Research on the aesthetic characteristics of Hainan archway—Take Haikou Zhongshan Road as an example

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Abstract: Hainan arcade contains rich historical and cultural connotations, which constitute the unique architectural culture of Hainan region. It is not only the product of historical development, but also the carrier of modern Nanyang culture blending in Hainan Island. From the perspective of aesthetics, this paper discusses the aesthetic expression and artistic value of Hainan arcade building from the aspects of the relationship between Hainan arcade building and blocks, architectural style and decorative materials.

Keywords: Hainan Arcade; Block; Architectural style; Materials; Aesthetic characteristics

1. The historical origin and evolution of the arcade in Hainan

After its initial formation in India, the architectural form of arcade building was introduced into the Malay Peninsula with the expansion of western colonization. Taking the Malay Peninsula as a node, it spread to Guangzhou, Hainan Island and Taiwan along the Pacific coast through maritime trade, immigration and three coastal routes.^[1]

Located in the southernmost part of China, Hainan Island is close to Vietnam, Thailand, Singapore and India. It has direct commercial contacts since ancient times. The overall style of its buildings is obviously influenced by the culture around these places. From some tropical building, you can find that the top of the façade used the lime carving pattern of Chinese characters. Hainan Arcade are widely distributed throughout the island, mainly concentrated in Haikou, Wenchang, Sanya area. In addition to the construction in the age, scale, shape of small differences, the similarity is very high.

The formation and beginning to take shape of the Arcade in Hainan has a direct relationship with overseas Chinese from Hainan. During the period of National Government, in order to improve the municipal planning, the government invited many patriotic overseas Chinese to return to their hometown and construct the buildings. The overseas Chinese had solved the problem of funds, and brought advanced technologies and materials to Hainan. The overseas Chinese from Hainan became the most powerful element for the generation and development of arcade buildings. Today, the Hainan Provincial government pays a lots attention to the project about protection and utilization of the arcade buildings and the historic district. Some arcade buildings had been repaired and the pedestrian street with arcade style had been developed. ^[2] In addition, Professor Chang Qing from Tongji University was invited to participate in the renovation of the Arcade buildings on Zhongshan Road in Haikou, which obtained good social response and promoted the academic research on the Arcade buildings in Hainan.

2. Literature review

German philosopher Johann Gottlieb Fichte put forward the concept of Aesthetic for the first time in the 18th century, called it "sensibility". It is a subject to study the aesthetic relationship between human and the world, is a philosophy of art. Its research object is art, but also all aesthetic experience and psychology.

G. W.F.Ege classified the characteristics of beauty into three categories in Aesthetics: First, beauty is the perceptual presentation of ideas, which explains all beautiful things with sensibility, which is different from rational methods. Second, the idea is hierarchical, art is the highest level of sensibility. Architecture

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and painting are one of the seven categories of art, which have the universal laws of aesthetics. Among the various categories of art, architecture is a symbolic form, representing one of the beauties of the universe.

China has a vast territory and a long history. Different cultures have shaped the architectural forms with distinct characteristics. Each kind of architecture is a representative of the local culture, reflecting the local living habits and customs in varying degrees. He Haifeng believes that the significance of the historical buildings to researchers is not only the superficial style in architecture, but also the worthy of the historical background and aesthetic value behind their architectural forms.

Japanese architect Yoshinobu Ashihara ever said in the Aesthetics of Street, compare the city with it's environment, the people general only get a structured city because the city has a higher density. To the "background" ,the city would have the feature of "graphics". There is the same relationship between streets and buildings.^[3]

In Hainan, Haikou Arcade Street is the best place where arcade buildings developed.^[4] After a hundred years of vicissitudes, Haikou Arcade contains extremely rich social and historical value. Zhang Kaili believes that the old street of Haikou Arcade is not only the blocks with rich life flavor of the original residents, but also the largest arcade building complex in terms of size and area.^[5] The culture of commercial and traditional mixed here, including the Nanyang culture and the sea culture. The art effected from several culture gives them unique charm no matter in the day or at night.

In Ren Ruijia's view, the beauty of Hainan arcade lies in contrast: the facade of the building is generally white, which make the building fresh and refined, simple and natural. Under the shining sun, this coexist successfully with the natural scenery of sky and sea, which conveys open and hospitable culture. Although the colors in the carved patterns are simple, the architectural components in the Haikou Arcade are extremely exquisite, which have high artistic and cultural value.

3. The aesthetic characteristics of the arcade in Hainan

The arcade's aesthetics lies in order, visual effects and architectural composition, forming a beautiful city image. [6]

The aesthetic characteristics of the arcade in Hainan are mainly reflected in the relationship between the building and the block, the facade of the building, the decorative materials and so on.

