

Study Characteristics of Interior Environment from Chinese Yangtze River Southern Traditional Residential House

-- Study Subject Wuxi Huishan Ancient Town

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Abstract

Huishan ancient town in City Wuxi had been carefully preserved; it consisted from numerous ancestral halls, temples and Taoist temples, as well as elegant residential houses, theatres and shops. Its interior environment has the typical characteristics of traditional residential houses in the south area of the Yangtze River. Taking some buildings in Huishan ancient town in Wuxi as an example, this paper illustrated the characteristics of its interior environment from six aspects: the interconnection between interior setup and external space, the flexibility and diversity of indoor and outdoor space, the richness and diversity of indoor furnishings, the decorative effect of indoor construction, the symbolic significance of indoor patterns and the ethics of indoor layout.

Keywords

Huishan Ancient Town; Indoor Environment; Ancestral Temple; Pattern.

1. Introduction

In the thousand-year history of civilization, the relationship between people and residence is up to close. From the ancient times, there was a record of the man named YouChao, the people are few but the animals are numerous, and the people are invincible to animals, insects and snakes. There are saints, who build nests out of trees to avoid Animal from , therefore people are grateful and endorse who as Emperor , so that the Emperors is called the YouChao [1]. The Youchao was respected as a leader by ancient Chinese because they helped people build homes. In the evolution of residence among thousand year, architecture and indoor environment have also experienced different development stages and unique historical and regional appearance. Taking buildings in Huishan ancient town in Wuxi as an example, this paper illustrated the indoor environmental characteristics of Chinese traditional residential house in the south area of the Yangtze River.

Xihui ancient town is located in the west of Wuxi city and at the northeast slope of Xihui and Huihui hill, only 2.5 kilometers away from city downtown, The Grand canal close to its North. It is characterized by its unique geographical location, beautiful natural environment, and dense distribution of ancient ancestral halls, It is the only block with well-preserved style and features of Wuxi street[2]. The residential buildings here are scattered and have a Thousand years history. There are ancestral halls, temples, Taoist temples, elegant houses, and lshops. The main feature of the building here is the single wooden eaves and the powdered tile structure. These buildings flourished in the Ming and Qing Dynasties and are still intact and show the characteristics of Ancient Chinese residential houses.

2. Indoor and Outdoor Spaces Interconnection

2.1. Interworking and Interaction

The houses in Huishan ancient town often show the interoperability of internal and external space. Take the room of prime minister Lu ancestral hall in Huishan ancient town as an example (see the figure below). Its hall directly faces the courtyard and uses the gate to separate the front hall from the front yard and backyard. Open the door to bring in the natural lighting of the yard, and the indoor ventilation is smooth, so that the indoor and outdoor space is unified, and the front and rear courtyards become the continuation of the indoor space.



Figure 1. Indoor of Prime minister Lu ancestral hall in Huishan ancient town



Figure 2. Indoor design of Prime minister Lu temple in Huishan ancient town

2.2. Space Transition

The houses in Huishan ancient town are often equipped with corridors, pools, walkways and Scenery platforms, which strengthen the interaction of internal and external space and make the space too natural. The following picture shows the backyard of Gu Kejiu temple, which is connected with the indoor corridor and a small view of the pool, which makes the space naturally over connected and has the style of Jiangnan garden.



Figure 3. Backyard of Gu Kejiu ancestral hall

2.3. Borrow Scenery

Borrowing scenery is an important way of taking scenery in Chinese gardens. In gardening, it refers to borrowing the scenery outside the garden or making the scenic spots in the garden set off each other and connect into one. "Its methods include: far borrowing, near borrowing, looking up borrowing, looking down, etc[3]. In the buildings of Huishan ancient town, the exterior landscape should be the continuation of the interior scene as far as possible through doors and windows, so that the beautiful landscape can be borrowed into the interior.



Figure 4. Lamination Pavilion



Figure 5. Round window

As you can see from the above figure, there are round doors at the front and back of the lamination Pavilion, and hexagonal windows on the left and right walls, so you can enjoy the scenery around the pavilion. The houses in Huishan ancient town make full use of the landscape borrowing techniques of Jiangnan gardens. Open doors and windows of different shapes can be seen everywhere, Created a clever landscape borrowing.

