

## Sharing Historical Districts under Limitation: An Acupuncture Renewal Design on a Block in Hengshan Road-Fuxing Road Urban Conservation Area

Ang Li

Department of Architecture, College of Architecture and Urban Planning, Tongji University, China

### **Abstract**

*In the context of urban development, historical and cultural elements have accumulated in spatial layout, forming the city's inherent characteristics. Even if faced with amounts of limitations, historical districts still have their own energy in the process of urban development.*

*The paper concentrates on a block in Hengshan Road and Fuxing Road Conservation Area. From 1901 to 1930, with the expansion of the French Concession, the boundaries and block were formed. Now it is complicated with historic buildings, Shanghai alleys and other additions, lacking of public space and separated from the city.*

*According to the protection plan, the forms of new buildings are strictly regulated. However, there exists an abandoned historic building, Ye Fukang house in No.3 Middle Wulumuqi Road. It can be changed to an urban lounge and shared with the citizens.*

*Based on the results of further research, the paper will introduce an acupuncture renewal design for Ye Fukuang House to create sharing space. It will be a micro cultural complex with a museum, a library, a salon, offices, a restaurant as well as bed and breakfasts. The high quality inner garden can be freely shared with the residents. In addition to that, the block with cluttered boundaries will be also opened and redesigned, making it lively again.*

*The paper seeks to summarize an ideal historical district which can both connect to the city harmoniously and serve the neighbourhood better. The acupuncture renewal with minimum intervention can maintain the spatial structure of historical districts, but also make it more adaptive to achieve the needs of sustainable and sharing cities.*

**Keyword:** Historical District, Acupuncture Renewal, Sharing Architecture, Urban Design

### **Introduction**

With economic development and social progress, many cities in China have entered a post-urbanisation phase. Once cities expanded outwards, while now they are growing more densely inwards. And urban regeneration has become more and more important than new city design.

Many cities in China have a long history. And there are many historical districts even in downtown, with cultural and architectural heritage value that precludes large-scale demolition and construction. However, the interiors of these historic districts may be dilapidated, with poor living conditions and a lack of infrastructure to meet the needs of modern life. What's more, there are much limitation when regenerating these historical blocks, where modern design methods often doesn't work. So they need to be updated on a small scale, which is known as acupuncture renewal. Taking Wuyuan Road block as an example, the paper will introduce an acupuncture renewal design, providing a possible model for urban regeneration.

## **Background**

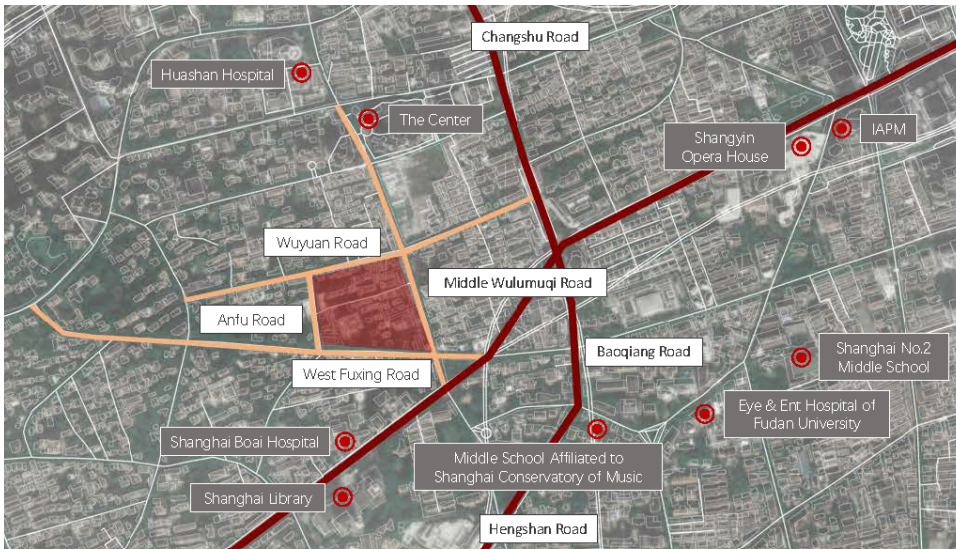
Acupuncture is a method of treating disease in Chinese medicine, which means that small needles are inserted into the patient's body at an angle to treat the disease by stimulating specific areas of the body. Acupuncture renewal is a small-scale urban regeneration model, in which a specific object is selected for minimal intervention through a transformation design approach, making the surrounding environment more active and the city more prosperity.

