

The Twilight of Shenzhen's Great Urban Village: Renovation of Baishizhou to Sustain Local Vitality and Improve Living Conditions

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Abstract: This paper examines the ongoing demolition of Shenzhen's largest urban village, Baishizhou, where poor living conditions and local vitality coexist. We focus on people's attitudes towards the demolition project and investigate how to renovate Baishizhou to enhance living conditions and sustain local vitality simultaneously. By conducting field research through surveys and interviews with current residents of Baishizhou, we find that people are concerned about their displacement and the disappearance of community culture. Also, people reckon natural lighting and overcrowdedness are the main needed-for-improvement aspects of their current living conditions. In discussion, we propose our replan of Baishizhou in zoning and architectural design to solve the issues we found. We believe that the renovation of Baishizhou should be both human-oriented and practicality centered, which would have multiple implications for the redevelopment of urban villages in modern China.

Keywords: Baishizhou, urban village, demolition, renovation, vitality.

1. Introduction

Since Shenzhen became a Special Economic Zone during China's Open and Reform Policy in 1980, it achieved an economic boom and rapid urbanization from a rural village of 0.3 million to a metropolis of 12.6 million in 2021, attracting people from all over the country to work and reside. At the same time, constant urban renewal takes place in Shenzhen, including transforming old neighborhoods that used to be new [1]. In particular, massive urban villages in Shenzhen were renewed by preservation, improvement, or demolition [1]. These Chinese urban villages, or Chengzhongcun, are areas of low building quality, high population density, deficient sanitation, and poor living conditions in an urbanized area [2].

Among urban villages in Shenzhen, Baishizhou is the largest one, with a population of 150 thousand in central Shenzhen, which was called into a demolition and renovation project in June 2019. Surrounded by affluent areas including resorts, golf courses, and luxury residential areas, it takes up 6.4 million square feet, consisting of dense old buildings in poor conditions and narrow alleys. It is facing a dilemma in which its "dirty, chaotic, and substandard" land use has been an increasingly problematic issue that contradicts an image of an optimal residential environment [1].

However, Baishizhou is also one of the most lively neighborhoods in Shenzhen. Crowded with

ninety percent migrants from all over the country, Baishizhou accommodates mainly young people aged 21-50, most of whom work in manufacturing, service, and construction nearby. Such diverse and young demographics in Baishizhou contribute to the inclusiveness and vitality of the neighborhood. During the night, people gather in various restaurants, and food stands on the streets, chilling and chatting about their daily lives during work, establishing connections with the community [3]. Many artists even created songs based during their stay in Baishizhou, expressing their complex emotions on urban lives.

Nevertheless, artists may never have a chance to create these songs again as Baishizhou are planned to be destroyed and replanned. According to the draft plan by the Urban Planning, Land and Resources Commission of Shenzhen Municipality in 2017, 4.9 million square feet of land are planned to be demolished, and 3.3 million square feet of land will be turned into new residential and commercial buildings [4]. In 2020, the government contracted the project out to LVGEM (China), Real Estate Investment Company Limited, to renew the neighborhood eight to ten years after the demolition and exile the original residents from Baishizhou [5]. LVGEM plans to “build a new community with over 2.3 million square meters of residential development distributed in a highly dense, mixed-use, vertical city” [6]. By May 2022, part of the old area in northern Baishizhou had already been torn down during the project.

The demolition of Baishizhou has raised public debates since the launch of the project in 2019. On the one hand, Baishizhou’s poor living conditions are consistent with all urban villages, including high density, low building quality, poor sanitation, etc. On the other hand, if Baishizhou is demolished and renovated, there are concerns that Baishizhou will lose its vitality as people are displaced. What are people’s attitudes towards the demolition project of Baishizhou? How can Baishizhou be renovated to sustain local vitality and improve living conditions? It would be significant to shed light on planning and policy-making to revitalize urban villages in contemporary China and harness the inclusiveness and quality of life.

Our research refers to the concept of the “planner’s triangle” of sustainability [7] and the design of healthy houses against diseases [8], prospecting possible improvements in living conditions in Baishizhou. Meanwhile, to keep the vigor in Baishizhou, Jane Jacobs’ ideal vision of modern life is about people’s everyday life and provides an ideal image. Moreover, the concept of the 15-Minute City gives excellent inspiration to renovating Baishizhou with “optimal density” and “diversity” to achieve living quality and local vigor [9]. Meanwhile, we researched collecting quantitative data from questionnaires and qualitative data from interviews with current residents. In addition, we proposed a blueprint of an envisioned Baishizhou neighborhood with better living quality by reorganizing and replanning the neighborhood and housing.