3. Flexibility and Diverse Indoor and Outdoor Space

Most of the houses and building in Huishan ancient town are wooden structure, with columns and beams as load-bearing components, and the walls only play a role of enclosure, making their layout flexible and diverse. It is the flexible internal space processing that makes it meet the needs of different functions.

In 1950s, after changing the indoor furnishings, the HuCili towe was changed into a tea room, leaving only a few old houses of Yangzhi hall. In modern times, it was used for living.

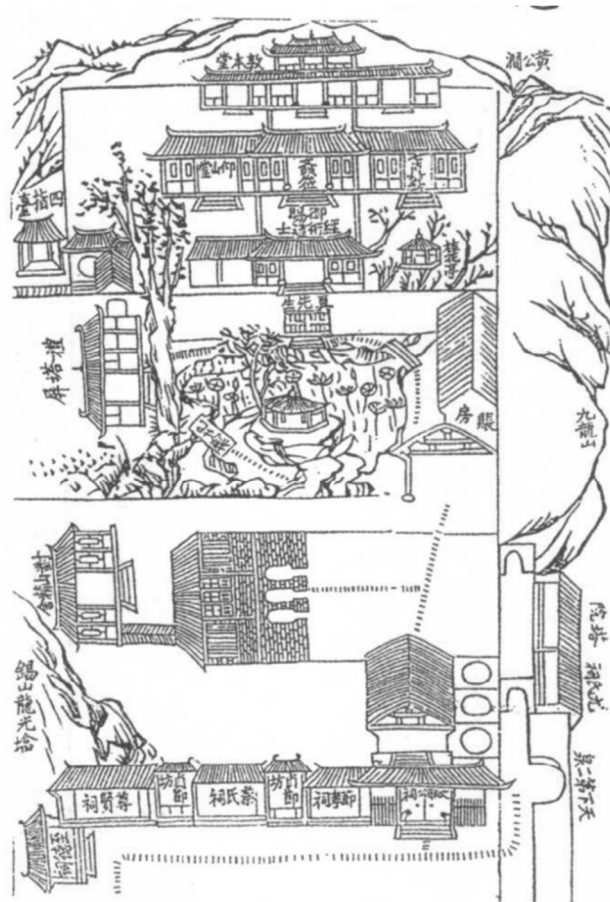


Figure 6. Layout of Hu Wenzhao ancestral hall

The interior layout of houses in Huishan ancient town is also very flexible. There are all kinds of partition fans, screens, furniture, curtains, etc. in addition to decorative functions; they also play the role of space division.

4. Richness and Diversity of Interior Furnishings

The interior of house in the ancient town is generally gray floor tiles and gray white walls. There are few decorations, but the interior furnishings are relatively rich .Many indoor scenes in the ancient town seem to have been restored today, and they have been restored according to the ancient craftsmanship as much as possible. At present, there is still a variety of furniture, painting, calligraphy, sculpture, decorations, handicrafts and so on. The following figure shows the WoYun hall. It can be seen that in addition to furniture, there are calligraphy, traditional Chinese painting and stone carving as decoration. Calligraphy and traditional Chinese painting are China's unique art categories, which highlight as national characteristics.

Huishan ancient town is also the birthplace of Huishan clay figurines, a folk handicraft. Its skills have been handed down for more than 400 years. In its heyday, there were more than 40 shops, and because of its charming appearance and auspicious meaning, it often appeared in the houses herein addition, purple clay pot, a characteristic handicraft of Yixing, Jiangsu Province, often appears in the indoor furnishings of Huishan ancient town. Purple sand originated in Yixing, Wuxi. It has both use substantial usage and decorative effect. Purple clay teapots have simple colors and various shapes. Because of their high artistic value, they are sought after and

loved by scholars, bureaucrats .They are often used for interior decoration. These handicrafts have become indoor decorative, highlighting regional characteristics and local customs.

There are many ancestral halls in Huishan ancient town. The local government encourages and develops the collection business. In these ancestral halls, there are hundreds of museums, hundreds of surname genealogies, celebrity exhibition galleries and other wide, diverse and large cultural, leisure and sightseeing spaces. This enriches the indoor display of the ancestral hall.

