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Zhuhai City as an Example

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Analysis and Research on the Process of Industrial Development and Transformation of Historical Villages—Taking Cuiwei Village in Zhuhai City as an Example

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Abstract: With the rapid development of science and technology, since the reform and opening up, the speed of urbanization has been accelerating. Zhuhai City has steadily promoted the transformation of old factories, old towns and old villages, thereby promoting the process of urban renewal and realizing the city's economy. Taking off has promoted the transformation and upgrading of the industry and improved the people's living standards. Urban villages are important carriers for cultural heritage and settlement spaces with strong regional characteristics. They can well integrate and fully express the production, life and cultural customs of local residents. I analyze and study the problems encountered in the process of industrial development and transformation of historical villages, and finally give corresponding policy recommendations for the future development of the villages.

1. THE STATUS QUO OF THE DEVELOPMENT AND TRANSFORMATION OF THE VILLAGE INDUSTRY

1.1 Industry development

The Cuiwei Historic District is currently out of touch with the construction and development of the Qianshan area. There are fewer and uneven POIs in the district, and the business form and function are single, which makes the village's commercial district less vigorous. The tourism and service industries do not match the development of modern urbanization, and neighborhoods are less well-known, making it difficult to attract outsiders to come for consumption and inspection. The available public space inside the block is the space for the activities of villagers and outsiders, and it carries a large number of people's unpredictable and predictable behaviors. The small area makes the gathering function of the space poor. In the theory of space syntax, the degree of integration in the study of the significance of public space, that is, the degree of integration of the horizon, mastering the spatial

integration of Cuiwei Village can grasp the strategic trend of the future renewal and development of the entire village and the direction of zoning planning. The core of the integration degree, as a bridge to the external space of the village, analyzes the external dynamic social and economic conditions and the flow of people, and analyzes the internal static villagers' life, production, industrial development, and future development of the village's idle site, playing an irreplaceable role.

Inside the village, there are a certain amount of commerce on both sides of the north-south Cuiwei North Street, Market Straight Street, and Dafan Street, the east-west Changshui Street, and the east-west Huaganglin Street at the entrance. Commercial interests and public transportation, as the most direct and basic interests of the Cuiwei Historic District, have had an important impact on the street space of modern cities.

1.2 Transformation process

At this stage, the economic benefits of land use in villages are low, and the type of business is single. The main economic activities are limited to shops, restaurants, and house rentals. The output value of economic activities is low, or even no output value, and the loss is greater than the profit. New businesses are unwilling to settle in, so that the flow of people and vehicles passing by will not stop here and carry out related commercial activities, which makes the permeability of different spaces in the village worse. Old businesses are also gradually moving away, resulting in fewer business formats and weaker street vitality, resulting in the disconnection of the flow of people, traffic, business organization, and spatial form.

As a result, the commercial vitality of the village continues to be low, and the business organization is more unified. The lack of public green space makes the green vision rate of street space low. Early chaotically constructed buildings and spontaneously formed streets made the outsiders walk in the village without signage. The chaotic spatial layout reduced their ability to perceive space. For the current housing construction quality and property rights issues, early Cuiwei villagers rebuilt and built the interior of the house according to their own needs, and privately connected wires and network cables, and placed their own daily necessities in the external space, making the interior of the house The plane is unreasonable, which reduces the concentration of the internal space of the building and the visual depth is high. The above-mentioned problems ultimately lead to poor integration, comprehensibility, coordination, and accessibility of the internal and external spaces of the street.

2. PROBLEMS IN THE DEVELOPMENT OF THE VILLAGE INDUSTRY

At the level of industrial development, the rich historical and cultural resources of Cuiwei Historic District should be used rationally, the protection of historic districts, the cultural tourism industry and the improvement of people's living environment should be coordinated, and the characteristics of historic districts should be fully utilized to promote local economic development and residents' living standards. The development of tourism and cultural industry can support the leading industry of the town's

economic revival. At this stage, the development of the industry faces the following main problems:

2.1 Historical districts are less well-known

The main attractions of Cuiwei Historic District are small in scale and the layout is rather chaotic. Due to the lack of systematic publicity and development of the village, the tourism image of the block is not prominent, and the regional influence is relatively narrow. It is only limited to Zhongshan Tanzhou. Although the traditional architectural features are more prominent, but The distribution of buildings in the block is relatively scattered, and the historical buildings are basically courtyard-style spatial layouts, and the construction methods and architectural details follow traditional practices.

2.2 The lack of service facilities

At present, the Cuiwei Historic District basically does not have the ability to receive tourism, and the traffic conditions are simple. In terms of external traffic, the traffic flow to Cuiwei Village needs to be improved. There are no public facilities and large parking lots. In the future, you can consider adding shared bicycles. There are still lower air conditioners in the inner lanes of the blocks. Pedestrians will bump their heads, which poses more safety hazards. Some lanes disorderly park bicycles, motorcycles, tricycles, and drying racks, occupying a large part of the road space. Less lighting equipment. With the gradual acceleration of urbanization, Zhuhai is a coastal city adjacent to Macau and Hong Kong. A large number of foreign tourists and tourists from Hong Kong and Macau come to travel every year. Cuiwei Village's reputation will increase accordingly, which will further aggravate the contradiction between supply and demand of tourism service facilities in the future (as shown in *Figure 1* below).