2. Literature Review

Our literature first reflects on sustainable development in enhancing urban living conditions in Baishizhou. In particular, achieving sustainability is based on balancing economic, environmental, and equity conflicts [7]. As the Shenzhen government plans to demolish and transform Baishizhou into commercial areas generating substantial economic benefits, many people living there for decades are forced to move unjustly despite economic compensations. Pursuing sustainability by solving conflict between economy and equity would be one of our core goals in renovating Baishizhou. Similarly, to cope with poor sanitation in Baishizhou, we need to consider healthy architecture design. In the last Century, modernists proposed architectural features including flat roofs, balconies, and terraces to combat epidemic diseases and improve urban hygiene [8]. In the twenty-first Century, public health and urban hygiene in architectural design should be essential in improving living conditions in Baishizhou in terms of natural lighting and ventilation. Meanwhile, for planning the density, the 15-Minutes City mentions “optimal density” that people can access spaces without the

demand for automobiles, where people can commute within 15 minutes [9]. The renovation of Baishizhou can aim to reduce automobiles to obtain more public space on the street. Meanwhile, it is important to consider people's time in commuting to community amenities.

As for sustaining the vitality and inclusiveness of Baishizhou, Jan Jacob's proposal on people's modern life touches upon maintaining local vigor in the city. Modernists agree with Jacob and address the importance of "the celebration of urban vitality, diversity, and fullness of life" resulting from people's everyday lives in public spaces. Jacob and other modernists envision everyday life in public spaces as valuable in planning public spaces like courtyards or parks for residents. Moreover, the dimension of diversity in 15-Minute-City illustrates how the inclusiveness of mixed-use of neighborhoods and culture would enrich the experience of urban dwellers [9]. Baishizhou accommodates people from diverse places, income statuses, and industries. There are also many family-owned stores and restaurants providing service for residents. Thus, renovating Baishizhou with diverse functions and people would be essential to maintain local vitality.

Overall, the literature significantly contributed to our research on renovating Baishizhou to improve living conditions and maintain vitality simultaneously. Although the context is different considering policy-making, demographic features, and authoritarians in modern China, it is still valuable to explore a better solution to reconstructing urban villages.

3. Data and Methods

In order to investigate people's attitude towards the demolition project in Baishizhou and how they feel about Baishizhou's current living conditions, we conducted qualitative research and quantitative research respectively.

A qualitative research method is employed in our research, as we conducted on-site visits and semi-structured interviews with three randomly selected residents of Baishizhou. During the interview, we asked open questions to explore individual experiences and opinions on the demolition project in depth. All interviewees have given informed consent to participate in our research.

Our empirical analysis is also based on quantitative data from an online questionnaire survey sent out to more than 300 current residents of Baishizhou. 291 valid samples have been collected, of which people aged from 26 to 35 years account for the most (39%). The average age is 38.1 years old, and more than 90% (92.3%) of the participants have lived in Baishizhou for more than one year. The questionnaire questions include personal characteristics such as gender, age, income, and housing characteristics and ask each participant to rate the aspect that is most needed for improvements in living conditions.

4. Results and Findings

The need to improve lighting, address overcrowdedness, and construct a public space

Consisting of old dense buildings in poor conditions and narrow alleys, the current problematic layout and overcrowded land use of Baishizhou have been called into question. Responses to the questionnaire show that 55% of the participants rated natural lighting as the most needed-for-improvement aspect of their home since the "matchbox houses," accessed through narrow alleys, are so closely packed that they are often referred to as "handshake" spaces with poor lighting. In addition, the need to address overcrowdedness and the lack of order in the streets and alleys and the desire to have a public space, or a community center, are highlighted by many participants.

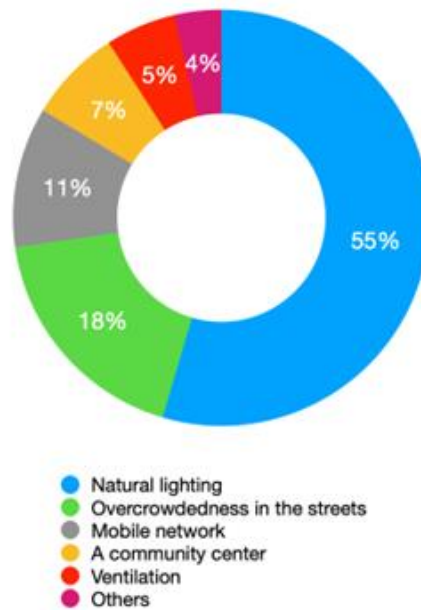


Figure 1: Response to the online questionnaire survey.

