Protect Hakka Architecture Based On The Concept Of Cultural Inheritance

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Abstract

Purpose: Hakka culture takes the traditional culture of the Han nationality as its core, and the breeding and formation of Hakka culture conform to the laws of cultural development. It is a complete system that integrates Hakka customs, values, and aesthetic sentiments. However, the preservation of hakka traditional buildings confronts different challenges due to lack of awareness of protection and external negative impact. It is urgent to explore strategies and approaches for the protection and sustainable development of the Hakka architecture.

Methodology: The main focus of this study is to conduct the cultural inheritance for Hakka architecture analysis. At first, using document analysis to further sort out the origin and track the development of Hakka architecture, as well as the development and protection of historical buildings in recent years, we can further discover different insights. Following, we conduct the ethnographic research methods in field work, which can provide the researchers with a detailed and rich resources for further support architectural analysis of explicit and tacit attributes in Haka historical architectures.

Conclusion and Recommendation: Based on the concept of cultural inheritance, it is necessary to explore and research the protection and renewal of current historical buildings from the explicit aspect and the implicit aspect. Taking the Hakka architecture in Heyuan as an example, preservation and renewal strategies from the view of cultural inheritance theory are proposed, providing effective reference for solving the problems that arise during the process of historical buildings protection. Although cultural inheritance may be influenced by external factors during the inheritance process, we need to ensure that with complete cultural attributes and in line with the requirements of the times, we integrate diverse cultural inheritance to promote the effective continuation of cultural inheritance.

Keywords: Hakka architecture, Architectural heritage, Cultural inheritance

1. Introduction

Hakka architecture is an ancient and modern crystallization of Chinese culture with high value. As an intuitive carrier of Hakka culture, Hakka historical buildings retain the cultural heritage of ancient buildings integrated with Hakka folk art, customs, ethics, and morality, forming a complete aesthetic system of Hakka residential architecture culture. With rapid social development, however, the preservation of Hakka traditional buildings confronts different challenges. A large number of Hakka historical buildings in China, and the traditional repair and protection methods are relatively obsolete and it is urgent to explore strategies and
approaches for the protection and sustainable development of the Hakka architecture. Therefore, this paper conducts cultural inheritance theory for better understanding art and science in the culture of Hakka historical buildings, which is beneficial to provide new ideas and methods for the inheritance and preservation of ancient architecture.

2. Literature Review

2.1 Research of the Hakka Traditional Architecture in China

The existing literature on traditional haka architecture is extensive and focuses particularly on theories, the provision of the cases introduction of different Haka architectures and type comparisons as well. Prior to the work of Dai (Li, 2022), much more information has become available on exploring Hakka traditional architecture. The literature on the Round house and Chinese Traditional Culture by Taiwanese scholar Lin Jiashu has highlighted the importance of Hakka architectural decoration. Luo (Li, 2022) has comprehensively studied the origin, living customs, cultural characteristics, ethnic distribution, and other aspects of the Hakka ethnic group and has done extremely in-depth research. It still has important reference value for the study of Hakka culture. It can be said that Luo has laid a solid foundation for the study of Hakka culture in China. Wu (Wu, 1970) comprehensively discusses several influential Hakka architectures in China from a cultural and philosophical perspective, and even in Hong Kong, Macao, and Taiwan, which provides a clear and referential perspective for future study in Hakka architecture.

In recent years, there has been an increasing amount of literature from foreign scholars. Keith’s research on Hakka historical architecture found that Hakka culture revealed the lifestyle of ancient Chinese people and that Hakka historical architecture reflected the architectural style of northern China in many aspects (Keith, 2012). Wang analyzed the formation of Hakka villages and the characteristics of Hakka historical architecture and discussed how to apply their noble to the protection and sustainable development of Hakka architecture (Wang et al, 2012). Jin studied the relationship between Hakka culture and Hakka architectural forms through the characteristics of Hakka architecture in Meizhou City, Guangdong Province (Jin et al., 2018).