Figure 1. Environmental status of Cuiwei Village

Image source: The author extracted from the summary (2019) of the renewal plan for the renovation project of Cuiwei Old Village, Xiangzhou District, Zhuhai City

2.3 Lack of professional publicity talents

Cuiwei Village has a long history of more than 700 years. There are many temples, ancestral halls and public ancestral halls in existence, which are basically idle. At present, there are no professionals in the reception and interpretation of tourists and inspectors. It is only the members of the Cuiwei Village Committee who occasionally make simple comments on Cuiwei's history or cultural heritage, and do not make too much publicity.

2.4 Lower development level

In the current village protection, the corresponding laws and regulations are imperfect, and the planning, management, and construction of the village are poor. Although the Cuiwei Historic District has rich cultural landscape resources such as dwellings, temples, ancestral halls, and public shrines, the village's Development digs out the cultural connotation in a shallow way, and has insufficient development efforts. Many farmlands in the village are also in a state of idleness. Tourism themes are relatively vague. In the increasingly fierce tourism competition of ancient villages and ancient cities, tourism brands are insufficient (as shown in *Figure 2 to 4* below).



Figure 2. Side of the residential building No. 4, Erheng Lane, Binlang Street



Figure 3. Cuiwei Kindergarten



Figure 4. Gable of Webster's Mansion

Image source: The author extracted from the summary (2019) of the renewal plan for the renovation project of Cuiwei Old Village, Xiangzhou District, Zhuhai City

2.5 Lack of corresponding guaranteed capital investment

The cultural relics in the villages are generally of low level, lack of effective fund protection, and the contradiction between protection and construction is more prominent. Although there are many ancient buildings of important value in the historic district, such as Wei's Mansion, Three Kings Temple, Guandi Temple, etc., they are basically lack of proper maintenance. After more than 700 years of baptism, many architectural relics have been severely damaged. With the rapid development of Qianshan's economy, the villagers' requirements for the living environment are getting higher and higher. Most of the existing ancient residential environments have been unable to meet the local residents' pursuit of

modern life. The renovation and expansion of the villagers' own houses also imposes demands on traditional buildings. The style and features cause a certain degree of damage. To resolve the contradiction between tourism development and historical and cultural relic protection, effective guidance and development must be carried out.

3. PROBLEMS IN THE DEVELOPMENT OF THE VILLAGE INDUSTRY

3.1 Problems of external environmental facilities

Public green facilities are seriously inadequate, far below the national standard, and are unevenly distributed. Street greening is poor. At this stage, there should be some old trees. Many residents choose to live in the shade, although they can make up for public green spaces to a certain extent. The problem of insufficient area is that most of the sidewalks in the village are too narrow to form a relatively good open space, but there is the potential for further tapping. There is no fixed parking area in the village, which easily causes internal traffic jams, and the access roads are not unobstructed, there is no signboard for route guidance, the public environment in the square is poor, and the flooding problem in rainy days is mainly caused by the low terrain (the ground elevation of the Cuiwei area is lower than the elevation of the surrounding municipal roads) (as shown in *Figure 5* below).

In the beginning, foreign business people settled in Cuiwei Village, including manufacturing, textiles, and morning and evening markets. They were serving the villagers of Cuiwei Village. At that time, prices were low and their profit-making purpose was weak. The evening stalls were also for migrant workers. It provides a platform for dinner and supper, and subsequent merchants settle in. The purpose or profitability is strong. They don't pay attention to the environment in the shop, so it is easy to cause environmental problems. There is no plan for public areas, and there is no problem of domestic sewage discharge. has been solved.



Figure 5. This is a white picture

Image source: The author intercepted from the summary of the renewal plan of the Cuiwei Old Village Reconstruction Project in Xiangzhou District, Zhuhai City (Mid 2019)

3.2 Business operation capability issues

Village functions are relatively closed, businesses are showing signs of decline, business layout is dominated by low-end businesses, and time-honored brands lack effective promotion. At this stage, Cuiwei Village is facing the problem of demolition and reconstruction. Through interviews and investigations, it is found that the businesses along the street are still in operation, and the textile industry still exists, serving the people of Cuiwei Village. In the mid-term, with the continuous entry of businesses, shop rents have risen too fast. Most of the shops are service-oriented, including barber shops, restaurants, daily necessities, supermarkets, acupuncture clinics, dental clinics, etc., and there are many repeated shops. The phenomenon of homogeneity has appeared because the government did not screen the shops that settled in, and because merchants settled in for the urgent need for profit, there is a lot of plagiarism and competition, the characteristics of the shops are not obvious, and the cultural and creative industry is changing. It is not obvious, and there is little room for growth, and there are no diversified business forms such as advertising companies and wedding photography companies entering Cuiwei Village (as shown in *Figure 6* below).

