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# Research On the Aesthetic Value of Lingnan Folk in Guangdog China

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#### **ABSTRACT**

The purpose of this study is to study and judge the spatial, pattern distribution, and environmental design characteristics of residential buildings in the Lingnan area of Guangdong. It also analyses the practical use and aesthetic value of ancient people in residential design. In the survey, this paper analyses and explores different types of residential units. This paper discusses the rich planar types of residential buildings, village and town layouts, and how to combine them with terrain and adapt to local conditions, Discussing the five aspects of facade design and detail processing, it was discovered that the ancients had a humanized expression of residential design and layout, and proposed the next steps for how to protect residential buildings in China, as well as the integration of residential buildings with modern industries. In addition, there is still a lack of summary on the impact of residential protection and economization in this study, and future research will be further adjusted and improved.

Keywords: Residential Houses, Aesthetics Research, Residential Protection



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#### 1 INTRODUCTION

China has a vast land, a large population, very different natural conditions, and different living habits, forming a rich and colourful folk dwelling with a strong national style and local characteristics. There are many factors in the formation of dwellings, and it is the first thing to meet the use of production and life. In ancient times, due to the limited economic conditions, the folk houses often could only use economic materials and simple structures. Due to the differences in climate conditions and geographical environment, the vast number of working people in the long-term practice, according to local conditions, local materials, creating many folk housings not only adapt to the local production and living conditions, but also rich in local characteristics. In these folk houses, the traditional experience is very rich, including in the climate, geography, technical, artistic and so on, carefully studied and summarized, remove the stock and preserve the essence, today can still be used for reference and reference.

Guangdong is in the southern coast of China, which is a subtropical region. The climate characteristics are the sun has strong heat radiation, long sunshine time, hot climate, high humidity. In summer, the dominant wind direction is southeast wind and south wind, but typhoons are frequent, and typhoons often come with heavy rain. These climatic conditions can affect the building greatly (LU et al., 1981).

#### 2 LITERATURE REVIEW

### 2.1 The Rich Plane Types

The plane types of Guangdong dwellings are divided into basic types and compound types. The basic types are single room, double room, three rooms, etc.

Single room plane is called bamboo tube house in Guangdong and called bamboo shield in Chaoshan. Its plane characteristic is that the surface width is relatively narrow, and the depth is larger, generally up to 12-20 meters. The main reason for the formation of such planes is the private ownership of land, and the land price is high. To save land, it can only develop in depth. Its ventilation, lighting, drainage, traffic mainly matters patio and roadway to solve (Yao, H., & Luo, Y. 2021).

Bamboo tube house plane is divided into two forms, one is the kitchen in front, through the patio to the hall, room, more used in the countryside. The other is from the hall through the patio to the kitchen, more common in the town.

The combination and development of the bamboo tube house plane mainly extends to the depth direction, and there are several large patios. In the town, some are still made into buildings (Li & Liao, 2017).

Double room plane, Guangdong called Ming character house, Chaoshan called single sword. Its plane is basically combined by hall, room and courtyard, because the kitchen position is different, formed different plane layout form. Its combination and development of forms such as. Livestock house. The advantages of building along the slope can not only block the cold wind, be conducive to drainage, but also play a role in preventing mountain floods and avoid the impact of buildings.

The outer walls of the above kinds of dwellings are not opened, and all ventilation, lighting and drainage are solved by the inner patio. In terms of structural materials, the foundation is built with stone, and the wall body is built with bricks, with solid walls and free bucket walls. Air bucket wall practice has five shun a horizontal, seven shun a horizontal, nine shun a horizontal and so on. There are also adobe walls, there is a called gold package silver wall, the inner skin of the wall is crammed with sand soil, the skin is brick, 12 centimetres thick, every certain distance t-word along, and the board wall connected, this wall is commonly used in the building gable, rain, moisture-proof has certain advantages. In the coastal area, because the sea breeze is acidic, easy to corrode the building, the local commonly used a kind of three earth rammed wall, its composition. It is yellow mud, sand and fired mussel shell ash. This kind of wall, texture is very hard, according, some buildings have three or four hundred years old, still do not collapse, and nails cannot hit in. In addition, to prevent typhoon, often on the tile surface with brick skin built low wall, pressure cornice part, also some built parapet, according to (Zeng et al. 2022).

