

THE RELATIONSHIP BETWEEN THE RENEWAL OF EXISTING BUILDINGS AND BUILDING TYPES UNDER THE BACKGROUND OF HISTORICAL LANDSCAPE CONSERVATION: TWO TYPICAL HISTORICAL BLOCKS IN GUANGZHOU

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ABSTRACT

The need to preserve the historical landscape of the town which is embodied by the built environment as a whole has been increasingly recognized all around the world. At present, with the real estate development activities is strictly limited in historical districts the main renewal behaviors have become user-led renovation of existing buildings, which will have an impact on the overall conservation of historic landscape. How do the differences and changes of existing buildings come into being and what factors influence them? Among the factors that affect the renewal of the existing buildings in the historic district, this paper focuses on the impact of building types on building reuse. Taking two historical blocks with different change trends and building types as examples, it illustrates what kind of socio-economic background and development conditions change to produce a certain building type and how to affect the renewal of existing buildings, and how does the building type affect the reuse of buildings, and then affect the change of historic districts. From the comparison of two blocks, it can be found that the dominant function and building type of the block have great influence on the renewal and renaissance.

INTRODUCTION

Historic districts, which carry the city's cultural assets and collective memory, are also subject to the strictest planning controls. At present, according to the overall concept of cultural heritage protection, in addition to cultural heritage site system, 26 historical and cultural blocks are designated and 817 historical buildings are registered through the protection planning and relevant laws and regulations. As an organic part of urban function, the "continuity of life" is an important criterion to judge the value of historical blocks, and continuous self-renewal is a significant feature of historical blocks which is different from other heritage. Based on the analysis of POI data captured by network map, it is found that Guangzhou historical block is a public service block dominated by residential function, which mainly provides comprehensive services and daily life services. The existence and development of historical blocks are affecting the city image and the quality of life.

To some extent, the reuse of registered historic buildings in Guangzhou reflects the change of historical district landscape. According to statistics, the utilization of historical buildings in Guangzhou presents two major changes: vacancy and functional change. 77% of the buildings with functional changes are related to the changes of residential functions, part of which is the transformation of residential into commercial, office and cultural exhibitions. It is the overall trend of the renewal of historical blocks that the building uses are compounded and the functions of historical blocks are mixed.

The change of existing buildings is the epitome of the development and change of the historic district, and also directly affects its historical landscape. How do the differences and changes of

existing buildings come into being and what factors influence them? This paper focuses on the impact of building types on building reuse. Taking two historical blocks with different change trends and building types as examples, it illustrates what kind of socio-economic background and development conditions change to produce a certain building type and how to affect the renewal of existing buildings, and how does the building type affect the reuse of buildings, and then affect the change of historic districts.

BACKGROUND

2.1 MAIN TYPES OF TRADITIONAL BUILDINGS IN GUANGZHOU HISTORICAL DISTRICT

As residential buildings account for the vast majority of historical buildings, residential types can represent the main building types in the historic districts. There are five types of residential houses in Guangzhou: traditional residence, Street shop in the Republic of China, arcade in the Republic of China, garden house and modern residence. Within the scope of historical area defined by the protection plan of historical and cultural of Guangzhou, the main traditional building types are bamboo tube house housing and its variants (bamboo tube collection house, the arcade building), in the historical city, Xinhepu historic district and the overseas Chinese new countryside historical district is the garden houses and modern residential building type represents. Outside the scope of historical area, the architectural types of historic districts are garden houses and modern houses.

This paper takes Xinhepu historical block dominated by garden houses and Renmin South historical block dominated by bamboo tube houses as examples to discuss the relationship between existing building renewal and building type from the perspective of building function change and commercial activities.