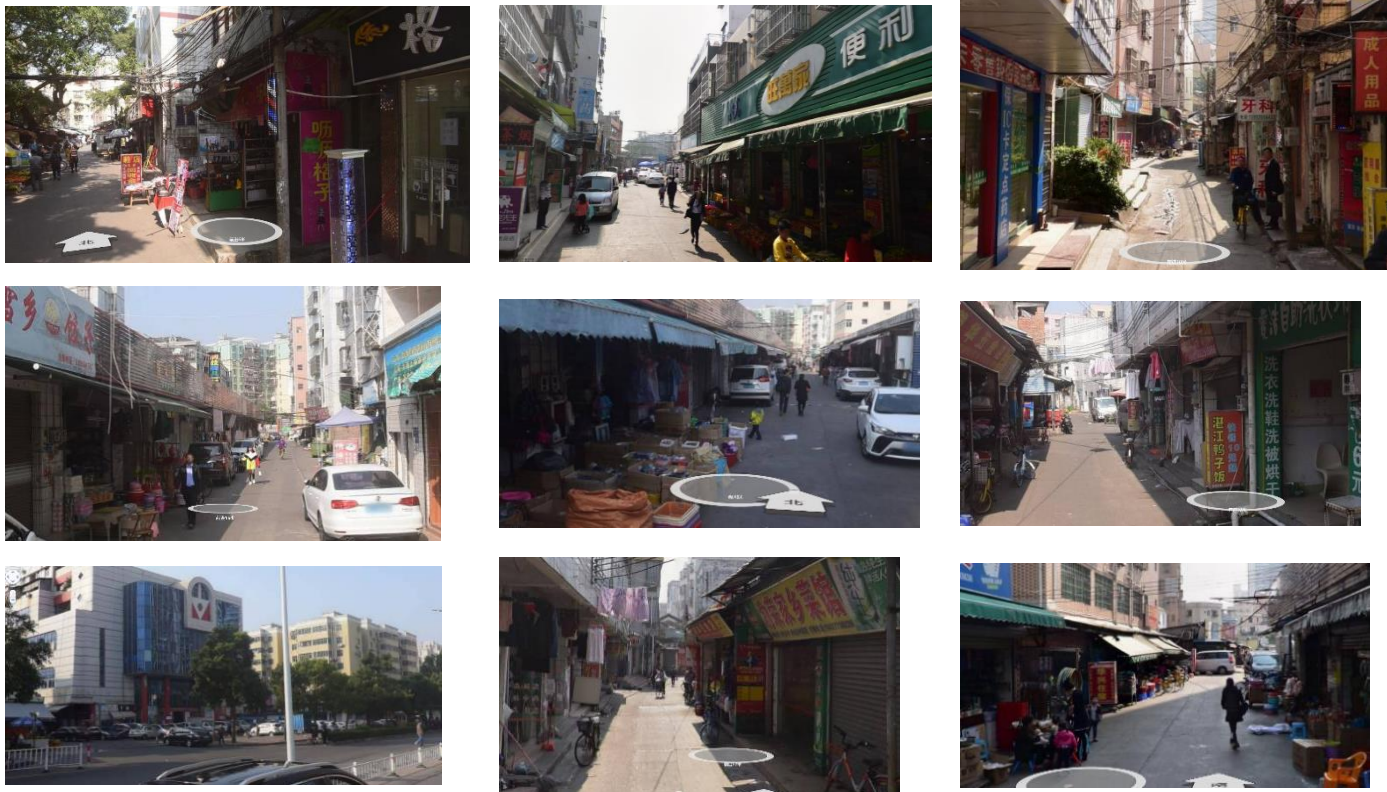


Figure 6. Business distribution of Cuiwei Village

Source: The author intercepted from the online street view map of the earth

3.3 Building quality and property rights issues in historical blocks

According to the relevant documents of Zhuxiang Update Zi [2019] No. 99, relevant explanations have been made on the area of villagers' houses, the area of collective properties in the village, and the area of property rights

of other stakeholders. The content includes the part of the villagers: the total construction area of the house is 420,677.75 square meters. The collective part of the village: the area of land reserved for production is 64,608.95 square meters, and the area of collective property in the old village is 15,976.22 square meters. In the old village site (excluding collective properties), the number of land-expropriated residents is 334, the number of urban residents is 146, the number of Hong Kong, Macao and Taiwan residents is 63, the number of other stakeholders is 132, and the number of non-land-expropriated residents is 3, The number of public housing estates is 10, and there are 788 households in total.

Most of the rooms are very old, and merchants have to renovate the internal and external spaces of the building. Therefore, all merchants repaired, decorated, and even built illegally or added floors to residential buildings. Therefore, the housing quality problems of Cuiwei Village at the current stage are mainly concentrated in:

(1) All merchants have not conducted safety certification on the housing structure;

(2) A large part of the houses are still in use beyond the service life;

(3) The structural foundation and building walls are affected. The weathering gradually loosened;

(4) There were cracks, water seepage and dust falling on part of the walls in the building, the stairs and railings inside the house began to loosen, and the roof truss began to rot.

