

Innovation and Development of Minnan-Style Decorative Tiles under the Background of "Internet +"

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Abstract

As a type of imported product, decorative tiles have, over a century-long process of integration with local culture and customs, evolved into uniquely characterized Minnan-style decorative tiles. These tiles embody rich cultural connotations and diverse forms. However, with the rapid advancement of the "Internet +" era, traditional cultural industries are facing both new opportunities and challenges amid the waves of digitalization and networking. The craftsmanship of Minnan-style decorative tiles is gradually declining, making it urgent to reconsider their inheritance and innovation. This paper takes "Internet +" as a pathway for cultural dissemination and development, aiming to explore new approaches to the innovation and development of Minnan-style decorative tiles, and to achieve both cultural inheritance and innovative growth.

Keywords

"Internet +", Minnan-style decorative tiles, Innovation, Development.

1. Introduction

As a type of imported product, decorative tiles have, through over a century of integration with local culture and customs, developed into uniquely characterized Minnan-style decorative tiles. These tiles carry rich cultural connotations and diverse forms. However, with the continuous development of the "Internet +" era, traditional cultural industries are facing new opportunities and challenges amid the wave of digitalization and networking. The craftsmanship of Minnan-style decorative tiles is gradually declining, making it an urgent task to rethink their inheritance and innovation. This paper takes "Internet +" as a medium for cultural dissemination and development, aiming to explore new paths for the innovation and development of Minnan-style decorative tiles, so as to achieve both cultural inheritance and innovative progress [1].

2. Visual Characteristics and Existing Issues of Minnan-Style Decorative Tiles

2.1. Visual Features

2.1.1. Rich and diverse patterns and motifs

Minnan-style decorative tiles refer to a type of ornamental brickwork used in traditional architecture in the Minnan region of Fujian Province, China. These decorative tiles are renowned for their rich and diverse patterns and motifs. Through the systematic arrangement and combination of geometric shapes, floral designs, and colors, they form exquisite architectural floor decorations [2], see Figure 1. The production process of Minnan decorative

tiles is unique, requiring advanced craftsmanship and a profound understanding of traditional culture. These tiles, with their abundant patterns and motifs, vividly reflect the distinctive cultural heritage of the Minnan region.



Figure 1: Patterns and Motifs of Minnan-Style Decorative Tiles

2.1.2. Elegant color combinations

Minnan-style decorative tiles emphasize elegant and harmonious color combinations, often utilizing rich yet refined palettes that exude a gentle and sophisticated temperament [3]. These colors typically reflect regional culture, traditional beliefs, and natural elements, imparting a unique charm to the architecture. The color schemes of the decorative tiles aim to convey cultural connotations through traditional hues and patterns, thereby enhancing the distinctiveness and artistic value of the buildings. These ancient and traditional color combinations add a unique style to the architecture of the Minnan region, attracting attention to the preservation and appreciation of traditional culture.

2.1.3. Orderly arrangement of assembled elements

The assembly patterns of Minnan-style decorative tiles represent one of their most captivating features. These patterns emphasize orderliness and symmetrical beauty. Through meticulous design and clever arrangement, the overall decoration achieves a sense of harmony and organization. Minnan-style decorative tiles are characterized by rigorous layouts and perfect symmetry, creating motifs with even rhythm, unified cadence, and a visually neat and bright appearance, thereby embodying the aesthetic of order [4].

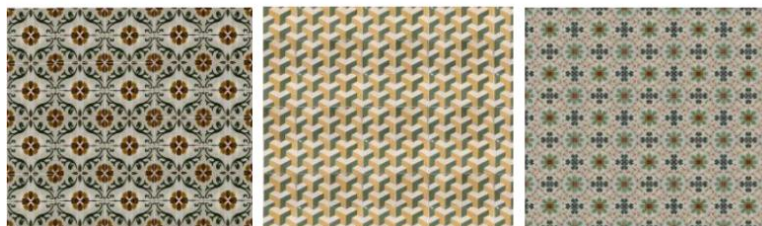


Figure 2: Assembly Patterns of Minnan-Style Decorative Tiles

By employing a classification and induction method, this study collects and organizes existing decorative tile patterns through the review of literature and historical works. The gathered images and materials of Minnan-style decorative tiles are categorized, allowing for the summarization of the evolving patterns, color schemes, and arrangement rules of Minnan-style decorative tiles, see Figure 2. This approach clarifies the theoretical foundation and research content.

