

# PRELIMINARY STUDY ON THE RENEWAL STRATEGY OF THE NEW ESTATE FOR WORKERS : FROM THE PERSPECTIVE OF PLACE-MAKING

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**Abstract:** Public spaces could be the embodiment of urban culture, as well as the collective memory of the neighborhood residents. In the context of China's urban development transitions, paying progressive attention to quality improvement, this paper selected representative “the new estate for workers” in Yangpu District Shanghai, which providing to workers in the past planned economic system. From several aspects, such as “quantity, order, surface and shape” analyzing the site's physical spatial feature, founding that it faced the drawback of “old, worn, isolated and lack” in the development .Meanwhile from the perspective of place-making, exploring unique opportunities and resources related to the collective memory. Eventually, this paper proposed its spatial and environmental design update strategy in terms of “recall, live, experience and link”

**Keywords:** the new estate for workers; update strategy; public spaces; place-making

## 1 Introduction

In the 1950s and 1960s, when Shanghai experienced socialist transformation, a large number of “*the new estate for workers*” were built, because it showed the superiority of socialism on the one hand, and on the other hand, “*the role of urban productive functions*” requires the active participation and input of the working class (Luo Gang, 2007). Then, in order to comply with the development of China's different transition periods , the industrial upgrading and migration has received enough attention, but the “the new estate for workers” and other renovations have not been paid attention. At present, China's urban construction has gradually changed from quantitative expansion to qualitative improvement. Urban renewal as an inevitable stage and major challenges of urban development, the important connotation of high-quality development is urban quality and urban experience. In the post-industrial era, the construction of creative cities guided by human resources needs to bridge the fragmented social space and use the construction of old communities as a mean to improve the quality of urban public space to cause residents’ spontaneous activities.

The quality of life of the old workers living in the new estate for workers has not improved. It is especially important to propose a space environment renewal strategy, to restore the life function of the streets and implement kind of culturally oriented urban renewal. The community as the basic unit needs to activate its innovation elements, update infrastructure and service supply requirements, and



provide more incubation space for the overall spatial and functional replacement of the "re-industrialization strategy" of upgrading the creative industry in Shanghai.

## 2 Lot analysis - quantity, order, surface, shape

### 2.1 Quantity: Spatial scale and scope

This article takes the example of the “Kongjiang Village” in Yangpu District, Shanghai, which is located on the northeast side of the central city of Shanghai, between the Inner Loop and the Central Loop, about 2km away from the Wujiaochang area, one of the Shanghai sub-centers ( As seen in Figure 1). The scope of this study is from Songhuajiang Road in the north, Kongjiang Road in the south, Yingkou Road in the east, and Huangxing Road in the west. The total area is about 1.1km<sup>2</sup> . Within the scope, there are 14 residential areas in the form of “the new estate for workers” such as Kongjiang Fourth Village, Kongjiang Second Village, Kongjiang Fifth Village, Kongjiang Third Village, and Kongjiang First Village . Each district is almost 5-17ha, basically belongs to the layout of small neighborhoods (As seen in Figure 2).



Figure 1: Study area location map



Figure 2: Study area division map

The main roads in the study area include the Jingyu Middle Road, Yanji Middle Road and Yongji Road in the West-East way, and Jingyu South Road, Cangzhou Road, Shuangyang Road and Yongji Road in the South-North way . The width of Jingyu South Road and Jingyu Middle Road is about 10-12m, the width of Cangzhou Road and Yongji Road is about 12-14m, and the width of Yanji Middle Road and Shuangyang Road is about 15-18m (As seen in Figure 2 and Figure 3).



Figure 3: Field research photos

The top [from left to right]: Jingyu South Road, Jingyu Middle Road, Cangzhou Road

The bottom [from left to right]: Yongji Road, Yanji Middle Road, Shuangyang Road

## 2.2 Order: Spatial texture and order

Spatial texture and order is a manifestation of the localization characteristics of this area in the historical dimension. There are many residential forms in the study area. For example, " the new estate for workers " housing mainly in the form of patches for multi-storey buildings determinant layout and high building density from the architectural texture analysis. The other residential building types are mainly high-rise point layouts with low building density. Meanwhile, although the area dominated by some public facilities is mainly low-rise, the building covers a large area. Overall, the compactness is not high, and only the layout of the building is considered. The consideration of the external space environment is insufficient, and some public facilities also cause the mutation of the texture in the lot (As seen in Figure 4).