In Cuiwei Village, the supervision function is absent, the quality of the building renovation is not good, and the house itself has many hidden safety hazards. During the renovation process, there is no government policy to provide reasonable guidance. It is inevitable that the villagers' current level of awareness will be low. There are major shortcomings. The only advantage is that it can reduce the discomfort caused by the relevant systems introduced by the functional units at this stage, which causes the dual constraints on thought and action, so that the society is formed based on people's needs, thereby promoting society. Groups from all walks of life have spontaneously formed a sense of reform, which can further make the government pay more attention to this matter and make relevant personnel formulate relevant policies for approval.

Rural land in the Cuiwei Historic District has historical contradictions in the work of determining rights. Most of the land in the district belongs to the original villagers themselves. As the process of urbanization continues to accelerate, the villagers' land consciousness and legal property rights have gradually become blurred, and there has been a contradiction between the two. Investigating the historical reasons shows that in the early days of the formation of Cuiwei Village, the government gave the villagers the unclear ownership of land. Spontaneous disposal, including villagers renting out new houses or renovated houses, and some merchants began to settle in.

After being widely watched in Cuiwei Village in 2000, the government originally planned to take back part of the land for use by the neighborhood committees of the community. This was met with strong opposition from the villagers. They spontaneously organized protests on the streets and even made noise at the government gates. Nowadays, some sites in Cuiwei Village lack a certificate of property rights. Due to major disputes in some buildings in the village, the Village Renewal Service Center has hired a lawyer to discuss with relevant villagers.

4. PROBLEMS IN THE EARLY PROTECTION STAGE OF THE VILLAGE

In June 2000, the prelude to the renovation of the old village was kicked off, and a series of policies and regulations were issued to protect and implement in this context. The effect is not significant. The reason is that the protection of historical districts was only proposed, but development was not mentioned. Therefore, it does not conform to objective laws. The following problems have arisen during the protection process:

(1) Road traffic: The current road network skeleton is basically completed. The main roads such as Renmin Road, Mingzhu Road, Cuiwei Road and Cuiqian Road form the road skeleton road network of the area, which bears the main external traffic volume of the area. The key research area is 1.5 square kilometers. Only the ground section of Cuiping Road is a secondary trunk road. The internal branch road of Cuiwei Old Village is imperfect, there is a problem of broken ends, and the traffic microcirculation is not smooth;

(2) Cuiwei Village belongs to the service scope of Gongbei Water Supply Plant. The water plant is located in Xiawan, Gongbei. The surrounding water supply network mainly includes municipal water supply pipes such as Mingzhu Road, Renmin West Road, Cuiqian Road, Cuiwei Road, etc., with municipal fire hydrants. All users within the scope of the renewal unit have been connected to municipal water supply pipes, and some of the pipes are exposed to the ground without being covered with soil. The hydraulic water volume within the village unit can meet the requirements for use;

(3) The village area belongs to the service area of Qianshan-Gongbei sewage system. There are sewage pipes on the surrounding main municipal roads. Due to the low elevation of the renewal unit and the imperfect internal sewage pipe network, the domestic sewage is mostly in the form of confluence after passing through the septic tank. Enter the sewage pipe. The current rainwater is mainly discharged through the flood drainage channel of Cuiwei Road on the south side. The elevation of the scope of the current update unit is low, and a small drainage pumping station is built on the southwest side. During heavy rain, there is flooding in the area of the renewal unit;

(4) The use function of Cuiwei Village is lacking. Educational resources in the entire area are relatively scarce and unevenly distributed. There is only one elementary school and kindergarten, namely Cuiwei Primary School and Cuiwei Kindergarten, as shown in Figure 32, corresponding to A33 and R32, respectively. It has been abandoned here and has no use function. The kindergarten has poor supporting facilities and poor construction quality. Once it encounters a typhoon, it will see water and needs to be updated;

(5) Infrastructure facilities are not complete, and there are a large number of dilapidated houses and vacancies. On the one hand, the land value of the plot has been seriously misplaced; on the other hand, it causes greater safety hazards, poor sanitation in the village, and garbage everywhere. , A large number of trash cans are exposed, dirty water can be seen everywhere, and the sanitary condition is not optimistic;

(6) Cultural facilities are relatively scarce. Because ancestral halls and temples are used by residents for profit, there are no decent cultural and recreational facilities in the village, and activity venues are relatively scarce, leaving no place for the elderly and children to play, public toilets and

environment in the village. The sanitation is poor, and there is often a big smell in summer, which has a greater impact on the people in the village, and the overall living environment is very bad;

(7) The municipal supporting facilities have been in disrepair for a long time, have been gradually aging, and the number is seriously insufficient. Many problems such as water supply, power supply, heating, fire fighting facilities and sewage treatment, and the transfer of hazardous garbage in and out are prominent. The original roads, pipe networks and municipal facilities in the village cannot meet the requirements of the current stage of production transformation. When the village is renovated and renewed organically, it is necessary to rebuild supporting infrastructure, develop green energy, set up a sewage treatment plant, and filter out Sewage, and set up green facilities to suck out harmful gases.