There are many examples of successful acupuncture renewals, such as Tai Kwun Centre for Heritage and Art in Hong Kong designed by Herzog & de Meuron. It has been transformed from a rigid and closed prison into an open and shared urban living room, creating a precious courtyard space in Hong Kong's high-density urban environment, which has become a great place for citizens to socialise and relax. Besides, there are also many excellent examples of street renovation in Shanghai. For historical buildings, it is important to consider developing their unique historical value on the basis of conservation, so that they do not become closed museums in the city but engines for the revival and prosperity of the area.

## **Spatial characteristics of the Wuyuan Road block**

Wuyuan Road block, located in Xuhui District, is a typical historical block in Shanghai. The subject of this acupuncture renewal design is a neighbourhood radiating southwards from Wuyuan Road, from Yongfu Road in the west to Wulumuqi Zhong Road in the east, from Anfu Road in the north to Fuxing Xi Road in the south. And it is located in the core conservation area of the Hengshan Road-Fuxing Road Historical and Cultural District in Shanghai, covering an area of about 4.7 hectares.

The block was formerly part of the French Concession, which was established in 1849. But Wu Yuan Road was not shown in map of the French Concession in 1925. So it is clear that the block was originally planned as a larger one, extending westwards to Wu Kang Road and northwards to An Fu Road. As the city was built and the population increased, more and more new buildings were constructed within the block. With Wu Yuan Road and Yong Fu Road defining the space more strongly, the block has gradually become a separate block. However, unlike Wukang Road and Anfu Road with vibrant and active spatial atmosphere, the neighbourhoods and roads within the Wuyuan Road remain relatively quiet and closed now, and are less effectively driven by the economic radiation of the surrounding area.



**Figure 1.** Location and surroundings of Wuyuan Road block.

The majority of the buildings in the block were built from 1911 to 1949. It used to be high-class residential area in the French Concession at the beginning of the construction, with a variety of styles of housing, including garden houses, new-style lanes and modern flats. The texture of the block has changed little since it was formed. And the current building types are still predominantly residential, with retail businesses located along the streets. As with most lanes in Shanghai, residents here have made many additions, destroying the historic fabric of the block. The questionnaire study has concluded that the residents of the different residential building types are spontaneously distributed in clusters according to their personal experiences, income and so on, lacking communication among themselves. There is a lack of interaction nodes within the block, and the few public spaces are occupied by disorderly parking, resulting in a low quality of public life for the residents. Due to the poor residential conditions, the quality of life of different income groups also varies somewhat, and the current residents lack a sense of identification with the history and culture of the block.

This is a completely free-growing block that blends into the surroundings, but also retains its own individuality, which has great potential for development. However, due to the confusing boundaries, the chaos traffic flow, the ambiguous property rights and the special significance of the historic district, it is difficult to make the regeneration of this block. And it is not allowed to adopt the same strong architectural means like modern community regeneration. Faced with a wide range of limitation, it is possible to intervene in the design of the regeneration of this block with minimal interventions through acupuncture renewal.



Figure 2. Traffic flow analysis map of Wuyuan Road block.

