2016

Policy Evaluation and Recommendation for Preserving Residential Compounds in Beijing: A Process-Oriented Approach

Yimei Zhang

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Policy Evaluation and Recommendation for Preserving Residential Compounds in Beijing: A Process-Oriented Approach

Abstract
Between 1949 and 1958, a large number of residential compounds were built in Beijing to house the growing population in the capital city of the newly founded People's Republic. They were planned as self-sufficient residential components of "work-units", and usually consisted of groupings of three to five-story buildings with various amenities and institutions. The construction of these neighborhoods profoundly shaped the city's landscape. Since the reform of the "work-unit" system and the opening of the housing market in the late 1990s, residential compounds gradually declined and are now threatened of demolition under the city's redevelopment projects.

The thesis researched into the history, evolution and current conditions of the residential compounds in Beijing, and argues that residential compounds deserve preservation because of their heritage and social values, yet traditional preservation policy is not sufficient to address the challenges posed by residential compounds, which requires a broader preservation perspective and an active participation in the urban redevelopment process. The thesis evaluates policies both already in place in China and used in the US, and proposes a new preservation process that makes meaningful interventions to better preserve these neighborhoods in Beijing.

Keywords
danwei, housing, redevelopment, work-unit, planning

Disciplines
Cultural History | Historic Preservation and Conservation | Theory and Criticism

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POLICY EVALUATION AND RECOMMENDATION FOR PRESERVING RESIDENTIAL COMPOUNDS IN BEIJING:
A PROCESS-ORIENTED APPROACH

Yimei Zhang

A THESIS
in
Historic Preservation

Presented to the Faculties of the University of Pennsylvania in Partial Fulfillment of the Requirements of the Degree of

MASTER OF SCIENCE IN HISTORIC PRESERVATION

2016

____________________
Advisor
Randall F. Mason
Program Chair
Associate Professor in Historic Preservation
Acknowledgement

I would like to first express my gratitude to my advisor Randy, who not only provided valuable instructions for my thesis, but has also mentored me all the way through the three years of academic journey at Penn.

I would also like to thank Kecia Fong, who has provided great insights for my thesis and inspired me through her own work in preservation.

To my fellow classmates, thank you all for the spiritual support and late-night company in the HSPV studio.

Last but not the least, I’m deeply indebted to my parents, who has supported me unconditionally all these years.
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INTRODUCTION

The subject of this thesis is not something from a remote antiquity, but rather places we remember from our childhood. Residential compounds built in the 50s became an intriguing topic for preservation in recent years in China, as the preservation field gradually realize that not only were traditional Hutongs and ancient Temples the victims of bulldozers of modernization, but also places of the recent past, the mid-rises our grandparents used to live, and the neighborhoods we used to pass through on our way to school. These neighborhoods were built soon after the founding of the People’s Republic in 1949 as the residential component of a “work unit”. They were self-sufficient neighborhoods with amenities and institutions, and housing were offered as welfare. The buildings were usually mid-rises of simple design - a result of both influence from the Soviet Union and the need of low-cost mass construction.¹ These housing projects fundamentally changed the urban landscape of Chinese cities.

The loss of these neighborhoods in recent years is not a surprising, but rather a typical story of China’s fast urbanization. As the economic development threatens the built heritage across Chinese cities, it takes perhaps a bigger toll on the contemporary heritage, as it largely falls out of the scope of preservation. At the same time, rising market pressure also makes residential compounds the prey of real estate developers. The urban land transaction mechanism has formed a strong coalition between the district government and the developers, fostering hasty

¹ David Bray, Social Space and Governance in Urban China: The Danwei System from Origins to Reform (Stanford University Press, 2005), 124.
and rapid redevelopment in older neighborhoods.

While this thesis focuses on the residential compounds built between 1949 and 1958 in the city of Beijing exclusively, it attempts to address two shared challenges of the contemporary heritage in China today. The first challenge is the need to broaden the scope of preservation to include more than just monumental and ancient architecture. In a country blessed with rich history and architectural heritage, the term “preservation”, interpreted and appropriated in various ways, has long been a monopoly for what Yi-Fu Tuan calls “public symbols”- sacred places, national monuments and ancient ruins that still constitute a great part of what preservationists are entitled to do today. In contrast, “field of care” – ordinary places that make people “emotionally bound to their material environment” - usually fall off the radar of preservation. However, as Dolores Hayden points out, these places are equally powerful in nurturing citizen’s collective memory in the form of shared territory. Preservation needs to claim the “entire urban cultural landscape” to be true to “a broad, inclusive social history”.

In current preservation system in China, heritage sites are listed as “Protection Units“ of national, provincial, municipal and county levels, with corresponding level of protection and financial support from the government. The year 1840 and 1949, marked by the start of the First Opium War and the founding the People’s Republic respectively, are regarded as the onset of the modern and contemporary era in Chinese history. This time frame is also used in classifying

\[\text{2 Yi-Fu Tuan, “Space and Place: Humanistic Perspective” in Philosophy in Geography, ed. S. Gale and G. Olsson, (Springer, 2012), 412.}\]
\[\text{3 ibid, 417.}\]
\[\text{4 Dolores Hayden, The Power of Place: Urban Landscapes as Public History (MIT Press, 1997), 11.}\]
heritage sites into ancient (before 1840), modern (1840-1949) and contemporary (after 1949).

Preservation plans are required for listed “Protection Units”, and are incorporated into city’s comprehensive plans. Between 1961 and 2016, seven rounds of national level listings have been announced by the State Administration of Cultural Heritage (SACH) - the central government branch for preservation issues. (Chart 1)

<table>
<thead>
<tr>
<th>Round</th>
<th>Year</th>
<th>Total Listings</th>
<th>Modern Heritage Listed</th>
<th>Contemporary Heritage Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1961</td>
<td>180</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1982</td>
<td>62</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1988</td>
<td>258</td>
<td>37</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>1996</td>
<td>250</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>2001</td>
<td>519</td>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>2006</td>
<td>1080</td>
<td>146</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>2013</td>
<td>1943</td>
<td>228</td>
<td>21</td>
</tr>
</tbody>
</table>

Unlike the time threshold that constitutes a big part of the challenge of preserving modernist architecture in the US and other parts of the world, the attitude toward contemporary heritage in China is influenced by more than just the age-centered definition of significance. Despite the fact that the first national preservation regulation in the People's Republic in 1961 specified the scope of preservation was “architecture, ruins, and artifacts related to important historical and revolutionary events, or ancient ruins, tombs, architecture, grottoes, and tablets with high historic, artistic and scientific values”, which didn’t explicitly

---

5 Official Website of State Administration of Cultural Heritage, compiled by author.
include modern and contemporary heritage into the preservation scope, the first round of national level “Protection Units” in 1961 still included the People’s Monument, which was erected only three years before in 1958.\(^6\)

The conflicted attitude toward modern and contemporary heritage is a result of, as Song Zhang puts it, not only “ancient over recent” but also “political over cultural”.\(^7\) The few listed sites of short history that have gained national heritage status in the first three rounds of listings, for instance, are all physical manifestation of the communist and liberation revolution. In fact, the category of listing modern and contemporary heritage was “revolutionary heritage”, before it was changed to “modern and contemporary heritage” in the fourth round of listing. As a result, though SACH issued *A Notice of Surveying and Protecting Outstanding Modern Architecture* (关于重点调查保护优秀近代建筑物的通知) in as early as 1988, officially stressing the importance of preserving modern heritage, it is still hard for residential compounds and other modern heritage sites to gain protection status today.

The second challenge the thesis attempts to address is the need to refine, if not reform, preservation policy. The “Protection Unit” system, mandated by the preservation law, has grown increasingly insufficient to address the development of preservation profession, causing a mismatch between preservation law and professional guidelines. The Preservation Law, passed in 1982 and amended in 2013, stipulates that heritage sites are listed only “according to their

---

\(^6\) SACH, *Temporary Regulations on Cultural Heritage Protection and Management 1961* 文物保护管理暂行条例, art. II.

historic, artistic, and scientific values”. 8 As the preservation field pays increasing attention to diverse values perceived by different stakeholders, however, two guidelines for preservation practice in China have all taken into consideration of social, cultural and natural aspects of values. The China Principles, recently amended in 2015, specified in Article 3 that “the heritage values of a site are its historic, artistic, and scientific values, as well as its social and cultural values”. 9 It stresses the role heritage sites play in nurturing memory, evoking emotions, continuing traditions and promoting cultural diversity. A more concise version of it is adopted in the Requirements on Drafting Preservation Plans of National Level Protection Units (全国重点文物保护单位保护规划编制要求) in China, which requires preservation plans to evaluate heritage sites according to their heritage values, which include historic, artistic and scientific values, and also social values, which has to do with the social, economic and cultural impact of a heritage site. 10 (Chart 2) However, since preservation plans are only required for “Protection Units” listed under the Preservation Law, the recognition of social and cultural values in professional guidelines only pertains to sites that are already listed, which may help little to actually list sites with social values.

8 Law of Preservation of Cultural Heritage of People’s Republic of China, art. II.
Secondly, the “Protection Unit” system also offers undifferentiated protection and regulation for all listed sites. Article 21 and 26 for example forbid change of “original status” in any kind of intervention, and article 23 discourages uses other than museums. (Chart 3) The strict protection of heritage sites is certainly necessary in face of recent huge loss of built heritage in the country. However, it is important to question their application on heritage of the recent past: should residential compounds enjoy the same level of protection as the Forbidden City? And perhaps more importantly, does it need the same level of protection, architecturally and structurally? The dilemma of current preservation tools in China is that it not only makes it difficult to list them, as it essentially asks for the same level of protection as the Forbidden City, but also makes it hard to reuse or rehabilitate them, as the strict protection would render big
alterations illegal.

Chart 3. Experts from the Preservation Law\textsuperscript{11}

<table>
<thead>
<tr>
<th>Articles</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 2</td>
<td>The scope of cultural heritage protected by the preservation law includes, among others:</td>
</tr>
<tr>
<td></td>
<td>“1. Ancient cultural ruins, ancient tombs, ancient architecture, grottoes, stone tablets and ancient murals;</td>
</tr>
<tr>
<td></td>
<td>2. Historical remains, artifacts, representative architecture relate to important events, revolutionary movements or famous people in modern and</td>
</tr>
<tr>
<td></td>
<td>contemporary era that have important commemorative, education or historical values”.</td>
</tr>
<tr>
<td>Article 4</td>
<td>“The principle of cultural heritage protection is prioritizing protection and rescue, allowing for reasonable use and improving management”</td>
</tr>
<tr>
<td>Article 21</td>
<td>“Renovating, maintaining, relocating cultural heritage should not change its original status.”</td>
</tr>
<tr>
<td>Article 23</td>
<td>“Protection Units that is publicly owned or ancient architecture can only be used as museums, archives or tourist sites. Any other uses of municipal and county level Protection Unit require permission from the upper government; those of provincial level require permission from the provincial government; those of national level require permission of the National Council.”</td>
</tr>
<tr>
<td>Article 26</td>
<td>The use of immovable heritage should not change its original status and should guarantee the safety of the protected architecture and its auxiliary components. Damage, alteration, addition and demolition are not allowed.</td>
</tr>
</tbody>
</table>

Thirdly, preservation policies can no longer neglect the socio-economic forces that continue to shape the urban landscape. As following chapters would reveal, the case of residential compounds is one that is closely related to the urban regeneration agenda that has led to the demolition of many old neighborhoods in recent years. Without proper and prompt intervention, 

\textsuperscript{11} Law of Preservation of Cultural Heritage of People’s Republic of China, translated by the author.
preservation will continue to lose ground in the fast-urbanizing society. There is no choice but to assert more forcefully in other development processes.