The conservation and organic renewal of Cuiwei Historic District is in its infancy. Due to the lack of effective guidance, introduction and other supporting facilities and services, catering and hotels are also lacking. The block fails to provide human landscapes, lacks landscape decorations and uneven distribution of overall greenery. . Take Cuiwei Village as a subsidiary attraction. Passing by is just to admire the scenery and not stay here for too long. At this stage, it is difficult for urban residents to understand the history of Cuiwei Village, and it is difficult to show the charm of the village.

5. REFINEMENT AND APPLICATION OF TRADITIONAL ARCHITECTURAL ELEMENTS

Cantonese culture is a regional culture in Guangdong and Hong Kong. The elements are Fengshuitang, memorial arches, gates, ancient trees, temples, ancestral halls, and alleyways. In the contemporary modern architectural environment, one cannot forcefully imitate the architectural style, otherwise there will be inconsistencies between the buildings, and the style of the historic district is prone to breakage. In the design process, the traditional elements of the building are refined, such as the deformation of form, material or internal details, and merge with the modern architectural style to form a unique charm. Among the design techniques, the more commonly used techniques are: extracting and collage the elements of traditional buildings, including facade colors, decorative styles, building materials, etc., adding and subtracting, and the different proportions are merged with each other to make the traditional buildings more in line with the modern Human aesthetics.

In order to show the commercial atmosphere of the future block, some sections of the characteristic commercial block were selected in the early-stage enclosure, and necessary components and facilities were combined to form a certain early-stage display surface. The color of the display surface is similar to the traditional building in the design of the facade. The indoor lighting can be in the form of warm tones to give people a warm feeling, so that the villagers can accept and gradually like the modern transformation and design (as shown in *Figure 7 to 10* below).



Figure 7. Display of the update effect of historical blocks



Figure 8. Effect picture of entrance plaza



Figure 9. Elevation display Figure 1



Figure 10. Elevation display Figure 2

Image source: The author extracted from the summary (2019) of the renewal plan for the renovation project of Cuiwei Old Village, Xiangzhou District, Zhuhai City

6. PUT WENTAI IN THE LAND WITH A MIXED AND DIVERSIFIED MODEL OF LAND USE

As far as Cuiwei Village is concerned, in the author's opinion, in addition to traditional historical buildings, there are also a large number of self-built buildings by residents in recent years. Because of its long history and prosperous commercial functions, the protection is taking the road of cultural inheritance and urban renewal. Although its physical development value is limited, its spiritual and cultural relics are relatively rich. In the planning ideology of Cuiwei Historic District, it should highlight characteristics, pay attention to inheritance, active protection, and sustainable use. The overall planning strategy should focus on protecting key areas, maintaining the overall pattern, constructing multiple districts, and realizing the activity between districts, thereby improving the integration of streets and lanes.

Although there are no more famous historical buildings in the village, excellent buildings such as Wei's Mansion, Three Kings Temple, Yanggong Pavilion, Cuiweidi Garden, etc. and the richer historical culture and market culture in the neighborhood still exist to this day. The organic renewal of traditional historical and cultural blocks, for historical areas lacking legal protection, adopts a combination of overall demolition and partial protection mode to deal with, which often leads to the main reason for the fragmentation of historical and cultural areas within the city. . The local comprehensibility is better, but the global comprehensibility is poor. People cannot perceive the whole space from the local space.

In the renewal of historical buildings, historical and cultural monuments, traditional living and recreational spaces, and rich local culture should be

jointly established in an open and transparent space, which is interconnected with surrounding historical elements to form a relatively complete historical main line of the village. As the main line of the overall memory of the area, it is necessary to advocate the strategy of cultural continuity of synergy and organic symbiosis to realize the organic symbiosis of historical districts, historical traditions and modern culture on three levels.

Cuiwei Village is located in the prosperous commercial area of Qianshan. There are many high-rise residential buildings, commercial and educational supporting facilities around it, and often have high functional carrying capacity. How to effectively and rationally use its main functions and values, and how to make Zhuhai diversified The integration of the culture of Cuiwei is the main focus necessary for people to dig deep into the vital genes of the Cuiwei Historic District, including modern service facilities such as commerce, culture, leisure, entertainment, and viewing, and revive the unique urban spirit and spirit of commerce for a century. Neighborhood vitality.

Cuiwei Street contains a rich market culture, changing the original single residential function and the main business formats along Cuiwei North Street, Market Straight Street, Dafang Street and other streets with clothing, designated pharmacies, convenience stores, gourmet stores, restaurants, dentistry, etc. form.

As there are many historical buildings in the block, it is necessary to dig out the cultural heritage, the effect and the catalytic function of cultural form on a huge scale. Under the mutual stimulation of the two, we will inject multi-cultural functions, focus on the existing historical buildings, and vigorously develop the cultural and creative industries. Combining business culture, traditional houses, and consumption with a strong sense of experience among residents in the Qianshan area, it enhances the experience of residents in the area and allows more people to participate to create a business model that conforms to the business format. Make full use of the functional carrying capacity of Cuiwei Historic District, implant modules in commercial development, and determine the function of the business and the area of the commercial form.