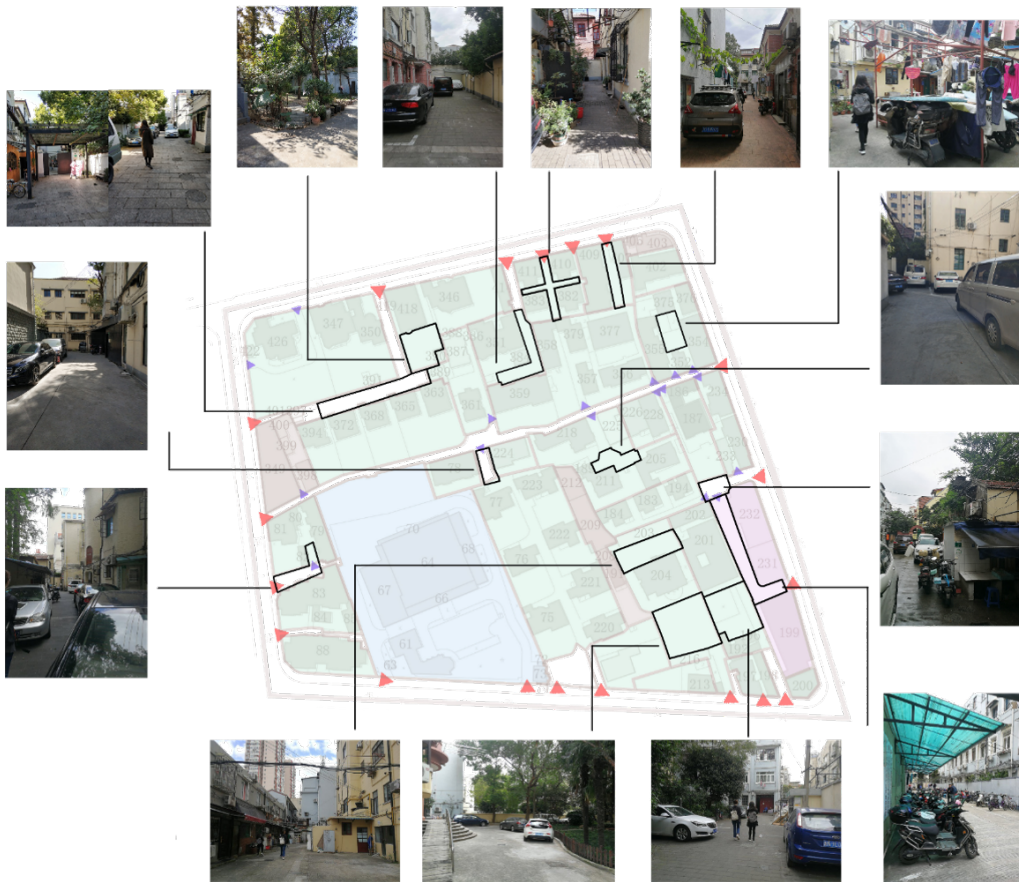


Figure 3. Site photographs suggest that there is a lack of public space in the neighbourhood.

Ye Fukang's House, located at 310 Long No.3, Middle Urumqi Road, occupies a relatively central position in the block. It is a detached garden house, built in 1940 and known as 'the Crystal Palace' because of its beautifully crafted glass. The main building is three storeys high, with a terrace on the top floor. And the secondary building is two storeys high, which used to offer accommodation to servants and drivers, with separate access and entrance. There is also a front courtyard, which was historically accessed from the south entrance with a swimming pool. And a patio stands between the main building and secondary building. From the exterior, you can see the red clear brick walls, concrete window casings and multiple horizontal lines of

fluted decoration between the horizontal windows, which suggests that the architecture is influenced by Art Deco.

In 2007, the Crystal Palace was listed as an immovable cultural relic in Xuhui District, but has always been vacant till now. It is of great value with the highest level of protection in Wuyuan Road block. If it could be given an acupuncture renewal to move it from private to shared use, attracting both residents and visitors, it could go some way to enhancing the vitality of the block and the quality of the street.



*Figure 4. Photograph of the south elevation of the Crystal Palace.*

### **Methods of acupuncture renewal design**

According to The Regulations on the Protection of Cultural Relics in Shanghai, the Crystal Palace belongs to the third category of protection level, which means that the main façade, the main structural system, the main spatial pattern and the valuable architectural elements of the building must not be changed, while other parts are allowed to be appropriately altered. In this renewal design, the basic pattern of the main building is retained, while the secondary buildings can be reorganised functionally by removing some partition walls, provided that the structural system remains unchanged. The parts to be repaired are the mosaic paving in the forecourt, the mosaic card walls in the bathrooms of the main building and other Art-Deco style decorations.