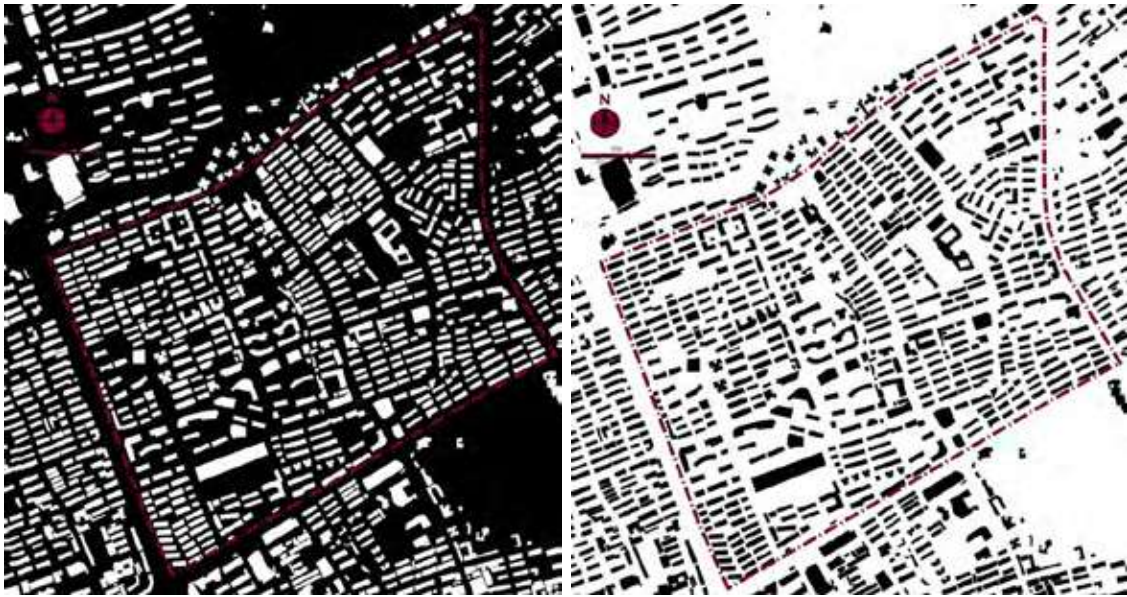


Figure 4: Texture analysis of the relationship between architecture and space

### 2.3 Surface: Spatial organization and interface

Starting from the spatial organization of different functions within the scope of research, the overall living space is mainly equipped with educational facilities, ministrant facilities, medical facilities and living and commercial facilities. Among them, the living space can also be divided into three different levels, the new estate for workers built in the 1950s and 1960s, the multi-storey residential quarters built in the 1980s and 1990s, and the high-rise housing buildings built after the 21st century in gated community . From the perspective of space and street interface, although there are many urban roads in the scope, the whole section is divided into 14 small neighborhoods, but the overall interface continuity is not high, and the road is only used as the skeleton of the division space. The east-west way road and street commercial interface creates a good vibrancy atmosphere, but the south- north way road is slightly insufficient due to the residential layout .(As seen in Figure 5)