According to Cuiwei's long-term historical and cultural value and location conditions, the overall positioning of the block is determined based on the commercial functions of the block. The education, housing, catering and commercial facilities around the village are relatively complete. There are residences, schools, department stores, mobile and tablet stores, restaurants, hotels, book reading rooms, display kiosks, etc., as well as indoor activity spaces with cultural and entertainment functions and financial services, as well as basic business forms such as commercial banks.

The development of mixed use can not only improve the quality of life and living standards of urban residents, but also improve the vitality of the neighborhood and the attractiveness of the city. The symbiosis of the lot. The folk traditional customs, textile industry, etc. are left behind and carried forward to make Cuiwei more vigorous while inheriting the historical context of Cuiwei. Let the history and culture of Cuiwei District go out, let more people come to visit and inspect Cuiwei Village after they understand Cuiwei Village, so as to achieve the effect of two-way linkage, achieve a better transformation goal for the internal functional conditions of the block, and involve all local interest developers The process of village development and promotion through a strong brand marketing.

7. PRINCIPLES TO BE FOLLOWED IN THE PROCESS OF VILLAGE RECONSTRUCTION

7.1 Improve the external environment of the village and the management of infrastructure construction

For the Cuiwei Historic District, the spatial form of the historic district as a material element is manifested by the non-material elements in the economic and social development of the village over the past 700 years. The interrelationship of the elements in the space is determined by the material elements, and the space elements will react with the material elements at the same time. The two interact and relate to each other. It happens that the space syntax studies the spatial form of the village through the relationship between the elements and the elements in the village space. The relationship is realized. In the site of Cuiwei Village, there are a large number of historical relics, residential buildings and a small part of public spaces, which have led to the flow of people and vehicles in the space. The flow of people and vehicles will in turn affect the nature of the land in the historic district, the different effects of different functions in different blocks, the changes in district policy orientation, and the problems of commercial operations. Therefore, it is necessary to speed up the development and construction of parking lots. In addition to dividing the parking lot area on the ground, the development and construction of underground parking lots should also be considered. At the same time, it is necessary to set up special personnel to manage the traffic and relieve the traffic pressure. For the environment in the village, environmental sanitation needs to be rectified, bicycles, motorcycles, and tricycles that are parked disorderly need to be cleaned up, and outside air conditioners placed lower in roadway houses are removed to reduce the depth of the topology so that people can observe within the unit space. More things, and then increase the value of local intelligibility.

Because public space is a very representative area for villages, urban space is very modern, and modern elements have a strong role in highlighting. Therefore, in the process of public space protection and renewal, increase the green area, expand the area of the public space area, and increase the spatial cohesion. Or plant corresponding greening on the roof or wall to expand the green area, thereby increasing the green visibility of urban areas. Or enrich the design of public spaces through sketches and furniture with local characteristics. After the land use is adjusted, the ground elevation needs to be raised, so that the rainwater can be discharged through the road rainwater pipes, and the rainwater in the planning area should be adjusted and refined appropriately to make the overall rainwater discharge safer, thereby effectively avoiding flooding and other phenomena.

7.2 Strictly regulate and guide business activities

The data simulated by using Depthmap software is consistent with the actual situation. It can be concluded that the composition of the village spatial form and the vitality of the neighborhood are relatively coupled, which is an important condition for the vitality of the neighborhood. Blocks with better connectivity can be increased. The opportunities for villagers,

residents in the area and tourists to walk through will attract more businesses to invest and promote more business distribution.

The administrative department of Cuiwei Village can effectively manage and persuade the merchants who will be settled in Cuiwei Village after the renovation or are still operating in Cuiwei Village at this stage, so as to avoid disorderly competition among merchants, leading to the phenomenon of simplification and disorder of business getting more serious. Ensure that businesses regulate their operations in the villages while ensuring that the cultural characteristics of the villages are maintained, develop diversified businesses, and increase the types of business formats. At the same time, businesses need to improve their own business capabilities and levels, build their own brands, and attract more people. Tourists come to consume, thereby increasing the concentration of internal and external spatial horizons.

7.3 Establish a liquid and gradual microcirculation model

Professor Liu Jian pointed out that the organic transformation of historic districts needs to consider how to effectively use land resources, because land is a relatively precious resource in cities, and the service life of buildings needs to be considered. The internal building structure of the village is mostly safe. Yes, we can consider revitalizing the building in the future (Liu Jian, 2013).

Professor Wu Jiang pointed out that in the process of renewal and reconstruction of historical districts, large-scale demolition and construction should not be carried out blindly. A consensus on guiding, historical relevance, and adaptability to the times should be established. The specific manifestation is that the process of demolition should be small and continuous. In a dynamic way, although the historical villages in the city are not entirely the main objects of historical and cultural protection, they should also be related to historical protection in the topic of urban renewal. The reason for the renewal of the historical villages is the urban environment and rapid development. The city's urban life and production activities adapt to each other, so it is necessary to adapt to the current needs in urban renewal (Wu Jiang, 2020).

