

Transmission and Renewal Strategies for the Ornamental Art Characteristics of Traditional Residential Houses in the Chaohu Region from the Perspective of Regional Culture

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Abstract

This study focuses on Changlinhe Ancient Town in the Chaohu region, examining the transmission and renewal strategies of traditional residential ornamental art. Employing a mixed-methods approach—including field investigations, interviews, and questionnaires—it explores how decorative symbolic motifs convey regional identity, cultural memory, and aesthetic values. The findings reveal that urbanization and design homogenization pose significant threats to the integrity of this heritage. In response, the study proposes a four-dimensional renewal framework encompassing streetscape continuity, functional adaptability, ornamental reinterpretation, and cultural narrative integration. This framework transcends conventional preservation models by combining regional cultural symbols with adaptive reuse strategies, aiming to resolve the tension between heritage authenticity and urban development. It highlights the potential of ornamental patterns as active carriers of cultural transmission and offers context-sensitive strategies for the sustainable conservation of vernacular architecture. The research not only enriches the theoretical discourse on heritage preservation but also provides practical insights for culturally embedded design interventions in rapidly transforming traditional settlements.

Keywords: Chaohu Lake Region, Regional Culture, Traditional Residential Ornamentation, Heritage Conservation, Sustainable Cultural Development

Introduction

Research Background

The preservation and renewal of traditional residential architecture have received growing scholarly attention amid the dual challenges of urbanization and cultural continuity. Among the architectural components, ornamental art plays a crucial role—not merely as decoration, but as a medium for conveying local aesthetic ideals, belief systems, and socio-cultural narratives. In the Chaohu region of Anhui Province, particularly in towns such as Changlinhe, ornamental elements such as woodcarvings and brick reliefs embody centuries of regional craftsmanship and symbolic expression, reflecting the distinct cultural landscape of the Jianghuai area.

Changlinhe Ancient Town, located on the eastern shore of Chaohu Lake, serves as a representative case (Figure 1). It preserves a notable number of Ming- and Qing-dynasty dwellings characterized by intricate decorative details. However, these cultural assets are increasingly under threat due to modernization, neglect, and the weakening connection between local residents and traditional craftsmanship. This raises a pressing question: How can ornamental heritage be renewed through a framework that reconciles regional symbolism with contemporary functionality, while avoiding aesthetic homogenization and cultural loss?

This study draws on cultural landscape theory and principles of sustainable heritage conservation to investigate the aesthetic, symbolic, and communal dimensions of traditional architectural ornamentation. Cultural landscape theory provides a valuable lens to interpret how human activity and the built environment interact over time, revealing the evolving meanings of decorative traditions. While much existing research has concentrated on



structural conservation, there remains a critical gap in understanding how ornamental symbols—particularly the wood and brick motifs distinctive to Jianghuai culture—can resist the homogenizing forces of rapid urbanization.

To address this gap, this research proposes a context-sensitive renewal framework rooted in regional identity and adapted to the lived realities of contemporary residents. Specifically, the study explores:

The representational features and cultural significance of traditional ornamentation in Changlinhe Ancient Town; Local residents' perceptions of decorative preservation and modernization;

Practical renewal strategies that uphold aesthetic continuity while supporting sustainable cultural transmission.

Through this analysis, the study aims to contribute to a more nuanced understanding of how traditional ornamentation can serve as a conduit for regional identity, enriching heritage renewal practices that integrate cultural values within broader conservation paradigms.

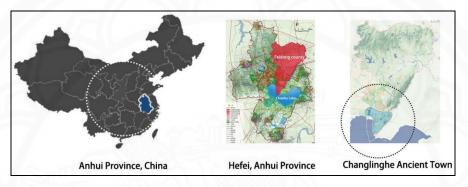


Figure 1 Location Map of Changlinhe Ancient Town.