3.1 The aesthetic relationship between arcade building and block

Walking along Haikou Zhongshan Road Pedestrian Street, the arcade on both sides contain Hainan's unique smell of local life inside and outside, permeating with natural, simple, cordial and full of vitality. The atmosphere is pleasant in terms of spatial scale, sequence, level and node.^[7]

Standing in the arcade street district, at a glance, the architectural outline of the arcade is divided into horizontal line and vertical line. The horizontal lines winding and undulating; The clear and rhythmic vertical lines like rain hitting plantain. The two complement each other like Chinese ink painting scrolls, forming a unique image of the city, which are rich in visual geometry aesthetics.

3.1.1 The beauty of street scale

The pleasant dimension of a streets mainly based on the people-oriented, the sensory experience and the convenience of action. Figure 1 shows the scale of the old town built during the Renaissance. When the ratio between the height of the facade and the width of the street would close to 1, the feeling is pleasant. If it is less than that, people will feel a little bit empty; on the contrary, if it is more than that, people will feel the buildings on both sides of the street are depressed. [8]

We take a street section of Zhongshan Road in Haikou City as an example (Figure 2). After surveying and mapping, it is found that the street width is 12 meters, and the height of buildings on both sides is close to this size, which indicates that pedestrians will have a more comfortable feeling. ^[9] It is easy to watch the exquisite architectural decoration above the second floor from a distance, and it is also easy to be attracted by shops at such close range.



Figure 1 Street of Zhongshan Road

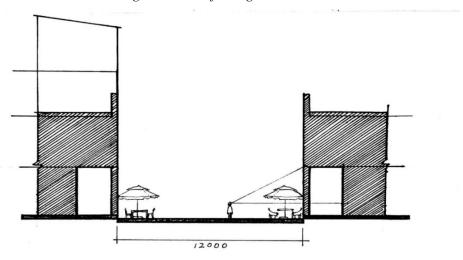


Figure 2 Street profile of Zhongshan Road

3.1.2 The beauty of sequence and nodes in space

The sequence of space plays a decisive role in the expression of architectural space image. Sequence space can give architecture clear direction from time and space, so as to strengthen people's recognition and good feeling of architecture. Zhongshan Pedestrian Street mainly presents the spatial sequence through the longitudinal level parallel to the Haidian River. Its good spatial sequence makes it a unique architectural product of beauty(Figure 3).



Figure 3 Plan of Zhongshan Road

On the longitudinal axis of Zhongshan Road Pedestrian Street, there are four transverse roads. The vertical and horizontal road intersections naturally form block rest nodes, forming a spatial sequence composed of lines and nodes, like musical melodies. The continuous colonnade on the ground floor has a strong sense of rhythm, forming a dynamic balance and giving people a clear sense of guidance when walking inside.

The square at the intersection of the road, as well as some specific markers, leads the space, provides shade and rest for pedestrians, and makes people stop and watch(Figure 4). The horizontal branch axis is mainly linear, which is close to vertical, forming the spatial sequence of auxiliary extension, which increases the richness and interest of the spatial sequence.

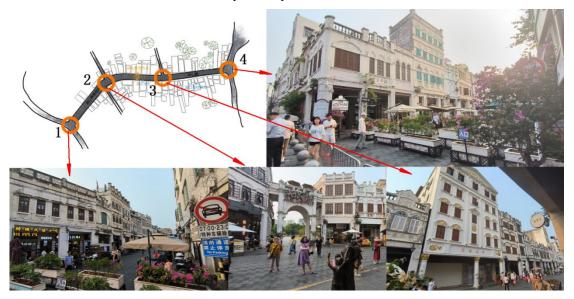


Figure 4 The view from Zhongshan Road nodes

3.1.3 The beauty of the arcade's wall

In traditional Chinese architectural culture, the wall is a kind of real separation, and there is little connection between internal and external space. However, in the spatial relationship between the arcade building group and the street, there are both physical walls and virtual colonnades.^[10] The columns outside the arcade are not only a recessive wall, but also an open space, with public functions such as communication, business, shade and rain shelter. The relationship between outside walls and inside walls becomes blurred and interesting.^[11] Form a rich aesthetic space.