The goal of the thesis is to provide policy recommendations for preserving residential compounds in Beijing. Chapter one assesses the values of residential compounds by researching into its history, evolution and current situation. Chapter two analyses the development of housing and preservation policies that pertains to residential compounds. Chapter three spells out the intricacies and challenges of preservation with two specific cases – Bai-Wan-Zhuang and Jing-Mian-Er-Chang, both were once residential compounds, and are now in dilapidated condition and face the threats of demolition. Chapter four lays out alternatives of preserving residential compounds by drawing on national and international experiences and discussing their feasibility in current socio-political environment, building on which, the last chapter proposes policy changes that will make meaningful interventions in current redevelopment processes for preserving residential compounds in the future.
CHAPTER 1 History, Evolution and Significance

Overview

Residential compound is defined in this thesis as housing project developed in Beijing between 1949 and 1958, marked by the year the People’s Republic was founded and the advent of the Great Leap Forward Movement. The nine years are generally referred to as the National Economy Recovering period (1949-1952) and the First Five Year Plan period (1953-1958). It was a period of a profound social re-configuration through intervention of spatial forms. Housing units were built as the residential component of a danwei, or “work-unit”, which has profoundly reshaped the urban landscape of the city.

The residential compounds in this period distinguish itself from later housing developments mainly in terms of the arrangement of buildings rather than architectural characteristics. Like later developments, the design of the residential compound in the 50s was based on the principles proposed by Soviet Union, which emphasized economy, simplicity, and the industrialization of the construction process.\(^{12}\) These principles led to the construction of three to five stories residential buildings with usually very plain architectural style and small housing units. However, the residential compounds during the 50s were designed into groupings of buildings (Figure 1) to mimic a traditional enclosed courtyard (Figure 2), and foster a collective lifestyle at a more practical scale.\(^{13}\)

\(^{12}\) David Bray, Social Space and Governance in Urban China: The Danwei System from Origins to Reform (Stanford University Press, 2005), 134.
\(^{13}\) ibid.
It cannot be denied that similar housing types can also be found after 1958, and other types of housing development, especially arranging buildings into rows instead of groupings, was also prevalent in the 50s. Currently, despite recent effort to redevelop old neighborhood that led to survey of several small areas, the city doesn’t have a detailed inventory of its housing assets. Therefore, it is hard to make more informed categorization based on all relevant variables like architecture, building material, and period of construction. This thesis therefore defines the study subject solely by the period of 1949 to 1958 in order to be more focused in discussion.

The year 1958 is a critical time for housing construction in the city. The onset of the Great Leap Forward Movement led to a disproportionate emphasis on heavy industry, resulting in a drastic decrease in housing investment; at the same time, the ideologically driven effort of cutting construction cost went to an extreme, leading to a great number of low quality housing projects. Therefore 1958 marked a pivotal change in the enabling environment of housing construction, and is a legitimate delineation of the topic. Based on the record in the Beijing gazetteer, at least 15 residential compounds were built between 1949 and 1958. (Chart 4) Some of them are still standing today, as shown in Figure 3.

---

Chart 4: List of Residential Compounds

<table>
<thead>
<tr>
<th>Name</th>
<th>Year Built</th>
<th>No. of Buildings</th>
<th>Floor Area (m²)</th>
<th>Factory Compound?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 酒仙桥 (Jiu-Xian-Qiao)</td>
<td>1950s</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>2. 铁道部第四住宅区 (Tie-Dao-Bu)</td>
<td>1950s</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>3. 和平里七区 (He-Ping-Li)</td>
<td>1950s</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>4. 六铺炕 (Liu-Pu-Kang)</td>
<td>1950s</td>
<td>79</td>
<td>474000</td>
<td>No</td>
</tr>
<tr>
<td>5. 西便门 (Xi-Bian-Men)</td>
<td>1950s</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>6. 京棉二厂 (Jing-Mian-Er-Chang)</td>
<td>1950s</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>7. 体育馆路小区 (Ti-Yu-Guan)</td>
<td>1952</td>
<td>23</td>
<td>47788</td>
<td>No</td>
</tr>
<tr>
<td>8. 槐柏树街 (Huai-Bai-Shu)</td>
<td>1952</td>
<td>N/A</td>
<td>33400</td>
<td>No</td>
</tr>
<tr>
<td>9. 真武庙 (Zhen-Wu-Miao)</td>
<td>1952</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>10. 百万庄 (Bai-Wan-Zhuang)</td>
<td>1953</td>
<td>N/A</td>
<td>69300</td>
<td>No</td>
</tr>
<tr>
<td>11. 三里河 (San-Li-He)</td>
<td>1953</td>
<td>142</td>
<td>387000</td>
<td>No</td>
</tr>
<tr>
<td>12. 幸福楼小区 (Xing-Fu-Lou)</td>
<td>1954</td>
<td>41</td>
<td>69562</td>
<td>No</td>
</tr>
<tr>
<td>13. 光明楼小区 (Guang-Ming-Lou)</td>
<td>1958</td>
<td>39</td>
<td>98112</td>
<td>No</td>
</tr>
<tr>
<td>14. 夕照寺小区 (Xi-Zhao-Si)</td>
<td>1958</td>
<td>35</td>
<td>51718</td>
<td>No</td>
</tr>
<tr>
<td>15. 白桥小区 (Bai-Qiao)</td>
<td>1958</td>
<td>33</td>
<td>52875</td>
<td>No</td>
</tr>
</tbody>
</table>

The first of these compounds ever planned and built was allegedly Bai-Wan-Zhuang, designed by architect Zhang Kaiji. Located west of the today’s second Ring Road, it was designed as groupings of residential buildings with kindergartens in the middle of each group and one elementary school and a shop at the center of the community. Office buildings were also planned at the edges of the compound (Figure 1). Later residential compounds shared great similarities with Bai-Wan-Zhuang, among which were Xin-Fu-Cun (Figure 4) and Xi-Zhao-Si (Figure 5).

---

Apart from residential compounds built for government staffs, most were built in the further north and east part of the city for factory workers. Jing-Mian-Er-Chang (No.2 Cotton Mill) is the one most extensively studied. Located in the northeast of the city, the residential area is just across street of the factory, and the compound is designed with all kinds of amenities necessary for daily life. (Figure 6) The floor plan is highly standardized and very compact. Units are organized around a shared stairway, in order to increase density and as a result, reduce the cost of providing facility. The room sizes are usually around 4 square meters per resident, and the function of living room is often incorporated into a bedroom.16 (Figure 7)

It is therefore not a surprise that the 50s’ housing development is in general a topic understudied for preservation. The relative short history and the once ubiquity of residential compounds make it challenging to raise awareness of its values in the general public and advocate for its preservation under current policy system. The rest of this chapter will trace the history and evolution of residential compounds in order to explore its heritage and social values as the basis for further discussions.

History

Residential compound was a product of two very distinct influences: the United States, and the Soviet Union. The first leaves its trace in early housing development through planners; while

16 The Soviet Union’s standard of 9 square meters per person was first used, which was much higher than the real living standard in China at that time. The slogan of “reasonable design, unreasonable use” was proposed to reconcile the problem by allowing two or more households to share one housing unit, based on the belief that as the living standard improves in the future, they can be adapted. Lv, Rowe and Zhang, Modern Urban Housing in China 1840-2000, 126.
the latter exerts impact through the *danwei*, or “work-unit” system.

Various articles have attributed the residential compound to the concept of “neighborhood unit” proposed by American planner Clarence Perry. He articulated the principles of this American version of garden suburb in the regional plan for New York. In his theory, a “neighborhood units” should be “regarded both as a unit of a larger whole and as a distinct entity in itself”. A unit is organized around a school, which not only locates in the center of the community, but also determines the size of population, so that every child can safely walk to school. The unit is bounded by arterial streets, while the internal street system is designed to discourage through traffic. (Figure 8)

When Sicheng Liang, one of the most influential figures in building modern Beijing, wrote in 1949 the basics principles of urban planning, he used the very translation of the term “neighborhood unit”. In his very own words, neighborhood unit is

> “the basic unit of residential area, a self-sufficient unit within a certain boundary...no automobiles are allowed within the unit, and the radius should be less than what a kid shall walk from home to school. Population and density should be regulated so that every household shall have full access to clean air, sunshine and green space. Every unit should be conveniently connected with working areas.”

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17 Chunlan Du, Ying Zou and Hongbin Bian, among many have all pointed out the direct relation of the western planning theory, namely “neighborhood units” and the design of residential compounds. However, how the idea of “neighborhood unit” is transported to China is not thoroughly explored. Chunlan Du et. al “Comparison of Danwei space and Xiaouq Space from the Neighborhood Unit Perspective”, Urban Studies (May. 2002), 88-94; Ying Zou and Hongbin Bian, “Comments on Urban Residential District Pattern in China”, World Architecture (May. 2000), 21-23.


Studied in Philadelphia during the 1920s in the University of Pennsylvania, Liang must have been well versed with all kinds of urban problems and planning ideas at that time. He mentioned in the same article that “big cities in the US and Europe have long been facing transportation problems – traffic jams and accidents happen all the time”; “in parts of London, all uses – residential, industrial and commercial – are mixed together”; “many western cities have become unfavorable for living, working, playing and walking”. Clearly he was trying to use the most advanced planning theory of his time, and draw lessons from western countries to avoid these problems. As one of the leading planning and architecture intellectuals of his time, Liang’s proposal was finally consolidated in the 1953 Draft Comprehensive Plan of Beijing. The plan basically restated Liang’s idea with more details:

“Modern residential areas are mostly based on neighborhood units...every unit has a population of about 5000 people. High-speed traffic goes around it, and is not allowed to go through it. Elementary schools, recreational facilities and community retail will be centered in the unit, surrounded by residential buildings. The distance between the neighborhood center and every residential building should be relatively similar...bus will be the major transportation mode between different units. Bus stops should be located appropriately in each unit.”

From a historical perspective, how exactly Perry’s theory have influenced Liang or other Chinese planners at that time is hard to pin down. The production of space, to appropriate the

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20 Guangqi Dong, Fifty Years Evolution of Historic Beijing 古都北京五十年演变录, (Southeast University Press, 2006), 27, translated by author.
title of Henri Lefebvre’s famous book, is an interactive process with the social-economic background of its time. “New social relation”, as Lefebvre pointed out, “demands new spaces”.21 Therefore though the adaptation of garden suburb in the planning of residential compound might have given them similar looks, what enabled the new space was more than a design idea.

The Soviet Union had its impact on residential compounds in a more profound manner. Soviet experts came to instruct the drafting of the first Comprehensive Plan of Beijing in as early as 1949 and set the goal of the city to be not only the political and cultural center of the country, but also the industrial center.22 The new government took the Soviet model that combined communal living with collective labor, adapted to its own governance tradition in the revolutionary years, and developed the “danwei” system. Like in the Soviet Union, the daiwei system is more than a way to increase labor productivity, but also a tool to transform social and cultural order.23

Simply put, danwei is “a hierarchy of state-owned workplace units”. Politically, danwei is a level of government, and “operates as a tool of the state for organizing and controlling urban society”; “each unit is responsible for its members and members need to check-in regularly when they are outside of their units”. Socio-economically, danwei is an entity that distributes resources from the central government to individuals and it “constitutes a ‘small society’ with

22 Dong, Fifty Years Evolution of Historic Beijing, 27, translated by author.
23 Bray, Social Space and Governance in Urban China, 93.
little need for inter-unit exchanges."  

Each *danwei* was also responsible for welfare provision for its permanent employees, the most important of which, was housing. Before 1980s, the municipality allowed each *danwei*—public agencies, factories, or universities—to have a piece of land at its own disposal, accompanied with financial support for the construction of office buildings, housing, community shops, schools, and other amenities within their piece of gated land.

Understanding residential compound as the product of the *danwei* system is vital to read the profound social re-configuration reflected in these spaces. Residential compound is distinctively different from traditional courtyards, and they occupy different territories in the city, too. The “old” Beijing, represented by Hutongs—the old alleyways was well bounded and defined by the city wall (Figure 9). Residential compounds however, were built outside the old city wall, where new construction could happen easily (Figure 10). The spatial distinction of Hutongs and residential compounds reflects two different aspects of Beijing in terms of social and cultural life. The “old” Beijingers occupied the narrow Hutongs with one-story courtyards and shared a local culture and memory of an imperial past. “New” Beijingers however, lived in the newly built, highly regulated, multi-story residential compounds. They were a relatively cultural-diverse group of people—government official, intellectuals, and factory workers who came from all parts of the country during the liberation war.