Source: Author (2023)

Literature Review

International conservation theory has evolved around core principles of authenticity, integrity, and public engagement. Thinkers such as John Ruskin warned against restoration that obscures the traces of time, advocating for the preservation of original fabric. In contrast, Eugène Viollet-le-Duc supported stylistic restoration toward an idealized form. Bridging these positions, Di (2022) introduced the notion of "release restoration" in the Chinese context—a calibrated approach that retains material authenticity while restoring spatial function.

China's modern conservation practices began to formalize following the 1982 "Regulations on the Protection of Famous Historical and Cultural Cities". However, many state-led projects emphasized visual restoration and commercial exploitation, often sidelining intangible heritage and community memory. In recent years, domestic discourse has increasingly embraced "living heritage" approaches that prioritize cultural continuity, local participation, and adaptive reuse (Hui, 2021).

Guidelines from the International Council on Monuments and Sites (ICOMOS) (1964)—notably the Venice Charter and the Nara Document on Authenticity (PUBLICOMOS, 1994)—have established global standards for heritage conservation. These documents advocate for minimal intervention, reversibility, and evidence—based restoration, emphasizing the importance of historical legibility and the avoidance of conjectural reconstruction. Although originally Western in origin, these principles have proven applicable to Chinese contexts, particularly in efforts to counteract over–restoration and loss of authenticity.

For example, Di et al. (2018) applied the principle of minimal intervention in the conservation of Tangquan Ancient Town in Nanjing, achieving a balance between architectural preservation and urban functionality. Similarly, Jifei (2017) proposed an art-led regeneration strategy for Huangjuya Old Street in Chongqing, integrating



cultural experience to stimulate public engagement. However, other projects—particularly in less-developed regions—have suffered from poor funding and technical capacity, leading to superficial repairs and cultural dilution (Qi et al., 2024). By contrast, Cicheng Ancient Town in Ningbo showcases a more successful integration of heritage tourism and urban revitalization, although commercialization remains a challenge (Liyan, 2019).

Tingting and Huanlian (2021) further emphasize that historic buildings must be adapted for modern use while retaining cultural value, arguing for sustainable upgrades that align with local lifestyles and environmental needs.

Research Objectives

- 1. To analyze the ornamental characteristics of traditional residential houses in the Chaohu region and explore how elements such as woodcarving and brick reliefs embody regional identity and historical memory.
- 2. To systematically assess the key challenges in the preservation and transmission of decorative heritage under urbanization, including craft discontinuity and aesthetic homogenization.
- 3. To develop a four-dimensional renewal framework tailored to Changlinhe Ancient Town, integrating cultural symbolism with functional adaptation, proposing sustainable strategies that balance authenticity with contemporary needs.

Methods and Materials

This study employs a mixed-methods research approach, integrating qualitative and quantitative data to examine the ornamental characteristics and renewal strategies of traditional residential houses in Changlinhe Ancient Town, Chaohu region. Triangulation was used to enhance the validity and reliability of the research findings.

Case Selection and Research Design

Changlinhe Ancient Town was selected as the case study for its well-preserved traditional residential architecture, diverse ornamental art forms—particularly wood and brick carvings—and its representativeness of vernacular architecture in the Chaohu region. As a living heritage site where historical, aesthetic, and functional dimensions coexist, the town offers an ideal setting for examining how regional culture shapes architectural expression and transmission strategies. The research design combines on–site documentation, stakeholder engagement, and digital modeling, guided by cultural landscape and sustainable heritage frameworks. Qualitative interviews captured stakeholders' nuanced perspectives, while quantitative surveys provided statistical validation. Triangulation was achieved by cross–referencing spatial analysis data with interview themes (e.g., "authenticity vs. functionality" tensions). SPSS and NVivo were selected for their complementary strengths in handling mixed–method data. Ethical compliance was ensured through the completion of a certified Human Research Ethics Training Program at Mahidol University on March 24, 2024. All procedures involving human participants were conducted in accordance with international ethical standards, including informed consent, voluntary participation, and strict confidentiality of personal data.

