

**PRESERVATION OF THE REGIONAL IDENTITY
OF THE ORNAMENTAL DESIGN OF DOORS
AND WINDOWS IN HUI STYLE ARCHITECTURE**

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2025

**PRESERVATION OF THE REGIONAL IDENTITY
OF THE ORNAMENTAL DESIGN OF DOORS
AND WINDOWS IN HUI STYLE ARCHITECTURE**

by

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**Thesis submitted in fulfilment of the requirements
for the degree of
Doctor of Philosophy**

May 2025

ACKNOWLEDGEMENT

This cross-country PhD journey has felt like living within a long, beautiful dream—at times surreal, at times challenging, but always deeply transformative.

My heartfelt gratitude begins with those who stood as the anchors and stars of this voyage—Prof. Muhizam, Prof. Hafizal, Dr. Pravina, and the many other generous mentors who have shaped both my academic mind and my personal growth. To Prof. Muhizam, your wisdom and quiet strength have guided me not just through the scholarly seas, but through moments of self-doubt and disorientation. You taught me that resilience is not loud, but patient and steady—an invaluable lesson I will carry far beyond this thesis. Prof. Hafizal, your spontaneity, humour, and vibrant intellect have turned our exchanges into moments of unexpected clarity and joy. And to Dr. Pravina, your attentiveness and care, from the early sparks of a topic to the final refining touches, have been the scaffolding that supported my every step.

As I write these final lines, I do so not with a sense of ending, but with a feeling of gentle turning—toward a new chapter. In the words of Prof. Muhizam, whose guidance continues to echo in my mind: “Focus on working hard and embracing the present; the future will unfold as it should.” I will carry this wisdom with me, not only as I step forward into new beginnings, but also as a quiet compass in life.

To all who were part of this journey—thank you. This thesis carries not only my voice, but traces of yours as well.

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LIST OF ABBREVIATIONS

TB	Traditional building(s)
MB	Modern building(s)
KMO	Kaiser-Meyer-Olkin
Rd.	Resident(s)
OCG	Online communication group(s)
USM	Universiti Sains Malaysia
BC	Before Christ
AD	Anno Domini

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**PEMELIHARAAN IDENTITI SERANTAU DALAM REKA BENTUK
HIASAN PINTU DAN TINGKAP SENI BINA GAYA HUI**

ABSTRAK

Situasi warisan yang tidak sesuai telah berlaku dalam reka bentuk hiasan pintu dan tingkap seni bina gaya Hui moden, jika perubahan yang tidak wajar ini tidak dianggap serius boleh menjejaskan pemindahan ciri-ciri serantau serta kesinambungan identiti penduduk tersebut. Berdasarkan Teori Regionalisme Kritikal, kajian ini menggunakan kaedah gabungan dalam reka bentuk kajian ini, di mana data dikumpulkan melalui kerja lapangan, tinjauan penduduk, temu bual separa berstruktur dan temu bual mendalam. Antara penemuan yang diperolehi kajian ini telah mengenalpasti tiga dimensi trend perubahan dalam reka bentuk hiasan moden Hui iaitu: pengurangan, peningkatan dan pengubahsuaian. Selain daripada itu, perubahan ini memberi kesan positif yang ketara terhadap identiti penduduk dalam empat dimensi: budaya, masyarakat, politik dan puak. Seterusnya, unsur emosi seperti keyakinan diri, rasa kepunyaan, kepercayaan dan nilai warisan telah dianalisis sebagai faktor dalaman yang mempengaruhi identity penduduk secara positif yang ketara. Akhirnya, satu garis panduan penunjuk baharu yang indikatif telah dicadangkan kepada kerajaan tempatan yang merangkumi empat prinsip pemeliharaan: pemindahan budaya, penyertaan sosial, sokongan politik dan adaptasi dalam puak. Keputusan tinjauan turut menunjukkan tahap sokongan yang meluas dari pendapat umum. Penemuan kajian utama ini memberikan sumbangan penting kepada pelbagai pihak berkepentingan seperti pembuat dasar, arkitek, sejarahwan dan ahli komuniti. Penemuan ini menyumbangkan pandangan praktikal dan mencadangkan pemeliharaan budaya serantau dan pembangunan mampan.

**PRESERVATION OF THE REGIONAL IDENTITY OF THE
ORNAMENTAL DESIGN OF DOORS AND WINDOWS IN HUI STYLE
ARCHITECTURE**

ABSTRACT

An inappropriate heritage situation has occurred in the ornamental design of doors and windows in modern Hui-style architecture, and these unreasonable changes, if not taken seriously, would impact the transmission of regional characteristics and the continuation of people's identities. Based on the Critical Regionalism Theory, this study used mixed-methods research design, data were collected through fieldwork, surveys with residents, semi-structured interviews, and in-depth interviews. Among the findings, this study identified three dimensions of changing trends in ornamental designs of modern Hui-style architecture: decrease, increase, and alteration. Secondly, these changes in ornamental design significantly positively impact the residents' identities in the four dimensions of culture, society, political and clan. Meanwhile, a sense of confidence, belonging, trust, and heritage were analysed as deep emotional factors that impacted the relationship. Finally, a new indicative guideline was proposed for the local government, includes four dimensions of preservation principles: cultural transmission, social participation, political support and clan adaptation. Moreover, the public opinion survey results demonstrate the widespread support level. The main findings of this study are of contributory significance to multiple stakeholders, such as policymakers, architects, historians, and community members, providing practical insights and recommendations for regional cultural preservation and sustainable development.