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Guo claims that if Hutong epitomizes what is now generalized as “traditional culture”, residential compound is the best example of the new “revolutionary culture” formed after 1949. It shared much in common with the military in terms of the standardization of space and the collective way of living. David Bray wrote about how China borrowed housing design from the Soviet Union and how the collectivity of everyday living was constructed in different levels:

“At the most basic level of collectivity, every three to five families shared toilets and kitchens within each basic housing unit. At the next level, each two to three buildings shared facilities like laundries, bicycle sheds and open space for recreation. Finally at the danwei level, all residents shared facilities like canteens, medical clinics, bathhouses, meeting halls, sports grounds, kindergartens, and primary schools.”

Residential compounds also embodied the imagination of a modern society in stark contrast with the traditional space. At a time when most Hutongs in the city proper didn’t even have indoor plumbing and running hot water, the infrastructure equipped in the residential compounds naturally became the symbol of modernization and progression. Residential compound was a place of “cultural superiority”, and a place where the new Beijingers, as Zheng pointed out, finally established emotional ties with the city and found a sense of belonging. In other words, the formation of a new Beijing identity – the sense of being the capital of a socialist, modernized country - is closely link to the specific place of residential compound.

26 Guo, “Residential Compounds and Beijing Culture”.
27 Bray, Social Space and Governance in Urban China, 151.
The disappearance of the residential compounds shares the same trajectory with the decline of *danwei* system. After the Open-Up policy was initiated in 1978, the transition from a planned economy to a market economy led to series of profound changes. The year 1987 marked the start of privatizing state-owned enterprises. The dominant role of *danwei* as part of the economy and social hierarchy waned away in the face of a growing private economy. Along with the diminishing presence of *danwei* came the housing reform in the 1990s. The year 1998 witnessed the end of public provision of housing. Units in residential compounds, once provided to the employees by each *danwei* as part of social welfare, became commodities in the market. *Danwei* employees were offered the opportunity to purchase the units at a favorable rate to initiate the process, and as units enter the market they were sold or leased at a market rate. The changing ownership of residential compound led to a different mix of residents. The once economically and occupationally homogeneous group in the compound is now replaced by an increasing share of senior residents, immigrants and low-income households, which has inevitably changed the way people identify themselves with this particular space.

Since the early 2000s, the Planning Committee and the Housing Authority of Beijing have undertaken several housing improvement initiatives, and residential compounds have been threatened by demolition and replacement of new high-rises. At the same time, the debate over the issue also showed the lack of emotional attachment to the place from the new residents, as well as a negative association with old neighborhood from the general public. As a more detailed analysis of the specifics of this initiative and the public reactions in the following
chapter will show, the changing “sense of place”, or the losing of it poses great challenges to preservation. The loss of the intangible qualities of a place – its people, culture and feel in general, usually preludes the loss of its physical integrity; and intervention in the fabric – restoration or renovation, is more often than not followed by a renewed local identity. Understanding the dynamics of the tangible and intangible qualities of residential compound, and the core values of it is crucial to preservation decisions.

**Values and Significance**

Residential compounds in Beijing is a distinct type of housing development in the 50s characterized by groupings of several three to five-story buildings within a larger compound. To assess the values of these neighborhoods, it is necessary to adopt a framework that considers both heritage and social aspects. The 2015 China Principles offers perhaps the most comprehensive value typologies by far, which might as well be used here to evaluate residential compounds in general.  

In terms of heritage values, the planning and architecture of residential compounds are the physical manifestation of the early history of the People’s Republic. As the number of residential compounds is decreasing in face of redevelopment pressure, they have become a rare evidence of the public housing conditions during the planned economy under the *danwei* system.

In terms of social and cultural values, they hold the memory of the collective way of living, and helped to build the identity of the city as the capital of a new Republic. As an integral part of

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28 Refer to chart 2.
the development of the city, they contribute to a comprehensive telling of the history and contribute to the physical continuum of the urban landscape in Beijing.

The current urban redevelopment projects that will ultimately determine the future of most old neighborhoods are also looming threats for residential compounds. It is imperative for preservation to intervene promptly right now and make sure changes in these endangered places will occur in an equitable and responsible manner, without compromising the heritage and social values.
Figure 1. Plan of Bai-Wan-Zhuang

Source: Beijing Urban Planning and Design Research Institute, Beijing Gazetteer: Urban Planning, 1999, 18
Figure 2. Traditional Courtyard (Si-He-Yuan)

Figure 3. Spatial Distribution of Residential Compound Today

Source: Beijing Urban Planning and Design Research Institute, Beijing Gazetteer: Urban Planning, 18-27
Figure 4. Plan of Xin-Fu-Cun

Figure 5. Plan of Xi-Zhao-Si

Figure 6. Plan of Jing-Mian-Er-Chang

Source: Zhang et al. The Spatiality and Spatial Changes of Danwei Compound in Chinese Cities: Case Study of Beijing No.2 Textile Factory
Figure 7. Room Plan of Residential Compound

Figure 8. A diagram of Clarence Perry’s neighborhood unit

It illustrates the spatiality of the core principles of the concept, from the New York Regional Survey, Vol 7. 1929

Figure 9. Old City Map shows the walled inner city and the non-built out area outside the wall

Source: Harvard Yenching Library
Figure 10. Relationship between old city and residential compounds

Source: Basemap from Google Map, drawn by author
CHAPTER 2 Preservation Predicament

Situating at the intersection of housing, planning and preservation, the issue of residential compound is a complex one. Before the thesis delves into the two cases that illustrate specific challenges in chapter three, it is necessary to first review the historical development of housing, planning and preservation policies and how they evolved into the current pro-demolition redevelopment strategy.

Renovation vs. Demolition: A Historic Overview

It is a chronic problem that the urban policy has favored demolition over renovation. Modernizing the historic city has mostly taken the form of large-scale clearance and new construction rather than an organic and gradual regeneration. The 50s and the 90s marked the start of two important phases of the so-called “transformation of the old city” the led to drastic change of the urban fabric: the first was driven by housing shortage, while the second was driven by market forces.

Tor first several years after the People’s Republic was founded, the government actually encouraged renovating old houses in the inner city, due to the lack of resources and limited financial capacity. The housing ideal of the government at that time was, as frequently described by a quote of Mencius - “Everyone shall have a shelter over the head”. In a more plain language, the People’s Daily published an article in May 1949, five months before the official declaration of the founding of the new government, entitled “How to solve the housing problem for the people of Beijing”, stating assertively that:
“It can be foreseen, that after we reached the status of a socialist county, all the housing will be owned publicly, and people will use them according to their own need; or, everyone will have the financial ability to build and buy their own house, and the government will play the role of regulating the use of it and preventing monopoly of the market”\textsuperscript{29}.

However, the gap between the rosy promise and the financial constraints was obvious: the city of Beijing inherited about 13,543,000 square meters (146 million square feet) of residential housing in 1949, most of which were traditional courtyards built in Ming (1368-1644BC) and Qing (1636-1912 BC) Dynasties, more than 60% of which were, as described by Beijing Gazetteer, “dangerous, leaking, crappy and old”.\textsuperscript{30} Another article published on People’s Daily claimed that:

“The people’s government will have to build a huge amount of urban housing to solve the living problem of the citizens. However, currently the country’s resources are mainly used for people’s revolution and the recovery and development of production. So it’s impossible to invest much in building housing. Therefore we need to encourage private capital to renovate and build housing units.”\textsuperscript{31}

Therefore between 1949 and 1952, the central government officially acknowledged private ownership of housing; stated that the rent should be kept within a reasonable range; incentives should be provided for owners to renovate houses; and a market should be established to

\textsuperscript{29} Duansheng Qian, “How to solve the housing problem for the people of Beijing”, \textit{People’s Daily}, May 21, 1949.
\textsuperscript{31} “Regarding the nature and policy of urban housing and rent”, \textit{People’s Daily}, August 12, 1949.
facilitate housing transaction and renting.\textsuperscript{32}

However, encouraging renovation during this time was only a makeshift: for one thing, private ownership was ideologically against the socialist principal, therefore in many cases, the right of homeowners – who is also categorized as a type of capitalists - was deemed secondary to that of the renter – who belongs to the “correct” social class of proletariats. It was a prevalent idea that “when cites are liberated, one should be able to rent for free”, “properties should be evenly distributed to all”.\textsuperscript{33} As a result, strict rent cap was set for the owners. In some cases, the rent was so low that the owners refused to renovate the house or even demolished their houses to prevent further loss.\textsuperscript{34} This chaotic situation of privately-owned housing can be illustrated by the number of disputes filed only within the time from March 1949 to May 1950, during which the Beijing municipal court dealt with over 2,000 leasing-related cases, 24\% of all lawsuits.\textsuperscript{35} The effort of discouraging private ownership was consolidated in the late 1950s, as the government initiated the reform of private ownership of housing. Before 1949, 74.2\% of all housing assets were private properties, and after the completion of “Socialist Reform” in 1956, most housing became public asset, managed by Danwei or the Bureau of Housing Management (房管局).\textsuperscript{36}

\textsuperscript{32} Guangqi Dong, \textit{Fifty Years Evolution of Historic Beijing} (古都北京五十年演变录), (Southeast University Press, 2006), 196.
\textsuperscript{33} ibid.
\textsuperscript{34} Qun Zhang, “‘All Shall Have A Shelter Over The Head’? – Analysis of the Housing Policy of the 50s ‘居者有其屋’？1950 年代的住房政策剖析”, \textit{Modern China Studies} 105 (Jun. 2009) 132-146.
\textsuperscript{35} Ming Zhu, “The People’s Court Dealt with Housing Disputes Discretely, Over 2000 Cases in the Past Year”, \textit{People’s Daily}, June 15, 1950.
\textsuperscript{36} Qun Zhang, “‘All Shall Have A Shelter Over The Head’? – Analysis of the Housing Policy of the 50s, 132-146.
The lack of policy support for renovation led to a rapid deterioration of housing inventory. In 1966, dilapidated buildings in Beijing doubled the number in 1949.37 Meanwhile, the growing population also exacerbated the problem. Despite increasing housing construction, the per capita living space actually shrunk between 1949 and the late 1960s, creating an even bigger challenge for regenerating urban neighborhood in a more gradual manner. (Figure 11)

During the Cultural Revolution, comprehensive planning was suspended and very little planned development was completed. The housing shortage was mitigated at first by piecemeal construction of low quality housing in open areas in the city, and later through large-scale replacement of one-story shanty houses with mid-rise residential buildings. In total, 610000 m² of old housing was demolished during this period of time, but the rate of population growth quickly outpaced that of new construction, resulting essentially in a more crowded living environment. More importantly, the funding for construction was appropriated from renovation funding, which further contribute to the longstanding problem of lack of financial support for renovation.38 From 1974 onwards, due to limited financing capacity the municipality had to further decentralize housing construction to each danwei, which was authorized to build housing from its own pocket on in its own piece of land to meet the growing demand. In the worst cases, danwei employees were encouraged to build temporary housing of their own. Most of the housing units built during this period were of very low quality and were demolished

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38 ibid.
gradually later. Old housing inventory without adequate upgrading and renovation incentives quickly became a huge burden for the city. In the beginning of 1991, Beijing Housing Authority did a survey of building inventory of the city and found 48,600,000 m$^2$ of old and dilapidated houses, in which 240,000 households and 920,000 residents lived.\textsuperscript{39}

The 1990s marked an era of rapid urban regeneration propelled by a coalition between the local government and real estate developers. In face of the growing number of dilapidated housing, the 1990 Comprehensive Plan of Beijing for the first time clearly listed the “Old and Dilapidated Housing Reform (ODHR)” as a major task for the municipality. District governments were given the authority to take on redevelopment projects, and the process, as required by the plan, should be combined with new district development, housing system reform, real estate management, historic preservation, as well as the improvement of infrastructure.\textsuperscript{40} Although preservation was mentioned in this official document, in reality the bona fide policy was distorted by the huge real estate zest brought by the introduction of the land transaction mechanism and the opening of the housing market. The Interim Regulations on the Sale and Transfer of the Land Use Rights over the Urban Land in China was passed in 1990 (IR90), separating the use right and ownership right of urban land, making it possible for developers to acquire land development right from local government by paying a certain amount of land transaction fee. The welfare system of housing distribution was also under reform during the

\textsuperscript{39} Ke Wei, “1990-2004: Two Large Scale Redevelopment of Dilapidated Housing in Beijing”, Beijing Planning and Construction, (Nov. 2005), retrieved from cnki.net.
\textsuperscript{40} Beijing Municipality, “Decision on Speeding up ODHR Projects in Beijing 关于加快北京市危旧房改造的决定”, (Government document, April, 1990).
80s and 90s and was officially ended in 1998, when housing officially became a market product that could be purchased by individuals. Capital investment quickly took over the housing market and established a business chain of purchasing land from the local government, demolishing existing buildings and building new residential projects.