Therefore, in the renewal and reconstruction of Cuiwei's historic district, the microcirculation mode is preferred. This type of mode advocates small-scale and gradual renewal. The main characteristics are: integrated street and street, street and building connection, and increase The agglomeration effect of the village. The current planning and renewal of Cuiwei Village's microcirculation model is mainly based on relevant laws and regulations to effectively integrate various facilities within the village, increase the villagers' enthusiasm for participating in the renovation and renewal of Cuiwei Village, and provide opinions and suggestions for the early, mid and late design stages . Construct a circulation system of the government, designers, and residents, continuously enhance the stability of the triangle, establish a fluid and gradual circulation model, and transform from the "government-led" model in traditional villages to a co-led by the government, designers, and residents The urban renewal model of "sharing, co-construction, and co-governance" only respects the wishes and choices of the villagers in order to increase the relocation rate of the renewed villages.

Use space syntax to analyze the visibility and accessibility of such blocks. After Depthmap dyes the straight lines, through the color of the lines, the

positive space and the negative space can be better identified, and the filtered negative space can be processed. Renewal and transformation can facilitate the intervention of public participation, and it is also conducive to the circulation and return of funds. Also need to clear the internal roads,

Provide reasonable guidance on the external streets, and combine the internal and external methods to make the transparency and recognizability of the blocks have a large room for improvement, so that they can be connected to the surrounding streets, buildings and landscapes, which is in the context of the city. Inheritance and development have good linkage. In addition, create space nodes in blind areas of public space and important intersections of streets and lanes, and set up signboards to enhance the recognizability of the space and enhance the penetration effect, which can more effectively attract tourists to stop and watch, which can be very good. It solves the long-standing problems of large visual depth, poor spatial visibility and spatial accessibility of Cuiwei Historic District.

7.4 Strengthen the control of housing quality issues during the renovation process

Relevant administrative departments in Cuiwei's jurisdiction need to conduct compulsory structural safety appraisal of houses that are in business or have closed, and at the same time strengthen and strengthen houses that do not conform to structural safety. If necessary, they can be demolished, and the main structural safety and safety are affected. Resolutely demolish and deal with the illegal addition of floors, illegal construction, and illegal transformations for stability, and build buildings that meet the specifications and standards in accordance with the existing building design fire protection regulations and other technical regulations to improve the visual integration of the building space. Comprehensibility reduces visual depth and enhances people's cognition of space.

Finally, it is necessary to establish an information consultation platform for the update of the Cuiwei Historic District. Before new merchants settle in the updated Cuiwei Village in the future, the district department needs to inform the merchants of all the relevant information about the rented house of the merchants, and the merchants need to submit the internal and external space transformation of the house within a limited period. The declaration form is used to ensure that the follow-up construction quality inspection and maintenance work can be carried out smoothly by the management part.

7.5 Create a block with internal and external linkage, multi-point triggering, and strong permeability

7.5.1 The style of historical district adjustment and control method

For the historical block, because of its long history, there are complicated roads inside, and the scattered historical buildings are scattered inside. It not only contains more complicated spatial relations, but also contains intricate social network systems, which are in the long-term development of society. Not in an advantageous position. Its existing historical features are both a protective cover and a barrier. Because it isolates the development of the city from outside, it has been well protected from the development and

construction around the city before the policy is issued. When the exterior of the village has been high-rise in recent years, the interior remains the same.

At this stage, the original streets and lanes of Cuiwei Village are dredged to increase the permeability of the area. Fully respect the texture and spatial layout of traditional streets and lanes, and find "acupoints" in the body of the old village. In these "acupoints", through the construction of squares, sculptures, sketches, etc., the vitality of life in a small scale is triggered. The internal spatial nodes of the village block and the global system establish a good unity and integrity, and the local spatial environment can better reflect the characteristics of the spatial pattern of the overall historical block.

Regarding the style and appearance of the historical block, the inner core area of the block is a concentrated protection area for historical buildings. Retro paving can be adopted. The enclosing wall established by separating the core area from the outside can have the same color and material as the former mountain walled city wall. The color of the ancient building restores its original color as much as possible, strictly respects the authenticity of the old shops, and continues the original style of the block. The new building height with commercial functions is established in the core area. It is not only in the control of building height, but also in protection. Historical buildings such as the Webster's Mansion, Wu's Ancestral Hall, and Xinlun Guogong's Ancestral Hall are similar, and there should be no excessive height difference, and the color matching should be similar to that of the surrounding historical buildings, and the jump should not be too large. The interior of a building with commercial functions can be designed as a Hello Kitty coffee shop, Thai Airy or jewelry retail store. So that Lingnan culture can be inherited and developed within the block (as shown in *Figure 11 to 13* below). Guided outside the village, strengthen the connection with the surrounding space within the site, strengthen the connection with the external area of the village, reduce the average depth of the village streets, and improve the connection value, comprehensibility, accessibility and integration of the village streets, To enable the layout of mixed business types with a higher comprehensive index. The agglomeration of mixed businesses can retain people and cars and ensure the longevity of historic districts (as shown in *Figure 14 to 16* below).