Data Collection

1. Field Investigation

Fieldwork was conducted from June to October 2024. Observational and spatial data were collected through architectural surveys, photography, and mapping of ornamental features across 35 representative residences. Special attention was paid to the location, motif types, material condition, and symbolic meanings of the wood and brick carvings. A spatial layout map of the ancient town was developed to analyze the evolution of functional zones and their influence on the survival of traditional ornamentation.



In-depth interviews were conducted with 20 local stakeholders, including residents, artisans, and officials, to gain insight into their knowledge, attitudes, and expectations regarding ornament preservation and renewal. Interviews revealed both practical concerns—such as damage, maintenance, and living comfort—and deeper reflections on cultural meaning and generational transmission.

2. Questionnaire Survey

A total of 119 structured questionnaires were distributed to residents, heritage experts, and local government representatives, achieving a 100% response rate. The questionnaire was designed to collect quantitative data on three key issues: 1) prioritization of wood and brick carving preservation, 2) perceptions of the cultural and artistic value of residential ornamentation, and 3) views on the importance of community engagement and government support. Quantitative analysis revealed significant stakeholder heterogeneity: 76% of residents (χ^2 = 12.3, p < 0.01) prioritized woodcarving preservation, likely due to its visibility in daily living spaces, whereas 62% of experts favored brick reliefs for their archaeological value. Cross-tabulation further indicated that respondents aged 50+ were 2.3 times more likely (OR = 2.31, p < 0.05) to associate ornaments with 'cultural identity' than younger groups, highlighting generational gaps in heritage perception. Notably, 59% of participants (n = 70) linked ornamentation to historical memory, a finding that anchors the study's theoretical argument about symbols as cultural carriers. Importantly, 88% of residents and 87% of experts stressed the necessity of coordinated community and governmental involvement for effective cultural heritage protection.

Table 1 Key Interview Insights on Restoration Challenges from Elderly Residents

Respondent ID	Age	Occupation Identity	Primary Concern	Specific Comments	Research Significance	
Mr. Chen	72	Retired craftsman	Temporary relocation	"During the 2018 roof restoration, my family had to move out for 3 months. The temporary housing lacked proper heating, and my wife's chronic illness was affected" (Interview Transcript 20240715-03)	Highlights the need for phased restoration to minimize health risks for vulnerable groups.	
Mrs. Wang	68	Long-term resident	Construction noise and dust	"The daily drilling during facade repair made it impossible to open windows, and the dust settled on our ancestral altar. We had to cover all ornaments with cloth ormonths" (Interview Transcript 20240802-11)	Illustrates how restoration methods impact intangible cultural practices (ancestral worship).	
Mr. Li	75	Former town history researcher	Loss of daily activity spaces	"The public square in front of my house was fenced off for 6 months during pavement renovation. Elderly neighbors used to gather there for morning exercises—now we have to walk 15 minutes to the nearest park" (Interview Transcript 20240910-07)	Reveals the social cost of abrupt spatial disruptions.	
Ms. Zhao	65	Local artisan family descendant	Skill loss during phased interventions	"When the west street was restored first, young craftsmen were only taught simplified brick carving techniques to meet deadlines. The traditional 'three-layer relief' method wasn't passed on properly" (Interview Transcript 20241005-18)	Connects restoration scheduling to craftsmanship transmission quality.	

Source: Author (2024)



Data Analysis

1. Qualitative Analysis

Interview data were thematically analyzed using NVivo to identify recurring patterns and perspectives. Three major themes emerged:

Perspective Gap: Residents emphasized daily utility and comfort, whereas experts prioritized the authenticity and cultural integrity of ornaments.

Preservation Challenges: Current conservation efforts face barriers such as limited funding, inadequate policy mechanisms, and a shortage of skilled artisans capable of restoring traditional carvings.

Conditional Modernization: Many residents supported modernization measures that maintain traditional ornamentation while improving domestic functionality and quality of life.

2. Quantitative Analysis

Survey data were analyzed using SPSS through frequency distribution and cross-tabulation. The results supported qualitative findings and offered statistical grounding for stakeholder preferences, confirming broad agreement on the prioritization of key ornament types and the perceived importance of institutional support mechanisms.