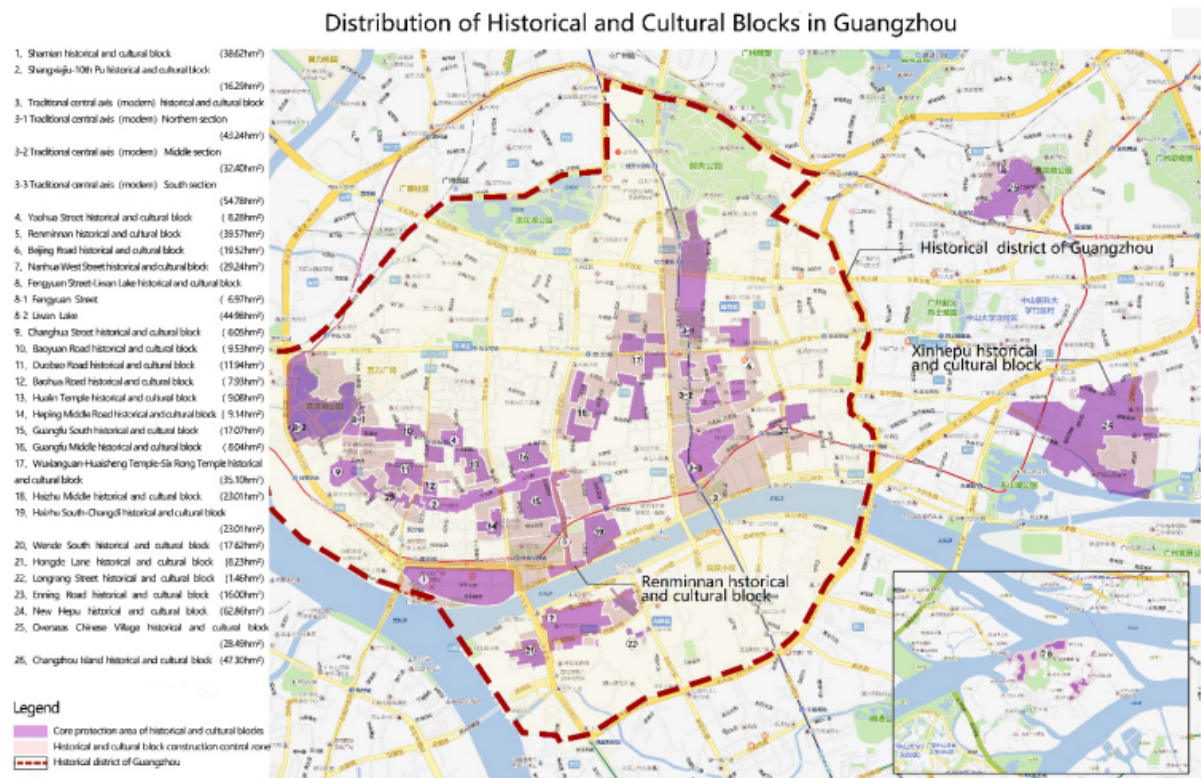


Figure1 The location of Guangzhou historical districts and two cases

2.2 CONSTRUCTION BACKGROUND AND BUILDING TYPE OF HISTORICAL DISTRICTS IN THE CASES

2.2.1 XINHEPU HISTORIC DISTRICT

Xinhepu Historic District, located in the Dongshan area in the east of Guangzhou historic District, was a single-family private residence built in 1920~1930 by bureaucrats who were tired of high-density living environment. The relationship between residential land and housing maintains the feature of "one house, one land", from the traditional form of "enclosed" to "extroverted". The constraints of traditional plots no longer exist, and the layout of residential building is more liberal, which is a subversion of traditional housing types. During the whole construction period, the shape of the plot tends to be more and more square, and the building coverage rate tends to decrease. The land area is generally 150 to 400 square meters.

Number	Location	Average ratio between front and side length	Average building coverage
1	Guigang Cross Road	1:2	75%
2	Jiangling Road	1:1.7	73%
3	Qiming Cross Road	1:1.7	62%
4	Xuguyuan Road	1:1.5	63%
5	Wayao Street	1:1.6	58%
6	Peizheng Cross Street	1:1.6	52%
7	Xinhepu Cross Street	1:1.5	53%
8	Security Street and cross road	1:1.3	45%
9	Songgang Road	1:1.2	48%