2.1.1 The Hakkas, the origin and culture

Hakka culture springs from the Confucian culture in the year 0 to A.D. 1000, which later developed during five migrations to the South at the year A.D. 1000 to A.D.2000 （Shown in Figure1）. However, the Hakka people in the history adhere to the Confucian culture during the migrations, while they gradually integrate into cultures from place to place, which is a kind of derivative culture under the influence or the choice of the natural environment and human environment (Luo, 1992; Wu, 1970). Subsequently, due to the relocation to Nanyang, Hakka culture becomes a model of integration of Chinese culture and world culture.
It is well known that the Hakka people gradually migrated from the Central Plain of the Huanghe River to the southern province border regions of Fujian, Jiangxi, and Guangdong. This migration took place over 1600 years and covered a distance of 1000 kilometres. The formation and development of the Hakka ethnic group are closely related to the large-scale southward migration of the Han nationality in Chinese history. During the migration process, in addition to having a relatively stable and independent living space, it is more important to form a new and relatively independent cultural subsystem after integrating with the local and regional cultures. This cultural system integrates the shared historical memory, common values, and everyday living habits of ethnic groups and can significantly strengthen the cohesion of ethnic groups. Hakka culture is a cultural type of unity and diversity, and the unity refers to the Hakka culture as a whole; the diversity is a component of Hakka culture, among which the traditional Central Plains culture occupies a dominant position.

2.1.2 The Hakkas, the Hakka architecture and the relationship

The study of Hakka architecture is an important part of the study of ancient Chinese residential buildings. Hakka architecture is a building style in southern China unique to the Hakka people. They are typically designed for defensive purposes and consist of one entrance and no windows at ground level. The English word for "architecture" is derived from the Greek words "Archi" (art) and "tekt" (first and foremost). From the "first art," we can see that architecture is the superposition of the dual attributes of material space and spiritual symbols. Nowadays, the world tends to be diverse, with different cultures constantly colliding, interacting, and blending.
The dual attributes of architecture, without exception, make Hakka architecture not only a tangible, external, and physical representation of Hakka culture but also its architectural style and structure reflect the architectural style of the Chinese nation. At the same time, it is also a living fossil that records the development and evolution of the Hakka ethnic system, providing valuable material information for future generations to study the origin, the clan society, the etiquette, and the culture of Hakka. Therefore, Hakka architecture is regarded as the carrier and model of Hakka people and culture.

2.2 Cultural inheritance Theory

The goal of most historical architecture is to adapt a design to human physical and psychological needs. At the same time, however, a particular style of architecture represents a group of cultural inheritance that are copied for as long as that style remains in favor. Humanity needs to house itself, and architecture represents a worldwide building industry that is forever looking for prototypes to copy. Clearly, the process by which architectural styles spread through copying is one that lends itself to a cultural inheritance theory explanation. A style that is difficult to reproduce will die out. The style succeeds not because its original examples are attractive or useful but because it infects the vernacular building tradition. Scholars, both domestically and internationally, have proposed different definitions and insights on the concept of cultural inheritance. The representative explanation in this article is that cultural inheritance are the fundamental factors determining the inheritance and change of cultural systems, possessing the ability for cultural presentation to impart and inherit over time.

2.2.1 Research of cultural inheritance theory in western countries

Cultural inheritance theory has also been combined with other theories and evolved into interdisciplinary theoretical research. Atran (2001) argues that high replication and high fidelity in cultural information transmission are exceptions rather than rules. The continuous and rapid mutation of information has created countless changes. Min and Lee (2017) applied the concept of cultural inheritance to virtual architecture on the Term 'Cultural DNA' from the Perspectives of Physical and Virtual Architecture”. John Wilkins argues that most cultural innovation is a recombination and variation of existing cultural inheritance, rather than selecting possible novelty.

2.2.2 Research of cultural inheritance theory in China

In recent years, scholars in the field of architecture have noticed the impact of cultural inheritance on the research of architecture. Chang (2003) argues that the urban spirit and architectural characteristics of Shanghai are closely related to cultural inheritance. He (2008) pointed out that architects should learn from tradition, exploring the source of architectural creation during the design program me.
Feng (2008) Contributed to the Construction of Huizhou Traditional Settlements. The analysis of building characteristics classified the cultural inheritance of traditional settlements according to their characteristics. Using cultural inheritance theory, Li (2022) analyzes Chinese Architecture from the aspect of the development and evolution of cultural inheritance in the modern era. Wei (2012) analyzes the cultural inheritance and established a cultural map of architectural regions from the perspective of the central role of regional cultural inheritance. The main directions include the field of architectural scale, regional scale, and residential scale. Among them, the building energy consumption cultural inheritance from Long (2007), the landscape cultural inheritance from (Liu, 2022) and the regional cultural inheritance from Wang, and the cultural inheritance are the main representatives, which provide new knowledge and idea for solutions. However, it should be noted that there are still some limitations in the application of the new theory regarding the depth of research, the system completeness, and the validation of hypotheses.