Integrated Analysis and Methodological Reflection

Triangulation of qualitative and quantitative findings revealed the multifaceted tensions between preservation and modernization. The convergence of interview and survey data emphasized shared concerns about loss of heritage elements and the need for context-sensitive renewal strategies. In particular, both data streams highlighted the urgency of integrating traditional ornamentation into contemporary living environments without compromising cultural meaning.

Methodological limitations included the scope of interviewees, potential bias in self-reported data, and technical constraints in spatial modeling coverage. These were mitigated through stakeholder verification, iterative analysis, and complementarity between data types to ensure interpretive robustness and practical relevance.

Results

Architectural and Ornamental Features and Their Cultural Significance

Field investigations indicate that traditional residences in Changlinhe Ancient Town predominantly adopt patio, courtyard, or combined patio-courtyard layouts. These spaces are typically arranged in a symmetrical pattern along a central axis, reflecting the hierarchical spatial order of traditional ritual culture. The corresponding ornamental treatments reinforce this hierarchy, with key decorative elements emphasizing the distinction between primary and secondary structures.

The surveyed buildings, mainly dating from the late Qing dynasty to the Republican era, display a fusion of northern and southern architectural characteristics, particularly evident in their moderate building scale and defensive attributes. The structures primarily employ load-bearing wooden frames with a combination of lifted beams and penetrated brackets, offering both structural stability and flexibility for disassembly and relocation. This construction method contributes to the buildings' long-term resilience and adaptability. (Figure 2)



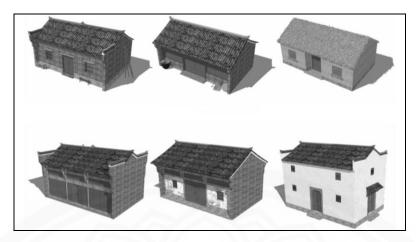


Figure 2 Architectural Drawings of Folk Houses in Jianghuai.

Source: Chenghong et al. (2020)

Ornamental features—particularly woodcarvings and painted embellishments—are concentrated on pediments, roof ridges, doors, and windows. These motifs serve not only aesthetic functions but also convey symbolic meanings: peonies denote wealth, lotuses represent purity, bats symbolize blessing, and dragon—phoenix pairs signify harmony. Such imagery embeds cultural values into the everyday residential environment.

Although influenced by Huizhou architectural traditions, the ornamental style in Changlinhe has developed localized traits, favoring horizontal composition and simplified, rugged forms. This regional adaptation reflects the practical needs and aesthetic preferences of the Chaohu area, forming a distinct ornamental language that embodies both craftsmanship and cultural symbolism.

Table 2 Diagram of Woodcarving Ornamentation Locations

Modeling	Description	Sample	Pattern Meaning
Beam	3 17/1	21 1 1 1 7 7	The Hidden Eight Immortals are based on
	Horizontal load-bearing members		the Eight Immortals' instruments, including
			the gourd, fish drum, yin-yang board, lotus,
			banana fan, sword, flower basket, and flute,
			which respectively symbolize immortality,
			following the will of heaven, a peaceful
			mind, purity, shelter from wind and rain,
			exorcism of evil spirits, communication with
			gods, and vitality of all things
Bracket	Supporting, oblique wood shape	7/1	The "Ao Yu pattern" has the image
			of a dragon head and a fish body, implying
			"fish leaping over the dragon gate",
			symbolizing great fame and success.
			As a mythical beast that suppresses water,
			it embodies the ancient people's simple
			wish for refuge, as well as the meaning
			of good fortune and wealth



Table 2 (Cont.)