Note: The location is sorted according to the construction sequence

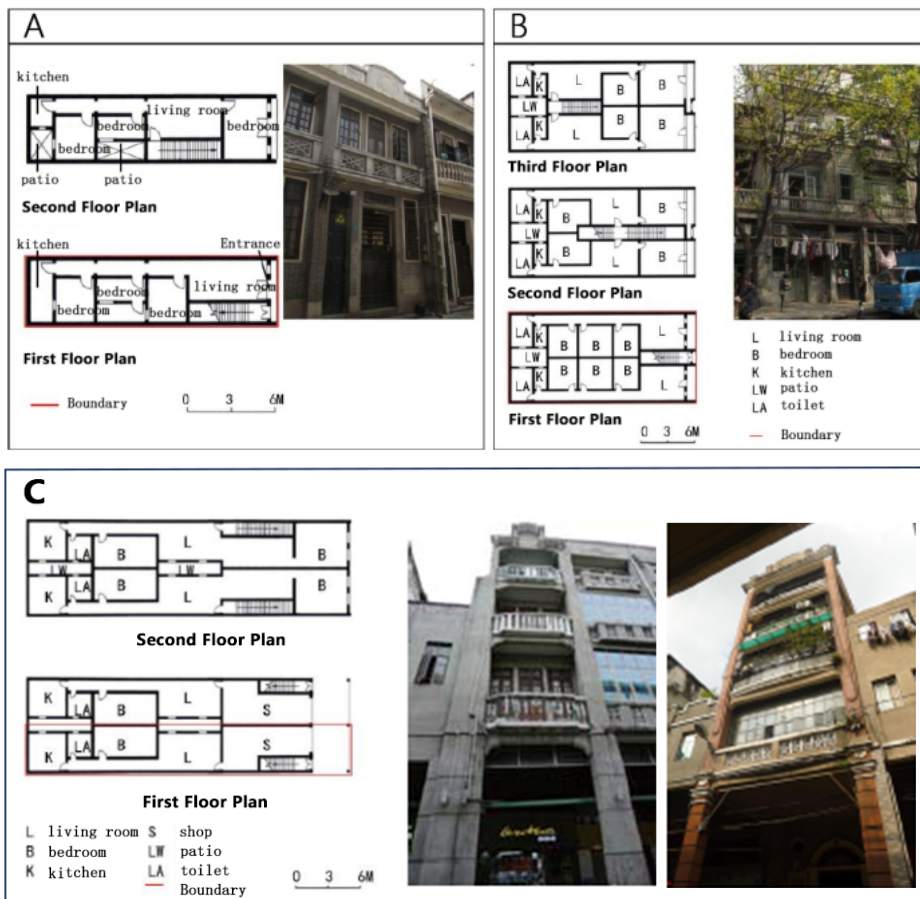
Source: Liao Yuanyuan, the process of urban form development in xinhepu District, Guangzhou [D]: PP. 52-55

Table 1 The plan features of Xinhepu historical district

2.2.2 RENMIN SOUTH ROAD HISTORICAL BLOCK

From the Revolution of 1911 to the second World War, Guangzhou was in the golden age of modernization, with relatively prosperous urban construction, so the western businesses, shops and business models appeared in Guangzhou. Affected by the period of "break the wall and build the road", the arcade commercial street "Renmin South Road" and the modern Riverside Road "Xidi" form the commercial center where many of the most famous time-honored brands were concentrated, was then known as the Bund of Guangzhou.

Renmin South Road historical block and its surrounding streets are mainly composed of bamboo tube house and arcade buildings (bamboo tube house street shop with colonnade). Bamboo tube house facing the street usually adopt the commercial and residential mixed type called "bottom commercial upper living" and "before commercial after living", which testifies the commercial prosperity in history and the modernization process of Guangzhou's urban construction learning from the West. bamboo tube house was the most important residential form in Guangzhou at that time. It was characterized by long and narrow plots and the boundary of the plot is consistent with the boundary of the building to create more frontages and accommodate more and more people.



Description: A: bamboo tube house collective residence B: bamboo tube house collective residence with shared staircases C: bamboo tube house street shop with colonnade

Source: Jintang Chen (2014) ' Characters and Evolutionary Process of Residential Area in Guangzhou after Early Twentieth Century: A Typo-morphological Approach', South China University of Technology.

Figure2 The appearance and Plane of bamboo houses and arcade building in the Republic of China

RESEARCH METHOD

This study adopts the methods of literature review, electronic map POI data acquisition and analysis, field research and interview etc.