3. Methodology

3.1 Document analysis

Document analysis, a qualitative research technique, is used by researchers for interpretation and to gain an understanding of their meaning and develop upon the information they provide. Three main types of documents are used in this paper including public records, personal documents and physical evidence. The process involves evaluating electronic and physical documents including public records and personal documents, to interpret them, gain an understanding of their development. The paper interprets the findings to build on current research and established sources to gather ideas and evidence to support the analysis of cultural inheritance in Haka architecture.

3.2 Ethnographic research methods

Ethnography is a qualitative methodology in numerous disciplines, including anthropology, sociology, and education, and is a practical research strategy in marketing, management, and public policy (Sangasubana, 2011). As the first-hand resource and a research technique, Ethnography allows the researchers to observe and experience events, behaviors, interactions, and conversations that manifest society and culture in action. Ethnography seeks to discover and record different types of information that are not readily obtainable through relatively detached approaches like surveys and observations with surveyors’ cultural understandings or assumptions (Devault, 2006). Besides, the ethnography is conducted to investigate work practices by analyzing social relationships and the relevance of experiences (Devault, 2006).

A field survey well has to be well-designed and administered appropriately. It can even be carried out quickly at a distance using telephones, mail, or the Internet. A great deal of information studies a particular place or group of people regarding demographics, economic activities, political opinions, and many other things through a survey instrument.
### 3.4 Study area

The Hakka architecture in Guangdong province are mainly distributed in the Hakka area represented by Meizhou City, and most of them are Wailong house. Wailong House presents the architectural characteristics of the folk houses in Lingnan area of Guangdong Province. Although it is different from the shape and details of the round house in Fujian and the Hakka architecture in Gannan region, it is also a residential building with Hakka style characteristics in Hakka culture.

The study area of this paper, Shangchenggen District is one of the historical and cultural origins of Heyuan City, the birthplace of Lingnan Hakka culture (shown in Figure 2). At present, the traditional houses preserved at the root of the upper city have been damaged to varying degrees and need to be repaired urgently. And the traditional culture has not been well excavated and utilized. Street space is crowded, disorderly construction phenomenon is prominent, the overall style is not coordinated. The urban transportation system needs to be improved, the width of internal roads is different, and parking facilities are lacking. The construction of municipal rain and sewage pipe network lags behind, and the quality of internal space environment is poor. Further exploring the cultural characteristics contained in Hakka architecture as a living fossil of historical development, a vivid carrier of customs and local culture, persistently exerting its unique inheritance and memory function.

![Figure 2 Location and overview of the research project site](Illustration by Wang Huan).
4. Architectural analysis with cultural inheritance theory

4.1 The Haka traditional architecture in Heyuan City, Guangdong

Guangdong Hakka Wailong House (围龙屋), also known as Wailong House, is a Hakka residential building with a roughly semicircular shape and an essential spatial carrier for Hakka ancestral temples. The Wailong House embodies the traditional etiquette and ethical concepts of ancient China while also possessing a strong sense of feng shui. The Hakka-enclosed buildings in Guangdong are mainly distributed in the Hakka region represented by Meizhou City, most of which are enclosed dragon houses. Wailongwu is mainly distributed in areas such as Meizhou, Huizhou, Shenzhen, Heyuan, and Shaoguan in Guangdong, where Hakka people are widely distributed. The enclosed dragon house reflects the architectural characteristics of the folk houses in the Lingnan area of Guangdong Province.

Wei Long Wu-type houses around Meizhou in the northeastern part of the province have unique characteristics (shown in Figure 3 and Figure 4). They included a semi-round pond in front of the dwelling; three buildings, namely, the lower house (Xia Tang: 下堂), middle house (Zhong Tang: 中堂), and upper house (Shang Tang: 上堂), located in the center of the dwelling; side houses (Heng Wu: 横屋) for habitation are arranged on both sides of these. Residential buildings surround the semi-round garden, which rises obliquely backward. The defensive function is less dominant; the complexes are more representative of an agricultural community. Although it is different from the shape and details of the Earthen Building in Fujian Province and Gannan Hakka enclosed houses, it is also a folk house with Hakka-style characteristics in Hakka culture.
Figure 3  Some Hakka architectural forms
(pictures from *Chinese Hakka architectural culture, 2007*)

Figure 4  Several common Hakka architectural forms
(the picture is from *The Chinese classic architecture*)
4.2 Cultural inheritance theory in Hakka historical architecture

The architectural and cultural inheritance refer to their underlying components or architectural elements. Briefly, based on the architecture itself, this paper claims two categories: the explicit elements and the tacit elements that refer to the material and spiritual, respectively.

