition to maintaining the traditional sacrificial procedures, new cultural and creative booths and flash mob performances will be added to support the protection of the intangible cultural heritage of the ceremony with commercial revenue. These practices indicate that effective development of intangible cultural heritage tourism requires the establishment of a closed-loop system for the transformation of cultural value into economic value.

3. The development strategy system of experiential intangible cultural heritage in Macao

The product development of intangible cultural heritage tourism in Macao needs to adopt a multi-dimensional product stratification mechanism to enhance the refinement level of intangible cultural heritage product development. For the public experience level, the design principle of low threshold and high interactivity should be adopted. The participation difficulty should be reduced through modular activity units to ensure that tourists can obtain cultural cognitive satisfaction within a limited time. For the in-depth study tour market, it is necessary to build a systematic knowledge transfer system, design immersive courses including skill imparting and cultural decoding, and form tourism products with academic value. Ensure that the products developed in layers can reach a broader customer base and precisely target the value of intangible cultural heritage products. Developers need to establish a dynamic evaluation mechanism, continuously optimize the product experience of tourists, actively collect users' feedback, enhance tourists' experience perception, and increase the cultural concentration perceived by tourists ^[8]. In terms of the specific implementation of intangible cultural heritage cultural tourism products, developers still need to innovate the forms of product implementation. Take the highly praised light show in Macao as an example: Developers should enhance the technical integration of the light show and aesthetically integrate digital means such as projection mapping and interactive sensing with traditional intangible cultural heritage elements. Reinterpret the cultural symbol system behind intangible cultural heritage through the language of light and shadow; By taking advantage of the dense urban texture of Macao, the historical districts are transformed into night cultural performance theaters. This integration not only extends the period of tourism consumption but also creates a new type of cultural space with the characteristics of urban memory ^[9]. The cultural and tourism department needs to coordinate resources to not only protect the authenticity of Macao's intangible cultural heritage but also emphasize the expressive tension brought about by technological development, so that the light show, as a form of light and shadow expression, always serves the transmission of the city's culture. Managers should also establish a more flexible content production mechanism to provide a survival space for the innovative expression of intangible cultural heritage. Allow creators to offer different experience versions in a single intangible cultural heritage product project based on the needs of different tourists. Let tourists become participants and creators of the night light show. By creating a city-wide light atmosphere, let tourists empathize with the urban environment and form a continuous cultural consumption stickiness ^[10].

4. Conclusion

The development of intangible cultural heritage tourism products in Macao presents a typical feature of the coexistence of multi-dimensional innovation and deep-seated contradictions. In the field of performing intangible cultural heritage, digital transformation represented by VR theaters of Cantonese opera and flash MOBS of folk dances has successfully broken through the spatial barriers of traditional art. However, the lag in technological iteration may lead to a decline in the quality of experience. Intangible cultural heritages of craftsmanship, such as the almond Cake Workshop and the tile painting workshop, have achieved public participation through modular decomposition, but they are facing the risk of cultural dilution caused by the simplification of the production process. The most enlightening aspect is the development of intangible cultural heritage during festivals. The Drunken Dragon Festival, through a layered design of core rituals and derivative experiences, has established a buffer zone between cultural protection and commercial development.

The three-dimensional solution proposed based on case studies has practical guiding value: establishing a zoning system of display–experience–study in the spatial dimension, such as the gradient design of the Luhuan Shipbuilding Exhibition Hall; Build an extended value chain of festival activities in the time dimension and transform single-day celebrations into sustainable consumption scenarios. In the technical dimension, a hybrid model of digital tools and physical inheritance has been implemented. The parallel operation of AR-guided tours and traditional craft demonstrations in Zhengjia Dawu is a successful example. It is particularly necessary to emphasize that the knowledge transformation ability of intangible cultural heritage inheritors is the core driving force for product upgrading, and their role should shift from performers to educators and design participants.

Disclosure statement

The authors declare no conflict of interest.

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