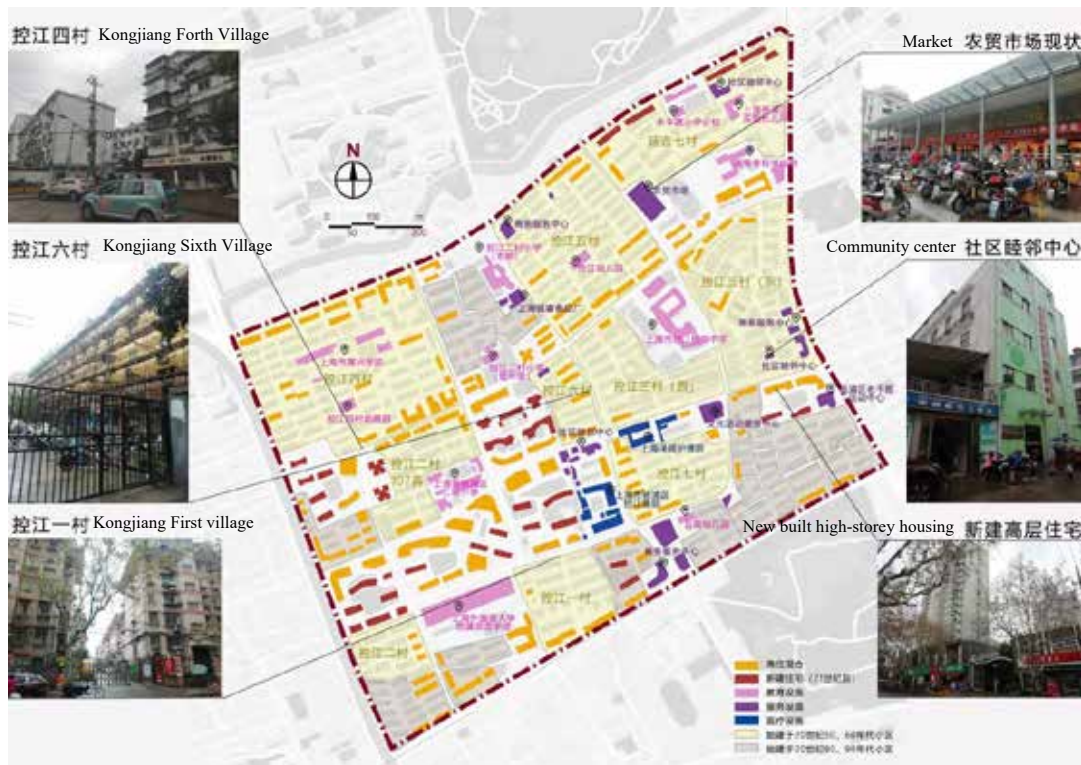


Figure 5: Spatial function organization analysis map

## 2.4 Shape: Spatial form and streamline

The spatial form is, to a certain extent, a microcosm of the era. As time goes by, the overall spatial form as a local continuation can also reflect the characteristics of the times. It can be seen from Figure 6 that most of the houses built before the 21st century are mainly low-rise and multi-storey, and their architectural forms constitute the main spatial form within the scope. However, with the development and construction of the real estate market, some gated communities have appeared. It appears in the high-rise point or plate form in the section, resulting in a morphological feature of overall disordered chaos.



Figure 6: 3D map of buildings and spaces forms

After excluding the educational facilities, the medical facilities, and the newly-built gated communities, it can be seen from the analysis of open pathways district 3, 8, and 14 have high connectivity with the surrounding roads, and the connected roads are not interrupted by the above-mentioned land use ; but district 4, 6, 7, 10, and 11 are occupied by the above-mentioned land use, resulting in poor connectivity. From the perspective of open green space, there is little room for residents to open up and use, and there is a shortage of open space. At present, two examples can also be seen that there are few people in use and insufficient space for activities (As seen in Figure 7).



Figure 7: Open pathways ,traffic sites and open green space maps and field research photos (①on the top right and ②on the bottom right)

### 3 Problem analysis - old, worn, isolated, lack

#### 3.1 Old: The living population is aging, and the corresponding service system is imperfect

According to investigations and interviews with some office staff, the majority of the residents in the study area are old retired workers from the typical factory, such as the Shanghai cigarette factory, and the average age is about 60 years old; and there are two relatively complete medical facilities in the scope. However, currently it is less suitable for elderly activities in terms of activity space and environment. to meet the diversified needs of the elderly, not only indoor activities, but also outdoor spaces. (As seen in Figure 8).



Figure 8: The elderly are resting in the community service center

### 3.2 Worn: Buildings, space and environment facilities are worn and have poor livability

Most of the houses within the study area were built in the 1950s and 1960s, at that time, its kind of the product of company welfare in the planned economy period, even after the 1990s renovation also capped nearly three decades ago, the overall architectural space livable poor. Although some buildings have applied for painting renovation of the facade of the housing, the lack of consideration for the systematic renewal of the residential environment of the urban community, the material space system composed of the building and space environment lacks complete planning and design.