2.2. Existing Issues

2.2.1. Oral and manual transmission method

The art of decorative tiles originated from foreign cultural transmission and exhibits a complex and diverse form. While absorbing foreign cultural elements, it simultaneously preserves

distinctive features of traditional Chinese culture, resulting in a certain complexity within tile culture. However, the mode of learning remains the most primitive oral and manual transmission method, lacking a systematic approach to inheritance and development. Consequently, the dissemination of this culture is relatively slow and the methods of transmission are relatively singular, which significantly restricts the inheritance and development of Minnan-style decorative tiles.

2.2.2. Outdated manual production methods

The production process of Minnan-style decorative tiles generally consists of seven steps: raw material preparation, design modeling, clay shaping, carving or printing, drying and curing, firing, and glazing and decoration, see Figure 3. All these steps are performed manually, which is time-consuming and inefficient. The production methods of Minnan-style decorative tiles typically employ traditional handicraft techniques. Although these methods may be considered relatively outdated in some respects, they represent a form of expression with a long history and rich cultural heritage. While these manual production methods are more time-consuming and labor-intensive compared to modern industrial manufacturing, they impart unique cultural and artistic value to the decorative tiles.



Figure 3: Production Process of Minnan-Style Decorative Tiles

2.2.3. Single development model

This study adopts the literature review method, consulting a large volume of relevant literature to understand the latest research developments. Based on the research theme of this paper, the current development status of Minnan-style decorative tiles is summarized, and the development pathways of the tile industry are analyzed, thereby laying a theoretical foundation for the study. The reviewed literature is categorized and organized to facilitate in-depth reflection on Minnan-style decorative tiles, leading to the identification of several challenges currently facing their development.

Although Minnan-style decorative tiles exhibit distinctive forms and high aesthetic value, their development still faces limitations. One major issue is the lack of digital transformation. Despite the growing popularity of internet technologies, digital transformation in the tile industry remains relatively stagnant, with insufficient online sales platforms and a lack of digital management systems, which hampers market expansion and information dissemination. Additionally, there is a lack of innovation capacity; in some regions, tile design and promotion still rely on traditional models, without sufficient impetus for creative advancement. In terms of integration between culture and industry, the deep integration of tile production with cultural elements still needs to be strengthened in order to promote more comprehensive development of Minnan-style decorative tiles within the cultural and creative industries.

2.2.4. The Significance of Inheritance and Innovation

The development of the Internet has significantly influenced various industries and continues to drive the evolution of the socio-economic landscape, injecting new vitality into the real

economy. By leveraging information and communication technologies, the Internet can be deeply integrated with traditional handicrafts, blending technological innovation with cultural heritage. This integration brings fresh momentum to the cultural industry [5] and offers new opportunities for the inheritance and innovative development of traditional crafts such as Minnan-style decorative tiles.

In terms of innovation, the Internet serves as a powerful channel for establishing digital platforms dedicated to the transmission of decorative tile heritage. These platforms can showcase and teach traditional craftsmanship, design concepts, and historical cultural contexts online, thereby promoting the preservation and continuation of tile-making techniques. Online education also plays a vital role in attracting younger generations to learn and engage with traditional crafts, injecting new vitality into the field. Moreover, Internet platforms can facilitate wider promotion of Minnan-style decorative tiles and expand their market reach. Through cultural and creative collaborations, the "Internet +" era enables interdisciplinary integration with design and innovation sectors, bringing new inspirations and creative elements into tile development.

As we enter the era of mobile Internet, Minnan-style decorative tiles are presented with entirely new opportunities for growth and transformation. Embracing this trend allows traditional culture to be integrated with contemporary advancements, ensuring that Minnan-style decorative tiles achieve more effective inheritance and innovation in alignment with the spirit of the times [6].