Being the capital city of China, Beijing municipality has full capacity to mobilize resources. Following IR90, the municipality issued an Implementation Guidelines of IR90 in 1992, granting itself the decision-making power of allocating land and allowing the developers to acquire land by a deferred payment of the land transaction fee upon project completion, which is the referred to as “Allocate First, Bid Later” policy. The close coalition between the local government and developers accelerated the ODHR projects to a new level. The redevelopment reached its peak in 1994 and 1995, during which over 1,500,000 m² of old housing units were wiped out and replaced by high-rises. Between 1991 and 1999, the city initiated 537 ODHR projects, and relocated around 2 million people.

While most ODHR projects were concentrated in the historic inner city area (within the Second Ring Road), the scope of ODHR has expanded greatly since 2000s to surrounding areas (the Third and Fourth Ring Road)(Figure 12). Redevelopment of residential compounds mostly falls into this period of ODHR projects, directed by the Tenth Five-Year-Plan that stressed the importance of housing reform. In 2000, Beijing municipality issued the often referred to as

42 Fang and Zhang, “Plan and market mismatch”, 149–162.
“No.19 Document”, which aimed at speeding up the ODHR process and improving compensation mechanism for relocated residents. It was a critical response to the numerous violent demolition cases in the past, and at the same time it also gave more bargaining power to the residents, whose disagreement to the compensation offer could drag the process for more than a decade. The Twelfth Five Year Plan (2006-2011) set the goal of upgrading “1,582 residential compounds of a total built-out area of 58,500,000 m²”\(^43\). The ambitious plan brought another wave of large-scale clearance of old neighborhoods, and the most recent Thirteenth Five-Year-Plan picked up the momentum. In 2013, Beijing Municipality expressed its will to work comprehensively on the “old residential buildings” scattered around the city. The goal was to “transform” 8 million housing units between 2013 and 2017. The initial plan of redeveloping Bai-Wan-Zhuang and Jing-Mian-Er-Chang, two cases that will be discussed in the next chapter, both started in the 2000s as a result of the renewed effort of ODHR yet were dragged for years and didn’t come to effect until 2013.

The Language of Demolition

The evolution of redevelopment policy shows that the redevelopment approach has been designed to smooth the clearance process rather than to encourage renovation. Apart from a biased policy that fueled the demolition craze in the past decades, it is also worth emphasizing that this process was justified through the specific language associated with demolition in the

official documents and mass media.

Three terms have been frequently used in the context of upgrading old neighborhoods: “transformation of shanty areas (棚户区改造)”, “renewal of old housing compounds (老旧小区整治)”, and “renovation of dilapidated buildings (危房改造)”. Initially, these three terms had quite different applications. “Shanty areas” refers to mostly temporary or low quality constructions, while “dilapidated buildings” refers to those that are structurally unsafe. “Old housing compounds”, on the other hand, as defined by the Beijing Municipality in its 2012 official document, are housing development “before 1990, of low standard, with old infrastructure, insufficient amenities, and without long-term management systems”.

These three phrases are distinct in nature, yet instances where they are used interchangeably in current ongoing discussion of urban regeneration are becoming increasingly common. The 2016 Plan of Transformation of Shanty Areas, for example, added 139 new projects covering 35,000 households, which includes not only temporary housing but also old neighborhoods that require only infrastructure upgrading or structure reinforcement. The ambiguity between “shanty areas” and “old neighborhoods” also reflects the undifferentiated demolition and redevelopment policy towards old housing, disregarding the particularities of historic, social and use values of each project. It in fact enables the pro-demolition policy by providing powerful vocabulary to justify clearance, while discouraging the preservation

argument by creating a false impression for the general public that the old and the dilapidated are the same.

Limits and Constraints of Preservation

What role should preservation play in the urban redevelopment process? If planning policy fails to regenerate the city in a more sustainable way, how can preservation intervene, especially when it comes to inherited built-environment of a more recent past? The task of bridging the gap between a pro-demolition urban policy and preservation efforts is a challenging one. Preservation is a field marginalized by the “growth coalition” of the government and developers bonded together by the land transaction mechanism. Preservation agencies at all government levels have very limited bargaining power and preservation needs are always compromised for economic development. As a result, the preservation policy in China, not designed to respond to urban regeneration in the first place, has gradually become insufficient to deal with current problems.

First and foremost, preservation law still largely focuses on individual buildings and rarely expands to the scope to the city. Historic buildings, or “Protection Units”, are at the center of the preservation system. Article 3 of preservation law stipulates that “immovable historic objects are assigned the status of ‘preservation units’ of national, provincial, municipal and county level significance according to their historic, artistic and scientific values, and are
protected by corresponding level of preservation department." Management of “Protection Units” mainly takes the form of “preservation plans” that documents existing conditions and drafts a buffer area of new development. This “building-oriented approach” of preservation has served its purpose since 1961, when the first listing of national register of “Protection Units” was announced. However, it has also isolated historic properties from the rest of the urban landscape. A broader perspective of preservation, which might be referred to as “urban approach”, takes the form of designation of “historic districts” or “historic cities”. It is relatively new and is still under exploration. Regulations on Historic Cities, Towns and Villages didn’t came to effect until 2008, and historic districts were still an area of neglect until 2015, when the state announced the first 30 historic districts in the country, out of which Beijing had three. However, instead of incorporating historic districts into the work of Beijing Municipal Administration of Cultural Heritage (BJMACH), the task of designating, regulating and monitoring historic districts and cities falls largely under the authority of Beijing Municipal Commission of Housing and Urban-Rural Development (BJHURD). It should be reiterated that BJHURD is the same agency that is responsible for ODHR projects. Therefore, the designation of “historic districts” and “historic cities” in essence creates an administrative gap between the BJMACH and BJHURD, especially when it comes to preserving “Protection Units” in “historic districts”.

How does the mismatch impact the urban landscape of a more recent past and residential compounds in particular? It is clear that in order to retain the character of residential

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46 Law of Preservation of Cultural Heritage of People’s Republic of China, art. II.
compounds, the whole area needs to be preserved in one way or another, which, in current preservation system, means either designating all individual buildings, or designate the area as a historic district. The former doesn't work because the significance of residential compounds lies not in individual buildings but their whole plan and configuration. The latter seems plausible but unfortunately will have to make BJHURD contradicts its own words of claiming many of the residential compounds as ODHR targets.

Second, preservation as a profession has not given enough attention to places not listed on the national and local register, yet have a distinct character or reflect an important social history. It is resulted on the one hand from the under-developed third sector in China, which makes preservation fully rely on government funding, and therefore largely focused on the “Protection Units”. On the other hand, the professional field in the country is still familiarizing itself with a broader perspective of preservation, which means not only to work within the circle of preservation, but also with other partners like planners, community members and real estate developers. A successful joint effort among different stakeholders in the urban redevelopment process is yet to been expected.

Apart from its limited scope, current preservation tools also lack a spectrum of different levels of intervention and only strains between the two extremes of either full protection or no protection. Article 23 in the preservation law, for example, stipulates that “Publicly owned memorials or historic buildings that are listed as ‘preservation units’ can only be used as museums, archives or tourist sites. Any other uses require approval from the preservation
department of a higher level."47 Other articles addressing renovation are even more ambiguous on the attitude towards alternative uses of historic properties. Article 26 explicitly states that “the using of immovable historic properties should follow the principal of ‘not changing the original status’. The safety of the building and affiliated properties should be guaranteed; damage, change, addition or demolition are not allowed”. These two articles make adaptive reuse extremely difficult in terms of administrative and regulative process, and in essence discourage preservation department to take into consideration of reuse projects.

**Conclusion**

The preservation of residential compounds faces a huge challenge under the current system. On the one hand, the urban policy has a tradition of taking demolition as the most effective tool for regeneration, and neglecting the opportunity of renovation and reuse. On the other hand, preservation policy is not capable of dealing with residential compounds whose value lies less in individual buildings but more in the collective arrangement. It is even less adept in providing more nuanced tools to address different levels of intervention of historic properties. A broader approach that bridges the gap between redevelopment and preservation is called for.

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47 Law of Preservation of Cultural Heritage of People’s Republic of China, art. XXIV.
Source: Data from Beijing Urban Planning and Design Research Institute, Housing Construction, Appendix, Diagram created by author.
Figure 12. Spatial Distribution of ODHR Projects (2001-2005)

Red indicates targeting projects; yellow indicates district projects.

CHAPTER 3 Two Cases

This chapter focuses on two cases: Bai-Wan-Zhuang and Jing-Mian-Er-Chang (Figure 13). They were both built in the early 1950s, and declared to be ODHR sites in 2006 and 2003 respectively. Through detailed analysis, this chapter aims to reveal particular obstacles for preservation in the two cases, and more importantly to discuss shared preservation challenges and opportunities for residential compounds.

Case 1. Bai-Wan-Zhuang

Change over Time

Bai-Wan-Zhuang refers to a neighborhood located just west of the old city, bounded by Che-Gong-Zhuang Street to the north, Fu-Wai Street to the south, San-Li-He Street to the west and Second Ring Road to the east. The residential compound, however, only occupies the northwest block of the neighborhood (Figure 14). Before 1949, this area was the burial place of people of the lower class. A historic map of 1939 may compensate the lack of imagery of what the place used to look like, showing the exact name of “Bai-Wan-Zhuang” just westward outside the city wall (Figure 15).

As people started to build temporary housing in this location, it became a small village in early 1950s and was chosen as the staff residence of Ministry of Machine Building Industry. The housing project was completed in 1953, providing 99,920 m² of family housing units, 12,324 m²
of single units and 6,624 m² of detached housing for government officials.⁴⁸ (Figure 16,17) Adopting the planning concept of self-sustaining “neighborhood unit”, residents had kindergarten, nursery, community co-ops, banks, post office and barbershop within walking distance. Hanbo Li, long time resident of Bai-Wan-Zhuang described Bai-Wan-Zhuang as a “small but complete”. “There were once four elementary schools and one middle school in the vicinity. Basically you could do anything without stepping out of the compound”. Community shops and small vendors were also a great continence: “You could buy sweet potatoes, peanuts, seeds and cabbages (around the corner). Very convenient.”⁴⁹

The neighborhood also boasted its great open space. “There was place for kids to play around, and there were plenty of trees and flowers. We could raise ducks in the courtyard”, according to Hanbo, “Every household had their own little garden in the yard, and there was a wall of pine trees. Our yard had a big locust tree and a giant willow”; “In the spring the green willow leaves waves against the red peach blossom; it was just beautiful”.