### 3.3 Isolated: closed space partitions cause social interaction barrier

Due to the construction of a number of closed communities with commercial houses, there are high walls around them to ensure their safety. However, the security and openness of space are always two contradictory features. The physical isolation of material space may even lead to the gradual isolation of neighborhood interactions at the social level (As seen in Figure 9). How to construct semi-public space and semi-private space is a problem that should be considered as a planning designer. From the means of creating space, to reduce the barrier of social interaction, we should provide communication space and platform for the harmonious coexistence of neighborhoods.



Figure 9: Gated residential district entrance signage

### 3.4 Lack: lack of continuity protection in a unique cultural background

As a microcosm of an era, "the new estate for workers" is an image of a cultural concept and a spatialization of political ideology (Zhang Wei, 2005). How to seek new development in the current era? After research, there are very little response to history in the lot, except for the texture layout of the building and part of the road based the historic layout, the other environmental facilities are lack of consideration of the cultural background, precious historical and cultural resources are lack of sustainability protection and extension.

## 4 Strategies preliminary - recall, live, experience, link

### 4.1 Recall: built on the collective memory of the place

When Shanghai pursues a superior global city, history should not be forgotten. In the new development context, more attention should be paid to creating space that echoes historical and cultural memories, considering its unique cultural background and protecting its sustainability. So that residents living in the area have memories have resonance.

Habwah defines collective memory as: "The process and outcome of a member of a particular social group sharing the past. The condition for ensuring the inheritance of collective memory is that social interaction and group consciousness need to extract the continuity of the memory." The construction of the site also provides basic material conditions for the formation and review of memory. The relationship of place identity is also interdependent, providing a material basis for the identification of individuals, society, and even historical memory through the construction of buildings, spaces, and environments (As seen in Figure 10).



Figure 10: Schematic diagram of place identity

After the analysis of the current situation resources, we will construct a site based on collective memory within the scope of the whole research, and try to reorganize the overall spatial structure. For the typical roads, the section

transformation is shown (As seen in Figure 11 and Figure 12). Yanji Middle Road is the main traffic-type road within the scope, and the height of the buildings on both sides of the road section is inconsistent. The strategy proposes to construct a continuous commercial interface and activity interface, to guarantee the continuity of space by constructing a miniature park. While the width of Jingyu Middle Road is narrow, the height and width ratio of the road is close to 1:1, which is suitable for constructing life-type roads, proposing the addition of a characteristic guiding sign system and cross-section processing of continuous activity space. Both transformation methods are to expand the pedestrian activity space as much as possible, so that the vehicle space is controlled to the lowest level. The reference for the miniature park can be found in the reconstruction project of Sujiatun Road in Yangpu District, Shanghai (As seen in Figure 13).