5. Exclusion and Displacement

The large-scale demolition of Baishizhou has had a significant impact on the lives of migrant workers, as it results in social exclusion by causing many low-income migrant workers to lose their homes in the low-cost living community that they once depended on.

With the sharp increase in rent due to the demolition, some migrant workers are forced to return to their home villages in rural areas. During the interview, construction worker Hong Jian suggested that, like himself, many of his colleagues who also live in Baishizhou have no choice but to leave Shenzhen even before the construction project finishes. The outflow of many migrant workers who work in essential labor-intensive industries threatens the sustainable operation of Shenzhen as it compromises the city's service level and reduces the city's competitiveness [10].

Concern over the loss of local vitality and community culture

The planned demolition of Baishizhou, which will result in the forced migration of many current residents, will also lead to the loss of local vitality that is of great importance and meaning to both current residents and the culture of the city as a whole. Zhang Huayi, 62, a grandma of two who has spent her entire youth in Baishizhou, expresses her close connection to the village and its unique community culture. She dreads the idea of “throwing out everything to rebuild” and having the demolition project erase a dynamic neighborhood.

As such, taking into account current residents' need for improvements and the concern over the displacement and exclusion of people, it is crucial to propose a framework of inclusive and sustainable redevelopment for Baishizhou that offers human-oriented design to improve living conditions while sustaining local vitality.

6. Discussion

There was no original site planning for the area. For decades, the authorities left the place to sprawl. All the alleys in the area are existing gaps between buildings rather than a real road or street for residents. The lack of regulation and systematic planning has led to informal growth, such as the “shake-hand” buildings and spaces in Baishizhou.

The sprawling alleyways inside this district are diffused and vein-like, which causes difficulties for people to understand the layout. This not only prevents people from getting familiar with the community, but it also contributes to segregation within the city.

6.1. Main Streets

The first steps of the design proposal are to set main streets for the whole area and create a clearer grid system for both this neighborhood and the area's traffic. A system that employs hierarchies of streets, mainly for bicycles and pedestrians coming from different directions, can provide a better experience for navigating and commuting through Baishizhou.



Figure 2: Local buildings and alleys Layouts.

Several buildings on these lines could be removed to create wider linear streets between several minor blocks. Main streets can be used to connect both blocks from the inside and create a connection to the city from the main entrance used to get into these blocks. The infrastructure to be built or replaced, such as outdated electricity wires and the power station, is designed to be arranged along these main streets. This further serves as a solution to the bicycle parking issue in the blocks. The residents in Baishizhou tend to leave their e-bicycles right outside the buildings, making the narrow streets harder to pass through as well as making the single buildings more dangerous to live in.

6.2. 1-min Circle and Community Centers

Services provided to the residents were quite remote. After determining where to set the main streets and redressing the basic outlines through blocks, we select intersection points as the center of 1-min circles that will serve as community centers for the neighbors. This second step is meant to provide this mini society with improved proximity-based community services for all age groups. People are supposed to be provided with most of their basic needs within the vicinity of each determined circle. Most commercial and social activities are walk-based, which means that 1-min-walk circles leads to more divided function distributions with a relatively low-density society. In other words, there would be more intensive functions for different age groups living here rather than planning from an urban scale without details for residents.

The design of the main streets and these 1-min circles can promote accessibility to public spaces and make the whole community better connected. It can also eliminate exclusion from the community and improve the sense of belonging and safety.

The component of the area that needs to be preserved is not the wires or outdated infrastructure,

but the people and activities in the neighborhood. The indigenous elderly who lives in this area spend most of their daytime chatting with others and hanging around in the neighborhood. Their daily routines are particularly conducive for social spaces such as squares and community centers. And the young people who have just graduated from college, and primarily lived in the neighborhood for a relatively short period of time, also wish to better connect with the community.

More squares placed in the corner of the main streets will provide more social space for residents to connect with each other in the neighborhoods, allowing people from different worlds to get to know and interact with each other. For specific designs on these social spaces, the nature of the connections and interactions among different age groups should be addressed.



Figure 3: Main Streets.



Figure 4: Public Squares and 1-min Circles.

6.3. Future Architecture Renovation Planning

As for the architecture part of the design, we propose to bring more natural light, more outdoor space, and Preserve community culture. However, due to the difference in building density in the region, we divided the region into high building density and low building density.