Only by understanding the inheritance of each part clearly can we further study the inheritance and transmission of the value and culture of the historical architecture internally. It is of significance to identify the core of cultural inheritance factors that affect the development of architecture, which lays the foundation for the design research in the following part of this research. A recent systematic literature review concluded that the research field of cultural inheritance, including architecture, urban planning, and landscape studies, explores and studies from different perspectives.

4.2.1 The explicit elements of cultural inheritance

The explicit elements represent the material elements that he building conveys itself, while the latter represents the culture or value of the building internally.

On the one hand, the explicit elements are reflected in the architectural construction （shown in Figure 5）. Taking the palace-type architecture in traditional Chinese ancient architecture as an example, its structure from top to bottom includes roof ridge decoration, roofs, roof trusses, and wooden frames below. The roof ridge decoration also includes decorations such as immortals and other animals. The roof includes double-eaved halls, Xie Shan, and wooden frame lifting beams and crossing. On the other hand, they are reflected in architectural ornament. Architectural ornament and traditional patterns are highly distinctive in historical district, such as traditional architectural patterns, historical and cultural patterns, eclectic decoration patterns, and era decoration patterns,
4.2.1 The tacit elements of cultural inheritance

Compared to the dominant architectural dominant cultural, the architectural recessive cultural is a type of recessive. The inheritance of cultural factors is an important focus of the theory of cultural inheritance in architecture. At present, there is no unified definition of the hidden of architectural culture in research. It is argued that hidden cultural inheritance include historical culture and folk culture (Guo, 2022).

Li (2022) demonstrate that recessive cultural inheritance in community culture. The tacit elements in architecture have their roots in their trajectory, which is the genetic factor of architectural culture (shown in Figure 6). These iconic cultural heritages, such as decorations, colours, materials, etc., will become the focus of cultural exploration and the main object of heritage protection, and will also become the entry point for exploring the cultural element and information elements of the Hakka historical architecture.
4.3 Architectural analysis of Hakka buildings applied with cultural inheritance theory

Cultural inheritance are not immutable, they will constantly change with the evolution of history. For Hakka historical buildings, the research results on Hakka historical architecture in the domestic academic community are very rich, mainly focusing on the constituent elements. However, a systematic approach to the renewal of Hakka historical architecture is required. There is a lack of discussion and insufficient consideration of the overall environment and cultural diversity. As the Genetic code of the cultural system, cultural inheritance are of great significance for maintaining regional vitality and inheriting historical culture. Therefore, based on the theory of cultural inheritance, the following text will attempt to analyze the many problems that exist in the continued development of Hakka historical buildings, in order to achieve architectural transformation while inheriting history and culture, achieving sustainable development. There are many current situations in the architectural culture in Shangchenggen District, such as the weakening of traditional culture and values, the decline of natural environmental carriers, and the disappearance of important historical nodes.

4.3.1 The adaptability of cultural inheritance

Hakka historical architecture has undergone centuries of sedimentation and has a profound cultural heritage, gradually penetrating various aspects of the development of Shangchenggen District architecture. Cultural inheritance have adaptability, natural selection and survival of the fittest. If cultural inheritance cannot adapt to environmental changes and have no strong protection measures, they can only be swallowed or even disappeared. The inheritors of ancient architecture in the region did not correctly view traditional culture while accepting new culture and did not realize the irreplaceable and immeasurable nature of traditional culture. When pursuing new materials, they implemented a "one size fits all" approach to traditional culture. The collision between the new and rich era culture and traditional culture ultimately led to the decline of traditional culture.

4.3.2 The continuity of cultural inheritance

The cultural inheritance are variant, undergoing mutations due to external negative influences. Hakka historical architecture has undergone thousands of years of development, and its cultural
Inheritance have also changed accordingly. Hakka historical buildings are the core cultural inheritance of Shangchenggen District, recording its progress and prosperity over thousands of years, while also reflecting the aesthetic values of different eras. In recent years, with the acceleration of urbanization, many traditional buildings in Shangchenggen District have been unable to continue their value due to improper protection, and some buildings have even suffered damage due to a lack of attention (shown in Figure 7).

From field research, it can be seen that many ancient buildings in the Shangchenggen District area are severely damaged due to the lack of proper maintenance measures. Many exquisite structures have been lost, and some even become abandoned. Therefore, Hakka historical buildings are facing enormous pressure. In order to achieve architectural renewal under the theory of cultural inheritance, it is necessary to adapt cultural inheritance to the times. Whether it is the texture of streets and alleys, spatial layout, or architectural style, these elements all reflect the characteristics and cultural heritage of Hakka historical architecture. This requires cultural inheritance to continuously regulate and update, adapt to changes in generations, and achieve long-term and healthy development.