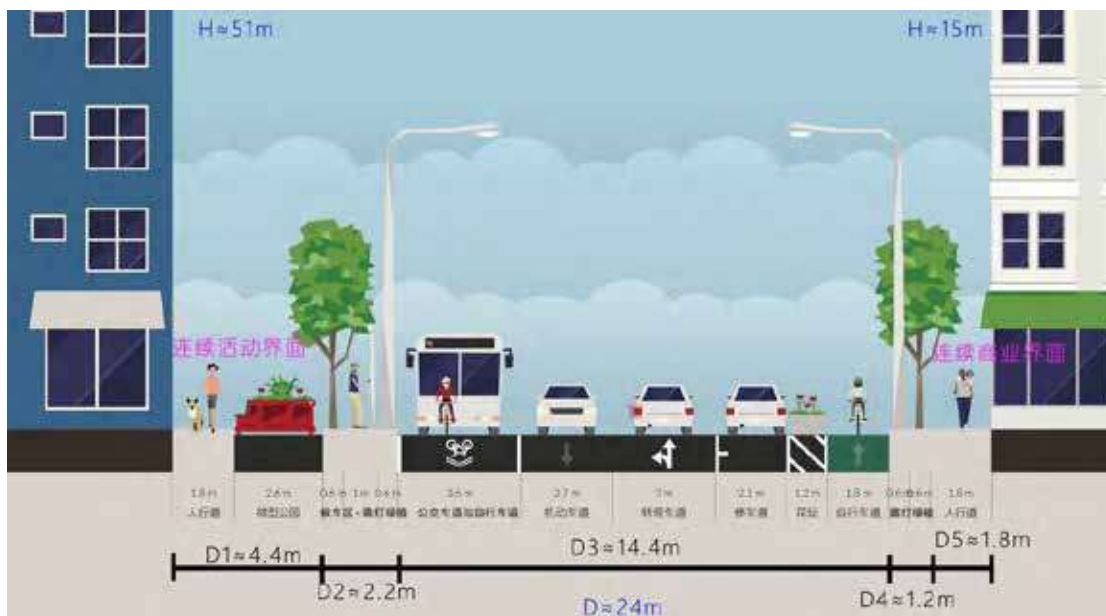


Figure 11: Reconstruction of Yanji Middle Road Section



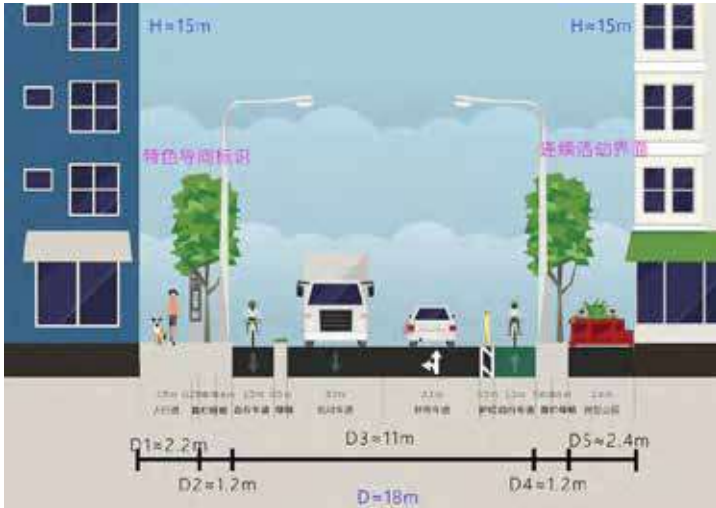


Figure 12: Reconstruction of Jingyu Middle Road    Figure 13: Miniature park case

#### 4.2 Live: Networking reshapes the vitality of public spaces

Urban space contains social concepts and human values, which are reflected in the lives of the people in which they live, which can be clearly experienced in the old area of the city (Zhoujian, 1996). How to reshape the vitality of public space, first of all, we can focus on the accessibility of space, put more indoor activities in the urban space, implanting the vitality of the living scene for the city. Meanwhile we should focus on strengthening the external communication of the event space. The road network density of the encrypted open path provides more open space, which is conducive to agglomerating more public activities to enhance the attractiveness of its space. In the strategy, we try to integrate the design of the openable residential area, connect the “communication interaction loop”, and set up the open center of the area in combination with other facilities in each area to improve the accessibility of each service function (As seen in Figure 14).

