The Protection And Significance Of Regional Characteristics Of Jinan Traditional Dwellings In Urban Renewal

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Abstract. Combining the preciseness of northern quadrangle courtyard with the smart beauty of southern dwellings, Jinan traditional dwellings have its own remarkable characteristics due to the unique geographical environment factors. With a long historical accumulation, Jinan dwellings contain a profound cultural heritage and spiritual connotations. Although people's awareness of protecting ancient residential buildings is gradually enhanced, it is easy to ignore the regional characteristics, which could lead to the phenomenon that our cities are becoming the same. Therefore, in the process of urban renewal, only by better protecting the regional characteristics of ancient architecture and excavating the artistic style and cultural connotation, can the traditional urban context be inherited, integrated and developed in modern architecture.

1. Characteristics of Jinan traditional dwellings

Jinan, the capital of Shandong Province and the birthplace of "Longshan Culture", has more than 2700 years of history. It is famous for locating in the south of "Jishui", one of the four ancient rivers. Due to its particular geographical location and structure, the old Jinan has formed a unique landscape "mountains, cities and lakes". Streams and lakes converged by numerous springs are interlaced with streets and alleys, running through the residential community in the old city. Jinan, a famous historical and cultural city, traditional dwellings are important materials and valuable resources to study regional culture and customs. The traditional dwellings in the old urban area belonging to typical Shandong dwellings have the style of northern quadrangle on the whole. They mostly adopt triad and the quadrangle shapes, which are rigorous and regular, respectable and orderly. However, the existence of spring, architectural layout, material, color, gate building and other local decorations of Jinan dwellings make it as beautiful and light as southern dwellings. The regional characteristics of Jinan traditional dwellings are mainly reflected in the following aspects.

1.1. Architectural layout

The layout of Jinan traditional dwellings in old urban area emphasizes adapting to local conditions and being in harmony with nature. Firstly, its layout characteristics are reflected in the organization of buildings and water systems. There are two main forms, one is that the courtyards are parallel to the spring on both sides and the streams are in the middle of roads; The second is that the buildings are distributed on both sides, streams and roads are in the middle, or houses are built by the water, such as Qifengqiao Street 8. What’s more, there are some springs directly blended into the dwellings, such as Yongquan Hutong No. 2 courtyard, Pingquan Hutong No. 3 courtyard. The integration of architecture and spring water has become an integral part of nature, which is one of the manifestations of Jinan dwellings in line with the regional environment. At the same time, because residential buildings and
1. streets are as flexible as the flow of spring water in the process of construction, treets and alleys are free to twist without straight crisscross, which makes the architectural layout very natural and breaks the regular and serious layout of traditional buildings in the north.

1.2. Material and color
The dwellings use local gray bricks and green board tiles. The upper part of the wall is built by caesious bricks and the bottom is a white stone base with a height of more than one meter. The roof is made of small blue tiles. Different materials are combined with each other harmoniously. The overall tone is elegant and simple, which also reflects the simple and peaceful customs of Jinan. The construction method with local materials makes Jinan dwellings more regional and conveys people's consciousness of saving resources and protecting the environment.

1.3. Decorative art and doorway
The exquisiteness and artistic style of Jinan dwelling is mainly showed through carvings and roof tiles. In addition to the traditional symbols of auspiciousness, there are also unique images such as lotus and lotus roots in Jinan, which perfectly reflects the characteristics of local culture. For example, the gate of Sun Family Mansion (No.21, Shuangzhongci Street) is exquisitely carved. The wooden sparrow braces are engraved vividly. A picture of knotted gourd and blooming lotus comes to our minds. On the top of the gable, there are two dragons playing with pearls. Flowers such as plums, orchids and peonies are carved on the architrave. The sparrows of No.6 residence of Xigongjie street are carved with flat peaches, symbolizing good fortune and longevity.

The gate house is one of the important signs reflecting the regional style of Jinan dwellings. The main ridge is the most characteristics model of the gate. It is different from that of the northern dwellings which has been relatively flat. The ridge throws beautiful curves along the ridge line to both ends, stretching like a swallow. This is similar to some ridges of southern dwellings, but something different. The roof ridge made of four layers of blue tiles can not only reduce its weight but also increase the height of the gate. Moreover, it makes the facade of the ridge multi-layered, virtual and solid. There are various kinds of tiles which symbolize auspiciousness and longevity. The unique form and materials of the ridge fully reflect people's innovative spirit and love for a better life.
2. Renewal of the old city in Jinan
The renewal of Jinan's old city is closely related to the development of our country. From early days of the nation to the 1990s, full-scale construction was under way and the city was rapidly built. People's awareness of protecting historical blocks was weak. Many ancient buildings and residential houses in the old city of Jinan were demolished. Since the 1990s, the real estate market has developed rapidly, and the old city with huge profit potential and development space has been favored by developers. In addition, according to the government's pursuit of GDP and indifference to the protection of historical districts, large-scale demolition and construction of the old city began with economic interests. High buildings rise straight from the ground resulting in many more serious damage to the ancient buildings in the name of protection. Old Jinan Jinpuku Railway Station, Wanzhuyuan South Courtyard, “The First Pool of Jiangbei”Mingxinchi, Dabanqiao and Xiaobanqiao which are the most representative residential alleys, and many other old buildings with Jinan characteristics were blindly demolished in the 1990s. The old city transformation has never stopped but the old city protection has never been effective. The status of Jinan's historical and cultural city is in jeopardy.

In recent years, with the economic development and the awareness of protecting ancient buildings, the styles and features of historic districts in old city have gradually received people's attention. The government is also committed to increasing the protection of ancient buildings in the historical districts renewal.