CHAPTER 1

INTRODUCTION

1.1 Overview

Hui-style architecture (Figure 1.1), one of the six major schools of ancient Chinese architecture, is a valuable heritage of the Huizhou region and was included in the UNESCO World Heritage List in 2000 (Tu, 2024). Hui-style architecture is distinguished by its uniform black tiles, white walls, and horse-head wall structures as distinctive identity markers (R. Gao et al., 2023). Particularly noteworthy are the distinctive ornamental designs of the doors and windows of Hui-style buildings, which encapsulate the abundant regional traits of Huizhou. Nevertheless, in the wake of societal progress and the march toward modernization, the distinct regional attributes of traditional Hui-style architecture confront the peril of gradual erosion (L. Li, 2024). To preserve and inherit this invaluable cultural legacy, the present study explores a trajectory for perpetuating the regional characteristics of ornamental designs of doors and windows in Hui-style architecture. This process involved comprehensive inquiry and research to actualize the sustained preservation of these regional characteristics.



Figure 1.1 The Ancient Hui-style Architecture

1.2 Background

Huizhou is a geographical location that is not physically present on a map; however, it is a geographic concept within China that has existed for nearly nine hundred years (X. Gao et al., 2023). Located in the southernmost part of Anhui Province, Huizhou is not a province or a city but a historical geographic concept (Figure 1.2). According to historical records, in 221 BC, Qin Shi Huang, the founder of the Qin dynasty (221-207 BC) and the first emperor of unified China unified the six kingdoms and divided the nation into thirty-six commanderies (Chinese: 郡; Pinyin: jun). The government established Yixian (Chinese: 黟县; Pinyin: yi xian) and Shexian (Chinese: 歙县; Pinyin: she xian) counties in this region, which were under the jurisdiction of Kuaiji commandery (Chinese: 会稽; Pinyin: kuai ji) (T. R. Ding et al., 2010). It was not until the third year of Song Hui Zong's (the eighth emperor of the Song dynasty of China, 7 June 1082 – 4 June 1135) (i.e., 1121 AD) that the region was officially renamed Huizhou by the government, with six counties under its jurisdiction: Shexian, Yixian, Xiuning (Chinese: 休宁; Pinyin: xiu ning), Wuyuan (Chinese: 婺源; Pinyin: wu yuan), Jixi (Chinese: 绩溪; Pinyin: ji xi), and Qimen (Chinese: 祁门; Pinyin: qi men) (T. R. Ding et al., 2010; S. X. Wang & Xu, 2023).

The name Huizhou was commonly used from the Song through the Qing dynasties (1121-1911 AD). However, in January 1912, during the first year of the Republic of China, the government renamed the region. Although there was a brief resurgence of the name Huizhou, on 27 November 1987, the State Council officially renamed the region Huangshan City, which has been used consistently since then (T. R. Ding et al., 2010; X. S. H. Liang, 2022). Despite this, due to the favourable geographical environment and rich history and culture, the region has cultivated

distinctive folkways and customs. Local residents have a deep regional attachment to the name Huizhou, consistently harbouring a sense of collective identity tied to it (S. X. Wang & Xu, 2023).

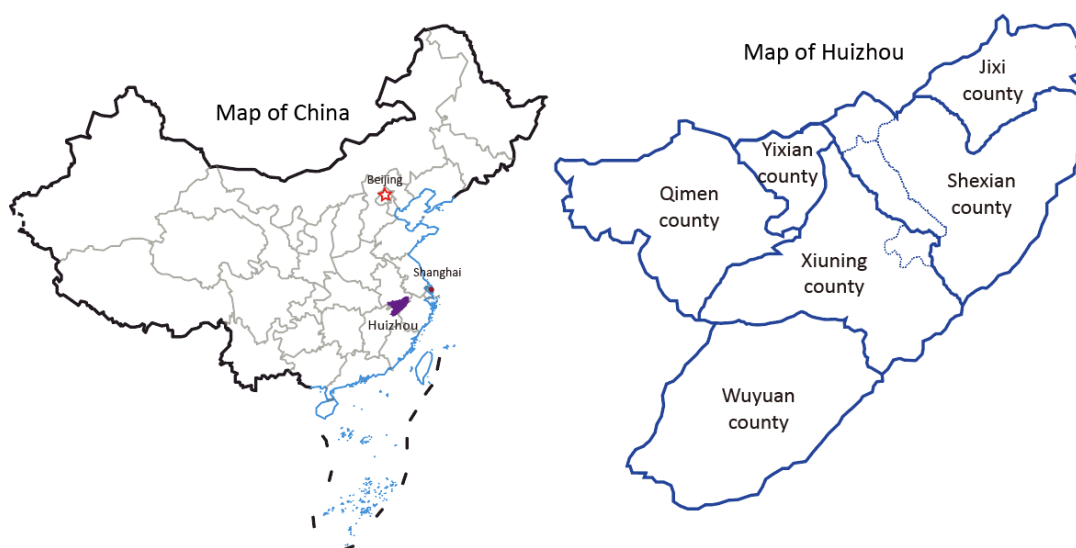


Figure 1.2 Location of Huizhou in China and the six counties in Huizhou
Source: (a) Downloaded from https://www.gov.cn/guoqing/2017-07/28/content_5043915.htm; (b) Downloaded from <https://anhui.tianditu.gov.cn/index.html>.

