# A STUDY ON THE VISUAL SYSTEM AND CULTURAL TRANSLATION OF THE DECORATIVE ART OF ANCESTRAL HALLS IN GUANGZHOU

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## ABSTRACT
Under the dual context of the global wave of cultural heritage digitization and the national strategy of rural revitalization, the decorative art of ancestral halls in Guangzhou is undergoing a paradigm shift from "clan symbol" to "cultural IP". Based on a field survey conducted in 2023-2024 on the Lai Clan Ancestral Hall in Zhengtian Village, Zengcheng District, Guangzhou, and 43 other Ming and Qing dynasty ancestral halls in the surrounding area, this paper proposes for the first time an analytical framework of a visual system consisting of "three carvings, two sculptures, and one painting", and constructs a four-stage research model of "historical accumulation - symbol extraction - digital translation - cultural and creative derivation". Through high-precision 3D scanning, semantic deconstruction of patterns, and user experience experiments, this paper: (1) systematically reviews the evolution of the form and decoration of ancestral halls in Lingnan since the Ming and Qing dynasties; (2) reveals the clan ethics, feng shui cosmology, and commercial spirit behind the decorative motifs; and (3) experimentally develops digital/physical cultural and creative products to verify the acceptance and emotional premium of traditional visual symbols in modern cultural tourism consumption scenarios. The research results provide a replicable paradigm for the digital restoration, intangible cultural heritage revitalization, and international academic dialog of Lingnan ancestral halls.
**Keywords:** Lingnan Ancestral Halls, Architectural Decorative Art, Three Carvings, Two Sculptures and One Painting, Digital Design, Intangible Cultural Heritage Creative Products

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## INTRODUCTION

In traditional Chinese society, ancestral halls function not only as spaces for clan rituals and ancestor worship, but also as key sites of local governance, moral education, and cultural memory. In the Guangfu region of Lingnan, ancestral hall architecture has developed into a system that integrates ritual order with environmental adaptability, shaped by migration history, regional climate, and local craftsmanship. Its axial spatial organization and distinctive elements such as dragon-boat ridges and wok-ear gable walls respond to humid subtropical conditions, while the decorative system known as the "3 carvings, 2 sculptures, and one painting" encodes clan narratives and regional esthetics into a recognizable visual language.

However, rapid urbanization and rural transformation have posed significant challenges to the preservation and activation of Guangfu ancestral hall decorative art. High maintenance costs, limited experiential tourism models, and externally dominated cultural and creative development have resulted in underutilized heritage resources and weak community participation. At the same time, advances in digital technologies including VR, AR, and MR along with user experience oriented design approaches, offer new opportunities for heritage preservation, interpretation, and creative transformation.

The study focuses on exploring how digital technologies can be employed to preserve and revitalize ancestral hall decorative art without compromising its cultural authenticity. It also examines how the visual symbols of these artworks can be transformed into experiential, marketable, and sustainable cultural tourism and creative products to contribute to rural revitalization.

## RESEARCH OBJECTIVES

1) To investigate the characteristics and cultural connotations of Guangfu ancestral hall architectural decorative art, encompassing historical dimensions, metaphorical meanings, structures and materials, as well as patterns and esthetics; and to digitally reconstruct these elements through digital art technologies.

2) To analyze the visual art elements of Guangfu ancestral hall architectural decoration, summarize its visual language symbols, and apply them to the design of cultural tourism projects.

3) To Construct a multi-dimensional evaluation system to conduct a comprehensive assessment of the outcomes of cultural and creative products and their exhibitions and displays across cultural, aesthetic, and market dimensions.

## LITERATURE REVIEWS

The core concepts and theoretical foundations involved in this study encompass clan culture and ancestral hall architectural art, the contemporary social functions of ancestral halls, and the characteristics of architectural decorative art in the Guangfu region. In addition, relevant theoretical research on user experience, digital virtual space technologies, and cultural and creative products is further elaborated to provide theoretical support for subsequent design practices.