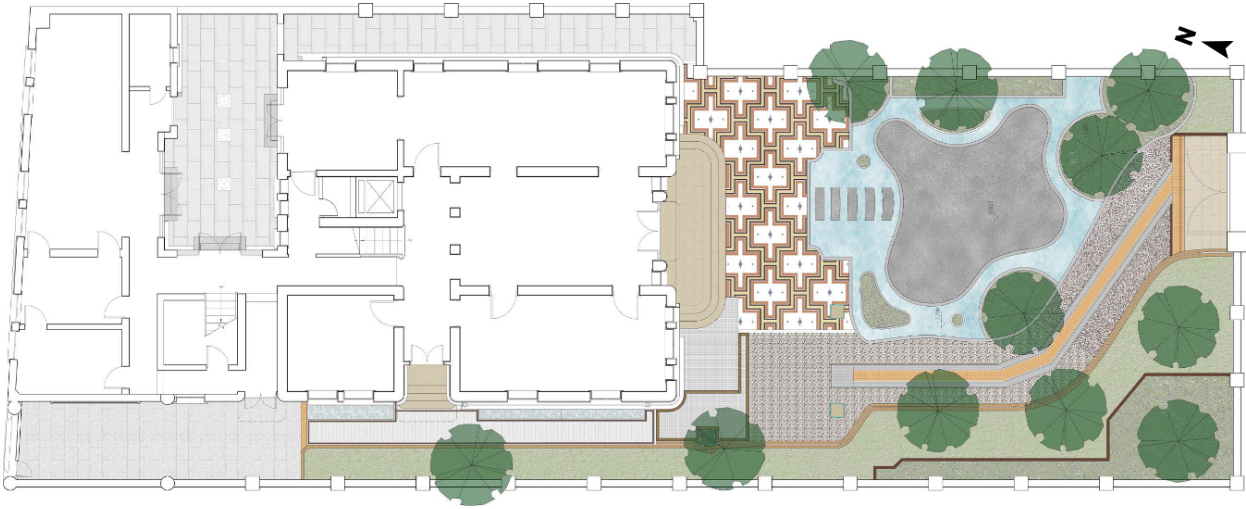
The acupuncture renewal design aims to restore the Crystal Palace to its former style, introducing art salons, modern exhibitions, themed restaurants, superior hotel and other functions, turning it into an open and shared urban living room.

The renewal design of the main building focuses on material restoration and spatial optimisation. A new lift will be implanted next to the stairwell, and lead to the roof terrace, to meet the needs of modern life. The ground floor is used for salons and exhibitions. And then the visitors can pass through the corridor to the secondary floor, where the thematic restaurant is reached. Both two levels of the sub-floor are set up as a restaurant, including a lobby, private rooms and outdoor tables, catering to the needs of different people at different times. The second floor of the main building is used for office management. As for the third floor, with its quiet and uninterrupted atmosphere, it will be converted into a hotel suite. The bathroom walls of the suites will be lined with mosaics, remaining the customers of the historic atmosphere.

The outdoor of the Crystal Palace is currently the most damaged. The mosaics on the walls are mottled and peeling, the floor mosaics are incomplete and the old swimming pool has been filled in so much that only a vague outline of its original form can be seen. Based on the restored swimming pool, an island will be designed inside the water to provide a venue for other activities such as outdoor chill-out parties, meeting the needs of modern life and human interaction. As the pool's historic edges are relatively blurred, to highlight the contrast between the past and the present, the internal island is relatively free in shape, which responds to the pool's boundaries with a rounded border.

The original trees within the site have been retained, and a circular sunken tree pond will be created to response to the shape of the pool and the island. There are also several free-floating objects scattered in the pool, which can sometimes act as fountains or other landscape features. The integrated design will be carried out exterior. One method is to restore of the mosaics wall and flower pond tiles in the north entrance alley, opening up the north-south path and truly transforming Crystal Palace into an open and sharing urban living room. Even if people do not enter the building itself, they can still experience a lively spatial atmosphere when simply walking through it.

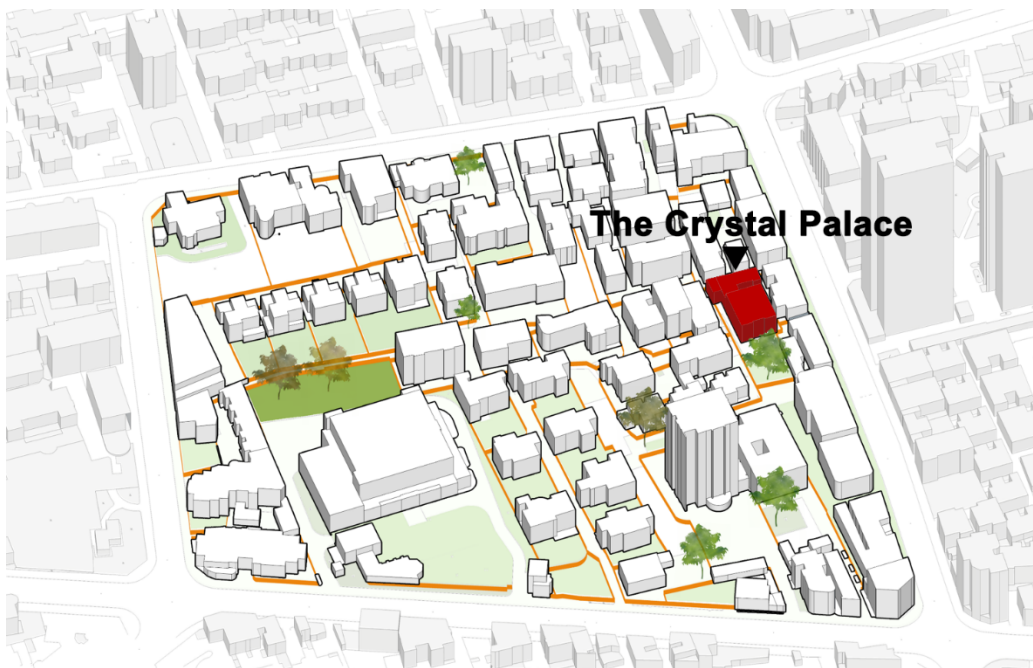
The Crystal Palace is now owned to a private enterprise, but can be shared with the public by transfer sharing. The office and accommodation spaces are relatively private, while the restaurant and other salon spaces can be opened to the public. After the acupuncture renewal design, the Crystal Palace will be a landmark building for the Wuyuan Road block in the future, providing a space for public activities for residents as well as an outstanding historical building that attracts visitors to participate in art salons. It is not a tall, towering mark, but a discreet space integrated into the whole neighbourhood, attracting passers-by with an openness, offering residents of the area more possibilities beyond accommodation and commerce.