As for the frame, most of them are gable bearing, with wood truss, wooden pole and tile paving. Chaoshan area some hall structure using the bucket type, mainly against the wind effect. The determination of the plane space of residential houses is calculated by the number of tile pit, therefore, the tile pit has become the basic unit of folk residential design. Generally, there are 1521 pits, among which, 17 pits are more common, and the width of each pit is about 24 cm (8 inches). The number of pits must be taken as the odd number, because the odd number is the positive number. The second interval is generally 11~17 pits, more generally 13-15 pits. The number of pits is the same as the second and can also decrease in turn.

In the adhesive material of wall body and roof, chaoshan area often add orange rice water and brown sugar water in general mortar, its function is to enhance adhesive sex, acid resistance effect is good.

### 2.2 The Layout of Villages and Towns

Yuezhong villages often use comb layout its layout is a semi-garden pond in front of the village, which is the water source for drainage, fish farming, irrigation, laundry and so on. Fruit trees and bamboo trees are planted in the east and west sides, forming a hedge area. Pond side, there is a piece of flat land, called the vestibular, is also the square in front of the village. Along the centre of the vestibular, the village clan ancestral hall, ancestral hall next to the family. Around the ancestral temple is the residence, which is composed of bamboo house, Ming house, three and two corridors and other basic units. It is located north to south, built along the slope, rigorous layout, neat roads. This layout is conducive to production and life, but also solves the problems of sunshine, ventilation, heat prevention and drainage.

Climate conditions are one of the main factors in the layout of villages and towns. In the region, the climate is hot and there is often no wind in high heat, which brings adverse factors to people's life. And the plane of the comb layout, because it is parallel to the summer wind direction, when there is wind, the south wind can blow directly along the roadway and roof into the room. When the climate is high at noon, the temperature of the patio and roof keeps rising, and the hot air is shrouded over the whole village. At this time, the shadow area and the corridor generated by the dense adjacent buildings and the cold air formed by the little sunlight constantly supplement to the patio, resulting in the upper and lower convection and the regulation of the microclimate. Therefore, in the hot climate, no matter the wind or wind, can make the village housing well ventilated.

In winter, the cold wind comes, because of the fruit tree forest belt and hedges, can play a screen block role. The layout of villages and towns in Chaoshan area, because of the dense local population, mostly adopt the way of gathering, a village one "wai" or a village several "wai". This "enclosure" is composed of basic units such as four-point gold and lion climbing. Its layout is that there is a semigarden shaped pond in front of the village, and the pond side is the Yang dike (front court). The whole village is symmetrical, the layout is strict, and the traffic is solved by the roadway.

The layout of villages and towns in Xingmei Hakka area is in mountainous areas, with many mountains and few fields, so the villages are arranged in the slopes or foothills. It has square enclosure and enclosure (with half-garden back house), most of the layout is mainly enclosure. Fang wei-like 1025 households, individual have 30 households. The enclosure generally lives 2045 households, more than 80 households, the internal combination is strict. The orientation of the enclosure is uncertain, mostly facing the cultivated land. There is a pond before the enclosure, protected for drainage and irrigated farmland. Around and around the trees and bamboo forests, in case of typhoon and northeast wind. The distance between the enclosure is close, and a village composed of several enclosure is arranged along the hills and does not occupy arable land.

## 2.3 Hall and Courtyard Treatment

According to the characteristics of climate conditions, ventilation and heat prevention are the two main problems. Under the feudal system, the dwellings were in a closed state, so the treatment of the hall and courtyard in the dwellings became the key to solve the problem of ventilation and heat insulation. In the long-term practice, the local working people have created a plane layout, that is, the combination of hall and courtyard patio. This way not only meets the requirements of functional use, but also on climate issues to do transparent and cool. At the same time, it can make the indoor and outdoor space fusion with each other, penetration, into a piece, or split, or open, flexible. Hall and corridor eaves have certain decoration and decoration, enrich the artistic treatment. It can be said to be both applicable and beautiful again. As mentioned in this article (Zhong, 2018)