Modeling	Description	Samp	ole	Pattern Meaning
Lattice door	It consists of a grid core, a skirt board and a belt ring board			The geometric pattern "winter melon pattern" symbolizes beauty and nature; the "Ruyi head" combination pattern symbolizes good luck and good fortune
Lattice window	As an important lighting and ventilation component, it is similar to the upper part of a partition door			The geometric pattern "Bubujin" means a bright future and success

Source: Author (2024)

Protection Timeline of Decorative Heritage in Changlinhe Ancient Town

Since 2013, the conservation of decorative heritage in Changlinhe Ancient Town has undergone three distinct phases, reflecting an evolution from emergency stabilization to integrated, sustainable renewal. This progression highlights the increasing recognition of architectural ornamentation—not only as a material legacy, but also as a symbolic representation of regional cultural identity. Elements such as woodcarvings, brick reliefs, and symbolic motifs have been consistently prioritized across all stages of intervention.

This timeline not only demonstrates the layered complexity of heritage conservation in a rapidly transforming socio-spatial context, but also provides an empirical basis for evaluating the effectiveness of multi-phase, culturally embedded protection strategies.

Table 3 Protection Timeline of Decorative Heritage in Changlinhe Ancient Town

Phase	Time Period	Key Actions	Focus Areas	Features
DI I	2013-2015	Emergency	Endangered	Use of original materials,
Phase I		restoration	traditional houses	historical references, craft authenticity
Phase II	2016-2018	Systematic repair	Residential	Restoration of ornamental details (e.g., floral
Phase II		of key sites	clusters	windows, beam carvings) with multi-source funding
DI III	2019-present	Integrated heritage	Town-wide	Digital archiving; spatial upgrading;
Phase III		renewal strategies	planning	community participation; cultural continuity

Source: Author (2024)

Challenges in the Protection and Transmission of Traditional Decorative Heritage

Field observations and interviews reveal that rapid urbanization has led to significant disruptions in the spatial and cultural integrity of Changlinhe Ancient Town. The functional layout of the town has become fragmented, and land use is increasingly disordered. A considerable number of historic residential structures exhibit signs of severe deterioration due to prolonged exposure to environmental degradation and human activity. Several buildings have been identified as structurally unsafe.

Residents, aiming to improve their living conditions, frequently modify or demolish original structures without formal approval. These alterations often involve occupying public space, replacing traditional materials with modern



alternatives, or introducing incompatible building forms. Such practices have resulted in the progressive loss of traditional architectural features and the weakening of the continuity of historical streetscapes.

Street-facing buildings—originally designed as mixed—use spaces with commercial functions on the ground floor and residential quarters above—have undergone extensive renovation. This has contributed to the erosion of their original typology and decorative identity. Many facades have been modernized, leading to inconsistencies in scale, materiality, and visual rhythm between historical and newly built structures.

The lack of systematic protection, restoration, and regulatory oversight has exacerbated structural decay and, in some cases, partial collapses of heritage buildings. Additionally, recent infill developments have introduced modern shopfronts with discordant styles and heights, further undermining the spatial coherence and ornamental character of the old street. These changes compromise the authenticity of the historical environment and dilute the immersive cultural experience once offered by the town's traditional architecture. (Figure 3)



Figure 3 Current Status of the Buildings.

Source: Author (2023)

Design Strategies for the Architectural Renewal of Changlinhe Old Street

Based on a systematic analysis of the decorative cultural features of traditional residential buildings around Chaohu Lake and supported by fieldwork, this section focuses on the current conditions of streetscape, architecture, and ornamental details in representative areas of Changlinhe Old Town. Through methods such as image documentation, spatial surveying, façade analysis, and material interpretation, a systematic design strategy for the renewal of the old street is proposed. The aim is to address the challenges posed by modernization to traditional cultural spaces and to explore a sustainable renewal path that balances authenticity with contemporary vitality through a multidimensional approach encompassing "streetscape, function, detail, and structure".

1. Unity of Overall Architectural Character: Texture Continuity and Place Identity

The existing buildings in Changlinhe Old Street are characterized by a juxtaposition of traditional Jianghuai residences and modern brick-and-stone constructions, resulting in a fragmented texture and stylistically incoherent streetscape. The architectural materials—mainly wood, tiles, bricks, and stone—reflect strong regional characteristics. However, due to recent urban development, some traditional wooden structures



have been demolished and replaced by new buildings with discordant volumes and materials, undermining the historical continuity and recognizability of the area.

