

Research on the Decorative Patterns of Modern Residential Buildings in Macao from the Perspective of Social Change

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Abstract: In the modern era, Macao has experienced another major turning point since the opening of the port, and the buildings of the Historic Centre of Macao were successfully declared a World Heritage Site in 2005, and Macao's architectural heritage has become an important part of Macao's culture. Cultural export has also become a key focus for Macao's tourism development. However, it is still rare to express urban culture through the connotation of patterns, and traditional patterns are the main carrier of regional culture, reflecting Macao's special regional style and culture, and are also important cultural elements for the eternal vitality of the city. By digging deep into the correlation between the decorative patterns of residential buildings and social and historical changes in Macao in the modern period, the particularity of the architectural decoration patterns in Macao is sorted out and summarized, and finally the particularity and regularity of the emergence and evolution of the decorative patterns of modern residential buildings in Macao are obtained.

Keywords: modern Macao; residence; decorative patterns; particularity

1. Introduction

As one of the earliest gateways for China's exchanges with the world, Macao's unique status and role can be traced back to the 16th century, and by the Opium War in 1840, the gateway of China was forcibly opened, losing its independent status, and accompanied by the historical process of humiliation, Macao became China's earliest foreign port and one of the economic and cultural meeting points between China and the West in 500 years. Macao's modern architectural culture is transplantable, which means that almost all styles and types of modern architecture were not developed in Macao itself, but were imported from the outside. [1] Under the background of many historical and cultural mixtures, Macao's modern folk houses record the social development and changes of Macao, and the diversified stimulation of society, history and culture also makes Macao's modern folk houses have the particularity and symbolism of the times.

2. An overview of modern residential architecture in Macau

Most of Macao's modern residential buildings are preserved in the Historic Centre of Macao, and the demand for architectural structure and shape extends and develops the decorative form of the building, which not only derives from the architectural composition object, but also becomes the target and carrier of decoration. Macao has created different styles of architecture in a special context, as early as the middle of the eighteenth century to the nineteenth century is the development period of Western-style architecture, the fifth year of Jiaqing (1800) entered the period of Chinese and Western architectural repair, Macao in the eighties of the nineteenth century began to appear a combination of Chinese and Western architecture, its decoration. From the second half of the 19th century to the beginning of the 20th century, architectural textures from different periods began to appear in the same building, forming Macao's unique Portuguese eclectic architecture. Lu Honghui and other scholars analyzed the main characteristics and causes of the details and decoration of historical buildings in Macao, which provided rich references and reference materials for the study of modern residential architecture in Macao. Architectural decorative patterns are attached to many parts of the building, so the decorative patterns

are classified by building components.

3. Architectural decoration pattern

Architectural decorative patterns are mainly distributed in buildings "The locations of doors, windows, columns, facades, etc., are classified and summarized according to the location of decoration in the survey of the decorative patterns of modern residential buildings in Macao. The architectural decorative patterns, with its special social background of the integration of Chinese and Portuguese culture, display unique regional characteristics, and are also important carriers of social and cultural heritage. There is a certain coupling relationship between the meaning of architectural patterns and their distribution in the architectural space.

3.1 Doors

Whether in the East or the West, doors are constructed as buildings and rise in tandem with architecture. Its role is not only to circulate or block space, but also to have a defensive function. The different architectural styles in different periods and regions also affect the style of the door. According to the survey findings, we divided the door into inner door and outer door for style analysis.

3.1.1 Outer doors

The gate independent of the main body of the building is mainly wrought iron, and the pattern is mostly curly grass. The gate, door bucket or porch attached to the main body of the building is the basic form, and the envelope structure is open or semi-open to form an excessive space, which plays the role of sheltering from the wind and rain, and its pattern process is mainly wrought iron, and the pattern is mostly curly grass pattern. The exterior door integrated in the main body of the building is widely used, which is characterized by keeping level with the main facade of the building, and the decoration is mostly distributed in the lintel, Chinese plaques on both sides of the door and pilasters, etc., and its decorative patterns are mostly concentrated on the lintel and door, including symmetrical flower plant patterns, geometric patterns, and swirling patterns.