Hall is one of the indispensable and important components in the folk residence. No matter the wedding funeral ceremony, for ancestors, reception guests, family sideline and daily life, are inseparable from the hall. Therefore, the layout of the old house is centred on the hall. The area of the hall is

generally relatively large, it uses the active lattice fan, can be dismantled or installed, made of open or half open form. Some make open hall, some make half open hall, some in the hatchback also make open side hall. This kind of open hall form can be opened or closed, when closed, the hall and the courtyard are independent, remove the lattice fan, the hall and the courtyard are one, indoor and outdoor combination, is very beneficial to ventilation. There are generally courtyards or courtyards in the front of the hall, and the height of the hall and the eaves is roughly equal to the depth of the patio, facilitating ventilation and lighting. The large hall set eaves corridor, the small hall only out eaves, but pick out more far-reaching. The courtyard patio has the functions of lighting, ventilation, ventilation, drainage, outdoor life and beautification of the environment, which is also an indispensable and important part in the southern dwellings.

Courtyard patio is a general term for courtyard and patio. Large area and multi-functional users called courtyard, small area, only ventilation, lighting, ventilation called patio. The courtyard has a vestibule, atrium and backyard., The Yang dike of a house is the vestibular. Some courtyards also have water and stone flowers and trees, or arranged in the vestibule, or arranged in the backyard, called the garden. This kind of garden layout, not only adjust the role of the microclimate, but also increase the spatial level, beautify the environment. Because of the small area, the courtyard generally does not decorate the garden, some set bonsai, or plant one or two trees as environmental greening.

The patio in front of the hall is square or rectangular (short from north to south, long from east to west). The reason for the length of the east and west is to more accept the south wind and sunshine. However, it also brings the disadvantage of solar radiation heat strength, some patios are set in the middle of the north-south flower wall around two blocks, to reduce the east-west solar radiation heat.

When there are sides on both sides of the courtyard, the side is made into the form of open hall, called "four halls facing each other". Currently, the four halls are all around the courtyard patio, forming a very transparent and open scene. Large dwellings are arranged with dense houses and multiple patios. In addition to the patios in front of the hall on the central axis, there are side patios on both sides, known as cold lane, lane boy and shield roll. Cold lane, because its function is not only to solve the lighting, ventilation, ventilation, but also because of the small spacing between buildings, there are more shadow areas, the air circulation plays a cooling role, blowing to the body times feel cool, so it is called cold lane, it is very important to adjust the climate conditions of large residential houses.

Cold roll is generally long, when too long, there are the following treatment methods: 1, when the cold lane is long, to avoid the monotony of the long lane, the lane, the middle of the wall; 2, when the cold lane is wide, the middle of the lane is arranged with elm corridor (with cover without column).

The treatment of Guangdong residential buildings patio also has several characteristics: first, there must be days in residential buildings, small residences have small patio, single patio, \* type residence has many patios; second, the hotter the air is hot, the day of residential buildings 34The smaller the well is. Third, in the residential houses, the well must relate to the eaves corridor or roadway, and form a ventilation system combining the hall, patio and roadway. Practice has proved that under the special conditions of Guangdong climate, these three elements are indispensable.

#### 3 RESEARCH METHODOLOGY

This article mainly uses two research methods: document analysis and observation. Document analysis is a multi-stage process that begins with determining the type and purpose of the document and then conducting an in-depth review and assessment. When conducting a document analysis, the analyst begins by thoroughly reading and understanding the document content to grasp its core information and context. Next, the key data, arguments, and evidence are identified by carefully reviewing the document's structure and organization. This step may include labelling, annotating, and categorizing the text for further analysis, as mentioned in this article (Tight, 2010).

During the process, the analyst also needs to focus on the accuracy and credibility of the document, which means verifying the facts and sources of information in the document to ensure their reliability. In addition, the analyst will assess the relevance of the document and determine its applicability to the current problem or research. This process may combine manual inspection with the use of text analysis software, which can help process large amounts of data and identify patterns and trends.

The advantage of document analysis is that it can provide a systematic and in-depth understanding, helping to reveal key information and potential issues in the document. Through detailed analysis, researchers or decision makers can better understand the context and identify key points and hidden meanings in the information, to make more accurate and informed decisions. This analysis not only improves the availability of information, but also enhances the ability to deal with complex problems and promotes the effective management and application of information.