To address this, a categorization system is proposed, classifying existing buildings into dilapidated structures, traditional wooden houses, and brick-tile constructions, with differentiated restoration strategies tailored to their value and condition. A unified material system for façade redesign should be implemented, incorporating materials such as grey bricks, cedar wood, and small clay tiles consistent with traditional textures. This ensures visual harmony between old and new structures in terms of scale, color, and materiality.

Moreover, the design should incorporate "cultural nodes" along the street to establish spatial rhythm and cultural expression. Strategic installations such as traditional archways, symbolic structures, and cultural exhibits can strengthen the visual order and enhance cultural legibility and emotional resonance within the street. As Simin and Xinwen (2022) points out, in the preservation of historic districts, the shaping of overall visual character should center on cultural themes and spatial order, employing selective expression of key features to achieve renewal objectives.

Table 4 Building Materials and Characteristics of Changlinhe Ancient Town

Causality	Name	Photograph	Specificities
Brick	Blue Brick		Extremely breathable and wear-resistant High thermal conductivity and density
Rock	Limestone		High resistance to compression and abrasion High hardness, dense structure
Wood	Cunninghamia Pine		Practical and natural colour Good thermal conductivity and humidity resistance
Roof Tile	Blue Tile		Extremely breathable and absorbent Maintains air humidity and resists corrosion

Source: Author (2024)

2. Coordinated Renewal of Building Form and Function: Balancing Authenticity and Adaptability

There is a frequent mismatch between the original functions of historical buildings and the spatial needs of contemporary life. In Changlinhe Old Street, numerous wooden dwellings and underutilized storefronts contribute to spatial inefficiency and reduced vibrancy. Based on spatial mapping and usage analysis, this study proposes a renewal strategy centered on "preserving form while regenerating function", aiming to maintain architectural authenticity while introducing adaptive reuse practices. (Figure 4)

The strategy classifies buildings into three categories and proposes differentiated renewal approaches:

Dilapidated Structures: For buildings that are structurally unsafe yet culturally significant, a "structural reinforcement + adaptive reuse" model is proposed. New functions such as cultural exhibition spaces or creative



studios can be integrated while preserving key historical fragments, using material blending techniques to achieve visual and structural continuity.

Traditional Timber and Qing-style Buildings: These should be restored following the principle of "restoration as found", preserving characteristic elements such as sloped roofs, horse-head walls, and wooden lattice windows. Interior layouts may be moderately adjusted to accommodate residential or exhibition purposes.

Generic Brick-concrete Buildings: As priority targets for aesthetic improvement, these can adopt a "façade redesign + spatial integration" strategy. Provided structural integrity is assured, traditional materials and regional ornamentation can be reintroduced to improve façade coherence and reinforce street vitality.

The proposed renewal respects the intrinsic logic of traditional construction while seeking a dynamic balance between visual authenticity and functional adaptability. Instead of superficial imitation or function-form dissonance, the aim is to realize cultural continuity and livability through context-sensitive transformation.

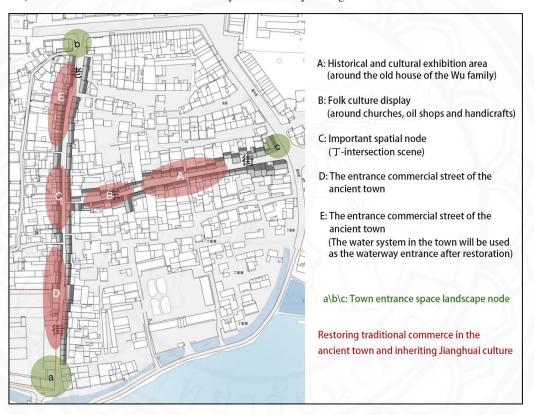


Figure 4 Masterplan of Building Form and Function Renewal.