3.1.2 Inner door

The inner door of the door style is usually located at the entrance of the room, and there are double door styles in larger houses, such as the inner door of the happy villa, which belongs to the larger door, and the decorative pattern of the door is distributed in the doorhead, lintel, skirt, and pilaster. The lintels (lamps shadows) of the door of the Lu family's large house are decorated with brick carvings, with bats, vases and other carvings. The partition doors of the Mandarin's House use decorative patterns based on image comparison, such as bamboo orchid plum blossoms; and decorative patterns based on homophonic analogy, such as peaches, bats, bottles, etc. [2]The partition door of the Lou kau Mansion, the partition part is decorated with stained glass, and the colored glass etching is a combination of Chinese and Western culture using handicrafts. At that time, families with this decoration could be described as either rich or expensive, and were generally placed in the living room or important hall. The stained glass is inlaid in a wooden frame, and the pattern symbolizes the blossom and wealth. [3]

3.2 Windows

Window, like door, is also an important building component in the building, and its form is also very many, because it is attached to the building itself and exists, so the development of the window tends to be consistent with the building. With the advancement of the times, windows not only have the characteristics of lighting and breathability, but also have a decorative role. According to the different forms of windows and the distribution of patterns, this study is studied through the following categories: wrought iron fence decoration, leaky window decoration, oyster shell window, arch coupon window.

3.2.1 Wrought-iron decoration

In the history of China's development, the use of iron to make weapons and agricultural tools has an earlier application, but it does not pay attention to the development of metal decorative arts. In the West, with the development of iron smelting technology and industrialization, iron art has been more and more widely used, and in the 20th century a large number of influx into China, so there are more or less traces of Western-style art style on various iron products; In architecture, iron art is generally used in decoration, such as doors, windows, fences, etc. In addition to the protective role of hindrance, iron art is used in

windows, but also has a decorative role, generally with geometric curls, wavy patterns, weaving patterns, etc.

3.2.2 Leaky windows

Leaky windows are a type of window with a relatively free form, which cannot be opened. Because of the hollow effect, it not only has the function of communicating the interior and exterior scenes, but also has the effect of dividing the space, achieving the effect of "like a connection and separation". In the Lou kau Mansion, the copper coin pattern tile leaky window is also added to the gray sculpture inverted cloud pavilion for decoration, and there are also iron decorative decorative windows and Manchurian windows in one decorative form, such as. In the Mandarin's House, there are common rows of leaky windows, which not only can strengthen ventilation, but also constantly reveal the windows to enjoy the scenery on the other side of the continuous when walking.

3.2.3 Oyster shell windows

Octagonal gold plate pattern oyster shell window is made of shell sheet processed and polished into translucent thin sheet and then inlaid on the wooden frame to make a window, with both light transmission and shelter, warm in winter and cool in summer, mostly used in the doors and windows of Lingnan houses, is a traditional architectural decoration with regional cultural characteristics in the coastal area of Lingnan. Due to the cumbersome process and the absence of craftsmen specializing in oyster windows, oyster windows have gradually introduced themselves to the historical stage. The oyster shell windows in the Mandarin's House and the Lou kau Mansion are mostly octagonal gold plate patterns common in Lingnan, which symbolizes the wealth of all directions, the gathering of talents from all directions, and a higher level.^[4]

3.2.4 Arch coupon window

The decoration around the window of the Vindic mansion has obvious Gothic arches, and the layers of line feet also appear on the arches, the window perimeter decoration forms an arch, the window lintel is shaped like an arch, decorated with a lotus pattern, and the window foot is decorated with a cross pattern of the layer line foot; House No. 6 Guia Slope Lane has horseshoe-shaped arched coupon windows, and the perimeter decoration of the window has Arabic decoration, as presented in Figure 1.



Figure 1: Wrought-iron decoration, Leaky windows, Oyster shell windows, Arch coupon window
(Photographed by This Research)

3.3 Column type

The decorative patterns of the columns are generally distributed in the column head, column body, and pillar base. There are columns, square columns and pilasters embedded in the wall for decoration; The carving themes include winter grass, flower basket style, and cocoon. In the modern residential architecture of Macao, there are a large number of column types, and their expression is not limited to the column form in Western classical architecture, but has some deformation, as presented in Figure 2. Columns and square columns are used as frequently in modern residential architecture in Macao, and both have pilaster forms. The most widely used capital-shaped carvings are plant patterns with honeysuckle grass and cocoon as motifs, in addition to complex capital-head decorations such as flower basket and multi-office patterns.