3. Analysis of the Inheritance and Innovation Pathways of Minnan-Style Decorative Tiles in the Context of "Internet +"

3.1. Diversifying the Presentation of Minnan-Style Decorative Tiles

3.1.1. Virtual Reality Cultural Experience

Virtual reality technology offers a novel cultural experience for Minnan-style decorative tiles. Through VR, users can engage in immersive interactions that allow them to appreciate the aesthetic beauty of the tiles, explore their historical and cultural significance, and even participate in virtual creative processes. As VR art has increasingly gained recognition in the field of visual media, its aesthetic attributes and cultural implications are attracting growing academic attention and research [7]. A virtual museum exhibition can be created to present the history, craftsmanship, and stylistic evolution of Minnan-style decorative tiles across different periods. In a virtual environment, visitors can tour exhibits, closely examine intricate patterns and fine craftsmanship, and explore the cultural background behind the designs. Additionally, a VR-based cultural journey focused on decorative tiles could immerse users in the rich cultural landscape of Minnan, allowing them to experience the integration of tile culture with local customs and traditions.

These VR-based cultural experiences not only enrich users' perception and understanding, but also provide innovative possibilities for the digital dissemination and promotion of decorative tile culture. By leveraging VR technology, users can access cultural experiences online, enabling them to engage directly with the artistic characteristics of Minnan-style decorative tiles. This form of engagement not only enhances cultural communication but also attracts broader public interest in, and awareness of, decorative tile heritage.

3.1.2. Establishment of a Digital Inheritance Platform

The establishment of a digital inheritance platform for Minnan-style decorative tiles requires the comprehensive integration of Internet technologies, multimedia tools, and educational resources to better preserve, promote, and pass down this traditional craft.

The platform should digitize relevant content related to decorative tiles, including production techniques, design patterns, and historical origins. These materials can be presented through images, videos, and text to meet the diverse learning and informational needs of users. Interactive experiences should be provided, allowing users to simulate the tile-making process through virtual gestures, controllers, or other devices. Such interactivity helps deepen users' understanding of the craftsmanship involved.

An online interactive community should be created to bring together tile makers, designers, and enthusiasts, fostering communication and sharing among users. Additionally, a comprehensive cultural heritage database should be developed to store cultural, historical, and design-related information on decorative tiles. This database will serve as a searchable resource for scholars and researchers, thereby promoting the transmission of craftsmanship and knowledge.

3.2. Expanding the Carrier Forms of Minnan-Style Decorative Tiles

3.2.1. Online Community and Interactive Experience

Integrating social media platforms with the online community facilitates users logging in via familiar social media accounts and enables content sharing across other social networks, thereby expanding the community's influence. The platform should provide users with space to upload their decorative tile artworks, creating an online exhibition of tile art. This approach stimulates users' creative enthusiasm while offering opportunities for others to learn and appreciate the craft.

The online community can offer interactive educational content, including video tutorials and live lectures. Professional tile makers and designers can share their expertise on the platform, interact with users, and demonstrate the tile-making process, thereby promoting learning and communication. Through the interactivity enabled by the Internet, this fosters exchanges, experience sharing, and innovative thinking, forming an organic and dynamic network for cultural dissemination.

3.2.2. Cultural Creativity and Design Development

Cultural creative product design centers on culture and creativity while emphasizing user needs, with imagery combining both subjective concepts and objective forms [8]. When designing cultural creative products, designers can integrate modern elements into traditional decorative tile designs, creating works that align with contemporary aesthetics and lifestyles. The design of decorative tiles need not be limited to ornamental purposes but can also pursue more practical functions. Exploring the integration of tiles with other materials can yield more creative and layered results.

Providing personalized customization services for decorative tiles, catering to customers' specific preferences for patterns, colors, or sizes, helps enhance the product's market competitiveness and meets individualized demands. By incorporating Minnan's history, traditional culture, and folk customs, designs with local characteristics can be developed. Such designs not only promote local culture but also attract wider public attention.

Establishing collaborative platforms with the cultural creativity and design industries encourages designers to participate in decorative tile design with modern aesthetics and innovative concepts. Such collaboration can infuse new artistic elements into the tiles, broaden the application scope of the products, and better align them with contemporary market demands.

3.3. Expanding the Online Dissemination Channels of Minnan-Style Decorative Tiles

3.3.1. Building a Specialized Internet Platform

As one of the distinctive traditional crafts of the Minnan region, Minnan-style decorative tiles face limited dissemination channels, making it difficult to clearly present their intricate production techniques. The openness, interactivity, and connectivity of Internet platforms can stimulate the dissemination and development of Minnan-style decorative tiles, leading to significant structural changes within the traditional cultural industry [9]. Leveraging such online platforms, content related to tile design, production techniques, and historical culture can be exhibited.