The regional culture of Huizhou embodies the essence of traditional Chinese culture. Huizhou culture highly represents of Chinese history and displays distinctive local characteristics (T. R. Ding et al., 2010). In particular, the study of the regional culture of Huizhou is an exclusive discipline in China called “Huizhou studies” (Chinese: 徽学; Pinyin: hui xue) (S. Lu et al., 2022). Together with “Tibetan studies” (Chinese: 藏学; Pinyin: zang xue) and “Dunhuang studies” (Chinese: 敦煌学; Pinyin: dun huang xue) are the three major fields of Chinese regional culture research (X. Wang et al., 2021). Among these, the material aspects of Hui-style architecture have received significant attention from scholars in recent years. This architecture reflects Huizhou’s unique natural and cultural characteristics and represents its people’s social background and creative concepts (Y. Song & Liao, 2023; Xiong & Su, 2014).

Hui-style architecture epitomises the traditional architectural ethos of the historic Huizhou region and stands as a quintessential example of regional traditional architecture in China. Local clan customs and the geographical environment influence traditional Hui-style architecture. The layout, structure, and even the colour of the buildings harmonise with the surroundings, forming a unique Hui-style characteristic (Bian, 2005; X. Q. Chang & Wang, 2017). G. Cheng et al. (2023) mentioned that the exterior colours of traditional Hui-style architecture are dominated by black, white, and grey, with the horse-head wall being its signature structure. In village planning, spatial treatment, or architectural carving art, Hui-style architecture fully reflects distinctive regional characteristics (Shen & Zhang, 2015; X. T. Yang & Zheng, 2022). Meanwhile, Wu and Bao (2019) indicated that traditional Hui-style architecture exhibits remarkable ornamentation, characterized by extensive brick, wood, and stone carvings, demonstrating a profound mastery of ornamental artistry.

The current state of modern Hui-style architecture involves mechanically copying specific Huizhou elements, attempting to convey Hui-style architecture through partial facade shapes (R. T. Shi & Bai, 2023; Z. Zhou et al., 2021). Over-protection policies for traditional architecture in ancient villages prevent residents from innovating modern Hui-style architecture. Meanwhile, the rise of tourism leads stakeholders to mechanically transplant so-called Huizhou elements, causing the development of modern Hui-style architecture to stagnate and repeat itself (R. T. Shi & Bai, 2023). Departing from its initial charm, repetitive replication has turned modern Hui-style architecture into mere facades devoid of essence. The region's sought-after essence has been eradicated by a rigid interpretation of Hui-style design principles, heavily influenced by modernism (G. Cheng et al., 2023; M. Y. Huang, 2018). This is

the dilemma modern Hui-style architecture faces, requiring a critical perspective to re-examine its principles.

Doors and windows of Hui-style architecture are essential carriers of Huizhou's regional characteristics, with ornamental designs highly valued today (X. Q. Chang & Wang, 2017; Yan et al., 2022). Doors in Hui-style architecture have practical significance and manifest the occupants' social status and cultural connotations, conveying diverse messages (G. L. Zhao et al., 2018). In Hui-style buildings, windows are usually designed in the same style as doors, and both are essential structures on the facade (Z. L. Pei & Zhang, 2019). Commonly found intricate carvings demonstrate the craftsmanship of local artisans, incorporating motifs symbolizing prosperity, longevity, and good fortune. These materials further emphasize the connection between architecture and the natural environment, highlighting the importance of harmony between human habitation and nature (R. Gao et al., 2023).

As living standards improve, people seek more than spatial functionality; they also desire diverse architectural aesthetics. Consequently, emphasizing the regional attributes of new cultural architecture has become a prevailing trend (L. Li, 2024). Integrating the regional attributes of the ornamental design of doors and windows of Hui-style architecture into contemporary architecture has become a prominent trend (X. Q. Chang & Wang, 2017). In recent years, considerable attention has been paid to the conservation and restoration of Huizhou windows and doors, as they are vital to maintaining the historical and cultural integrity of the Hui-style architectural landscape. Conservation efforts have focused on preserving original buildings and incorporating traditional design principles into new constructions to ensure that these ornamental

elements remain iconic features of the region (X. Gao et al., 2023). Hui-style architecture's aesthetic appeal and cultural symbolism have made it popular in modern design, often integrated into contemporary environments to evoke a sense of tradition and regional identity (G. L. Zhao et al., 2018).