Figure 11. Internal road dredging



Figure 12. External guidance

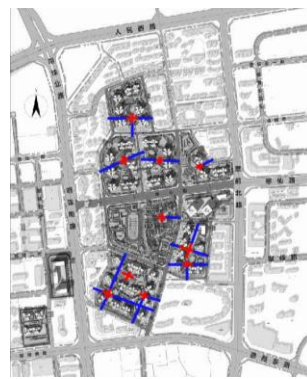


Figure 13. The internal and external connections of the village

Image source: The author repainted according to the plan of Zhuhai Architectural Design Institute



Figure 14. The facade display of Hello Kitty



Figure 15. Tai Ai Li display design



Figure 16. Side view of Hello Kitty

Image source:<http://www.linkshop.com.cn/club/archives/2013/537648.shtml>

7.5.2 Adjustment method of business layout on both sides of streets and lanes

When adjusting the business layout of the historic district, externally it is necessary to increase the number of service-type and entertainment-type facilities in Cuiwei Village. Internally, because they are all commercial along the street, the layout of the internal business of the district should be developed in the direction of homogeneity and diversity. To form a complete commercial interface as much as possible to maximize the function and commercial value of small shops, clinics, fast food restaurants, etc. According to the analysis results of the space syntax, the area with the best integration in the whole village is in the road A area, and the integration is higher. The place is in the area from Cuiwei Street to Dafang Street, so the business format after the block renewal should develop vertically along the direction of Road A and the three streets. It is the development of the street format in the direction of vertical, vertical and flaky. Small shops themselves improve the ability to operate independently. The commercial part of the newly built residential commercial complex is divided into planes according to the column network. The exterior is designed with a modern facade. The color should not be too bright, and the overall number of colors should not exceed Three colors. Only in this way, the external recognition of historical blocks will be enhanced and the connectivity will be better (as shown in Figure 17 to 20 below).



Figure 17. The effect of the future commercial renovation and renewal



Figure 18. The linear extension of the facade

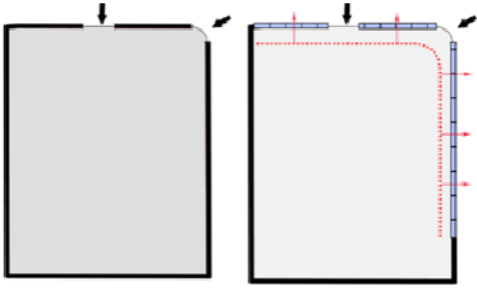


Figure 19. Reasonable division of the commercial floor plan

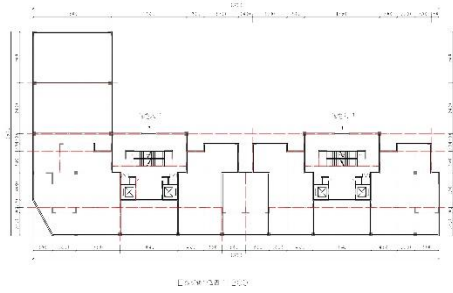


Figure 20. Commercial floor plan

8. SUMMARY

With the rapid development of my country's economy, the process of urbanization has gradually accelerated, and a large number of ancient villages have been abandoned and compressed, which has caused serious damage to the original structure of ancient villages. The development of the village block is closely related to the protection and organic renewal of the block, the embodiment of commercial value, the connection of internal and external traffic and road networks, and the development of the economy. Through investigation and analysis, it can be seen that Cuiwei Village has an excellent location. Conditions, but the living conditions and environmental conditions are extremely poor. The aborigines lease their houses to migrant workers at lower rents, making it difficult to attract high-quality tenants. The functions of historic blocks and buildings fail to meet the living needs of contemporary people. Coordinating with each other, young people cannot appreciate the cultural atmosphere of the neighborhood, let alone the sense of belonging in the historic district. What they want is to rebuild or move away from the original place of residence. Although a new update plan was introduced in the previous reform and practice, the reform practice and the plan text are separated from each other, and there are many economic problems in the transformation process. A lot of money must be spent to repair and strengthen various buildings due to disrepair. In historical districts, private residences and shops account for a large proportion of the walls, cracking walls and structural instability. Villagers generally have low incomes and do not have the financial means to protect historical buildings. Most of the renovation funds must rely on external Funds come to support.

In the future development, it is necessary to strengthen public participation and collaboration between the government and residents, put people first, comprehensively and systematically sustainable, improve the living environment of residents, improve infrastructure construction, renovate roads and lay pipelines, and continue to ensure the best interests of residents. The government should also hire professionals to repair buildings with historical value in the village, and improve housing quality and living environment on the basis of not destroying historical value. Increase the historical and cultural identity of the new generation of residents, thereby enhancing the attractiveness of the block, so that more villagers can move back after the block is renewed.

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