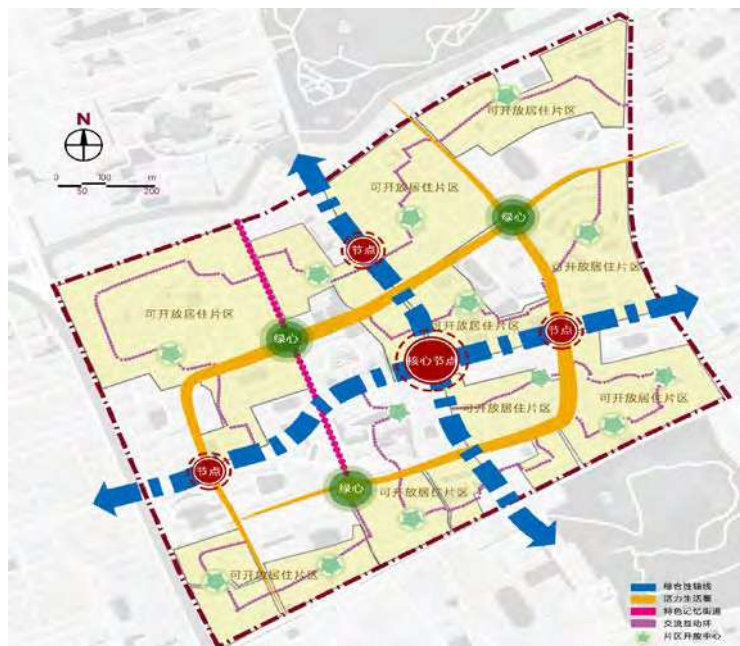


Figure 14: Spatial structure network analysis

Secondly, the construction of public space can not be renewed from a single location or facility. It should be combined with the dynamic street interface, living area and other linear surface space, taking into account the network reshaping measures from the entire scope to create a compact and continuous space interface. It can help to form the diversity and agglomeration of public life, and consider the diversity of time meaning in the overall order, so that the entire area is full of vigor and vitality. In the strategy, we try to order the main street as a major comprehensive axis, at the intersection of the lot as a core node to create; connecting the Jingyu Middle Road, Jingyu South Road and Yongji Road to create a "dynamic living loop" putting to provide comprehensive services to the leisure life of residents; and constructing the Cangzhou Road as a characteristic memory street, build a sample street as a place; building a small "green heart" at each major road node, and adjust the overall network planning to reshape the vitality of the site. According to the author's research, the reconstruction project at Sujiatun Road and Fuxin Road in Yangpu District, Shanghai is worth learning (As seen in Figure 15 and Figure 16).



Figure 15: Fuxin Road Pocket Park

Figure 16: Sujiatun Road Miniature Park

#### 4.3 Experience : Enhance the intuitive feeling of identity and orientation

The mutation of spatial scale and texture will form the spatial identification. Whether it is for the architectural scale or the street space, the attention to the identification and orientation of the construction space can enhance the intuitive feeling of the residents; for example a building balcony , enclosed courtyard or in the life street, event plaza, identify and guide space are based on site-specific feature shape. At the same time, focusing on the construction of the iconic venue can also provide more interesting space in the lot. However, when creating such a space, attention should also be paid to the isomorphism of the local space, following the basic road network or architectural texture, and usually selecting the necessary nodes in the daily life path of the residents, by establishing a visual focus. So that the attractive space landscape is shaped and styled. We can also use design techniques such as color change, height and size contrast to enhance the visual perception of its identification and orientation. At the same time, attention to the establishment of the landmark will not only affect the research scope or even the impact of the development of the lot and the region from a larger scope.

Taking the core node transformation as an example, the current space is divided into three types of typical space (As seen in Figure 17). Space ①, ④ Can be summarized as the surrounding street space for service business, and both of them have the opportunity to create varying space; space ② due at the exit of the bank, at present, the vitality is only poor. Just a kind of street waiting space; space ③ is a rare public open space in the district, but there are fewer people in there because of the lack of interesting and vivid activities. Through the above analysis, we try to propose the following transformation means: considering different use functions, combining a variety of guidance and service facilities in a large space, setting up an activity space, and creating a "mutation" in the space, through color change, scale change. Different facilities are set up , combining with the small scale space, different service facilities add fun to the pedestrian space and increase opportunities for interaction. Small-scale facilities such as newspapers, signs, etc. can be set up in a limited space. ( As seen in Figure 18).



Figure 17: The current situation of the core node space of Yanji Middle Road

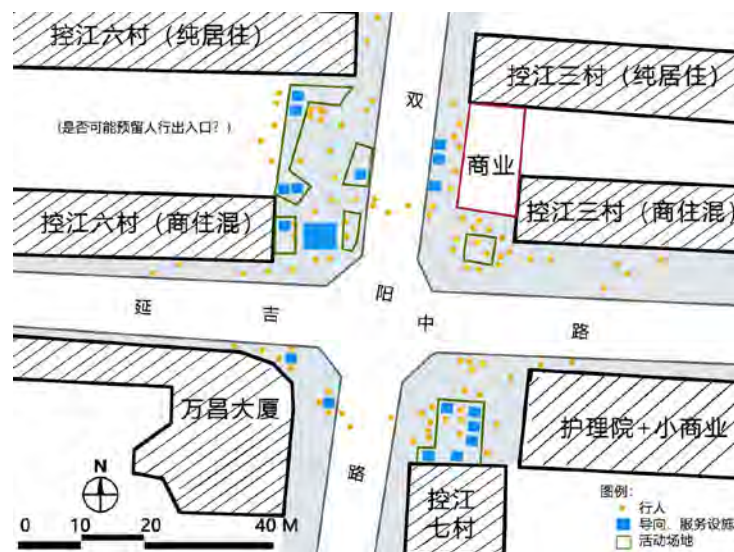


Figure 18: core node space transformation concept map

#### 4.4 Link: Moderately mixed development guarantee smooth Neighborhood Communication

Moderate mixing use and open positive spatial construction are important foundations for building a harmonious neighborhood. Residents living in the same area have the responsibility and obligation to contribute their own homes and create a livable living environment. From the perspective of space, more private and semi-private spaces will be transformed into semi-public and public spaces (As seen in Figure19). Meeting the needs of construction of space environment for different ages people, we can consider the optimization of mixed arrangement of functions such as business, leisure and amusement. Different leisure places providing a platform for effective communication among residents' neighbours.