As noted by previous literature, there are two areas for improvement in the ornamental design of doors and windows in modern Hui-style architecture. First, Huizhou's regional characteristics still need to be improved. These regional characteristics are often neglected in order to meet modern architectural trends (Z. L. Pei & Zhang, 2019). Second, Huizhou's regional characteristics are used inappropriately, often reduced to superficial visual elements that do not truly represent them (G. L. Zhao et al., 2018). As a result, doors and windows in modern Hui-style architecture need a unified Hui-style, failing to express Huizhou's regional characteristics adequately and indirectly affecting people's identity (X. S. H. Liang, 2022; L. Shi, 2020).

Combining the ornamental design of traditional Hui-style architecture with modern Hui-style architecture is highly feasible (Hou, 2023). Although traditional and modern Hui-style architectures exist in present-day Huizhou, starting from the late 20th century, there was a blind pursuit of modern minimalist styles. This led to insufficient attention to the regional characteristics of Huizhou and a neglect of protecting and inheriting these exquisite ornamental designs (Y. T. Li & Zhou, 2021). However, during this period, people's consciousness shifted, and they gradually began to attach importance to the continuation of regional characteristics. Incorporating Hui-style ornamental design elements into modern buildings can enrich architectural aesthetics, provide a foundation for architectural design development, satisfy people's

spiritual pursuits in modern life, and enhance residents' regional identity (L. Gao, 2021).

China has recently implemented specialised protective measures to enhance the preservation and continuity of traditional architectural regional traits (B. Li et al., 2022; L. Li, 2024). Over the past few decades, the Chinese government has introduced a series of preservation policies for historic structures meticulously designed to cover various aspects of ancient architecture (Hu, 2021). Particularly in the last five years, the local administration introduced the “Regulations on the Protection of Huizhou Ancient Buildings in Huangshan City” (Huangshan Government Network, 2018), specifically tailored for traditional Hui-style architecture. These protective policies include comprehensive strategies, from preservation planning to sustainable development for these structures.

W. J. Song (2023) emphasized safeguarding and perpetuating traditional regional culture while aligning efforts with China's societal context. Achieving this requires harmonizing interventions with historical trends and enacting policies that resonate with public sentiment and approval. This endeavour addresses a fundamental human spiritual yearning, societal advancement, and the bolstering of regional cultural confidence (Xia et al., 2022). As China rapidly advances socioeconomically, rekindling an appreciation for ancient ecological principles rooted in harmonizing with the celestial order and nature holds significant value. This revaluation enlightens contemporary minds and fosters a harmonious society (Chua, 2022).

1.3 Problem Statement

Hui-style architecture, as one of the six major schools of traditional Chinese architecture, holds significant historical, artistic, and cultural value (X. Gao et al.,

2023). Its characteristic features—such as white walls, black tiles, horse-head gables, and intricate carvings on doors and windows—not only reflect the Huizhou region’s unique aesthetics but also embody the local residents’ social values and cultural identity (M. R. Liu et al., 2020). In recent years, this architectural style has served as an important reference in designing modern regional-style buildings across China, especially in culturally themed towns and tourism developments (Z. L. Pei & Zhang, 2019). However, the adoption of Hui-style elements in contemporary architecture is often limited to superficial features, lacking authenticity and coherence (L. Gao, 2021; G. L. Zhao et al., 2018). This undermines their cultural essence and risks reducing heritage into aesthetic symbols detached from local meaning.

Although previous studies have explored Hui-style architecture from historical, artistic, and preservationist perspectives, few have empirically examined the transformation of ornamental design—particularly doors and windows—and its impact on residents’ identity and emotional belonging. Despite the high value of Hui-style architecture, the doors and windows of Modern Hui-style architecture in Huizhou lack the inheritance of regional ornamental designs found in traditional Hui-style architecture (S. Y. Liu et al., 2024; Z. L. Pei & Zhang, 2019). The lack of mixed-method research integrating visual analysis, resident perception, and expert recommendations constitutes a critical gap. Moreover, under the influence of Western minimalism and modern pragmatism, many new buildings in Huizhou have abandoned or misused traditional ornamental language (Hu, 2021). Even with local government policies promoting architectural heritage preservation, the mechanisms for integrating meaningful traditional elements into modern design remain ambiguous and inconsistent (L. Li, 2024).

Development requires buildings to undergo changes, while complete preservation limits alterations to their appearance (Celadyn & Celadyn, 2022). Finding a balance between development and preservation requires identifying indicators that enable the positive evolution of ornamental designs for doors and windows of Hui-style architecture and applying these to the architecture itself (Z. L. Pei & Zhang, 2019). To address this issue, this study adopts Critical Regionalism Theory as its guiding framework. This theory advocates architectural design that balances global modernity with local traditions, emphasizing the importance of cultural continuity in the built environment. The study not only contributes to academic discourse on identity and heritage architecture but also provides practical insights for policymakers, architects, and community stakeholders engaged in sustainable regional development.

1.4 Research Aim

To preserve the ornamental design characteristics of doors and windows of Hui-style architecture in the traditional and modern Hui-style architecture, which incorporates traditional regional style.