*Figure 5. Ground floor and the courtyard plan after the acupuncture renewal design.*

### Results and Discussions

The acupuncture renewal design does not aim to transform single buildings. Using the Crystal Palace as a basis, further community regeneration can take place in Wuyuan Road block. The pattern and texture of the historic district will be restored by removing plastic sheds and earthen walls erected illegally by residents. At the same time, car parks are planned rationally and internal street spaces are sorted out to provide space for public activities for other residents, turning spare space into shared space. What's more, some old residential buildings can also be adapted, such as adding lifts to meet the requirements of the local elderly in their daily life.



*Figure 6. Overall renovation strategies of Wuyuan Road block.*

### Conclusions

The regeneration of historical districts often faces various limitation, such as economic, traffic, legal, property rights, etc. Not all blocks are in a position to be completely built up and renewed, which is why acupuncture renewal is needed. In acupuncture renewal design, one of the most important thing is to select an easily identifiable space or building as an object, like the Crystal Palace. Only if the object has a certain research value and is of great significance in the area, it can better drive the regeneration of the whole district.

What's more, acupuncture renewal is a process that starts from small and progresses step by step. From single objects to whole neighbourhood, organic and more suitable and sustainable development is required. It usually doesn't benefits from the renewal design immediately, but are slowly reflected in people's daily life and experience.

In addition to top-down strategies, acupuncture renewal also requires bottom-up research and feedback, more important, humanistic care. People are the users of the space and the main body of the city. And it is from their experience that the acupuncture renewal can make the buildings and spaces better serve the user, and the users can also inspire new activities that will lead to the revival and prosperity of the whole district.

## Acknowledgements

This paper is subsidized by NSFC project which is named as Research on Time and Space Elements and Expression System of "Sharing Architecture", NO.51978468.

## References

1. Sun Qian, Li Wen & Hu Zhongjun. (2010). Public center-led urban acupuncture. *Chinese and Foreign Architecture* (12), 100-101. doi:CNKI:SUN:ZWJC.0.2010-12-023.
2. Ye Zupan, Jiang Ke & Li Jing. (2013). Implantation and acupuncture - Reflections on the transformation of the cultural district of Duolun Road, Shanghai. *Chongqing Architecture* (05), 4-7. doi:CNKI:SUN:CQJZ.0.2013-05-005.
3. Zhu Mingjie & SiuKin Wai Michael.(2016).Urban acupuncture as a strategy for public space renewal in old communities. (eds.) *Proceedings of the 12th International Symposium on Environmental Behaviour Research* (pp. 1217-1222).
4. Careva, Kristina,,Lisac, Rene,,Pletenac, Tomislav & Vukić, Jana.(2017).City Acupuncture as a Participatory Tool in Revitalizing Public Space. *prostor : znanstveni časopis za arhitekturu i urbanizam()*,. doi:.
5. Chu Haifeng, Ding Zhaolong & Liu Yajun. (2020). Reflections on the conservation and renewal of historical districts from the perspective of urban acupuncture. *Hunan Packaging* (04), 29-32. doi:10.19686/j.cnki.issn1671-4997.2020.04.007.