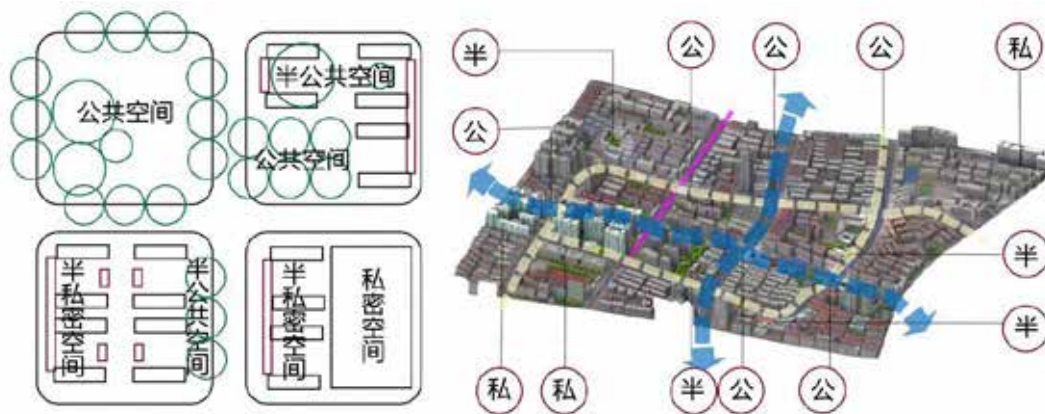


Figure 19: Space-level hybrid concept map of transformation

We should also consider the streamline of residents' behavioral activities, comprehensively meet their life experience and service needs, and build a public space suitable for their communication based on the scale of people. Usually small- scale space will also give people a sense of security and intimacy, making residents more willing to communicate with each other. In this case, it is based on small-scale public space construction, moderately mixing peripheral service functions, and providing the possibility of ensuring smooth communication in the neighborhood. Taking the Cangzhou Road constructed by the proposed characteristic street as an example, firstly we could integrate the interface into the mixed layout of commercial and residential, and then the street space formed by different interfaces could be classified and guided. It can use the additional facilities space, green space, guiding behavior streamline and different interface processing on both sides to optimize pedestrian experience and ensure smooth communication ( As seen in Figure 20).



Figure 20: The status quo analysis and transformation concept of the characteristic memory street Cangzhou Road

## 5 Conclusion

This paper takes the example of the “Kongjiang Village” in Yangpu District, Shanghai, from the aspects of spatial scale and scope, spatial texture and order, spatial organization and interface, spatial form and streamline, analyzing the spatial characteristics. Then through the analysis of the problem, it is found that its’ unique cultural background lacks continuous protection, closed space partitions cause social interaction barriers, space environment facilities are old and worn, and livability is poor. The author tries to construct an urban renewal strategy based on the perspective of place identification, and proposes suggestions for the renewal and development of the “the new estate for workers” section from the aspects of site construction, network reshaping vitality, enhanced identification and orientation, and moderate mixing. At present, the sense of place identity that is gradually weakened, it needs to be intervened from the means of space, and gradually restore the public value that workers should have in the new village. As a review of the memory of a generation, a realistic image of history, and the continued inheritance of a cultural resource, we have the responsibility to think and inspire its protection, development, and transformation. From the perspective of the development of time dimension, in the future, we can comprehensively consider the co-construction, co-governance and sharing of the old public housing community, and actively use the open street system to enhance its comprehensive service functions, to build more low-density low-intensity mode to achieve internal and external linkage. Realizing the cultural-oriented traditional community renewal and demonstration, attracting more entrepreneurial, innovative and creative people for urban development, and enhance the identity of the new and old integration.

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