The design of the compound was drafted by the famous architect Zhang Kaiji (1912-2006), who was also the architect behind numerous iconic buildings across the city, including the viewing platform in front of Tian-An-Men Square, Beijing Planetarium and San-Li-He Government Compound. Zhang was famous for his eclectic design that combined elements of Chinese architecture with Beaux-Arts tradition. In the design of Bai-Wan-Zhuang, he

incorporated the traditional zigzagged “cloud pattern” into the plan and architectural detail (Figure 18). The naming of each building group also follows Chinese horoscope, making it a very unique case in building history.

The three-story red brick design had its influence from the Soviet Union workers’ housing\textsuperscript{50}. While Zhang didn’t write specifically about his design of Bai-Wan-Zhuang, his view on residential development is fully represented in the architecture. Zhang was a strong opponent of high-rises and actively advocated for mid-rise, high-density development. Bai-Wan-Zhuang, as a result, is comprised of mostly three-story buildings with a group of two-story detached houses for government officials. In an article published in the *Architectural Journal*, he explained in detail why high-rises should not become the future of city development. Apart from all the argument of cost, sunlight and land use, he insightfully pointed out that the modernization didn’t equal to high-rises, which was a false assertion often held by many government officials. Real modernization of a city, as he claimed, means “highly efficient infrastructure and administration, high quality environment, optimal division and collaboration of labor, as well as highly developed cultural and social life”.\textsuperscript{51} His vision for a modernized historic city was well ahead of his time. As the real estate craze in the past decades have completely changed the city into a forest of skyscrapers, Bai-Wan-Zhuang remains to be one of the few neighborhoods that still enjoys a comfortable human scale environment.

\textsuperscript{50} Rongxiang Jia and Ying Sun, “The Cultural Character and Value of Bai-Wan-Zhuang Residential Compound in Beijing”, *Journal of Beijing University of Civil Engineering and Architecture* vol. 28 (Sept. 2012), 76-80.

Living in Bai-Wan-Zhuang was definitely something to be proud of in the 50s. In long-time resident Li’s very own words, “it was the paradise; nowhere else can compare.” The photo of a family moving into Bai-Wan-Zhuang vividly depicts the joy and pride of living there. (Figure 19) In stark contrast with the traditional Si-He-Yuan in the inner city, where different families crowded in the same courtyard and little modern amenities were provided, Bai-Wan-Zhuang symbolized a new lifestyle of a nuclear family with the central heating system, electricity, and radio. As the staff housing of government agencies, the residents were mostly senior engineers and scientists. Many state leaders also spent years in the detached two-story houses. Former premier Li Peng was one of them, who wrote about the years in this neighborhood in his biography.52

Several major changes have impacted Bai-Wan-Zhuang in the past decades. The 1976 Tang-Shan earthquake resulted in severe damage of many buildings in the city. Bai-Wan-Zhuang underwent a comprehensive reinforcement of the structures especially the ring beams in the buildings. During the 80s, Bai-Wan-Zhuang was among the first neighborhood to have access to pipeline gas when most other residential neighborhood still used gas tanks. As the area started to be developed, new residential buildings replaced the central courtyard in late 1980s, and surrounding areas were gradually built out. Natural gas came to Bai-Wan-Zhuang during the 90s and in the early 2000s electricity capacity was improved to meet the increasing demand of

air-conditioning and the use of other appliances.\textsuperscript{53}

**Redevelopment Plan**

Rumors of redeveloping Bai-Wan-Zhuang Neighborhood first came up in 2003, as part of the city’s renewed ODHR projects. The redevelopment areas were actually located outside the 1953 residential compounds. The application for redeveloping Courtyard No. 21, for example was filed in 2007 and was approved by Beijing Municipal Commission of Urban Planning (BJMCUP) in 2011 after a 30-day public hearing.\textsuperscript{54} The Housing Improvement project of the North Bai-Wan-Zhuang neighborhood kicked start in June 2013, one month after the West City District signed agreement with the National Development Bank and secured three billion RMB for redevelopment (Figure 20).

Though current redevelopment plans seem to have spared the 1953 residential neighborhood, the threat of demolition is everywhere in the air. In many to-be-demolished buildings in the North and South Bai-Wan-Zhuang redevelopment area, there are giant banners with the slogan “Do not let the selfishness of a handful of residents sabotage the housing project that benefits all”. Huge signs of “Demolition” were also written on the temporary fences in the neighborhood (Figure 21). The redevelopment plan, as approved by the BJMCUP, proposed high-rise mixed-use development, with a portion of housing units dedicated to


existing residents who choose to move back. (Figure 22) It can be foreseen that as the surrounding area is occupied by high rises, the residential compound in the middle will not hold up to the real estate pressure long. As a result, the threat of demolition has discouraged the residents in the compound to make any improvements to their houses. In fact, many residents in the compound are already preparing for the demolition, though few of them did express the hope for preservation.

**Assessment of Values**

Compared with other residential compounds, Bai-Wan-Zhuang is a relative special case. It has high historic values not only as “one of” the residential compounds, but also allegedly as the “first” residential compound built in the city. Aesthetically, the use of red brick, traditional decorative motif, and the naming of building groups also make it the finest architectural representation of its type. It is also one of the few residential works of the architect Zhang Kaiji, and also embodies his ideal for mid-rise residential developments in the city.

In terms of social values, Bai-Wan-Zhuang contains both personal and collective memories of its residents. For current residents, mostly senior citizens and low-income renters, Bai-Wan-Zhuang is a rare place by the second Ring Road that still offers affordable and convenient housing units.

**Preservation Challenges**

The call for preserving Bai-Wan-Zhuang emerged as early as in 2003 as a result of the
redevelopment rumor.\textsuperscript{55} It is reported that preservation proposal was submitted to the Tenth Chinese People’s Political Consultative Conference of Beijing Municipality, with however no concrete results.\textsuperscript{56}

In 2015, a group of local planners and architects stepped in and started to advocate for the preservation of Bai-Wan-Zhuang residential neighborhood, hoping to intervene before it is officially declared as ODHR project. These planners, who formed a loose grassroots volunteer group “the Young Planners League”, have been trying to get it listed on the local register under the category of “Outstanding Modern and Contemporary Architecture” in order to guarantee its legal protection and funding, unfortunately with limited progress.

Despite the fact that Bai-Wan-Zhuang is hailed as the “first” and “finest example” of residential compounds in almost every planning and architecture textbooks on contemporary China, attempts of listing it on local register didn’t seem to have turned into anything substantial. Indeed, there is a growing attention on modern and contemporary heritage marked by the 2004 Official Notice of \textit{Further Protecting Modern and Contemporary Architecture}. The notice however, came from the Ministry of Housing and Urban-Rural Development (MOHURD), not SACH, as many would assume, which is another case of the administrative mismatch discussed in the last chapter. The city of Beijing announced the first municipal level listing of 71 outstanding modern and contemporary sites with 188 individual buildings in 2007, most of

\textsuperscript{55} According to an online search of news reports related to Bai-Wan-Zhuang, the earliest one regarding redevelopment project appeared in 2003.
which were theatres, public buildings and university buildings, as the listing criteria did ask for “exceptional” historic, artistic and scientific values. Therefore the chances of Bai-Wan-Zhuang being one of them seem small. It might still take years for vernacular architecture to acquire the same “exceptional” status in preservation policy.

Apart from the challenge of listing, a more daunting, and often neglected challenge for preservation is perhaps how to manage both physical and social change. The neighborhood character has been altered with the increasing senior and renter population, as well as the aging infrastructure. Figure 23 shows that the drastic aging population in the neighborhood. The share of senior citizens in Bai-Wan-Zhuang is now over eleven times that of 1956, and the migrant population takes nearly 20% of the total residents. Besides, illegal additions, unattended open areas and insufficient parking space also led to a huge decrease of the quality of public spaces. (Figure 24) In a survey conducted in February 2016 by the Neighborhood Committee, 1,642 out of 2,149 questionnaires collected, accounting for 76.4% of all samples, showed strong demand on parking regulations to free public spaces. Now the neighborhood is characterized by “complicated mix of residents, dirty and messy environment, and lots of waste recycle spots”. The sense of pride no longer exists in current Bai-Wan-Zhuang neighborhood.

The residents themselves also had a mixed feeling for the redevelopment project. Many

longtime residents have expressed their wish of saving the neighborhood. For Ding Xiaochun, Bai-Wan-Zhuang is a place full of memories: “I’ve lived here since I was five. Now my parents still live here. I still remember when I first took my boyfriend home, it was snowing, and it impressed him so much to see the beautiful white snow against the red brick buildings”. However, they also admit that the severely aged structure needed to be replaced, if not comprehensively renovated. Ding recalled the 1976 earthquake and the damage it brought to Bai-Wan-Zhuang: “we had a hole on the wall as big as a basin”, “I admit that the material used in Bai-Wan-Zhuang, the copper handle, the wood window and door frame, was top level of its time, but there is no way for the red brick to compare with concrete, though they are of good quality.”

The aging sewage system, lack of insulation and insufficient parking spaces are among many problems of this old neighborhood.59

For more recent residents, Bai-Wan-Zhuang is a place less associated with history and memory, but more with the labels like “old” “dilapidated” and “shanty”. In the “pre-development period” devised in the new compensation mechanism, which required over 70% of the residents’ consent of the project before it can be officially approved by the BJMCUP, the project was generally well accepted. It didn’t take long for the developer to collect enough signatures to further the project, but the process was not smooth. The residents who signed the agreement earlier ended up getting less compensation because of the increasing bargaining

power of the remaining “nail” residents as time went by. Besides, the residents who were used
to the convenience of the central location of Bai-Wan-Zhuang complained frequently about long
commute from the relocation housing in the far north of the city. As the “nail” residents
continued to stick to their property and ask for more compensation, the relocated residents
were irritated and petitioned in 2015.60

The case is still unfolding as this thesis is being written. It is worth reconsider the question
asked in the beginning: why we need to preserve this place in the first place? Is it worthwhile?
Despite all the argument of its significances and values, it cannot be neglected that currently the
interest of relocated and remaining residents supersedes any preservation arguments. If
Bai-Wan-Zhuang is to be preserved in any form, the preservation strategy has to be combined
with housing development strategies. Living condition needs to be improved and enough units
need to be provided to rehouse displaced residents. Alternative strategy will surely require a
creative collaboration between BJMCUP, BJHURD, BJMACH and the developer.

Case 2. Jing-Mian-Er-Chang

Change over Time

Jing-Mian-Er-Chang, or Beijing No.2 Cotton Mill, is located in the once east suburb of the
city. Built in 1954 as the workers’ housing in the once massive textile industry cluster, the
residential compound of the No. 2 Cotton Mill was the only section survived today. Unlike

60 “The Beauty of Bai-Wan-Zhuang cannot be forgot”, Beijing Youth Daily, Nov. 23, 2015, retrieved from
Bai-Wan-Zhuang, which enjoys a status of being the “first” and “finest”, Jing-Mian-Er-Chang exemplifies an even tougher situation shared by most residential compounds today. Its relative obscurity and the complexity of the municipal ODHR agenda pose big challenges to current preservation strategy, while the fact that the factory complex of Jing-Mian-Er-Chang was redeveloped into a business incubator for creative industry in 2008 also encourages preservation to seek for innovative tools.

The Ba-Li-Zhuang (literally translated as “eight li village”) neighborhood where Jing-Mian-Er-Chang is located got its name from the fact that it is eight Chinese Miles from the city (Figure 25). When the 1953 Comprehensive Plan of Beijing decided that the capital city should also be a place that “produces” rather than just “consumes”, and should focus on industrial development that relied on the power of the worker’s population, this area was still very much unpopulated and therefore was planned as an industrial zone (Figure 26). As part of the effort to develop the textile industry, Beijing No. 2 Cotton Mill, as its name suggests, was constructed in 1954 following Beijing No.1 Cotton Mill. The Textile Industry Department acquired 242,500 m² of land from the municipality for factory complex and 170,000 m² for the housing development. In the early 1955, all 33 apartment buildings were completed. Later Beijing No. 3 Cotton Mill was built together with the Beijing Printing and Dyeing Factory next to the No.2 Cotton Mill, together forming an industry cluster, or a “textile city”, as was more often referred to by the locals. The living area was separated from the factories by Chao-Yang Road and was also planned in the same fashion as Bai-Wan-Zhuang with axial grouping of L-shaped
buildings and enclosed courtyards (Figure 27).