EXISTING ARCHITECTURAL RENEWAL AND HISTORICAL LANDSCAPE CHANGE IN THE CASES

4.1 CULTURALLY-ORIENTED REGENERATION AND HOUSING TO BUSINESS: XINHEPU HISTORICAL DISTRICT

Xinhepu is the largest existing group of traditional residential houses combining Chinese and Western styles. Most of the buildings in the block still retain the residential function. With a total area of 62.55 hectares, there are 302 cultural relics and historic buildings in the district. The update activation of space have gradually formed a unique characteristics. Complex outlook and cultural image such as courtyard and the western architectural features, attracting young people , culture and art lovers, architects to buy or rent old houses, which are reused as coffee shops,

select shops, art galleries, B&B, art clubs and center for makers according to the thinking of "repair the old as before". Because of the convenience of downtown location, it also makes the block as an excellent site for studios and offices (Map Xinhepu commercial point). The original residential building was transformed into a consumer space catering to young people, art lovers, as well as creative class.



Figure 3. Land use in historic buildings 1

Housing to business or office is very common in Xinhepu historic district, which is not directly related to the historical value of buildings. However, the proportion of cultural relics and historic buildings for adaptive reuse is very high. For example, the "five major overseas Chinese gardens" (Spring Garden, Ming Garden, Jian Garden, Kui Garden and corner Garden), which serve as cultural heritage site, are used as commercial or public welfare. A large proportion of historical buildings with traditional features have been converted into places or studios for consumption (Figure3). The most attractive feature of these places are the quality of the space and its cultural, artistic and historical atmosphere.

4.2 LOW LEVEL OF COMMERCIAL ACTIVITIES AND HOUSING TO WAREHOUSE -- RENMIN SOUTH ROAD HISTORICAL BLOCK

4.2.1 THE INFLUENCE OF SOCIAL AND ECONOMIC DEVELOPMENT

With the end of the age of waterway transportation, the eastward shift of Guangzhou's urban development, and the construction of elevated road, Renmin South Road historical district has changed from a municipal commercial center into a block with clothing, hardware accessories, electronics and other small commodity wholesale as its main business form (Figure4). Although there is a large-scale commercial development, the area is still dominated by bamboo tube houses and retains a large number of buildings with historical features. Among them, the registered historic buildings used to be the site of time-famous brands such as finance and insurance, shops, tea houses and medicine shops.







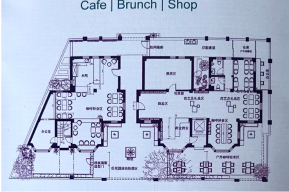

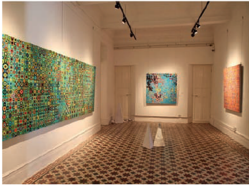

The Reuse Case of Cultural Relic Unit			
Case	Spring Garden	Mu Garden	Ming Garden
Function	Museums, kindergartens, vacant	Gallery, cafe	Cafe, Homestay
Photo			
the Reuse Case of Historical Building			
Case	Xin Garden	Olive Mountain	Qing Garden
Function	Cafe, exhibition hall, homestay	Sale of cultural products	Vintage grocery store
Photo			
Interior Space and Function			
			
		First floor plan and interior space of Xin Garden	
			
Indoor exhibition space and leisure space in Kui Garden		Interior of buyer's shop	

Figure3 Block business format and reuse of existing buildings in Xinhpu historical district

Like most of the historical districts in China, Guangzhou's historical districts suffer from mixed property rights after political movements and policy changes, and the overall environment of the districts is not maintained for a long time. Large scale real estate development, viaduct construction and wholesale industry bring large amount of floating population and storage demand. The trend of low level of street business is obvious, which leads to the phenomenon of replacing houses with warehouses, local population moving out, and the weakening of overall historic atmosphere. Most of the buildings with historical features are regarded as shops and warehouses of the wholesale industry, while those belonging to public houses are hard to keep up with and some private houses are vacant or let out at low rent since the original owners no longer live.