1.5 Research Objective

1. To identify the changes that have occurred in the visual and non-visual elements of the ornamental design of doors and windows of modern Hui-style architecture as compared to traditional ones.

2. To analyse the impact of changes in the ornamental design of doors and windows of modern Hui-style architecture on the identity of Huizhou residents.

3. To propose the new indicative guideline for the preservation of Hui-style architecture for the local government.

1.6 Research Question

1. What changes have occurred in the visual and non-visual elements of the ornamental design of doors and windows in modern Hui-style architecture compared to the traditional ones?
2. What is the impact of changes in the ornamental design of doors and windows of the modern Hui-style architecture on the identity of Huizhou residents?
3. How should local governments preserve the regional identity of Hui-style architecture?

1.7 Definition of Key Terms

This part defines the key terms used. These definitions are taken from the respective literature that explains these terms (the detailed description is stated in Chapter 2).

Hui-style architecture refers explicitly to the ancient Huizhou school of architecture, not the architecture of the modern administrative region of Anhui Province (Y. P. Wu & Bao, 2019). For more apparent differentiation, many scholars use terms like “Huizhou architecture” or “Huizhou-style architecture” in translation (C. Y. Liu, 1994; Z. Peng et al., 2021; H. Shao et al., 2019). Regardless of the nomenclature, the three terms denote the same entity within this study and the referenced literature.

Traditional Hui-style architecture refers to ancient buildings from the Ming and Qing dynasties (1368-1912 AD) with typical Hui-style features. These features include but are not limited to, the building’s form, structure, and ornamental design

(G. Cheng et al., 2023; X. Gao et al., 2023). **Modern Hui-style architecture** refers to buildings constructed after the 21st century that incorporate modern design elements into the basic features of traditional Hui-style architecture. These modern buildings retain some characteristics of traditional Hui-style architecture while incorporating contemporary styles, materials, and technologies (M. Y. Huang, 2018). Thus, these terms are used to describe the buildings and compare the changes in their ornamental designs more clearly.

Ornamental design refers to the elements of visible modelling, patterns, motifs, materials, techniques, and non-visible ideas used in the doors and windows of Hui-style architecture. These elements enhance the building's visual attractiveness and aesthetics while conveying regional characteristics (Pingale et al., 2017; S. P. Zhang, 2019; Zhu, 2014). Ornamental design plays a pivotal role in architecture, reflecting regional attributes such as culture and history and conveying the building's owner's religious convictions and aesthetic ideals (S. P. Zhang, 2019). This study focuses on the ornamental design of doors and windows in Hui-style architecture.

Regional characteristics do not equate to “regional uniqueness” (Miller, 2002; Mumford, 2016). Although the Huizhou region may have certain distinctive attributes, this does not mean these attributes are unparalleled or conspicuously distinct globally (D. Chang, 2023). In this study, regional characteristics refer to the features of Hui-style architecture that present the attributes of Huizhou within its regional context. These features include architectural style, material selection, craftsmanship, and deeper connotations, reflecting a specific region's historical, cultural, and social background (Gil-Piqueras & Rodríguez-Navarro, 2021). Hui-style architecture, as a

typical regional-style architecture, has obvious regional characteristics reflected in the ornamental design of its doors and windows.

Identity denotes an individual's self-perception and affiliation within various societal and personal contexts (Brubaker & Cooper, 2000; D. Buckingham, 2008; Woodward, 2003). This includes how individuals perceive and define themselves and how they are perceived by others within specific groups or communities (D. Buckingham, 2008; Maalouf, 2011). In this study, "identity" pertains to how individuals are associated with the ornamental design of doors and windows in Hui-style architecture. Analysing identity involves understanding how individuals' connections to their cultural heritage influence their attitudes and perceptions towards the architectural environment (Canizaro, 2007).

1.8 Research Scope

The research scope of this study includes:

1. The traditional Hui-style architecture comes from representative traditional Hui-style architecture from the Ming and Qing dynasties (1368-1912 A.D.), which is recorded in the List of Historic Buildings in Huangshan City (Huangshan Government Network, 2021). The modern Hui-style architecture was built in the 21st century in Huangshan City. Hui-style architecture from other periods and regions is beyond the scope.

2. Focus on the doors and windows on the facade of Hui-style architecture without discussing the interior doors and windows.

This is attributed to the fact that the ornamental design of doors and windows in Hui-style architecture serves as a vital vessel for encapsulating the distinctive

regional traits of Huizhou. In comparison to other architectural elements, it adeptly conveys the central artistic essence of Hui-style architecture. Simultaneously, the doors and windows adorning the building facades feature a consistent design style, further enhancing the unity of the architectural ensemble (G. L. Zhao et al., 2018).

3. Focus on the ornamental design of the doors and windows of the existing Hui-style architecture to study; the ornamental design of the doors and windows that existed in history but cannot be found now is not in the scope.

4. Focus on local residents aged 18-60 living in Huizhou for the data survey, as this study is directly related to the homes of local residents in Huizhou. In general, 18 is the age of the legal majority, and the vast majority of people retire at 60 (Berkman et al., 2018; Pilipiec et al., 2021). This age group has a clear sense of personal judgement; they are not a vulnerable group, and conducting research on them ensures that there are no ethical implications (Unguru, 2022).