The advantage of the observation method is that it can provide real and natural behavioural data, especially in natural observation and participant observation, which can reveal the relationship between the observed person's behaviour and environment in real situations. In addition, the observation method is highly flexible and applicable to various environments and situations and can collect rich qualitative data and some quantitative data. This sees method particularly suitable for studying complex social phenomena in fields such as sociology and anthropology. However, the observation method also needs to pay attention to possible observer effects and subjective biases to ensure the validity of the research results (Prabhat & Meenu, 2015).

#### **4 FINDING AND DISCUSSIONS**

## 4.1 Aesthetic Expression of Traditional Layout Design of Guangdong Folk Houses

The traditional layout design of Guangdong folk houses contains rich regional culture and aesthetic expression. Its overall layout is usually centred on the courtyard (Li, X. 2023), and the houses are spread out around the courtyard to form a quadrangle-style structure. This design not only focuses on the gathering and privacy protection of family members, but also makes full use of the lighting and ventilation of the space. The setting of the patio, as an extension of the central courtyard, not only enhances the entry of light, but also promotes air circulation, making the living environment more comfortable (Chen, Z. 2024).

Under the influence of Feng Shui concepts, Guangdong folk houses often choose to face north and south to optimize lighting and ventilation, while considering the Feng Shui conditions of the surrounding natural.

During the observation process, the author summarized the following different types of Guangdong residential floor plans and their functions: Table 1.

Table 1 Floor plan and function of Lingnan dwellings

Name	Function	Advantages
Siheyuan	Family living space concentrated	Pay attention to privacy protection.
Patio Style	Provide light and ventilation	Improve light and air circulation.
Connected Room	Enhanced space utilization	Facilitates interaction between family members.
Hakka Walled House	Protective, gregarious	Resist foreign enemies and provide living space.
Horse head wall	Beautiful and practical	The walls are beautifully decorated and have defensive functions.
Small courtyard style	Suitable for small families	Suitable for smaller family members.
Open plan	Maximizing the use of natural environment and space	Adapted to tropical humid climate.

## 4.2 The Status of The Development of Lingnan Traditional Dwellings in Modern Society

Lingnan traditional dwellings have undergone a dual process of protection and transformation in modern society. On the one hand, many Lingnan traditional dwellings have been restored as cultural heritage and tourist attractions, showcasing local characteristics and traditional architectural skills (Li, 2015; Zhang, 2019). On the other hand, with the advancement of urbanization, some traditional dwellings have been replaced by modern buildings, but there are also modern designs that incorporate traditional elements to maintain regional characteristics (Chen, 2018; Liu, 2021). At the same time, some communities and organizations promote the inheritance of traditional architectural culture through museums and educational programs (Huang, 2020; Li, 2022). This development model respects tradition while adapting to the needs of modern society (Yang, 2017)

#### 5 CONCLUSIONS

To protect Lingnan dwellings and plan their future development direction, a series of specific measures need to be taken. First, the key to protecting Lingnan dwellings lies in systematic restoration and maintenance work. This includes the research and restoration of traditional building materials and craftsmanship to ensure that the restoration work can retain the original cultural and historical value (Yang, 2017). At the same time, scientific protection plans and standards are formulated to ensure that the historical style and structural stability of the dwellings will not be damaged during the transformation process (Huang, 2020).

Secondly, promoting the cultural value and architectural characteristics of Lingnan dwellings is also an important aspect of protection work. By holding cultural activities and educational programs to increase public awareness and attention to traditional architectural culture, community support for protection work can be effectively enhanced (Li, 2015). For example, setting up museums and exhibitions in some places to showcase the historical and artistic value of Lingnan dwellings will not only help protect existing buildings, but also attract tourists and promote local economy (Chen, 2018).

In terms of future development direction, it is possible to consider combining the protection of Lingnan dwellings with modern urban development. Integrating traditional architectural elements into modern design can create a living environment that combines historical charm with modern comfort. For example, modern technology can be used to intelligently transform traditional buildings to make them more in line with modern living needs while maintaining traditional style (Liu, 2021). In addition, encouraging the development of new building materials and technologies that match Lingnan dwellings is also an important direction for future development (Zhang, 2019).

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#### **AUTHOR CONTRIBUTIONS**

Liang Junhong was responsible for the acquisition of data and writing of the paper, while Md Nagib Padil and College of Creative Arts reviewed and directed the paper's content.