As material carriers of clan culture, ancestral halls exhibit a close interrelationship between their architectural forms and cultural connotations. Anthropologist Maurice Freedman, in his work Lineage Organization in Southeastern China, provides a systematic discussion of clan culture. He emphasizes that ancestor worship occupies a central position within lineage organizations, constituting the core spiritual foundation of clan culture and sustaining internal family cohesion. Architect Liang Sicheng, in A History of Chinese Architecture, points out that ancestral hall architecture is an essential component of the traditional Chinese architectural system. Beyond serving commemorative and ritual functions for ancestors, ancestral halls embody profound family culture and social ethics. From the perspective of architectural

ontology, the spatial layout, structural organization, and decorative patterns of ancestral halls profoundly reflect the patriarchal clan system and traditional family values of ancient Chinese society.

With ongoing social transformation, the functions of ancestral hall architecture have gradually evolved from singular ritual spaces into diversified public spaces. Based on a review of existing literature, this study summarizes the contemporary social functions of ancestral hall architecture, as presented in Table 1.

**Table 1** Contemporary Social Functions of Ancestral Halls

| No. | Functional Dimension | Description |
|---|---|---|
| 1 | Ritual Function | The most fundamental function of ancestral halls. As venues for ancestor worship, regular ancestral rites reinforce collective memory and reverence among clan members. |
| 2 | Cultural Transmission | A key base for the transmission of clan culture. Through activities such as genealogical compilation and the establishment of family precepts, ancestral halls preserve and promote family history, fine traditions, and core values. |
| 3 | Social Education | A space for educating younger generations within the clan. Through the teaching of Confucian classics and ritual norms, ancestral halls provide ideological guidance and behavioral regulation. |
| 4 | Community Center | A public space for gatherings and communication among clan members. By hosting events such as weddings, funerals, and festive celebrations, ancestral halls strengthen various forms of social connections. |
| 5 | Historical Archive | A repository of clan historical heritage. Genealogies, contracts, and documents are preserved to provide empirical materials for tracing family history. |
| 6 | Economic Activities | Participation in internal clan economic management. In specific contexts, ancestral halls assume functions such as managing clan property and distributing economic returns. |
| 7 | Law and Order | A traditional mechanism for maintaining social order. Ancestral halls perform judicial and mediation functions to resolve internal disputes and uphold family and local order. |
| 8 | Tourism and Exchange | A contemporary platform for cultural display. Many ancestral halls have been transformed into tourist attractions, drawing external visitors and facilitating cross-cultural exchange and dissemination. |
| 9 | Artistic Display | A comprehensive showcase of traditional architectural arts. Structural techniques and decorative arts such as carving and painting demonstrate refined traditional craftsmanship. |
| 10 | Spiritual Symbol | A spiritual totem of the clan. Ancestral halls embody cultural identity and serve as an important source of spiritual belonging and emotional attachment for members. |
| 11 | Identity Marker | A materialized representation of clan strength. Architectural scale and decorative hierarchy often symbolize a clan's social status and economic power. |
| 12 | Functional Transformation | Adaptive reuse in modern society. Some ancestral halls have been revitalized as cultural centers, museums, or community service facilities, serving contemporary public life. |

Guangfu ancestral hall architectural decorative art exhibits distinctive regional characteristics. Research on Lingnan Architectural Decorative Art points out that it represents a treasure of Chinese architectural art, not only carrying historical memory but also demonstrating exceptional esthetic value. Scholars have summarized its decorative craftsmanship as "three carvings, two sculptures, and one painting": the three carvings refer to wood carving, stone carving, and brick carving; the two sculptures refer to ceramic sculpture and plaster sculpture; and the one painting refers to polychrome painting (murals). Through these figurative or abstract artistic forms, clan culture is transformed into visualized cultural symbols. In contemporary cultural and creative product design, researchers are attempting to extract and reconstruct these ancestral hall decorative elements, integrating them with contemporary esthetic sensibilities to create cultural creative products that embody distinctive Guangfu regional characteristics.