A community exchange platform can be established to enable users to share experiences, exchange ideas, and provide forums for discussions on tile-making, thereby promoting interaction and collaboration among users. This facilitates the dissemination and development of Minnan-style decorative tiles and provides comprehensive support for their growth. Additionally, consumer platforms can be provided to form consumption channels, thereby promoting cultural dissemination and the development of the cultural industry, see Figure 4.

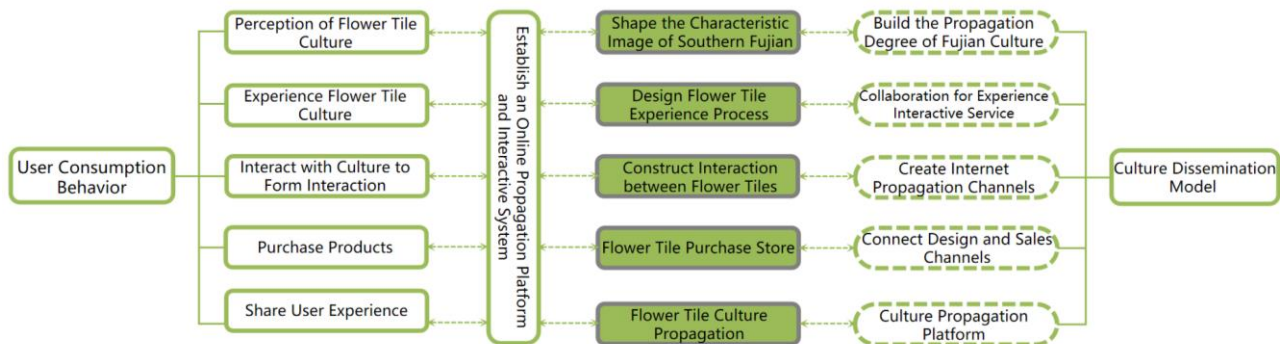


Figure 4: Channels of User Consumption Behavior Dissemination

3.3.2. Expanding the Dissemination Scope of Minnan-Style Decorative Tiles through New Media

Utilizing new media is an effective approach to promote the dissemination of traditional cultures such as Minnan-style decorative tiles in today's digital era [10]. Producing professional videos related to decorative tiles, showcasing their beauty and uniqueness through visual media, can attract greater audience attention. Establishing a dedicated official website provides more comprehensive information. Participating in and creating relevant online communities and cultural exchange platforms fosters cultural communication and dissemination. Within these communities, connections with enthusiasts can be cultivated. Through these new media methods, the beauty and culture of Minnan-style decorative tiles can be conveyed to a broader audience, injecting new vitality into traditional crafts.

3.3.3. Cultural Creative Product Design

Minnan-style decorative tiles are typically known for their vibrant colors, distinctive patterns, and exquisite craftsmanship. When designing cultural creative products based on Minnan-style decorative tile culture, it is important to integrate traditional cultural elements with modern design concepts to meet contemporary market demands. For instance, designing a unique lighting fixture incorporating Minnan-style decorative tile elements for home decoration not only serves an aesthetic purpose but also promotes cultural dissemination [11]. The tile patterns can be offered with personalized customization services, allowing users to create cultural and creative products tailored to their individual preferences and needs, see Figure 5. Creative product design rooted in Minnan-style decorative tile culture requires balancing the

inheritance of traditional culture with modern market demands, emphasizing innovation, personalization, and storytelling to attract a broader audience.



Figure 5: Cultural Creative Product Design

4. Conclusion

A small decorative tile carries the emotional attachment of the Minnan people, embodying their hardworking and humble spirit even after venturing to Southeast Asia with courage and determination. It also reflects the emotional expression of their glorious years in life [12]. As a representative cultural symbol of the Minnan region, Minnan-style decorative tiles possess profound cultural connotations and high artistic value. However, with the rapid development of the internet era, the development of Minnan-style decorative tiles has gradually become disconnected from modern social progress. Therefore, it is necessary for Minnan-style decorative tiles to draw on the experiences of inheritance and innovation from other intangible cultural heritage, actively exploring pathways of inheritance and innovation under the perspective of "Internet +", so as to promote the dissemination and development of their culture.

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