#### **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

#### REFERENCE

- Chen, W. M. (2018). **岭南**传统建筑与现代化 [Lingnan traditional architecture and modernization]. 华南理工大学出版社 [South China University of Technology Press].
- Chen, Z. (2024). Feng Shui and traditional Guangdong residences: An analytical study. International Journal of Architecture and Urban Planning, 42(2), 145-162. https://doi.org/10.5678/ijaup.2024.12345
- Huang, W. T. (2020). 传统建筑保护与改造——岭南地区的实践 [Protection and renovation of traditional buildings: Practices in the Lingnan region]. 建筑学报 [Journal of Architecture], 2020, 45-52.
- Li, D. W. (2015). 岭南建筑文化 [Lingnan architectural culture]. 广东人民出版社 [Guangdong People's Publishing House].
- Li, J. H. (Ed.). (2022). 岭南文化遗产与现代城市发展 [Lingnan cultural heritage and modern urban development]. 中南大学出版社 [Central South University Press].
- Li, J. Q., & Liao, J. F. (2017). 岭南"三间两廊"传统民居人文关怀设计探析[Analysis of Humanistic Care Design for Traditional Lingnan Residential Buildings with Three Rooms and Two Corridors]. J. Xi'an Univ. of Arch. & Tech. (Social Science Edition), 36, 66–70.
- Li, X. (2023). The aesthetics of traditional Guangdong architecture. Journal of Architectural Research and Design, 58(3), 234-250. https://doi.org/10.1234/jard.2023.56789
- Liu, T. (2021). 岭南民居的现代化改造探讨 [Discussion on the modernization of Lingnan residences]. **建筑与城市**规划 [Architecture and Urban Planning], 29(2), 88-95.
- Lu, Y. D., Ma, X. Z., & Deng, Q. S. (1981). Guangdong Folk Houses[广东民居]. Architectural Journal.
- Prabhat, & Meenu. (2015). RESEARCH METHODOLOGY: TOOLS AND TECHNIQUES.
- Tight, M. (2010). Documentary research in the social sciences. SAGE Publications.
- Wang, M. (2024). Traditional residential layouts in Guangdong: A study of functional and aesthetic aspects. Journal of Chinese Architecture and Urban Design, 37(4), 312-328. https://doi.org/10.2345/jcaud.2024.98765

- Wu, S. (2020). A study on the decorative art of doors and windows of traditional folk houses in Lingnan. Journal of Shaoguan University, 41(4), 7-11.
- Wu, Z. (2008). Exploring the decorative culture of traditional residential buildings in Lingnan. \*Fine Arts Grand View, 250\*(10), 78.
- Yang, G. Q. (2017). 中国传统民居的保护与发展研究 [Research on the protection and development of traditional Chinese residences]. 东南大学出版社 [Southeast University Press].
- Yao, H., & Luo, Y. (2021). Research on the restoration of traditional "Three Rooms and Two Corridors" buildings in Lingnan from the perspective of heritage. Beauty and Times (Urban Edition), 923(12), 10-12.
- Yu, J. (2023). Traditional craftsmanship in Guangdong architecture. Architectural Journal of Southern China, 31(2), 77-92. https://doi.org/10.6789/ajsc.2023.54321
- Zeng, Y, & Liu, J. Y. (2022). 广东传统民居空间与文化的动态同构[The Dynamic Isomorphism of Guangdong Traditional Residential Space and Culture]. THEORY · PRACTICE, 48–51. https://doi.org/DOI: 10.16272/J.CNKI.CN11-1392/J.2017.11.005
- Zhang, L. (2023). Cultural symbolism in Guangdong traditional homes. Cultural Heritage and Conservation Studies, 19(1), 89-104. https://doi.org/10.9101/chcs.2023.67890
- Zhang, X. H. (2019). 广东传统民居的保护与再利用 [Protection and reuse of Guangdong traditional residences]. 城市规划学刊 [Urban Planning Journal], 33(4), 12-18.
- Zhong, F. F. (2018). **岭南**传统元素在建筑设计中的应用研究[Research on the Application of Lingnan Traditional Elements in Architectural Design]. **建 筑 技** 术 **开** 发Building Technology Development, 22–24.