Source: Author (2024)

3. Regional Reconstruction of Architectural Details and Decorative Elements

Architectural details are key identifiers of local character and cultural memory. Fieldwork in Changlinhe Old Street reveals a significant rupture: recent new-builds and renovations lack the regional decorative vocabulary, diminishing cultural expressiveness and community identity. To address this, the study proposes a façade detailing strategy rooted in local ornamental vocabulary and traditional construction logic, enhancing both recognizability and place-based symbolism.

The strategy involves three main components:

Simplified Compositional Logic: Traditional façades are abstracted into a four-part vertical composition—base, wall, roof, and components—to serve as a design framework for modern decorative reconstruction.



Motif Extraction and Modularization: Localized ornament types such as huazhao (flower grilles), carved balustrades, and dougong (bracket sets) are extracted and modularized into repeatable design units, allowing contemporary buildings to visually echo traditional forms while remaining practically viable.

Material and Craftsmanship Revival: Key materials and methods—gray brick, pitched roofs, clay tiles, and exposed brick masonry—are reintroduced to reinforce the visual identity and mnemonic value of façades. (Figure 5)

As Song (2021) asserts, the crux of heritage-compatible modernization lies in the cultural reinterpretation of architectural details, with ornament serving as a vital medium of symbolic transmission. Through this regionally grounded re-articulation of detail, architecture is repositioned not merely as physical shelter but as an expressive carrier of cultural continuity.



Figure 5 Reconstruction Strategy for Architectural Details and Ornamentation.

Source: Author (2024)

4. Integration of Structures and Street Space: Spatial Narrative and Cultural Immersion

Beyond individual buildings, street space and minor structures also play vital roles in streetscape renewal. This study emphasizes a three-tiered approach—"node-segment-district"—to create a coherent chain linking space, elements, and cultural themes:

Node Optimization: Historical gateways can be restored, small public plazas redesigned, and cultural display walls introduced to form engaging spatial nodes with historical atmosphere;

Structural Integration: Regionally iconic elements, such as horse-head wall-inspired lamps or traditional railing motifs, can be reinterpreted and integrated into landscape furnishings and signage systems, creating visual and semantic continuity;



Cultural Context Construction: Narratives of local history and folklore can be embedded within spatial layouts. Scene-based environments and symbolic expressions help foster immersive cultural experiences and emotional connection within the street. (Figure 6)

As Zaihui (2021) emphasizes, revitalizing traditional streetscapes requires more than physical restoration it demands cultural regeneration and the integration of participatory mechanisms to construct meaningful spatial narratives and expressions of place identity.



Figure 6 Updating the Practice Strategy Map. **Source:** Author (2024)

Discussion

Urbanization and the Transformation of Historic Towns

Rapid urbanization in China has significantly altered the spatial and cultural structure of historic settlements. In Changlinhe Ancient Town, unregulated development has led to fragmented streetscapes, incompatible building forms, and weakened architectural identity. Field research indicates widespread replacement of traditional wooden houses with generic concrete structures, eroding local memory and identity.

This tension between modernization and preservation is common in many historic towns. Without context-sensitive design, modernization often undermines heritage authenticity. In response, this study proposes an integrated renewal framework—linking spatial form, functional adaptation, materiality, and ornamentation—to balance development with preservation.

Unlike thematic conservation models in towns like Xidi and Wuzhen, which focus on tourism and surface restoration (Jiang, 2006), the proposed typological strategy emphasizes cultural authenticity and everyday functionality. This approach offers a shift toward more inclusive, community-rooted heritage revitalization.

Coordinating Form and Function: A Typological Strategy

Preserving traditional houses requires balancing cultural significance with practical needs. This study categorizes buildings into three types—structurally unsafe heritage, traditional wooden houses, and generic brick structures—and proposes differentiated interventions.



For structurally unsafe but significant buildings, a "reinforcement + adaptive reuse" model is applied, preserving key elements while accommodating new uses. Traditional wooden houses are restored in situ, retaining elements like horse-head walls and carved windows, with optimized layouts. For generic brick buildings, visual integration is achieved through façade redesign and material refinement.