5. Discussed elements of ornamental design, including modelling, patterns, motifs, materials, techniques, and ideas. Other elements of ornamental design are outside the research scope and are explained in the literature review.

6. The concept of identity discussed relates to social identity, cultural identity, political identity and clan identity (L. Shi, 2020). Other dimensions of identity are not included in the research scope.

1.9 Research Significance

The academic value of this study is demonstrated by interweaving ornamental design and identity, both in breadth and depth, thereby opening up new avenues for

understanding design theory, psychology, and sociology. This study promotes interdisciplinary dialogue and collaboration by combining theories and methods from design, psychology, and sociology. This integrated approach broadens the scope of scholarship and enriches the understanding of heritage architecture and social structures. The insights from this research provide an in-depth exploration of how people perceive and interact with their cultural surroundings while also highlighting the importance of preserving cultural identity through design. In addition, the conceptual framework can be applied to conservation studies of other geo-cultural buildings.

The significance is not only within academia but also impacts cultural conservation and urban planning practices. The identified changes in ornamental design can serve as a reference for staff involved in architectural preservation. By considering the degree of impact of identity, specific elements can be efficiently selected for preservation. Moreover, the preservation guidelines developed can guide future investigations of cultural architecture in conservation areas. In addition, the results can provide a basis for government agencies and organizations to develop and implement effective policies and measures for cultural conservation. This is particularly important in the context of urban planning and cultural heritage conservation. By providing empirically based insights and practical strategies, this study can influence policy formulation and guide the preservation of cultural heritage and architectural traditions in the context of urban development and global influences.

1.10 Thesis Outline

This dissertation consists of six chapters, excluding the appendices and references. Chapter 1 focuses on an overview of the study, including the background

of the subject matter and the research rationale. It outlines the problem statement, highlights the main issues, and presents the research aim, questions, and objectives as milestones. Definitions of key terms, research scope, and significance are provided to give more clarity to the study.

Chapter 2 encompasses the literature review, examining the regional characteristics of ornamental design in Hui-style architecture, as well as studies on identity recognition and guidelines for architectural preservation. Throughout the process, the research rationale was clarified, and scholars' perspectives, results, and methodologies were discussed and compared. These reviewed works provide valuable literature as references. By synthesizing these sources, research gaps were identified, leading to the establishment of a suitable conceptual framework in conjunction with the theoretical framework.

Chapter 3 details the methodology, including the mixed methods design with a case study framework, the selection and use of research instruments corresponding to the three research questions, the sampling techniques and sample sizes, the data collection procedures, and the data analysis approaches. Additionally, the ethical considerations of the study are stated to ensure the research's soundness.

In Chapter 4, aligned with the research questions, the photographic data from fieldwork are coded. A comparative analysis is conducted using tables to identify variations in the ornamental design of doors and windows between traditional and modern Hui-style architecture. Subsequent analysis of questionnaire data investigates the impact of these changes on residents' identity, while in-depth emotional factors are determined through coded interview data. Lastly, professional recommendations for

preserving Hui-style architecture were obtained from in-depth interviews. A questionnaire was designed based on these results to measure residents' support.

Furthermore, Chapter 5 encompasses the interpretation, dissection, and advancement of the research findings. This chapter revolves around discussing the primary discoveries and outcomes, aiding readers in understanding the academic and practical significance of the research. It elucidates how this study aligns with existing literature and paves the way for future comparative and contrasting analyses. It highlights the congruencies and discrepancies between this study and other research. It provides a concise overview of the study, emphasizing key findings and viewpoints. It presents the knowledge gaps addressed and novel insights provided by this research, underscoring its potential for practical applications and elucidating its impact.

Finally, Chapter 6 summarises the whole study. The methodology and results of the entire study are reviewed, and the implications of the findings are interpreted. Based on this, the contributions of the study are highlighted. In addition, the limitations and shortcomings of the study are argued, along with an outlook for future research endeavours.

1.11 Summary

This chapter has provided an overview of the research background, highlighted the problems surrounding the preservation of ornamental designs in modern Hui-style architecture, and introduced the theoretical and practical motivations behind this study. It has outlined the research objectives, questions, and scope, and discussed the significance and originality of the study in addressing identity-related issues in architectural heritage. The chapter also introduced the theoretical foundations

underpinning the study and defined key terms used throughout the thesis. By establishing a clear rationale and direction for the research, this chapter lays the groundwork for the subsequent chapters. Chapter 2 will offer a comprehensive review of the relevant literature, further contextualising the study within academic discourse and identifying specific gaps that this research seeks to address.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides a solid foundation for subsequent research by organising and analysing existing literature. It starts with an overview of Hui-style architecture, gradually delving into crucial concepts such as ornamental design, identity, and heritage preservation, aiming to integrate insights and understanding in these areas. Ultimately, this chapter will outline this study's theoretical and conceptual framework, laying the groundwork for analysing the regional characteristics of ornamental design in Hui-style architecture.