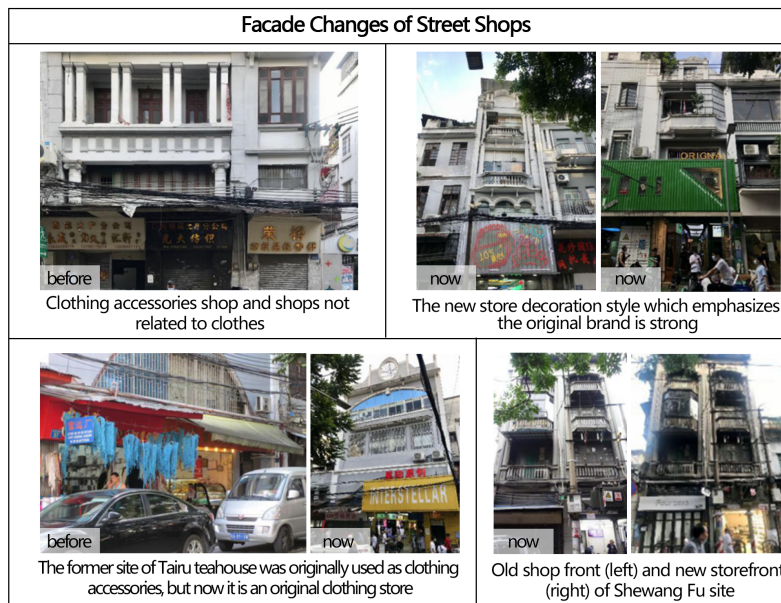
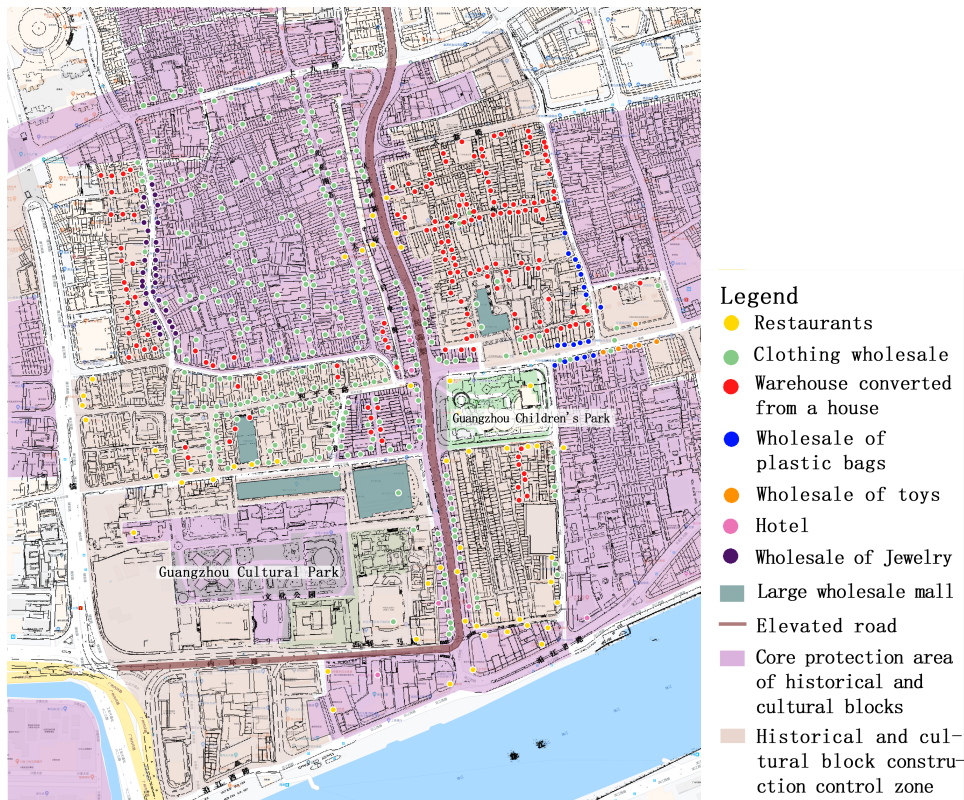


Figure 4 Block business format and reuse of existing buildings in Renmin South Road

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industry, while those belonging to public houses are hard to keep up with and some private houses are in vacant or let out at low rent for original owners no longer live.