The concept of User Experience (UX) was first proposed by Don Norman in 1995, who defined it as the purely subjective feelings formed by users during the process of operating or using a product. This definition indicates that user experience primarily arises from the interaction between users and products. Therefore, in the product design process, adopting a user-centered approach and fully addressing diverse experiential needs is of critical importance.

Digital virtual space technology, as a key technology within the field of digital art, can trace its developmental origins back to early twentieth-century simulation technologies. The concept of virtual technology was articulated by Mitchell, W. J. (1992) and has since evolved from early computer graphics research into contemporary Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) technologies. The advancement of these technologies has not only driven innovation in artistic forms of expression but has also provided new creative spaces and expressive methods for art and design. Murray, J. H. (2010) further discussed the application of such technologies within the field of art and design. In artistic practice, virtual space technologies are increasingly employed to create immersive experiential environments, enabling audiences to interact with artworks in novel ways. For instance, through VR technology, artists can construct three-dimensional virtual galleries that allow visitors to experience artworks within virtual worlds, thereby transcending the limitations of traditional physical spaces.

## RESEARCH METHODOLOGY

This study adopts qualitative research methods, including literature review, interviews, field observation, cross-disciplinary integrative analysis, and combination of theory and practice.

The construction of a Structural Equation Model (SEM) for experience design is a multivariate statistical analysis technique that allows researchers to simultaneously examine the relationships among multiple variables. In the study of digital restoration and the development of related cultural and creative products, with the ancestral hall decorative art of Zengcheng District as the research medium, SEM helps to elucidate how ancestral hall decorative art influences user experience and how such experiences subsequently affect cultural and creative product design and market performance.

First, variables within the model such as user satisfaction, perceived cultural value, and design esthetics are identified based on theoretical frameworks and previous studies. Next, data are collected through questionnaire surveys, user testing, or market data analysis. Subsequently, statistical software (e.g., AMOS, LISREL, or SPSS) is employed for model estimation and validation, including assessments of model fit, the significance of path coefficients, and the reliability and validity of latent variables. Through this approach, it becomes possible to reveal how different design elements jointly influence user experience and how these experiences are translated into preferences and purchase intentions toward cultural and creative products.

Field survey data collection encompasses detailed characteristics of ancestral hall architecture and the actual conditions of the surrounding environment. Specific data include the building area of ancestral halls, structural layouts, styles and material types of decorative art, as well as the quantity and categories of decorative motifs. For example, records were made of dragon-boat ridge elements, stylistic features of wood and stone carvings, and the area and morphological characteristics of plaster sculptures. The investigation also covers historical background information, such as the year of establishment, historical transformations, and cultural significance, as well as the role and status of ancestral halls within the community. In addition, on-site surveys were conducted on the surrounding natural environment, transportation conditions, and levels of community development. These data contribute to evaluating the accessibility of ancestral halls and their potential contribution to local cultural tourism. Through the integration of these datasets, researchers are able to provide precise references for digital restoration while offering rich cultural elements and market insights for cultural and creative product design, thereby ensuring cultural relevance and market adaptability.