Additionally, due to the cultural specificity of the research target—Hui-style architecture, a part of China's heritage architecture—there is limited literature available in English. Therefore, the literature reviewed in this section includes sources from Google Scholar, WOS, and Chinese-language literature from China National Knowledge Infrastructure (CNKI). Most of the reviewed literature was published in the last five years; however, to ensure representativeness and comprehensiveness, the time frame for literature on the ornamental design of Hui-style architecture was extended to 20 years. Select documents or books representing developmental milestones were included for specific definitions and historical descriptions, even if they fall outside this time range.

2.2 Hui-style Architecture

2.2.1 Definition

The academic community has differing criteria for distinguishing between traditional and modern Hui-style architecture. A reasonable distinction between the two is necessary to compare the differences. Existing literature commonly defines buildings constructed during the Ming and Qing dynasties (1368-1912 AD) as traditional Hui-style architecture, characterized by their similar design styles and ornamental features (T. R. Ding et al., 2010; R. Gao et al., 2023; C. Y. Liu, 1994). In contrast, modern Hui-style architecture is discussed in light of China's current policies and cultural background, with academic studies referring to buildings resembling traditional Hui-style architecture built after the 21st century (X. D. Chen, 2022). Clarifying the basic definitions of the research targets helps to lay out the research more clearly.

2.2.2 History of Development

The origins of traditional Hui-style architecture can be traced back to the Song Dynasty (960 - 1279 AD), developing alongside the rise of the Huizhou merchant community. No actual archaeological evidence has been found to support this, although ancient records suggest an earlier origin (Y. Zhang, 2019). Wei (2013) pointed out that the development and evolution of traditional Hui-style architecture are closely related to the culture, society, politics, and clan development in the Huizhou region. Traditional Hui-style architecture was formed by the settlement of different clans, with the solid economic foundation of the ancient Huizhou merchant group providing material support for its development (Y. Li et al., 2023).

The Huizhou region has historically embraced the cultural concept of “returning to one's roots,” with the Huizhou merchant community investing a significant portion

of their earnings from other places into the construction of their hometowns (González Martínez, 2022; X. Wang et al., 2021). Later, due to historical wars and other political instability factors, traditional Hui-style architecture deliberately made the windows on the building's facade very small, a structural design that increased defence against external enemies (Gong & Wang, 2023). Moreover, both Q. Zhang (2019) and Zang (2006) noted that the government promoted the tall facades of buildings at the time as a policy measure intended for fire prevention, which, from a policy management perspective, contributed to the formation of a unified regional characteristic of traditional Hui-style architecture.

By the time of the Ming (1368 - 1644 AD) and Qing Dynasty (1616 - 1912 AD), traditional Hui-style architecture reached its zenith but witnessed a decline during the late Qing Dynasty due to warfare. S. P. Zhang (2019) analysed that during the Qing Dynasty, the Hui-style merchant community experienced the pinnacle of China's commercial growth, benefiting from flourishing economic circumstances. During this epoch, the intricacy of ornamental designs within traditional Hui-style architecture reached its apex, infused with the distinctive perspectives of Hui-style merchants on the arrangement, structure, and internal layout of buildings (G. H. Chen, 2013).

The affluence of the economy and exceptional craftsmanship rendered Hui-style architecture a fusion of commercial prosperity and feudal culture. This amalgamation endowed it with both practical utility and profound cultural implications. Regrettably, H. Yang and Zhang (2016) revealed that the progression of traditional Hui-style architecture halted due to the disruptive influence of warfare from the late Qing Dynasty to 1949. Numerous edifices were destroyed in the conflict, and even those that were spared suffered from incomplete preservation (Q. Wang et al., 2021).

Through the lens of ancient architectural evolution, Hui-style architecture emerges as a paramount exemplar within China's historical architectural style (A. Q. Ma, 2018). C. Liu (2020) emphasizes that the six regional architectural schools: Hui-style architecture (Chinese: 徽派建筑; Pinyin: hui pai jian zhu), Jing-style architecture (Chinese: 京派建筑; Pinyin: jing pai jian zhu), Jin-style architecture (Chinese: 晋派建筑; Pinyin: jin pai jian zhu), Su-style architecture (Chinese: 苏派建筑; Pinyin: su pai jian zhu), Chuan-style architecture (Chinese: 川派建筑; Pinyin: chuan pai jian zhu), and Min-style architecture (Chinese: 闽派建筑; Pinyin: min pai jian zhu), hold a prominent position in the history of ancient Chinese architecture.

Simultaneously, H. J. Shao (2022) highlighted that these diverse schools of ancient architecture, characterized by their distinct historical and cultural legacies, encapsulate the profound weight of China's architectural history. H. W. Wang (2022) underscored the pivotal role that Hui-style architecture occupies within Chinese architecture and art. He contended that the intricate sculptural elements in Hui-style architecture showcase the exceptional craftsmanship of artisans from bygone eras. Furthermore, Wu and Bao (2019) posited that Hui-style architecture transcends mere architectural form, serving as a symbol and a crucial component within Huizhou culture. It embodies the region's vibrant history, culture, and human attributes.