The evolution of Jing-Mian-Er-Chang is a physical embodiment of the social change in the past half a century. In the 50s, it was a self-sufficient danwei society. The map of the compound in 1957 upon completion shows Jing-Mian-Er-Chang upon total completion with performance center, schools, kindergarten, hospital, canteen, public shower, post office and stores (Figure 28). The compound was probably a standard design of worker’s housing and the chief architect is unknown. All the buildings built in the 50s are three-story, red brick structures with concrete pillars as load bearing component. The austere exterior and pitched roof is also typical for worker’s housing at that time.

The residents of the compound were mostly workers of the Cotton Mill and their families. For them, moving into the residential compounds was a not only a leap in living quality, but also the proof of the unprecedented high social status of the workers’ class that the new government promised. (Figure 29)

The social turmoil of the 60s and 70s led to an exacerbated housing shortage and the suspension of the city’s comprehensive planning process, which was reflected by the unmanaged construction in the compound. Except for a few planned developments including the kindergarten expansion in 1960, the public bath in 1974, and new housing in 1976, additions and temporary structures started to encroach the open spaces. (Figure 30)

Being the residential component of the Cotton Mill, the development of Jing-Mian-Er-Chang has been greatly influenced by the ups and downs of textile industry. The
state-owned Cotton Mill underwent a extensive management restructure in the 80s under the Open-Up policy and the resulting improvement in productivity led to the constructions of more housing units and community amenities. Between 1984 and 1994, five buildings were completed, providing another 30,000 m² of housing units.\textsuperscript{61} The new housing development was mostly five to six-story buildings, some of which replaced the three-story brick buildings of the 50s (Figure 31). Similar to Bai-Wan-Zhuang, the termination of the \textit{danwei} system in late 80s opened opportunities for private capital to intervene the housing market and build on the land originally allocated to each danwei. As a result, several high rises were built in the 90s by private capital. Original employees living in the neighborhood was relocated to the units from Floor 1 to 18, while the rest units were sold at a market rate.\textsuperscript{62} (Figure 32)

Jing-Mian-Er-Chang is the only complex survived the industry reform in late 1990s. With the development of the neighborhood and the declining of textile industry, the No.1, 2 and 3 Cotton Mills were consolidated in 1997 into Jing-Mian Group and the factory was relocated further from the center.\textsuperscript{63} Report of redevelopment appeared first in the \textit{Beijing Morning News} on Oct. 14\textsuperscript{th}, 2003.\textsuperscript{64} In June 2005, the BJMCUP officially announced the neighborhood as the ODHR site. No.1 and No.3 Cotton Mill constituted the first two phases of redevelopment plan and were quickly wiped clean. Jing-Mian Group partnered with Fang-Sheng Development Company in the

\textsuperscript{62} ibid.
\textsuperscript{64} “The Largest ODHR Project in the City is Launched”, \textit{Beijing Morning News}, Oct 14, 2003.
project. Upon its completion in 2008, the neighborhood was largely replaced by high-rise residential and commercial development (Figure 33).

**Redevelopment Plan**

In the same year of completing the first two phases, Jing-Mian Group decided to change its original “tabula rasa” development strategy and rehabilitate the factory complex of the No.2 Cotton Mill as incubating spaces with abundant sunlight and accessible greenery for creative industries. The main building was turned into an office building. Peripheral structures like boiler room and garage were demolished and replaced by new office buildings.

From a preservation perspective, the rustic industrial feel of the original factory complex seem to have lost in the renovation, though the iconic jagged roof still gives a slight hint of its industrial past (Figure 34). However, the general manager of Jing-Mian Group claimed in an interview that the project was driven by preservation enthusiasm: “A city has its history and culture. If we demolish all the industrial heritage, there will be nothing left when we talk about this period in the future.”65

No matter it was a decision motivated by preservation or not, the business model seems to have worked out. Jing-Mian Group partnered with a State-owned real estate capital to form Guo-Mian Cultural Creativity Development Company with 25 million RMB equity investments each. Located in the vicinity of the headquarter of China Central Television and the

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Communication University of China, the industrial park marketed itself to the mass media industry and the office units have been fully occupied since its completion in 2011.66

In stark contrast with the successful reuse of the factory complex, the redevelopment of the residential compound came to a halt in 2008 due to financing difficulties. The ODHR projects, when combined with housing reform, usually rely on selling market rate housing units to sustain cash flow of the project. Jing-Mian Group planned to fill the financial gap of redeveloping No.2 Cotton Mill with the income from phase 1 and 2. However, the project was dragged for too long due to compensation disputes. The delayed redevelopment also prevented infrastructure improvement and maintenance to be made in the remaining residential compound. The aging sewage system was one of the many problems that troubled the current residents. Zhao Weimin, long time resident of Jing-Mian-Er-Chang and also used to work for the No.2 Cotton Mill as a technician, claimed in an interview that the aging of the pipes over the years had contaminated the drinking water. Regarding the repeated reports from the residents of the water quality, the Municipal Sanitation Bureau inspected the water quality and determined it was not up to the standard in several indexes and the infrastructure needed improvement.67

What is more at stake is probably the structural instability of the building. Li Shukai, who used to work as an electro-chemical technician for the No.2 Cotton Mill claimed to be very familiar of the structure: “It was built solely by bricks”, “no reinforce concrete”. The anti-seismic

capacity of the structure was also in question, as the Director of the Neighborhood Committee Lihua Zang confirmed: “Experts have done inspections. The results were kept enclosed, but definitely not an optimistic one.”68 For most residents, ODHR project is a chance to improve living condition through the compensation mechanism. The sudden stop of the project left residents of Jing-Mian-Er-Chang in despair. In August 2011, over 500 residents signed a petition to the BJMCUP demanding the resume of the redevelopment project of No.2 Cotton Mill as soon as possible. The BJMCUP replied that it could not be started until the finalization of the new ODHR policy and redevelopment plan. Now the residential compound still sits in neglect and disrepair.

Assessment of Values

While Jing-Mian-Er-Chang may not exhibit as much architectural significance as Bai-Wan-Zhuang, its connection with the cotton industry makes it an important physical representation of not only the *daiwei* system, but also the early industrial history of the People’s Republic. Unlike the factory complex that is now turned into office units, residential component of the once huge “Cotton City” is a piece of living history that still evolves today. It offers a sense of continuity that connects to the city’s industrial past that is now hard to find.

While the plan and human scale of Jing-Mian-Er-Chang is significant in telling the social history and should be preserved in certain way, the architecture of it might be open for bigger intervention.

Preservation Challenges

Jing-Mian-Er-Chang shares similar challenges with Bai-Wan-Zhuang in terms of growing renter and senior population. However, Jing-Mian-Er-Chang has a greater loss of its physical integrity, despite the fact that its comfortable human scale and austere red brick structure still exhibits certain characteristics that tell a story of its industrial past. Additions without any design coherence over the years greatly undermined the characteristic of the neighborhood, while the unmanaged parking and street vendors have encroached public spaces (Figure 35). The structural instability of the buildings also poses serious questions for adaptive reuse. In the worst case, when these buildings are determined unsalvageable and need to be demolished, preservation needs to come up with innovative tools to interpret the history of residential compound in new design.

Adaptive reuse of the existing buildings also poses specific design challenges. First, the living area of each unit is way below current housing standard for a single-family household. If it is intended to still house existing residents, units need to be enlarged in one way or another. Second, for any ODHR project to be financially feasible, the developer needs to gain enough profit from selling the additional units at a market rate after setting aside units for residents decided to move back. As a result, high-rises need to be built inevitably, if a more innovative development alternative cannot be devised.

As one of the attempts to reconcile development and preservation, Jiang and Zhou made an attempt to reimagine Jing-Mian-Er-Chang in the National Housing Design Competition. Their
strategy is to combine units and add bays to increase unit size, and construct two more stories to each building to increase unit numbers. (Figure 36) This proposal does address the aforementioned two design challenges, yet its heavy remodel of interior, exterior and scale makes it almost impossible to pass even the least restrictive preservation guidelines. Another possibility might be choosing a handful of buildings to preserve and replace the rest with high-rises to meet the housing demand. This approach, however, clearly loses the opportunity to preserve the compound holistically.

Conclusion

The two cases illustrate several common challenges for the preservation of residential compounds in Beijing. First, as discussed in the last chapter, a biased policy actually discouraged timely renovation of old houses, and the prolonged ODHR process aggravates the problem, especially in the critical period between the point when a place was under consideration and the time when it is officially declared as ODHR site. The threat of demolition, as shown from the two cases, prevents residents from investing in renovation, which might make demolition inevitable after a few years. During this window time that usually drags for years, it is a missed opportunity for preservation not to intervene.

Second, the changing demographics in the residential compound makes the growing number of seniors and renters new stakeholders of the place. The current ODHR projects only recognize the right of homeowners through compensation mechanism but they are not necessarily the people who actually live in the residential compounds. If these compounds are
to be preserved, it is a challenge to preserve the collective memory of the past against the inevitable demographic change, and an even bigger challenge to leverage the changing population to curate a new shared experience of living in the residential compounds while paying respect to its past.

Going forward to devise effective policy interventions to preserve the residential compounds, there are several important lessons that can be extracted from the two cases:

First, preservation cannot save all structures, because of both financial and technical constraints. However, it doesn’t mean preservation should not take into consideration of all structures that exist and once existed. The question is how to use design to interpret the inevitable loss of some unsalvageable buildings.

Second, preservation needs to intervene before it is too late. Preservation needs to be incorporated into the redevelopment system and assert its stand from the beginning. When a site sits untended for years, there will be few alternatives other than demolition.

Finally, preservation needs to work outside its circle. Residential compound is not only a preservation issue. It is in the core interest of local government, real estate development, and last but not the least, current residents. The failure of balancing interests of all stakeholders, including developers would make it hard to draft a feasible preservation plan.
Figure 13. Location of Bai-Wan-Zhuang and Jing-Mian-Er-Chang

Bai-Wan-Zhuang and Jing-Mian-Er-Chang are shown as No. 10 and No. 6 respectively.