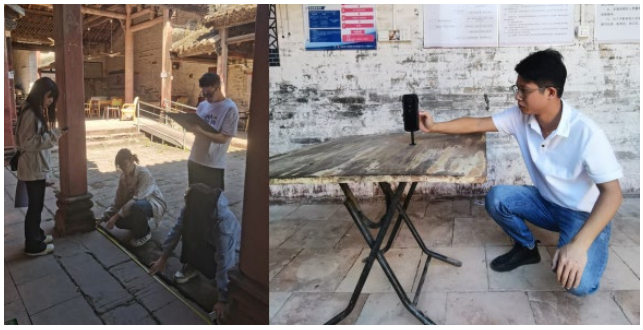


**Figure 1** On-site data collection and 3D scanning at Zhetian Village, Zengcheng District, Guangzhou.

Researchers conducted a survey and study of ancestral hall architecture in the Guangzhou region, organizing and analyzing data on large and small ancestral halls built during the mid-to-late Qing Dynasty based on previous studies. The findings reveal that in the Guangfu region, the construction of large ancestral halls occurred later than that of small ancestral halls, concentrating during the Xianfeng, Tongzhi, and Guangxu reign periods of the Qing Dynasty. During this period, large ancestral halls and public ancestral halls (gongci) flourished simultaneously, with those exceeding 2,000 square meters accounting for approximately 30%. Large ancestral halls exhibited super-standard specifications, typically featuring a three-route, three-entry, five-bay layout, with areas ranging from 5,000 to over 6,000 square meters. The Chen Clan Ancestral Hall in Guangzhou exemplifies this phenomenon with its massive scale, magnificent decoration, and imposing appearance—truly a rare sight. According to the current data, this situation largely aligns with the aforementioned analyses of social, economic, and cultural factors.

Data collected through interviews cover the historical background of ancestral halls, decorative art styles, socio-cultural significance, and levels of public participation. Specific information includes the year of establishment, the number of decorative motifs employed, the number of experts and local residents participating in interviews, and questionnaire results related to perceptions of ancestral hall decorative art. In addition, visitor flow data, community attitudes toward ancestral hall conservation, and feedback on potential demand for cultural and creative products were documented. These data provide detailed contextual information for digital restoration and offer market- and culture-oriented guidance for cultural and creative product design, ensuring that project implementation aligns with cultural value preservation and transmission.

Data collected from the questionnaire survey comprised 500 valid responses, with a response rate of 97%. The dataset covers participants' levels of awareness of ancestral hall decorative art, their acceptance of digital restoration technologies, as well as their interest in and purchase intention toward cultural and creative products.

The data analysis indicates that more than 80% of respondents possess a certain degree of knowledge about ancestral hall decorative art, whereas the level of support for digital restoration technologies is comparatively lower, at approximately 60%. Regarding preferences for cultural and creative products, about 75% of respondents expressed willingness to purchase cultural and creative products designed based on ancestral hall decorative art. The majority of respondents were willing to pay a mid-range price for such products, generally between RMB 30 and 60. In addition, most respondents acknowledged that ancestral hall decorative art plays an important role in cultural heritage transmission and education, and they supported its preservation and promotion through modern technological means. These findings provide an empirical foundation for the present study, offering guidance for the direction of digital restoration, the optimization of cultural and creative product design, and the promotion of cultural continuity.

The evaluation of cultural and creative product design involves data analysis across multiple dimensions. Specific data include user satisfaction survey results, product sales figures, market feedback, and user behavior analysis. Methodologically, both quantitative approaches such as sales volume statistics and market share assessment and qualitative approaches such as user interviews and focus group discussions are employed to comprehensively evaluate design acceptance and market performance.

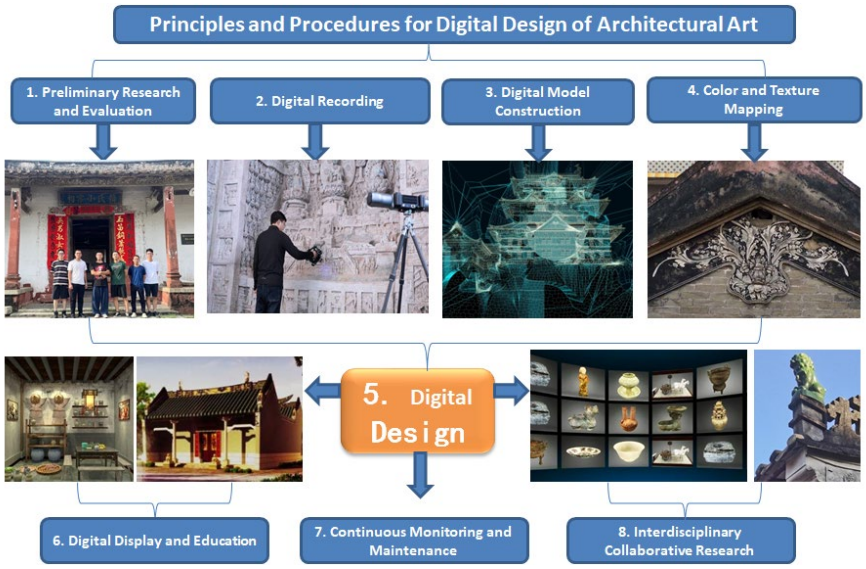
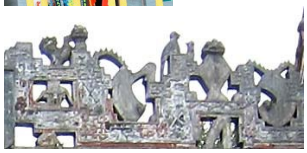