![Figure 7 Destruction of architectural cultural inheritance](photo taken by Wang Huan)

### 4.3.3 The reconfiguration of cultural inheritance

There are mutated cultural inheritance in diverse cultural inheritance. Utilizing the characteristics of mutated cultural inheritance and innovating to achieve this approach can preserve the inherent functions of modern architecture, transplant cultural inheritance into it, and endow it with new cultural meanings. Maximizing the extraction of key core elements in architectural cultural inheritance and transforming them, inheriting them through excavation, preservation, and transplantation of architectural cultural inheritance, making cultural inheritance an inherent driving force for the sustainable development of historical buildings.

### 4.3 Implementation

When protecting and updating historical buildings, cultural inheritance should be reconstructed and reproduced through design strategies and technical techniques.
Nowadays, the architecture in many areas has begun to realize the combination of richness and diversity. According to this theory, it is necessary to build a modern architectural culture with the most Chinese characteristics and change the traditional architectural culture. We must always pay attention to the status of nations and regions in cultural history, so as to inherit the same process of development and innovation. The ultimate goal of activating and utilizing Hakka historical buildings is to give them new sustainable uses without changing the original state of the buildings, so that they can be revitalized and bring into play the economic and social benefits in line with the development of today's life.

On the one hand, this requires the integration of architecture with people's emotions and national culture, and the combination of regional historical culture to endow architecture with historical character and humanistic spirit so that people can obtain resonance and sense of belonging through architecture, and truly inherit the cultural connotations in traditional architecture. On the other hand, in terms of action technology, in order to achieve sustainable development, traditional ancient architecture in Shangchenggen needs to adapt to the requirements of the times and integrate ancient architecture with modern architecture. Due to technological advancements, modern architecture has a characteristic of variability, which enables it to better integrate with traditional architecture.

Respect the local architectural context, materials, and space, and maintain consistency with the original building. Traditional architecture in Shangchenggen should adapt to the environment while respecting history and reality because architecture is a part of the environmental ecology. In the process of transforming traditional architecture, it is necessary to minimize environmental damage and make adaptive changes based on terrain, climate, and other factors, rather than destroying the environment and forcibly integrating into modern architecture. In the adaptive transformation of traditional architecture, attention should also be paid to human spiritual and material feelings. Architecture should not only meet people's practical needs, but also infuse local humanistic ideas and emotions. It should be integrated with time, space, history, and nature to create an atmosphere that meets people's psychological needs. While renovating, we respect the form and context of traditional buildings in the surrounding area, maintain the original historical texture outside the building, and maintain the layout and decoration of the original building. Only in the construction of the internal space, we reflect a sense of comfort, highlight modernity, and conform to the living habits of modern people. On the basis of respecting historical reality and the environment, it also injects humanistic emotions (Shown in Figure 8 and Figure 9).

Finally, we can focus on the traditional art and audience market, and effectively expand the survival and development space of traditional art in traditional architecture by developing cultural and creative products that align with traditional art and audiences, promoting the auspicious culture and feng shui culture carried by traditional architectural art to be displayed through modern and diversified materials. This can align traditional architectural art with the aesthetic of modern society, narrow the distance between traditional architectural art and the modern public, and enable the modern public to show a greater degree of recognition of traditional architectural art.
Figure 8  Drawing of Shangchenggen District historical area reconstruction
(Illustration by Wang Huan)

Figure 9  Some important Hakka building protection cases
(Illustration by Wang Huan)
5. Conclusion

Based on the concept of cultural inheritance, it is necessary to explore and research the protection and renewal of current historical buildings from the explicit aspect and the implicit aspect. Taking the Hakka architecture in Heyuan as an example, preservation and renewal strategies from the view of cultural inheritance theory are proposed, providing effective reference for solving the problems that arise during the process of historical buildings protection. Although cultural inheritance may be influenced by external factors during the inheritance process, we need to ensure that with complete cultural attributes and in line with the requirements of the times, we integrate diverse cultural inheritance to promote the effective continuation of cultural inheritance. The ultimate goal of activating and utilizing Hakka historical buildings is to give them new sustainable uses and provide the economic and social benefits in the daily life.

This article believes that it is necessary to strengthen the protection and promotion of traditional architectural culture and make efforts in public opinion promotion, and other aspects to enhance the traditional cultural values of contemporary people. At the same time, traditional culture should also be re-created, integrated into modern functions, and implanted with new cultural ideas, which can achieve the secondary rebirth of traditional culture. Cultural inheritance have timeliness, and without the help of external forces, they cannot be passed down for a long time.

6. References