Source: Basemap from Google Map. Data from Beijing Gazatteer. Created by author.
Figure 14. Bai-Wan-Zhuang neighborhood and the residential compound

Source: Basemap from Baidu Map. Created by Author

Figure 15. Historic map showing the name “Bai-Wan-Zhuang”

Source: Detailed Map of Four Suburbs of Beijing, 1939, Retrieved from Harvard Yenching Library
Figure 16. Site and unit plan of Bai-Wan-Zhuang 1953

Figure 17. Historic Photo of Bai-Wan-Zhuang upon completion

View of Bai-Wan-Zhuang Street


Three-story Buildings
Two-story detached houses

Figure 18. Building Details

Source: Baidu Image

Figure 19. Moving into Bai-Wan-Zhuang

Figure 20. Current redevelopment area of the neighborhood

Source: Basemap from Baidu Map, annotated by author

Figure 21. Banners in the Neighborhood

It says “Do not let the selfishness of a handful of residents sabotage the housing project that benefits all”

Photo Credit: Bai-Wan-Zhuang Online Forum http://jiefangdajun.lofter.com/
Figure 22. Redevelopment Plans
Redevelopment Plan for No.21 Courtyard

Source: Public Announcement from the Beijing Municipal Commission of Urban Planning
Redevelopment Plan for Bai-Wan-Zhuang North

Source: Flyers handed out in Bai-Wan-Zhuang neighborhood
Figure 23. Demographic Changes
Change in Senior population (over 60 years old) between 1956 and 2010

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<td>1636</td>
<td>229</td>
</tr>
<tr>
<td>under 60</td>
<td>3121</td>
<td>7617</td>
</tr>
</tbody>
</table>

Diagram created by author
Figure 24. Illegal additions and unregulated parking

http://www.thepaper.cn/newsDetail_forward_1394575

Figure 25. Historic Map showing Ba-Li-Zhuang

Source: Detailed Map of Four Suburbs of Beijing, 1939, Retrieved from Harvard Yenching Library
Figure 26. Comprehensive Plan of Beijing, 1953

Grey indicates industrial use

Source: Guangqi Dong, Fifty Years Evolution of Historic Beijing 古都北京五十年演变录, (Southeast University Press, 2006), 27
Figure 27. Plan of the Textile Cluster

Figure 28. Plan of the Residential Compound of Jing-Mian-Er-Chang in 1957

Figure 29. People’s Pictorial photos showing the joy and pride of workers moving into residential compounds

Caption: Worker’s Housing will be ready on the 1st October. The 16 newly built houses will accommodate 250 worker’s families.
Source: People’s Pictorial, Oct. 1953
Figure 30. Plan of the Residential Compound of Jing-Mian-Er-Chang in late 1970s
Red indicates new constructions; blue indicates change in use

Figure 31. Plan of the Residential Compound of Jing-Mian-Er-Chang in early 1990s and late 1990s
Red indicates new constructions

1. High-rises (After demolishing the Ceremony Hall)
2. Elementary School
3. Kindergarten
4. Demolished Botanic Garden
5. Studio Housing, Hospital, Canteen
6. Ba-Li-Zhuang Co-op New Development
7. Housing
8. Textile Industry College
9. Business Services
10. Post Office
11. Playground
12. Middle School
13. Kindergarten
14. Hospital (Public Shower and Garage Demolished)
15. Garage Demolished
16. Office Building
17. Factory Complex
18. Undeveloped Area
19. Newly Planned Housing
20. Housing built in 1976
21. Family Housing
22. Community Factory
23. Public Shower
24. One-story Housing
25, 26. New Housing built in the 80s
27. New Housing after demolition
28. High-rises built on open space
29. Playground (after demolition of the 50s’ buildings)

1. Ceremony Hall
2. Elementary School
3. Expanded Kindergarten
4. Botanic Garden (demolished in Cultural Revolution)
5. Studio Housing, Hospital, Canteen
6. Ba-Li-Zhuang Co-op
7. Housing
8. Textile Industry College
9. Expanded Business Services
10. Post Office
11. New Housing Development (Playground demolished)
12. Middle School
13. Kindergarten
14. Public Shower
15. Garage
16. Office Building
17. Factory Complex
18. Other Housing Development
19. Housing
20. Housing built in 1976
21. Family Housing
22. Community Factory
23. Public Shower
24. One-story Housing
25, 26. New Housing built in the 80s
27. Worker's Entertainment Room

Figure 32. Buildings of each phases of development

Residential Compound built in 1950s:

Mid-rise housing built in 70s
High-rises built in 1990s

Source: Baidu Image

Figure 33. Current condition of the textile cluster

Source: Basemap from Baidu Map, annotated by author
Figure 34. Adaptive Reuse of the Factory Complex (Legend Town)

Plan:

Source: Beijing Shikongzhucheng Architecture Firm

Main Building:

Source: Baidu Image
Rehabilitated Factory Complex:

Source: Beijing Shikongzhucheng Architecture Firm
Factory Complex before rehabilitation:

New Office Buildings replacing peripheral structures:

Source: Beijing Shikongzhucheng Architecture Firm
Figure 35. Additions and use of public spaces:
Figure 36. Reuse Proposal

<table>
<thead>
<tr>
<th>Original Unit Layout</th>
<th>Combine Units</th>
<th>Add Rooms</th>
<th>Add Balcony</th>
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<td><img src="image" alt="Diagram" /></td>
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CHAPTER 4 Preservation Alternatives

While the previous chapters focus on the “why” – why we need to preserve and why it is hard to do so currently – this chapter focuses on the “how”: how to intervene with innovative preservation policies. It is necessary to first take a look at the spectrum of preservation policies.

The following diagram shows the two dimensions of preservation policies. The horizontal axis is the scope of policy. “Building-oriented” approach refers to policies that address mostly individual buildings, while “urban approach” works more broadly within an urban context. The vertical axis shows the degree of integration with other fields including real estate, planning and community development. Policies can either work only within the preservation ordinance under SACH or integrate with other development strategies.

Chart 5: Dimensions of Preservation Policies

Individual and District Listing

Both individual listings as “Protection Units” and “Outstanding Modern Architecture” and
district listings as “Historic Districts” are policies already in place in China. The “Protection Unit” system has been and still is the most frequently used and most effective preservation policy. By listing one building or a group of buildings as “Protection Unit” of national, provincial, municipal or county level, the building acquires legal protection under the preservation law and cannot be torn down.

The attempt to list the residential compound as “Protection Unit” in Beijing, however, faces several challenges. First, the “Protection Unit” system asks for “outstanding” architectural values for more recent heritage and attached little importance to social values. Despite the fact that residential compound is one of the few surviving physical evidences of the history of the 50s, its relatively limited architectural value (except for Bai-Wan-Zhuang, which might be a special case), complexities involved in ODHR projects and the current dilapidated condition all make it hard to gain acknowledgement in the system. Currently, no residential compound is listed as “Protection Unit” of national or municipal levels in Beijing.

Another way to provide certain protection for modern heritage is the listing of “Outstanding Modern Historic Architecture” regulated under MOHURD. The listings of modern heritage in various cities and provinces, however, are not the equivalent of a modern heritage category in the “Protection Unit” system. It only prevents listed buildings from demolition through the regulative power of the BJMCUP, not the preservation law. In fact, the register also mandates that the listed buildings “shall not be demolished”, with a modifier of “in principal”, which in fact offers less legal protection than the “Protection Units” system. In the city of Beijing,
4 out of the 71 listed modern heritage sites have already been demolished, none of which, was listed as “Protection Unit” on local or national register.\(^{69}\)

“Historic district”, and “historic city” or “historic village” alike, differentiates itself from “Protection Unit” in its scope, and also in its regulative body. Unlike “Protection Unit”, which is mandated by the law to be established in every city, historic district is regulated by BJHURD or BJMCUP, and is a relative new tool to many places. Historic district listing also prioritizes neighborhoods with traditional character. Currently, there are 3 national historic districts and 33 local historic districts in Beijing, none of which is aimed at preserving modern heritage.

The variety of buildings in a “Historic District” makes it necessary to draft different levels of preservation measures for different structures. The BJMCUP has surveyed all the buildings in its historic districts in 2002 and categorized them into 5 groups: Historic, Protection, Improvement, Maintenance, and Replacement.

“Historic Buildings” are those that are already listed as “Protection Units” and strictly protected. “Protection Buildings” are those with distinct traditional architectural character but not listed as “Protection Unit”. The exterior is protected, but interior can be modernized and altered. “Improvement buildings” are those with some traditional character but relative low quality. They can be renovated and rebuilt to meet modern needs, but the traditional plan and style must be kept. “Maintenance Buildings” are modern buildings with compatible scale and

design, therefore can be kept. “Replacement buildings” are modern buildings with low quality and no architectural value, or high-rises built in the recent decades. They can be demolished through ODHR projects or redevelopment. “Street-facing structures” need to be renovated or replaced to be compatible with the character of the historic district.

Chart 6: Survey of Historic Districts in Beijing

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
<th>Intervention</th>
<th>Share of total Building surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic</td>
<td>“Protection Unit”</td>
<td>No change</td>
<td>7%</td>
</tr>
<tr>
<td>Protection</td>
<td>Historic Character</td>
<td>No exterior change</td>
<td>9.3%</td>
</tr>
<tr>
<td>Improvement</td>
<td>Good Quality</td>
<td>No change of character and plan</td>
<td>23.8%</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Modern Building</td>
<td>Maintain</td>
<td>7.3%</td>
</tr>
<tr>
<td>Replacement</td>
<td>Compatible</td>
<td>Demolition</td>
<td>49.2%</td>
</tr>
<tr>
<td>Street-Facing</td>
<td>Faces Street</td>
<td>Renovation Demolition or</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

As it shows from chart 6, modern buildings, which makes for over half of the historic district, are all categorized as to be maintained or replaced. Therefore although adopting historic district for the preservation of residential compounds can make use of the existing policy, it is still challenging to work within the same framework aimed mainly at preserving traditional architecture. It would potentially cause conflict to categorize residential compounds as “Historic”

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or “Protection”, since according to the chart residential compounds can only be grouped as “Replacement Buildings”.

**Application in Shanghai**

The city of Shanghai may serve as a good comparable for Beijing. Despite the shared challenges and insufficient policy tools, Shanghai made several policy advances in preserving modern heritage, especially residential compounds within the current preservation system. The 2002 *Protection Regulation of Historic Cultural Districts and Outstanding Modern Architecture of Shanghai* (上海市历史文化风貌区和优秀历史建筑保护条例) changed one of the listing criteria from “built between 1840 and 1949” to “with 30 years of history” explicitly gave recognition for modern heritage. The regulation specified four levels of intervention according to the “historic, scientific and artistic values” as well as the “fabric integrity”. From the most to the least strict measures, the first level forbids changes of the façade, structure, plan and interior design of the building; the second forbids changes of the façade and structure, but allows more room for alteration of the plan and interior design; the third level allows changes of the interior but not the façade and structure; the fourth only regulates changes of the façade.

Blessed by these changes in preservation policy, Cao-Yang New Village, the first residential compounds built for factory workers in Shanghai, was listed on the Shanghai local register of *Outstanding Modern and Contemporary Historic Architecture* in 2004. Built in 1951 also adopting the “neighborhood unit” concept, Cao-Yang new village was planned more in a garden
city manner, offering 1,002 working class households decent living spaces.\textsuperscript{71} (Figure 37) It has been showcased to various foreign leaders and visitors during the 50s as an example of the worker’s high social status in the People’s Republic. (Figure 38)

Similar with residential compounds in Beijing, Cao-Yang New Village also suffered from deteriorating infrastructure, substandard living conditions, as well as changing demographic mix. However, the listing seems to have dragged the place back to the center of public attention, and the district government has oriented its preservation policy toward renovation rather than redevelopment. In the past several years, the district government made large investment to the neighborhood, including 8 million RMB in 2009 to update electricity system, repaint walls, and repair roofs, and another 8 million RMB to improve public spaces in 2010. In 2011, the district tried to use financial incentives to encourage voluntary renovation from the residents. Each household was compensated 600 RMB per square meter for refurbish kitchen and bathroom. In 2015, the neighborhood witnessed active public participation when a community charrette was held in Cao-Yang New Village to gather opinions from the residents as the basis for further planning. (Figure 39)

Cao-Yang New Village faces the pressure of real estate development as well as the wish of many residents to move to newly built high-rises. It is now under consideration whether to demolish two thirds of the existing buildings and invest intensively on the preservation of the

section with the longest history.72

Generally speaking, the city of Shanghai has made meaningful attempts to preserve residential compounds within the listing system. The effort of encouraging voluntary renovation by the district government and their effort to seek for alternatives of balancing housing requirement and preservation can be a great reference for Beijing.

**Incentives**

Incentive is a way to encourage rather than enforce preservation. It leverages the market forces to turn preservation from a financially unfavorable choice to a financial feasible one. In the US, and many other countries with similar market-centered structures, tax incentives play an important role for preservation. The 20% rehabilitation income tax credit in the US for example has successfully motivated private developers to actively participate in the listing and rehabilitation of historic properties. Another tool is Transferable Development Right (TDR), which allows developers to sell the unrealized Floor Area Ratio in usually low-rise historic district for use in other non-historic areas.