2.1. Qushuiting Street and Baihuazhou District
At present, the quality of the protection and renewal of Qushuiting Street and Baihuazhou District in the old city of Jinan is relatively high. Most of the existing traditional residential buildings in Qushuiting Street area have been well protected. The appearance of buildings with geographical elements is repaired with the principle of “repairing the old as old”. The ridges of the houses, the roof tiles and the gray bricks on the walls are all prepared. The damaged parts are repaired with the same or similar materials. People reconstruct the blocks based on the layout of the original buildings and the water systems, focusing on protecting the spring water resources in the streets, allocating public space and public service facilities to improve the living environment quality of the current residents. The Baihuazhou area is a pilot project for the protection and reconstruction of Mingfu City under the leadership of the government. The project plans the traditional dwellings and historical buildings in the area as a whole. Combing the historical resources of Jinan, it reconstructs the high value ancient buildings and typical Jinan courtyard, which protects and reappears the historical scenes of the old Jinan.

2.2. Quanlefang
Although the commercial operation of Quanlefang on the west side of Baihuazhou is not good, its architectural layout is indeed a successful case in urban renewal. Unlike many modern buildings in the old city, Quanlefang respects the local culture of Jinan and learns from the layout and relationship...
between Jinan traditional dwellings and springs. It forms a space-changing, twisted and inner street space through the serial connection of spring water. People are able to experience the fun of interacting with spring water from a variety of angles. The concept of fusing traditional residential elements in the old city with modernity makes the entire building and the traditional neighbourhood on the west side coexist harmoniously.

3. The loss of regional characteristics of Jinan traditional dwellings

In the old city renewal of Jinan, although the features of the traditional dwellings have increasingly been got attention and protection, there are still the problems of losing regional features and cultural connotations. If new antique buildings only have the appearances but lack regional characteristics, it can lead to the phenomenon that our cities are becoming the same. Then Jinan will also face the danger of losing its unique regional style.

3.1. The reconstruction of Kuanhouli

Before the reconstruction, the site of Kuanhouli was been called "Kuanhousuo Street", one of the four famous streets in the southern old city. The 400-meter old street is been called "The Museum Of Ancient Buildings", gathering the traditional quadrangle courtyard in the Qing Dynasty, the quadrangle courtyard in the republic of China period and the buildings with both Chinese and western styles after the opening of Jinan, carrying the history and memory of this old city. Nowadays, under the development of Shimao Group, only a very few ancient buildings such as Jin Courtyard are preserved. Most of the residential courtyards have been removed and updated for antique buildings. Then The Jinan Historical and Cultural City Protection Planning decided “The Kuanhousuo Street after transforming is no longer the protection object", it's truly a pity. Now the commercial here is prosperity and the antique architectures are similar to old ones but they lost the regional characteristics of the old Jinan. In terms of architectural layout, the scale and direction of the streets in Kuanhouli do not continue the texture of the old city, which is transformed into the same commercial pedestrian street that was in conformity with market law and consumer’s needs. At the same time, the new antique architectural combination lacks the sense of surrounding of Jinan ancient dwellings. In terms of the structure and materials, it adopts the modern reinforced concrete frame, and only pastes the facade with gray blue bricks, while the brick and wood structure on traditional residential buildings have disappeared. On the facade art, the color and decoration style lacks logic and order. The traditional Chinese style is mixed with the western style, and the exquisite carving culture of the ancient dwellings has not been inherited. The decorative patterns on the gable are simple and rough. In addition, the unique gate form of the old buildings no longer exists. In terms of the business structure, catering industry accounts for the largest proportion but cultural activities, museums and cultural products that can reflect the cultural characteristics and deposits of Jinan are almost nowhere to be seen, which makes Kuanhouli tangible but not spiritual.

Figure 5. Antique buildings losing regional features and cultural connotations in Kuanhouli

Figure 6. Antique buildings copied Huizhou ancient dwellings in Quanfu hill of Pingyin
3.2. *Imitation of Huizhou architecture*

Due to the serious neglect of regional features of Jinan traditional dwellings, people built Hui style architecture in southern villa area of Jinan and Quanfu hill of Pingyin. Combined with Hui elements, the villas in southern mountain of Jinan build Ma Tau Walls, while antique buildings in QuanFu hill totally copied Huizhou ancient dwellings. Its construction, facade and even detail decorations are extremely similar to Southern dwellings. Jinan has its unique characters. Just like the characteristics of Jinan dwellings, it is not only solemn and honest because of locating in the north, but it also shows light and beauty thanks to springs. Similarly, ancient dwellings in Huizhou were developed and formed according with the geographical environment in the south of the Yangtze river. The gate is set to prevent rain water from splashing on it along the wall. The patio is used for ventilation and lighting. Mau Tau Wall is formed to protect the village from fire and wind. The formation of traditional dwellings is not only the precipitation of history and culture but also the choice of the natural environment. Different regional architectural culture laid a solid foundation of the unique style and features of different cities. What we have to do is to protect and inherit not only the appearance of traditional dwellings but also the spiritual connotation and regional features. At last, the problem that every city looks the same can be dealt materially and the regional culture will be inherited.

4. Conclusion

With its unique regional culture characteristics, Jinan dwellings show the architectural charm of north springs. In the process of urban renewal, we should pay attention to the unique texture and explore the pattern of the old city. We should also inherit ancient residential architecture culture style and regional characteristic and protect the city's historic context and memory. As a famous historical and cultural city, combining tradition with modernity, Jinan should truly live up to its reputation vibrantly.

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