**Figure 2** Digital design workflow for ancestral hall architectural art

Based on the aforementioned research methodology, the research team conducted systematic investigations in eastern Guangfu, approaching from dual dimensions of ancestral hall architectural art and consumer behavior characteristics. They initially constructed an innovative pathway for the visual transformation of traditional architectural heritage. As illustrated in **Table 2,** this framework extracts design vocabularies from seven categories of architectural elements—including lion dance culture, stone and ceramic sculptures, wood and brick carvings, lime plaster paintings and colored decorations, and dragon-boat ridge ornaments—to develop targeted cultural and creative products for different age groups: handicraft toys and kites for children, bookmarks and specialty beverages for teenagers, phone cases and apparel for young adults, and home decorative ornaments for middle-aged cultural

enthusiasts, thereby achieving stratified dissemination and living inheritance of traditional architectural values.

**Table 2** Cultural Product Development and Design Strategies for Ancestral Hall Architectural Decorative Elements

| **decorative elements** | **patterns / motifs / designs** | **Consumer Groups and Products** |
|---|---|---|
| Ridge Lime PlasterPatterns and Lion Dance Art |   | Primary school students; stationery, kite art, bag accessories, IP characters |
| Stone carving patterns and ceramic figurines of ancestral hall architecture |   | Primary school students; craft toys, handmade clay art, decorative pendants |
| Architectural wood carving and brick carvingdecorative patterns |   | Adolescent students; specialty beverage (milk tea) cup sleeves, artistic bookmarks, pendants, stationery products |
| Wood carving decorations and aoyu (leaping carp) art motifs |   | Adolescent students; specialty beverage (milk tea) cup sleeves, artistic bookmarks, pendants, stationery products |
| Painted patterns and lime plaster sculptures |  | Young adult students; phone cases, T-shirts, scarves, decorative pendants, refrigerator magnets, office supplies |

| | | |
|---|---|---|
| |  | |
| Lime plaster relief art |   | Young and middle-aged adults; room hanging ornaments, decorative art, gift packaging; |
| Architectural main ridge — dragon-boat ridge art form |   | Young and middle-aged adults; decorative ornaments, pendants, bookmarks |

The evaluation framework is structured into primary and secondary indicators. The primary indicators consist of four core dimensions: form, color, material, and texture. A total of 24 secondary indicators further refine these dimensions, comprehensively covering all aspects of design detail. The entire evaluation indicator system strictly adheres to the principles of scientific rigor, comprehensiveness, integrative assessment, representativeness, and relevance, thereby ensuring the accuracy and effectiveness of the evaluation.

**Table 3** Evaluation Index System for Digital Art Design and Cultural and Creative Product Design

| **Primary Dimension** | **Secondary Indicator** | **Quantitative Value / Scoring Method** |
|---|---|---|
| A. Form Restoration Accuracy | A1 Overall Form Similarity | Deviation ≤ 5 mm |
| | A2 Component Proportion Accuracy | Tolerance ≤ 3% |
| | A3 Completeness of Detail Features | Missing rate ≤ 2% |
| | A4 Symmetry / Visual Balance | Visual deviation ≤ 5° |
| B. Pattern Fidelity | B1 Motif Recognition Accuracy | ≥ 95% |
| | B2 Line Smoothness | Jaggedness ≤ 1 px |
| | B3 Pattern Scaling Distortion | Deformation ≤ 3% |
| | B4 Semantic Consistency of Patterns | Expert evaluation ≥ 4/5 |
| C. Material and Texture | C1 Color Difference (ΔE2000) | ≤ 2.0 |
| | C2 Surface Roughness | PBR roughness deviation ≤ ±0.05 |
| | C3 Specular / Metallic Accuracy | PBR deviation ≤ ±0.03 |
| | C4 Tactile Simulation Score | User rating ≥ 4/5 |
| D. Functional Adaptability of Cultural Products | D1 Daily Usability | Usage frequency ≥ 3 times/week |
| | D2 Scenario Compatibility | User acceptance ≥ 80% |
| | D3 Portability Index | Volume ≤ 300 $cm^3$; weight ≤ 300 g |
| | D4 Openness for Secondary Creation | Source files or API provided |