3.1.4 The beauty of the outline of the arcade

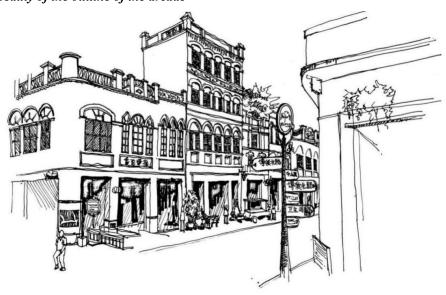


Figure 5 The view from No. 1 node

There are the first contour line and the second contour line in the relationship between the arcade building and the street.^[12] The first outline refers to the original appearance of the building, while the second outline refers to the protruding part of the outer wall of the building or the addition of temporary construction members, such as commercial billboards (Figure 5).

Compared with Xiamen Arcade building and Guangzhou arcade building, the first contour line of Hainan arcade building is relatively obvious.^[13] This shows that the ancient Hainan people is relatively conservative in business. Even in the most prosperous Zhongshan Road in Hainan, the arcade buildings here are mostly used for both commercial and residential purposes. For publicity purposes, the merchants will integrate the advertisement design into the facade, such as making billboards on the pillars of the first floor of the arcade building or carving characters on the top of the first floor, rarely damaging the appearance. The overall outline of the arcade building is still very clear. The upper part of the arcade outline is varied and rich, while the lower part of the colonnade shows the square structure in a unified and neat way, giving people a top-heavy visual impact. This kind of street landscape makes the people standing in the middle of the road have a kind of special psychological feelings towards the center, ²which strengthens the beauty of the arcade.^[14]

3.1.5 The beauty of place memory

Many Hainanese have arcade buildings in their childhood memories(Figure 6). The arcade building is compact, with connected corridors outside and closed lighting patios inside. People become close in this small space of illusory boundary, and can clearly perceive the smoke of the next house or the cries of neighbor's children.

Secondly, the arcade block is winding, with many branches and corners, which is convenient to form the place memory.

Moreover, standing under the corridor bridge and gazing at the arcade building on the opposite street, it has the centripetal force of framing, forming the shadow corner space in the building(Figure 7). The corridor is accessible from side to side, which is closed but not completely closed, giving people a comfortable and intimate feeling of being protected.

Finally, the street height and width of the arcade building in Hainan are constructed according to the proportion relationship between the street and the building in the western Renaissance period. It is not as tall and majestic as the skyscrapers of modern cities, but adopts the street building scale suitable for Hainan. It is precisely this appropriate street and building scale that is effectively integrated into the life content of Hainan people and becomes the material and emotional object that can be perceived and controlled in the memory of local residents.



Figure 6 The view from No. 2 node



Figure 7 The view from No. 4 node

3.2 The beauty of the form of the building's facade

The facade of the arcade complies with the three-stage principle of western medieval architectural aesthetics. Three horizontal, five vertical or more. It's a very classic aesthetic model(Figure 8).



Figure 8 Facade of street intersection where Guoxing Library

Hainan Arcade building has a unique roof shape and arched doorway, with an external colonnade, the whole building presents a beautiful curvilinear beauty. The appearance of the pillars is simple. Compared with the columns, they do not have too much decoration, highlighting the concave display of the storefront plaques along the street.

Above the second floor, decorations are strong, there are special emphasis on the window part. The Windows have different forms, such as square, round, round arch, Gothic arch, etc., and installed layers of progressive window covers, full of meaning auspicious window decoration. The glass of the window is made of many small pieces of colored glass spliced into exquisite patterns. The sunlight reflects colorful light through the glass, which is full of fun.

"Parapet wall" and "Beauty chair" are the most wonderful parts of Hainan Arcade building. The parapet is the delicate, half-man-high low wall on the front of the arcade roof facing the street. Typhoons often pass through Hainan. In order to adapt to the typhoon-prone climate, locals raised the height of the "parapet walls" and punched round holes in the walls to reduce wind resistance.

In ancient times, women can not go out easilly, generally can only watch in the second floor, so the second floor balcony armrest on the long chair is nicknamed "beauty chair". Most of the materials are made of Hainan local timber or reinforced concrete.

The arcade building at the intersection takes advantage of two spans at the corner, which has a landmark effect (such as Guoxing Bookstore, etc., see Figure 8). The collision between western architecture and local style produces the facade form of arcade building with Hainan regional characteristics.^[15]

3.3 The beauty of architectural decoration materials

In Hainan arcade building, the plan was always narrow and deep, and the lighting in the middle part is weak. The glass tiles are often used for sunlight and ventilation. Sometimes, atrium is in the middle of the building to get the same arm. Hainan arcade buildings have various styles in facade. Load-bearing walls are mostly large-sized brick thick walls, the wall base is built of stone, and the internal partition wall is thinner brick wall or plate wall. The ground was mostly paved. The ground floor was the tile or the wood; The roof was flat. The wood pattern is magnificent. Lime carving for building painted by mineral color.