This typological approach avoids blanket solutions and allows targeted renewal. However, a limitation is the lack of post-renewal evaluation. Future research should incorporate resident feedback and functional assessments to verify the strategy's long-term impact.

Ornamentation as a Cultural Medium

Architectural ornamentation conveys local identity and cultural continuity. In Changlinhe, modern constructions often lack the symbolic language of Jianghuai architecture, leading to a loss of regional distinctiveness.

To address this, the study adopts a modular design system based on traditional façade hierarchies—"base—wall-roof-component". Elements like huazhao screens, dougong brackets, and flower-lattice panels are reintroduced using traditional materials and scalable techniques. This strategy maintains authenticity while enabling contextual adaptation.

The study treats ornamentation as an evolving cultural medium rather than static replication. Through symbolic expression and community perception, ornamentation strengthens place identity and enhances heritage resonance.

Public Interfaces and Cultural Narrative

Beyond individual buildings, the continuity of public space and cultural narrative is central to the identity of historic towns. This study emphasizes the integration of street segments, visual nodes, and public plazas to reconstruct a coherent and immersive spatial experience. Key interventions include the reestablishment of traditional gateways, installation of interpretive walls narrating local history, and the reactivation of intersection plazas as communal gathering points.

Local cultural elements are embedded into urban furniture and infrastructure—for example, horse-head wall-inspired lamp posts and signage using traditional woodcarving techniques—enhancing both functionality and place identity. This integrated design strategy reinforces visual unity and supports the transmission of intangible heritage through everyday engagement.

Conclusion and Suggestions

This study investigates the transmission and renewal of ornamental art in traditional residential buildings in the Chaohu region from a regional cultural perspective. Through field surveys, image analysis, and spatial diagnostics, it examines how architectural ornamentation, particularly woodcarving, color, and symbolic motifs, serves not only as decorative elements but also as vital carriers of local identity, historical memory, and aesthetic values. These findings directly respond to the study's core objectives: 1) identifying the typological and symbolic characteristics of traditional decorative systems, 2) analyzing the challenges posed by contemporary transformation, and 3) proposing renewal strategies that maintain cultural continuity while meeting modern spatial needs.

The results reveal that ornamentation in traditional architecture is not a passive remnant of the past but an active medium of intangible cultural transmission. Yet, this heritage faces significant threats from urbanization, spatial-functional mismatches, and material degradation. In response, the study proposes a four-dimensional renewal framework that emphasizes spatial authenticity, adaptive reuse, cultural reinterpretation, and community-sensitive



design. These strategies allow for the integration of traditional symbolic systems into modern architectural language, balancing preservation with adaptability.

This research contributes to cultural landscape theory by challenging the preservation-modernization binary. Instead, it demonstrates that traditional decorative heritage, such as Jianghuai woodcarvings, can be recontextualized to support both aesthetic continuity and contemporary livability. The study further underscores that urban renewal, when guided by culturally embedded design principles, can enhance not only the visual coherence of the built environment but also the everyday experience and cultural attachment of local residents. Community interviews and spatial diagnostics suggest that renewed public spaces and reactivated ornamentation elements have improved place recognition and strengthened local identity.

Importantly, the research cautions against tourism-driven renewal models that prioritize external consumption over internal coherence. While tourism is acknowledged as a potential economic benefit, this study argues that sustainable renewal should first and foremost serve local cultural continuity and daily life. The "value of the town", as stated in earlier sections, lies not only in its architectural legacy but in its living cultural system, a point made explicit through the analysis of spatial functions, symbolic meanings, and material renewal paths throughout the study.

Future research should expand on these findings by incorporating participatory design with residents, conducting longitudinal assessments of social and spatial impact, and comparing similar practices across regions. Moreover, digital tools, such as 3D scanning, VR simulations, or AI-driven pattern recognition, hold promise for documenting, analyzing, and revitalizing ornamental heritage in a rapidly evolving urban context.

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