| | | |
|---|---|---|
| E. Cultural-Market Impact | E1 Enhancement of Cultural Identity | Pre–post survey difference ≥ +1.5 |
| | E2 Willingness to Pay Emotional Premium | Premium acceptance ≥ 20% |
| | E3 Social Sharing Rate | voluntary sharing≥ 40% |
| | E4 Sales Conversion Rate | Click-to-purchase ≥ 8% |

**1) A scoring mechanism integrating professional expertise and target audiences:**
The design evaluation process is conducted by a diversified evaluation panel, which includes not only industry experts but also potential users of the target tourism products.
**2) Detailed comparative scoring:**
Members of the evaluation panel assign scores to each design proposal based on the established evaluation indicators. These scores are subsequently subjected to detailed comparison, enabling in-depth evaluation and analysis of each design plan.
**3) Weighted average score calculation:**
To ensure the fairness and accuracy of the evaluation results, a weighted average method is employed to synthesize scores from different evaluators and audience groups. This approach accounts for variations in evaluators' influence and professional expertise, thereby generating scores for each product across the secondary indicators.

# RESEARCH RESULTS

**Interpretation of Ancestral Hall Architecture and Cultural Connotations**
**1) Formal Codes: Historical Stratification of Architectural Form and Ornamentation；**
Guangfu ancestral halls exhibit characteristics of historical stratification, with large-scale halls concentrated in the mid-to-late Qing Dynasty. The typical form features a three-route, three-entry, five-bay layout, often exceeding 5,000 square meters. These halls integrate Central Plains ritual order with Lingnan climatic adaptation, utilizing axial layouts, dragon-boat ridges, and wok-ear gable walls to achieve a unity of ceremonial hierarchy and environmental resilience, reflecting the historical processes of socio-economic transformation and lineage cultural expansion.
**2) Decorative Vocabulary: Visualized Clan Narratives**
The decorative system of "three carvings, two sculptures, and one painting" forms a structured visual language that encodes clan ethics, beliefs, and regional esthetics through motifs, colors, and layered craftsmanship, enabling cultural narratives to be clearly identified and transmitted.
**3) Historical Depth: Architecture as Migration Record**
Variations in scale, spatial depth, and ornamentation of ancestral halls reflect successive waves of migration and economic change in Lingnan from the Song to the Qing dynasties, positioning these buildings as architectural records of collective mobility and prosperity.
**4) Spiritual Dimension: Family - State Integration**
Beyond ritual functions, ancestral halls operated as centers of education, governance, and community life, embodying a Lingnan expression of the traditional family-state isomorphism that integrates scholarship, commerce, and social cohesion.

**Overall Tourism Value Transformation**
Through an in-depth study of ancestral hall architecture and the local cultural tourism market in eastern Guangfu, researchers have found that ancestral halls in southern Zengcheng have been successfully transformed from isolated ritual spaces into dynamic cultural tourism assets. This transformation has generated substantial growth in visitor numbers, tourism revenue, and related local industries, culminating in the formation of a distinctive "ancestral hall economy" within the Greater Bay Area.
**1) Immersive Experience Integrated with Traditional Cultural Heritage**

Guangfu ancestral halls integrate architectural spatial design with digital technologies to create immersive cultural experiences, enabling visitors to deeply engage with clan histories and Lingnan construction craftsmanship. Concurrently, the fusion of culture and tourism activates an "ancestral hall economy," transforming cultural heritage into sustainable economic practice. This fosters a virtuous interaction between preservation and market development, offering innovative pathways for the adaptive reuse of traditional architecture.