In the past two years, with the acceptance of online shopping and trading by the public, clothing wholesale shops have become more miniaturized and branded. Clothing stores have spilled over from professional large-scale wholesale markets to bamboo tube houses and inner alley dwellings. Small ready-made shops, which emphasize originality, fashion and combination of online and offline, replace the original garment accessories and community commercial shops, and the historic district seems to become a large fashion wholesale market. According to the comparison between the facade of historical building archives and the current status, it can be found that the shop replacement cycle is very short, and the shop decoration tends to have strong visual impact and design sense. the renewal of existing buildings present commercial vitality and have a greater impact on the historical landscape of the street (Figure4).

4.2.2 THE IMPACT OF WHOLESALE TRADE INDUSTRY ON BLOCK SPACE

Under the influence of the wholesale trade industry, the traditional residential community has gradually changed into a compound function of housing, warehouse and commerce. It becomes a very common phenomenon that shops are all over the streets, and the internal housing is changed into warehouse(Figure5).

Because the wholesale industry needs a large amount of space for storage, handling and transfer of goods, most of the open space in this area is used as temporary storage, loading points. The sales method mainly based on online shopping has also increased the situation that scattered goods and vehicles occupy the public space. Crowding and noise pollution affect the quality of space and normal life of the community.

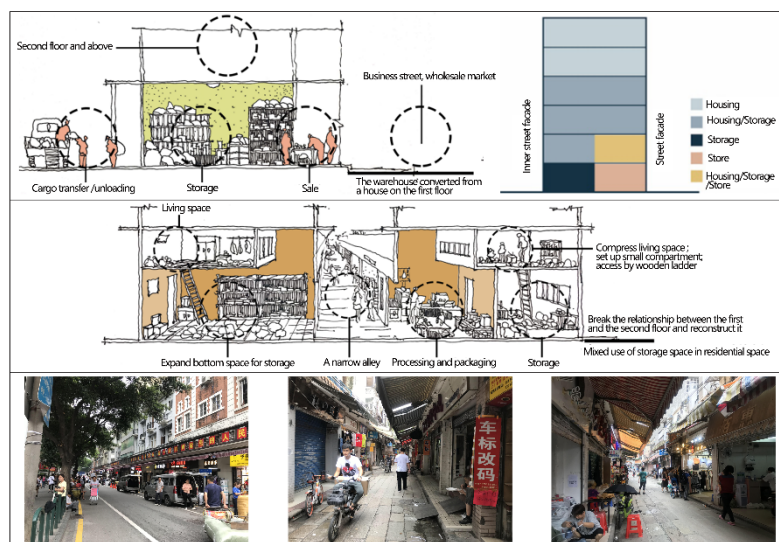


Figure 5. The relationship between shops, warehouses and residential functions, streets and lanes

CONCLUSIONS

It is obvious that the bottom-up force plays an important role in the formation and development of two historical districts in Guangzhou. In Xinhepu historic district, the bottom-up transformation is driven by the sense of community brought by the unique culture and spatial environment and the

groups in the consumption space share the same emotional preferences connected with art, place and history. In the Renmin South historical district, the impetus comes from the development of the wholesale industry from the bottom up, and the economic income is the driving force. Culturally-Oriented regeneration is easy to integrate with the daily life of the community, while the export-oriented business and trade industry brings negative effects to the daily life of the community. There is no denying that the bamboo tube house does not meet the modern living standards due to its type of building and land restrictions. The commercial substitution of residential function brings economic vitality and young practitioners to the use of bamboo tube house on Renmin South district. Although such activation cannot reflect the cultural value of the block and is in conflict with community life.

From the comparison of two blocks, it can be found that the dominant function and building type of the block have great influence on the renewal and renaissance. Noble residential space is relatively stable. On the one hand, most of the property rights are relatively clear, the owners have the ability to transform themselves or rent to more suitable operators. On the other hand, their high-quality space is more adaptable, which means the change of times and the aging of buildings do not reduce their value, but it appears the phenomenon that residence is changed into business and office. On the contrary, Blocks with commercial function are more susceptible to the urban development, business changes and market fluctuations. Multiple or ambiguous property rights of a building, and the house is restricted by the land and adjacent buildings, which make it difficult to update to meet the requirements of modern life. All of these lead to the decline trend of the block, such as the decay of the block functions dominated by the wholesale market and the deterioration of the space quality in Renmin South Road district.

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