Figure 2: Column type (Photographed by This Research)

3.4 Facades

The facades of modern residential buildings in Macao are diverse in style, including the Happy Palace in the style of palace-style villas, the White House in the classical Renaissance style, and the Gao Kening residence in the Western classical architectural style, and its decoration is mostly distributed on the triangular mountain flowers, coupon shoulders, and pilaster tops, as presented in Figure 3. Its façade decoration is mostly plaster; There are plant floral patterns, ribbon patterns, curly grass patterns, geometric patterns, most of which want to match the architectural style. The interior of Gao Kening Residence can be seen in the Chinese decorative style from the corner gate, reflecting the decorative characteristics of the mixture of Chinese and Western cultures, as well as the life interest of the owner of the mansion.

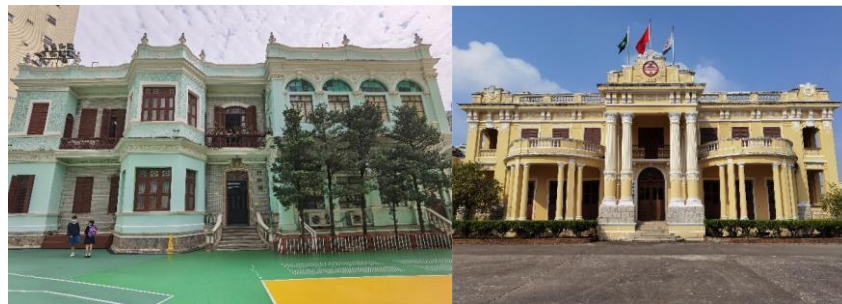


Figure 3: Facades (Photographed by This Research)

4. The decorative style of Macao residential architecture

4.1 Portuguese culture

The architectural reflection of Portuguese culture is the Portuguese classical style, its architectural form is mainly classical, in the decoration omitted complex decoration, the color is mostly bright pink, yellow and other decoration, because there is no too much decorative pattern, so in the building more white based horizontal line decoration, this color contrast in order to highlight the difference between it and classical architecture. There is also the Portuguese eclectic style, in Macau eclecticism is the eclectic mix of architecture with Portuguese style: such as the original site of the Mansion of Vendic, its architecture belongs to the Portuguese eclectic style type, the overall architectural color is the common beige of southern European architecture, and the decorative features of its architectural components include arched ticket windows, square windows and Gothic pointed ticket windows, with Corinthian columns, this building has two distinct elements of the era.

4.2 Portuguese settlement culture

According to historical records, the Portuguese colonized Brazil, the African coast and India in Latin America before coming to Macau, which contributed to the background of cultural integration, and the penetration of these cultures can also be traced in the decorative patterns of modern residential buildings

in Macao.

In the Mandarin's House, you can find the decorative window technique from India, that is, decorating it with shell flakes; Perforated wooden ceilings similar to Latin American technology can be found in Chinese-style houses. In the Chinese residential architecture of Macao, some fruit patterns are used to decorate, such as pomegranates, apples, etc., Jesuit historian P. Benjam Antonio Videria Pires in his famous book "The Same Way - The book "Cultural Integration of Macao" talks about the various crops imported into Macao by the Portuguese: "The Portuguese introduced new varieties of food to China, and we provided Chinese with varieties such as corn, peanuts... Pomegranates, pineapples... To the above items should also be added apples, osmanthus ... Grapes (produced only in the central and northern provinces of China)... Some items we brought from the Americas and Africa"^[5]. It can be seen that the culture of the Portuguese colonial area is inextricably linked to the pattern of the decorative patterns of modern residential buildings in Macao.

4.3 Late Qing Dynasty culture

In the late Qing Dynasty, there has been a new architectural image that combines some Western and Western styles, and there are a large number of Chinese-style partitions in the two Chinese-style mansions of the Mandarin's House and the Lou kau Mansion, whose hanging style and pattern are similar to those of the Qing Dynasty, and the construction of the Lou kau Mansion is based on the Xiguan Mansion, so it is also mixed with the characteristics of architectural decoration in the late Qing Dynasty^[6].