**2) "Symbols as Content" and Everyday Consumption**

Through digitization and design translation, ancestral hall decorative motifs are transformed into cultural and creative products and urban visual media, enabling heritage symbols to permeate everyday life and shifting ancestral halls from tourism destinations to elements of urban cultural memory.

**3) Community Co-Creation and Sustainable Operation**

Community co-creation models link cultural and creative revenue with heritage maintenance and public welfare, enhancing local participation and ensuring the long-term sustainability of tourism development and cultural value retention.

**Limitations and Challenges in the Empowerment of the Tourism Industry through Ancestral Hall Culture**

Zengcheng, located in eastern Guangzhou, is home to 43 ancestral halls dating from the Ming and Qing dynasties. Despite their architectural refinement, the cultural tourism potential of these ancestral halls has yet to be fully realized. This section analyzes three major challenges dormant resources, insufficient supporting facilities, and weak endogenous development capacity and proposes corresponding pathways for improvement.

**1) Dormant Resources**

The ancestral hall clusters of Zengcheng possess scarcity in terms of historical continuity, spatial concentration, and craftsmanship. However, the limited coverage of nighttime tourism facilities currently constrains visitor experiences, resulting in low rates of secondary consumption. A proposed solution is the establishment of an "Ancestral Hall Night Tour Alliance," which would implement unified lighting design standards and expand nighttime tour coverage, enabling roof ridges and architectural forms to continue narrating cultural stories after dark.

**2) Insufficient Supporting Facilities**

While the cultural narratives embedded in the ancestral halls are rich, the experiential dimension remains underdeveloped. During holidays, ancient villages experience high visitor volumes, yet supporting facilities such as parking areas, public restrooms, and dining services are often inadequate, negatively affecting visitor satisfaction. The recommended strategy is a "micro-renewal and micro-circulation" approach: utilizing idle or underused spaces to introduce temporary facilities, optimizing educational and experiential circulation routes, and extending visitor dwell time.

**3) Weak Cultural and Creative Economic Performance**

Structural Problem and Proposed Model. Cultural and creative product development in Zengcheng ancestral halls is constrained by low sales performance and external dominance, leading to the outflow of cultural value-added benefits; a community co-creation and revenue reinvestment model is therefore proposed to enhance local youth participation, heritage conservation, and benefit retention.

Only by converting cultural heritage into sustainable economic drivers, improving supporting infrastructure, and retaining locally generated revenue can ancestral halls shift from static heritage assets to dynamic engines of cultural tourism development.

As architectural records of Lingnan migration history, eastern Guangfu ancestral halls form a renewable cultural archive, which the following section analyzes through four dimensions: spatiotemporal context, motif evolution, high-frequency symbols, and micro-scale case studies.

## DISCUSSION & CONCLUSION

This study establishes an integrated framework for the interpretation, digital representation, symbolic translation, and creative application of Guangfu (Zengcheng) ancestral hall decorative art. The findings confirm that ancestral halls function as complex cultural media rather than static ritual buildings, combining ritual order, climatic adaptation, migration memory, and regional esthetics. Their decorative system, centered on the "three carvings, two sculptures, and one painting," forms a recognizable and re-encodable visual language suitable for digital and creative transformation.

In terms of cultural tourism value, three IP transformation pathways nighttime immersive experiences, "symbols as content," and community co-creation enable ancestral halls to shift from isolated destinations to components of everyday urban culture, while improving experiential depth, economic sustainability, and local benefit retention.

User and market data reveal a gap between high cultural recognition and lower support for digital restoration, alongside strong willingness to purchase cultural and creative products. This indicates that digital heritage strategies should prioritize experiential value and authenticity communication rather than technology display alone.

Methodologically, the proposed evaluation framework and the use of Structural Equation Modeling (SEM) provide a quantifiable and testable approach to linking decorative art features, user experience, and market behavior, integrating heritage preservation and cultural industry development within a unified analytical system.

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