Some exhibits are listed below.

Folk crafts: carving, huishancai painted clay figurines, Buddhist statues, copper, stone, wood, red sandalwood, ivory, wood carvings, etc;

Stamp, securities and coins: sparks, cigarette labels, lottery tickets, door rolls, ticket coins, coins, postal products, etc ;

Calligraphy and painting art: paper cutting, couplets, old photos, maps, founding number, newspapers, ancient books, rubbings, etc;

Four treasures of study: pen, ink, etc ;

Rare stone and shell Collections: Yuhua stone, marble, etc ;

Other categories: camera, snuff bottle, ashtray, lamps, etc.



Figure 7. WoYun Hall



Figure 8. Huishan clay figurine workshop

5. Interior Design and Decoration Effect

In the houses and building in Huishan ancient town, many indoor structures have been processed by art on the premise of meeting the function, to achieve the unity of function and art.

Most of the columns, beams, citron, Fang and other structures, which related to the roof in the houses in the ancient town are exposed and beautified, making them both functional and artistic. The following figure shows the ceiling of dunxu stage. The roof is not painted, but all wooden tenon and mortise structure, which is concave inward. It is octagonal caisson type, with exquisite technology and good decorative effect.



Figure 9. Ceiling of dunxu stage

Figure 10 below shows Dougong, also known as PAIKE. In terms of function, it can transfer the weight of the eaves to the load-bearing column through the connection of the bucket arch. After the artistic processing of the craftsmen, it has become a special decoration. The Dougong of Ligong temple is decorated with wood carvings, with patterns of lion Hydrangea Dougong, Taishi Shaoshi Dougong, dragon pattern, etc, all have special auspicious meanings. Lion Hydrangea is often used to ward off evil spirits. The lion in Buddhism is the king of all animals, which means auspicious. Taishi Shaoshi is a traditional allegorical pattern commonly used in Chinese traditional architecture. Its pattern is that a lion holds a young lion, or two lions, one big and one small, play with hydrangeas. In Buddhism, the lion also symbolizes the majesty of Buddhism. The lion is homonymous with the teacher, "which means that the official fortune is prosperous, and also includes high hopes for future generations [4]. The dragon pattern is the totem of the Chinese nation, and it also implies holy auspiciousness, auspiciousness and festivity. There are also beautiful stories and legends such as "hoping for a son to become a dragon" and "carp jumping over the dragon's gate".



Figure 10. No. 104 xiuzhang street, Huishan ancient town

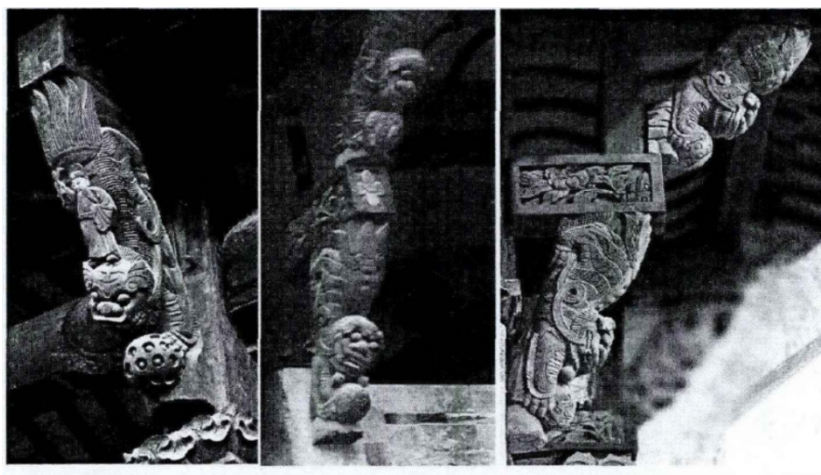


Figure 11. Lion Hydrangea arch in Ligong Temple

In addition to roof decoration, there are more decorative doors and windows. The partition door in Huishan town is usually carved with bas relief, with rich patterns and auspicious meanings. The lattice door is usually made of a whole piece of wood into a rectangular frame, with a ratio of 4:1 or 3:1. The frame is divided into three parts, Upper spacer plate, lower skirt plate and middle TaoHuan plate. Upper spacer plate, located in the visual center, is also the richest and most fascinating part of decoration. In order to keep out the wind, yarn or leather paper should be installed on the door partition window. If the pane is too large, the leather paper is vulnerable. Therefore, there are dense wooden lattices at the heart of the lattice doors in the ancestral hall. Usually, wooden mullions are used to form a grid, and the combination of lattice stripes can be varied. By the middle and late Qing Dynasty, glass gradually became popular, and the wooden lattice in the center of the lattice was gradually evacuated. The patterns composed of these wooden lattices have different meanings, which makes the decoration have connotation and charm.