Concrete columns and beams are used in Hainan arcade usually. Some balconies were made by concrete for the floor too. and the same as the door beam column. On the top of the building and the entrance, the traditional lime carving was very striking.

The decoration can be found that mixed with traditional Chinese style, Rococo and Baroque. The collection of various architectural styles, elements and building materials forms the unique style for the Hainan arcade. [16]

Focus on color collocation and coordination, the whole building has a strong visual affection. Compared to the Xiamen arcade, and Guangdong arcade, the color of Hainan arcade is light, milky white, light yellow are the common paint they were used. But the window frame was often coffee-colored wood. It makes them graceful and elegant.

4. Conclusion

To sum up, the arcade buildings in Hainan have certain historical memory and is rich in cultural heritage. As one of the unique cultural landscapes in Hainan Island, it has very significant historical and cultural value. The planning and façade of the arcade building in Hainan followed some certain order, which make a sense with symmetry and unity. The materials that used in the arcade buildings are exquisite, such as local high-quality wood, stone and lime carving painted with natural minerals. Different material has its own characteristics, that makes the buildings more colorful. The interior of the arcade buildings is user-friendly. All the details such as furniture, hanging pictures, lamps and lanterns taken into consideration, composed a whole part which makes people can get comfort and beauty. The architectural appearance of the arcade is very gorgeous and exquisite.

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References

- [1] WANG Mo. Research and Analysis on Visual Art of Arcade Building in Haikou, Hainan [J]. Research on Fine Arts Education, 2015(13):174-175.
- [2] Yu Mengxuan, Wu Yuting. A Preliminary study on Aesthetics of the Walking Street on Zhongshan Road in Xiamen [J]. Southern Architecture, 2011(02):77-79.
- [3] Zhao Shuwang. Preliminary Study on Street Aesthetics of Arcade Buildings in Xiamen [J]. Hundreds of Art, 2011, 27(S2): 58-60.
- [4] Fan Mingchen. People · Wind -- A New Look of the Arcade in Hainan [J]. China Publishing,

2020(23):76.

- [5] Tian Yu. Development and application of architectural art teaching resources in middle school art teaching in Haikou Arcade Street [D]. Hainan Normal University, 2019.
- [6] Wang Mo. Architecture of Arcade in Hainan [J]. Art Science and Technology, 2017, 30(09):2.
- [7] Zhou Hao. Development and Application of Arcade Building Architecture Art in Middle School Art School-based curriculum [D]. Hainan Normal University, 2017.
- [8] Wu Xiaoliang, Liang Yunyun. A comparative analysis of the Residential area of Arcade in Hainan and the Ancient Residential Area in Shanxi from the perspective of Tourism culture: A case study of the Old Street of Arcade in Haikou and the Royal Courtyard in Jinzhong [J]. Tourism Survey (Second half),2017(06):290-291.
- [9] Ren Ruijia, Peng Haoyang, Li Youwei. Analysis on Architectural Features of ancient Arcade in Hainan [J]. Jiangxi Building Materials, 2016(13):34-35.
- [10] Ren Rui-jia, Liu Yu, Ye Mian-yuan, GUO Ruo-nan. Hainan arcade buildings components decorative art [J]. Value engineering, 2015 (31): 256-258. The DOI: 10.14018/j.carol carroll nki cn13-1085/n. 2015.31.103.
- [11] He Haifeng. Aesthetic Value of Xiamen Arcade Building from the Perspective of Eclecticism [J]. Art Science and Technology, 2019, 32(01):223-224.
- [12] Zheng Wei. Reflection on tourism development value of Arcade in Hainan [J]. Drama Home, 2015(12):257-258.
- [13] Han Minshu. "go into the hainan arcade comprehensive practice curriculum research report [J]. Journal of education practice and research, (B), 2015 (01): 10-12. DOI: 10.14160/j.carol carroll nki. 13-1259/g4-b. 2015.01.005.
- [14] Chen Jing, Wang Fang. Inheritance and Translation of the Development of contemporary Arcade in Hainan [J]. Architecture and Culture, 2015(01):144-146.
- [15] Hou Baizhen, LIU Lili, LI Minquan. Arcade in Hainan [J]. Urban Housing, 2014(12):87.
- [16] Wang Shoubin, Shi Zhenqing. Analysis on the protection and development of the Arcade Street in Hainan [J]. Tourism Overview (Second half), 2013(24):154.