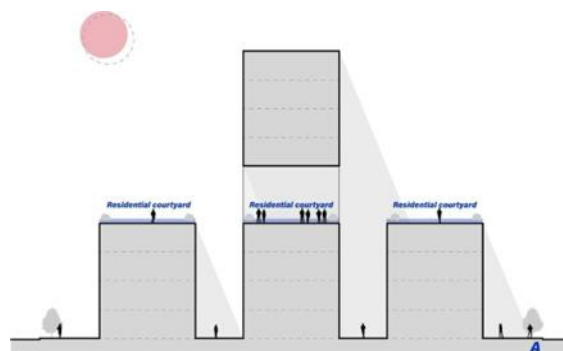


Figure 5: High Building Density Area Section.

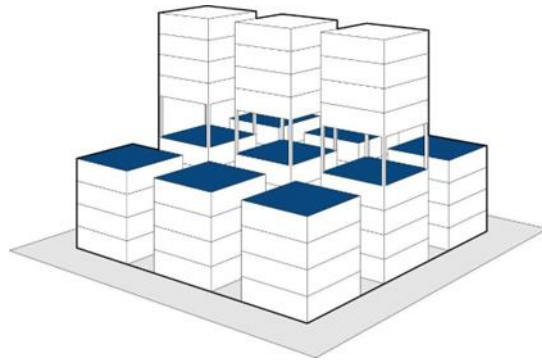


Figure 6: High Building Density Area 3D view.

In the area of high building density (Fig 5, Fig 6), the density of buildings is usually large because it needs to meet people's living needs. So in our proposal of a high construction density area, we will still keep the original building density in place to ensure that residents have enough housing, and on this basis, the roof of the space to exploit, make it the same level as the roof of the new outdoor space, people at the same time of enjoying the sun can also interact with households and other units, to ensure the normal development of neighborhood relations. At the same time, the middle of the building is raised overhead to ensure that the rear units also have sunlight.

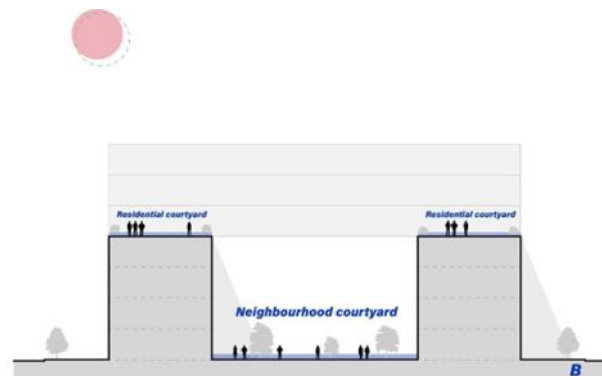


Figure 7: Low Building Density Area Section.

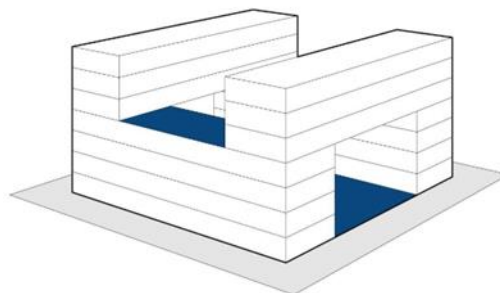


Figure 8: Low Building Density Area 3D view.

In the area of low building density (Fig 7, Fig 8), there is usually enough land for public space. People in the community can carry out activities in the public area, so we imagine the area with low building density as a Mix use space. Combining commercial, residential, and community centers, the commercial and community center located in the low-floor area can bring economic value to the

community, and at the same time preserve the community culture well so that people can communicate more closely. Residential residents can ensure that residents still have enough housing so that they don't have to move out of their original area.

7. Conclusion

In response to the research question about people's attitude towards the demolition project of Baishizhou, we found that residents are concerned about their displacement and exclusions. Also, our interview with local residents reveals their pessimistic attitude on sustaining local vitality and community culture. As for methods to renovate Baishizhou, we summarize that the renovation proposal should focus on improving lighting, lessening overcrowdedness, and constructing public spaces, according to our survey on local residents.

In terms of discussion, we further propose an ideal blueprint to cope with problems we found. First, we rearrange main streets to reduce overcrowding and improve mobility. Second, we propose public courtyards combining with 1-Minute Circle for every resident to access public spaces, which maintains community vigor. Moreover, our architectural design of the neighborhood will improve natural lighting, enlarge public spaces and increase connectivity.

Unlike proposals from government authorities or LVGEM, our research focuses on local residents to hear their voices on the renovation of their neighborhood. Moreover, we base on practicality to propose our blueprint of Baishizhou renovation. We believe that applying the mindset of human-oriented and practicality can be significant in sustaining local vitality and improving living conditions in Baishizhou and other Chinese urban villages.

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