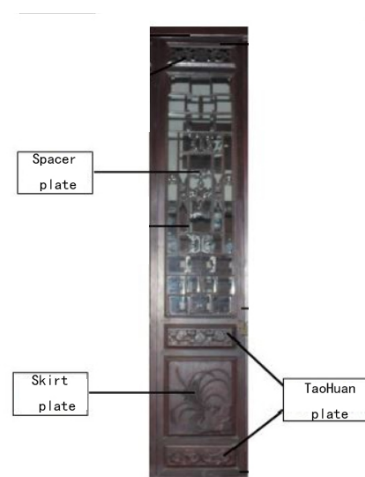
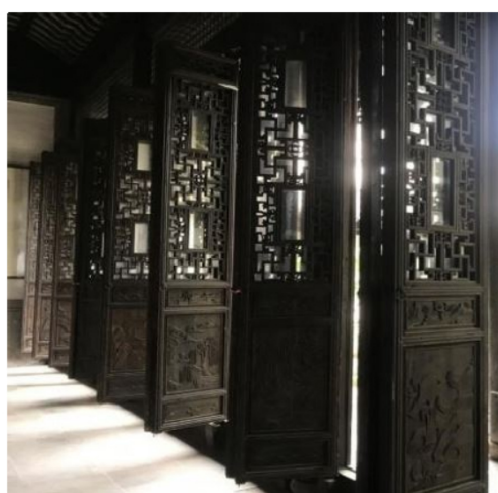


Figure 12. Partition door, No. 11, xiuzhang street, Huishan ancient town

6. Symbolic Meaning of Interior Pattern

Abstract auspicious patterns are often used in architecture and interior decoration in traditional Chinese architecture, "It is to express abstract emotions with intuitive images, so as to achieve the purpose of expressing aspirations, relying on things and feeling things[5].

Decorative patterns with symbolic significance can be seen everywhere in the interior decoration of houses in Huishan ancient town.

First, let us take a look at the decorative patterns on the doors and windows of the houses in Huishan ancient town. They not only have the function of daylighting and ventilation, but also have intensive decorative patterns, including text patterns, flower patterns, character stories, ancient treasures, geometric patterns, etc.

The characters and patterns are straightforward and generous. They are often repeatedly arranged and combined into various flowers and characters with simple lines. The combination of lines and surfaces has a strong sense of rhythm, giving people a sense of beauty and full of moral meaning. The typical is ice crack, which is often used in doors and windows. The ice crack is formed by many herringbone permutations and combinations. The pattern looks like the ice has just been broken open, indicating that the earth returns to spring, everything recovers and ice and snow melts. It indicates that all unpleasant things are about to pass, good wishes will be realized, and a vibrant scene will appear soon. Students generally use the ice crack on the window, which indicates that Rome was not built in a day. It reminds readers to study hard in the harsh environment then eventually break through the ice and make achievements.



Figure 13. Ice crack on the gate of shanghetang



Figure 14. Checkered pattern of alley in ancient town

In addition to the above geometric patterns, there are watering well shaped patterns and \perp -shaped patterns, which correspond to the constellation in the sky known by the ancients as the first well-known star in the south of the twenty-eight stars, symbolizing auspiciousness. \perp -shaped pattern is a beautiful implication and symbol of delicacy, beauty and rules. Geometric patterns are the most common. For example, the checkered pattern is also known as the network pattern. The net is the fishing tool of the primitive ancestors, symbolizing the recruitment of wealth and treasure. The "fish" is homonymous with "Yu", so the net also has the meaning of surplus. The squares of the grid pattern represent the meaning of integrity everywhere. Therefore, as a common pattern on the center of the door and window grid, the grid pattern indicates that the owner is rich but honest.