4.4 Lingnan culture

Among the main examples of Lingnan culture are the two Chinese-style Lingnan buildings of Mandarin's House and Lou kau Mansion, which were built in the 8th year of Tongzhi of the Qing Dynasty and the 15th year of Guangxu of the Qing Dynasty respectively. The octagonal gold pan Lingnan craft oyster shell window is the common feature in the decoration of the two large houses, the decoration of the Mandarin's House Bo style belt is quite similar to the decorative form of the Canton area, and the ceramic window flowers are also similar to the style in the architecture of the Guangfu area, although the gray plastic window frieze reflects Western production techniques, but there are also traces in the Canton area, and the form of the door official is also similar. The construction of the Lou kau Mansion replicates the architectural layout and decorative layout of the Xiguan Mansion, which is a traditional house with Lingnan characteristics. Macao belongs to the Lingnan region in terms of geographical location, and a large number of immigrants from Guangdong and other Lingnan regions have come to Macao, which further consolidates the Lingnan characteristics of Macao's urban architecture.

5. The particularity of the decorative patterns of modern residential buildings in Macau

In view of the special geographical location and historical background of Macao, when selecting and studying architectural samples, it is laid down that the particularity of the pattern in this study cannot be studied from a single perspective of the building itself, but must be linked with the main body of the building to find the particularity of the decorative pattern of modern residential buildings in Macao^[7]. The peculiarities of their patterns are summarized in chronological order as follows:

5.1 Simplified single period of modern residential architectural patterns in Macao (1846-1868)

At this time, Macao's urban architecture was characterized by a simple eclectic fusion of Portuguese elements, without the complex design of various Western-style classical buildings in the early Qing Dynasty. For example, the building of the Governor's Palace (now the Office Building of the Chief Executive of Macau), built in 1849, only simplified ancient architectural capitals and simple Iberis moldings. This is the efficiency pursued by modern cities^[8]. The delicate components and luxurious decoration of Western-style classical architecture in the early Qing Dynasty have been replaced by the emerging generation of foreign Portuguese eclectic architecture.

5.2 Macao's modern residential architecture pattern during the period of integration of East and West (1869-1916)

During this period, Macao's architectural patterns were a fusion of East and West, with Lingnan garden style, Suzhou and Hangzhou gardening characteristics, and Chinese and Portuguese style stone

roads appearing simultaneously in the paving pattern. This period is not only a fusion of Chinese and Western cultures, but also a fusion with the Indian Goan style. At this time, Macao's modern residential buildings were rich in patterns and colors, and the production techniques were diverse and the materials of the patterns were also quite rich.

5.3 Macao's Modern Residential Architecture Pattern Classical Eclectic Period (1917-1935)

The architectural patterns of Macao during this period accepted the architectural styles popular in Europe at that time, and the Arabic decorations presented by its decorative patterns also showed that Macao not only accepted the fashionable architectural styles of some European parts, but also the neo-Muslim style and the Iberian style. Macao added a large number of unique Iberian elements to the use of eclectic style, resulting in the unique Portuguese eclectic architecture of Macao.

6. Conclusion

From the perspective of architectural patterns, Macao throughout the modern period, from the coexistence of continental style and Lingnan style, to the coexistence of Portuguese eclecticism and Lingnan style plus Chinese and Western styles, and finally to the coexistence of neoclassical style and eclectic style. The architecture of each period has changed according to its own time stage, due to its geographical location and human environment. As the first city in China to come into contact with Western civilization, after more than four centuries of historical evolution and the fusion of Eastern and Western cultures, Macao has created its rich cultural heritage and precipitated its precious cultural resources, so that Macao, which lives alone, interprets the essence of Eastern and Western cultures in the times. The social connotation of Macao's modern development has laid the foundation for the particularity of the decorative pattern of modern residential buildings in Macao, and the particularity is of great significance to the promotion and development of the humanistic tone of urban architecture as a regional label. The study of residential architectural patterns is not limited to architecture-related design, but also has certain design help in other design fields. The inheritance and innovative application of decorative patterns can allow designers in various fields to reflect their culture and innovation in their designs.

Acknowledgement

Funding: This study was supported by: 1) The Science and Technology Development Fund of the Macao Special Administrative Region (0036/2022/A); 2) Guangdong Provincial Philosophy and Social Science Planning Lingnan Culture Project 2022, (Project No: GD22LN11); 3) The Key Lab of Subtropical Building Science, South China University Of Technology, Project No: 2022ZD01, 2022ZD06, 2022ZD07, Topics of visiting scholars; 4) Guangdong Normal University of Technology, the project of improving the scientific research ability of the construction unit of the doctoral program, project number: 22GPNUZDJS59; 22GPNUZDJS58

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