The evolution of modern Hui-style architecture began gradually, only taking shape at the onset of the 21st century. Ren (2018) highlighted that after New China's establishment in 1949 (The People's Republic of China, PRC), the predominant focus was on economic advancement, relegating the inheritance and safeguarding of traditional Hui-style architecture to a minor concern. The emergence of new Hui-style architecture gained momentum at the outset of the 21st century. Luo (2021) noted that

new Hui-style architecture emerged as an amalgamation spontaneously crafted by residents, who infused representative attributes from existing traditional Hui-style architecture. This fusion gradually coalesced into distinctive architectural forms that retained the cultural characteristics of Huizhou while adapting to the contemporary milieu and modern aesthetic preferences. Scholars coined the term “modern Hui-style architecture” to describe this genre (Y. Chen et al., 2017; X. Zhang et al., 2019).

In recent years, many scholars have analysed the development of modern Hui-style architecture (M. Y. Huang, 2018; H. W. Wang, 2022; L. Yang, 2022; X. T. Yang & Zheng, 2022), and their reflections on the current situation are mainly summarized in three points: first, to truly identify the characteristics of traditional Hui-style architecture in depth, as the base for inheritance and innovation, and to break the equivalence between Hui-style architecture and superficial symbols like “horse-head walls” and “black and white grey tones”; second, to combine the new Huizhou style with modern architecture using new technology and materials; third, to focus on making the inheritance and development of tradition practical and accessible for ordinary people rather than cumbersome and expensive. Nonetheless, the inheritance of regional characteristics from traditional to modern Hui-style architecture is still not well addressed (R. T. Shi & Bai, 2023).

2.2.3 Doors and Windows of Hui-style Architecture

Hui-style architecture boasts a highly intricate structure, with a distinction between the configurations of doors and windows on the building’s facade and those within its interior spaces (Z. L. Pei & Zhang, 2019). While the interior doors and windows of Hui-style architecture are also intricately carved (Yan, 2015), this study explicitly focuses solely on the windows and doors adorning the building’s exterior facade. Consequently, the design of interior windows and doors is not included in this

study's scope. Y. Li (2019) contended that the windows and doors on the facades of Hui-style architecture create a nuanced interplay between solid and void elements in the building's external structure. This interplay enhances the overall architectural form's sculptural quality, enriching the structure's visual perception.

Traditionally, the making of doors and windows relied on manual craftsmanship, with artisans using simple tools to carve wood into intricate patterns and structures through their exquisite skills. High-set small windows are commonly incorporated into the outer wall configuration, effectively delineating a secluded courtyard space (W. Wang & Pan, 2022). In contrast, the design of the main entrance door diverges from the overall facade composition. Typically, this door is adorned with intricate ornamental motifs, conveying an impression of opulence. The gate itself is often lavishly ornamented, exuding an aura of grandeur. The exterior frames of these gateways often feature extensive bluestone door hoods or doorposts, seamlessly integrated with the towering plain walls and harmoniously aligning with the design motifs of the small, elevated windows (Qiu & Jiang, 2022).

The value of doors and windows in Hui-style architecture lies in their aesthetic appeal and their functional and cultural significance. Aesthetically, Hui-style doors and windows are renowned for their intricate carvings and unique design, enriching the architecture's visual appeal and adding artistic and ornamental elements to the overall structure (Y. Zhang, 2019). Functionally, these doors and windows provide essential ventilation and lighting while cleverly maintaining the building's privacy (Q. Wang et al., 2021). Culturally, Hui-style doors and windows carry the local residents' traditional customs and spiritual essence. Through the ornamental design of these doors and windows, one can observe the distinctive local customs of the Huizhou region, as well

as the residents' pursuit of a good life and their beliefs (X. Q. Chang & Wang, 2017). These doors and windows are part of the architecture and are important carriers of cultural memory and identity.

2.2.4 Selection of Hui-style buildings

The rational selection of cases is fundamental for ensuring objectivity and fairness in the research process. Based on C. F. Gao (2019) and Qian et al. (2021), the sampling methods described for Huizhou architecture were subjective, based on the researchers' personal judgments and failed to demonstrate the representativeness of the samples. Solely relying on researchers' experience for judgment makes it difficult to achieve sample universality (Levitt, 2021). However, referencing official documents for selection criteria is more rational and objective because they are based on established guidelines and standards (Mannan & Al-Ghamdi, 2021). Furthermore, using official documents ensures that selection criteria are based on transparent and reliable information (Entradas et al., 2020). The official documents provide a framework for assessing the effectiveness and safety of screening methods (Lederer et al., 2021; Yung & Chan, 2013).

In selecting traditional Hui-style architecture, C. Zhang et al. (2023) analysed three prototypical Huizhou villages through a systematic procedure. Initially, they ensured these villages were included in the prestigious List of Famous Chinese Historical and Cultural Villages (State Administration of Cultural Heritage of China, 2003). Following the guidance of the Information on Immovable Cultural Relics (State Administration of Cultural Heritage of China, 2007), they adopted a random sampling strategy to select three significant buildings with Huizhou characteristics. These selected structures were then comprehensively analysed to obtain representative samples. C. Zhang et al. (2023) selected Hui-style architecture more objectively by