Flower patterns include Begonia and miscellaneous flowers. The style of Begonia flower is a symbol of gorgeous color. The crabapple style lattice flower pattern is quiet and elegant, with unique style. It not only implied the beauty inside beauty, but also symbolizes the fruitful autumn harvest. It is also an integral part of the four kinds of flowers implying "the wealth of Yutang[6].

Figure story patterns often appear in Huishan ancient town, such as the delicate and beautiful landscape figure paintings on the gate of Huishan cross street, It shows scenes such as high playing broad theory, playing the piano, playing chess. The composition of the work is full and the characters are vivid, which reflects the humanistic style of WuXi. These patterns all record the life scenes at that time. The content of the story can often teach future generations to inherit culture and remember etiquette.



Figure 15. landscape figure painting on the gate of Huishan Cross Street

There are also animal patterns, which also appear in doors and windows. Bat patterns are common. In the ancient town, the wooden door of Lord Ma ancestral hall is carved with bat patterns. Bats imply that there are blessings everywhere, and reflect the master's charity and accumulated virtue, hoping that all blessings will come.

Secondly, various patterns with both decorative and profound implications can be seen everywhere on the reliefs (stone carvings) on the outer walls of houses, tiles and the column foundations in the interior. As shown in the figure below, the outer wall of "Scholar from Song Dynasty" is carved with clusters of grapes under the gatehouse, implying that children and grandchildren are full and blessed. In addition, Magnolia and Begonia patterns often appear on the relief on the outer wall of houses, indicating wealth and auspiciousness and symbolizing the social status of the owner of the house.



Figure 16. The outer wall gatehouse of Scholar from Song Dynasty

7. Ethics Concept on Interior Layout

There are a large number of ancestral hall buildings in Huishan ancient town. The ancestral hall is the place for the ancestors of clan priests. At the same time, it has the functions of collecting genealogies, setting up private schools, preaching principles and laws, and discussing law. The architectural space pattern of the ancestral hall conforms to the ritual system, "Since ancient times, these rituals have been guided by ethics, and there are fixed paradigms. Therefore, the internal space of the ancestral temple has very little change. It is mainly the central main sacrificial space, maintaining the stylized spatial layout due to the needs of sacrificial function[7].

The imperial court of the Ming Dynasty had a clear hierarchy. The official family temple had three entrances, the first into three rooms, the second into five rooms, the third into three rooms, and a gate. The regulation of the ordinary people's ancestral hall is relatively simple. There are three ancestral halls, with the middle gate outside. There are two steps outside the middle door, both of which are three levels. The East is called the east stage, and the west is called the west stage. The lower steps are wide and narrow everywhere. They are covered with houses, so that they can be used by the family. It is also a suicide note, clothing, sacrificial utensil library and divine kitchen in the East. It is covered with Zhouyuan, which is not an outer door, and a plaque is often added. "At the same time, it is stipulated that officials above the third grade can build the ancestral hall into three rooms and nine shelves. Officials below the third grade have a slightly lower shape and are built into three rooms and five shelves. This is the legal shape of the imperial court. No matter how powerful and low-quality families are, they dare not exceed this legislation .

The ancestral halls in Huishan ancient town are elegant yet well organized, and the regulation is not high. Many of the existing ancestral halls are three halls, mostly with a north-south symmetrical central axis layout. Most of the ancestral halls have tall walls, doors, gatehouses, screen walls, main hall, veranda, Lobby and other rooms, and there are wing rooms on both sides of the main hall. Gu Kejiu ancestral hall, Prime Minister Xue ancestral hall and Prime minister Lu ancestral hall are all arranged as this mode.

8. Conclusion

The interior environment of traditional houses in Huishan ancient town has the characteristics of Chinese traditional architecture, integrates the characteristics of Jiangnan gardens and reflects the local characteristics. It contains secular customs and ethics in the layout and decoration of buildings. The repair and protection of buildings in Huishan ancient town is the inheritance and protection of valuable material and materialized heritage. Together with

modern buildings with tall buildings, they have formed an era of beauty and harmony, which provides inspiration for the development of Chinese indoor environment.

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