In the strictly regulative environment in China, preservation incentive is still a rather under-explored territory. It is commonly believed that if preservation allows any room for demolition, the real estate market will take the chance. However, one neglected fact is that, developers also behave according to the principal of maximization of profit. If the incentive is

structured well enough to bridge the gap between preservation and development, it will be a reasonable choice for any profit-driven developer.

Having said that, it is also necessary to acknowledge the strong government involvement in the market and the close relationship between the land transaction mechanism and demolition. Creative adaptation of incentives that are widely used in the US is called for in the Chinese context, which needs to target key links in the ODHR process: designation, redevelopment, and housing distribution. BJMCUP is fully responsible for designating ODHR projects. However in recent years, pre-development need to collect signatures of over a certain amount of all residents stating their support for the project.\(^73\) In this phase, preservation can intervene by providing financial support for renovation, so as to stop housing deterioration, which in many cases has eventually catered to a pro-demolition environment. The key stakeholders of the redevelopment phase are the district government and the real estate developer. The district government sells development right at a certain “land transaction fee”, and the developer can usually secure a special loan at a favorable interest rate from the National Development Bank.\(^74\) Incentives can be devised by restructuring the financing terms, including deferred payment of land transaction fee, or lower interest rate to encourage developers to keep more existing structures. In the housing distribution phase, the district government can restructure the

compensation terms to encourage original residents to move back to the neighborhood, while providing the developers financial support to allocate more units for affordable housing.

**Application of Transferable Development Rights (TDR) in Zhejiang**

TDR has in fact been experimented in the province of Zhejiang in the late 90s, with the purpose of farmland conservation. Urban development in China is planned by the central government and an overall land use plan is made every 10 to 15 years. Each year the central government distributes land use quota to lower level governments and sets goals for “farmland conservation rates” and “total supplementing farmland area”. These numbers need to be met through zoning process. Zhejiang province has a target conservation rate of 85%, meaning 85% of all farmland is allocated as “Baseline Farmland”, and therefore cannot be used for urban construction anymore. Facing growing demand for urbanized land, especially in fast-developing cities, Zhejiang province started a regional farmland trading system. Simply put, this system guarantees regional baseline farmland area while allowing for more agriculture-dependent cities to take more farmland quota from more urbanized cities. The system was legalized and standardized through Local People’s Congress legislation process. Scholars have generally spoken highly of the policy innovation and concluded that the dilemma between development and farmland conservation was inevitable, but policy and institutional innovation was a better option than strict regulation.\(^7^5\) Despite many of its merits, the lack of proper regulation led to

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the appropriation of farmland in many smaller cities, so the system was not adopted nation-wide and was terminated by the central government.

Preservation is not as prioritized as food security in the government agenda, and doesn’t bring more urban land to cities like transferring farmland quota. There’s no precedence of using TDR for historic preservation in China. However, the case of Zhejiang province shows the possibility of using TDR in preservation. In a similar manner of swapping farmland with urban land, preservation might be combined with new district development.

**Conservation District**

Conservation district has gained growing attention in recent years as a response to the limitations of traditional preservation policy in its determination of values and integrity. A study done by the US National Park Service listed three kinds of areas or neighborhoods that might be qualified for conservation district. The first kind is the bordering or “buffer” area of a designated historic district, aimed at protecting the edges of the historic district. The second kind is areas that does not meet the 50-year rule for historic district but is likely to be qualified in 5 to 10 years. The last are those neighborhoods that “might never qualify for historic status”, but still worth preserving for its “social and economic value, or for their utility as affordable housing”. 76

Conservation district, despite all the local variances, takes the form of either “historic district-lite” or “zoning overlay”. 77 The first one is usually structured the same way as local historic district

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with similar listing criteria and regulated by the historic commission, while the latter one regulates change in the neighborhood through zoning ordinance under the planning commission.

The conservation district model might be an administrative and legal challenge in China, yet it is nonetheless a path worth exploring for residential compounds. First, many residential compounds like Jing-Mian-Er-Chang, might never be qualified for historic district, while Bai-Wan-Zhuang can be a potential candidate in the future. Conservation district therefore is a tool to offer an alternative for preservation in China, which often needs to choose between the two extremes of the museumization of historic districts, and the wrecking ball of ODHR projects. It in fact mothballs the neighborhood, provides certain “status” to prevent demolition and focuses more on “managing change” with the emphasis of affordable housing.

A 2011 study of six conservation districts in the US revealed the key elements and the spectrum of interventions, which can serve as a great reference for China. The conservation districts surveyed were created mostly by grassroots movements when the neighborhoods were facing both great physical and social changes. Major threats include demolition, decreasing owner-occupied homes, increasing crime, aging infrastructure, changing street character, and disappearing local business. The challenges shown in case of Bai-Wan-Zhuang and Jing-Mian-Er-Chang have much in common. Besides, in Bai-Wan-Zhuang, there has been some

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grassroots effort to preserve the neighborhood, showing favorable enabling environment for conservation district.

Adopting the key elements of conservation districts in the US and putting them together with that of an ODHR project, as shown in the following chart, the two projects exhibit a lot in common. It shows that on the one hand, a lot of administrative infrastructure is already in place to start conservation districts, and on the other hand, a small change in the process of current ODHR projects would lead to more preservation-oriented results.

Chart 7: Comparison of ODHR and Conservation District

<table>
<thead>
<tr>
<th></th>
<th>ODHR</th>
<th>Conservation District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Building Quality, Infrastructure</td>
<td>Building Quality, Infrastructure, history, etc</td>
</tr>
<tr>
<td>Designation</td>
<td>Planning Commission</td>
<td>Planning Commission</td>
</tr>
<tr>
<td>Public Consent</td>
<td>70% of public consent required to start the project</td>
<td>Necessary</td>
</tr>
<tr>
<td>Public Participation</td>
<td>Public hearings required</td>
<td>Necessary</td>
</tr>
<tr>
<td>Key Concerns</td>
<td>Redevelopment, Relocation of Residents</td>
<td>Neighborhood Character, Housing Affordability</td>
</tr>
<tr>
<td>Reviewing Body</td>
<td>Planning Commission, BJHURD</td>
<td>Planning Commission, SACH</td>
</tr>
<tr>
<td>Reviewing Items</td>
<td>Redevelopment Plan, Compensation Plan, Relocation Plan</td>
<td>New Construction, Demolition, Land Use Change</td>
</tr>
<tr>
<td>Result</td>
<td>Redevelopment</td>
<td>Preservation</td>
</tr>
</tbody>
</table>

**Affordable Housing**

Important for conservation district in the US is also to integrate with affordable housing
policies. Preservation Economist Donovan Rypkema has pointed out the link between old historic properties and affordable housing in the US, stating that: “older and historic neighborhoods, unlike any other areas, are providing homes for families from every financial strata, particularly for those in need of affordable housing”.79 The Advisory Council for Historic Preservation also issued a policy statement in 2006, reconfirming that “rehabilitating historic properties to provide affordable housing is a sound historic preservation strategy”.80 Making the connection between preservation and affordable housing is perhaps the best way to respond to the prevalent “gentrification” accusation of historic designation. Compared with the clearance-redevelopment model, preservation is able to retain existing residents through preserving their homes.

Current ODHR redevelopment indeed gives the opportunity for homeowners to move back to the neighborhood through purchasing the new housing units at a favorable rate, yet it also gentrifies the whole neighborhood by pushing out the low-income renters, leading to an increasingly stratified urban landscape. For those residents that choose to be compensated by new housing units, they will be relocated to the north 5th Ring Road where the biggest affordable housing projects are situated. Residential compounds, on the contrary, offer favorable location with affordability. A study on Bai-Wan-Zhuang and three other neighborhoods in the vicinity shows that not only did Bai-Wan-Zhuang score higher in

transportation, environment and amenities than high-rises neighborhoods, it was also cheaper. The reason is probably because residential compounds were designed to be spatially economic. The strategy to make housing more affordable today is not much different. According to the regulation of government-funded welfare housing, the standard unit size for low-income renters is minimum 50 square meters, and for low-income households the standard is minimum 60 square meters, which is the same as most units in residential compounds. It is therefore a missed opportunity for the city to repurpose residential compounds as welfare housing units.

Conclusion

Based on the evaluation above, the chart 8 summarizes the key aspects of each category of preservation policy.

<table>
<thead>
<tr>
<th>Chart 8: Summary of Preservation Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples</strong></td>
</tr>
<tr>
<td>“Protection Unit”</td>
</tr>
<tr>
<td>“List of Outstanding Modern Architecture”</td>
</tr>
<tr>
<td>Historic District</td>
</tr>
<tr>
<td>District Listing</td>
</tr>
<tr>
<td>Historic Village</td>
</tr>
<tr>
<td>Conservation District</td>
</tr>
<tr>
<td>Tax Credit</td>
</tr>
<tr>
<td>TDR</td>
</tr>
<tr>
<td><strong>Prioritized Values</strong></td>
</tr>
<tr>
<td>Architectural</td>
</tr>
<tr>
<td>Historic</td>
</tr>
<tr>
<td>Economic</td>
</tr>
<tr>
<td>Social</td>
</tr>
</tbody>
</table>

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81 The study chose four residential neighborhood in the same district: two compounds built in the 50s: Bai-Wan-Zhuang and Jianshebu Compound, two high-rise neighborhoods built in the 2000s. The first two neighborhoods offer cheaper housing, higher FAR, better environment (less noise, better air quality etc), transportation (close to schools, restaurants, parks and other amenities). Dongquan Li and Xian Li, “Spatial Differentiation Analysis in City Blocks from the Perspecive of Environmental Quality Assessment: The Case of Four Residential Neighborhoods in Sanlihe District Beijing”, Urban Studies (Feb. 2014), 126-129.

<table>
<thead>
<tr>
<th>Application</th>
<th>Existing</th>
<th>Existing</th>
<th>TDR for farmland conservation</th>
<th>None</th>
</tr>
</thead>
</table>
| **Pros** | - Strong Legal enforcement  
- Already in place | - Different levels of interventions  
- Certain legal protection  
- Already in place | - Participation of the private sector | - Allow more room for renovation and new construction  
- No requirement for outstanding architectural value  
- Greater public participation |
| **Cons** | - Hard to get listed  
- Limited scope | - Hard to get listed | - No legal enforcement | - No legal enforcement |

While the existing “Protection Unit” and “Historic District” system offers the strongest legal protection, it also limits the possibility of preservation to be more targeted in its intervention and be more integrated into the urban redevelopment process. In comparison, incentives and conservation districts might offer innovative solutions to current preservation predicament. In reality, a combination of different tools might be required for an effective policy.
Figure 37. Plan of Cao-Yang New Village, Shanghai, upon completion
Historic Aerial Photo of Cao-Yang New Village

Source: Zhu Xiaoming, Planning, Design and History of Shanghai Caoyang No. 1 Village, annotated by author

Figure 38. International Visitors at Cao-Yang New Village
Source: Cao-Yang New Village History Archive,
retrieved from: http://lnyt.blog.163.com/blog/static/218432171201501661812465/
Figure 39. Improvement of Public Spaces in Cao-Yang New Village
Community Charrette held in 2015

CHAPTER 5. Recommendations: Process-Oriented Preservation

As the last part of this thesis, it is necessary to revisit the key questions that the previous chapters have dedicated to: why preserve residential compounds and how to do so. Traditional preservation theory and practice in China, which is still relevant in the discussion of preserving residential compounds, provides a very straightforward answer: the significant ones are enshrined and the rest can be left out. The tool it uses is listing sites as “Protection Units” – in this system, preservation is largely as a decision of listing or not listing.

This is nonetheless a valid and efficient way of dealing with heritage that are of high historical and architectural significances, but no longer sufficient for contemporary heritage that is valued for its socio-economic significances. The current status of residential compounds has shown clearly that the urban development process has made preservation more contested than ever. Saving the structure and turning into a museum can no longer be the answer, and the distinct nature of the recent inherited spaces requires a new approach of preservation, as it is increasingly influenced by a variety of stakeholders – residents, district government and developers alike, shaped by market forces, and closely integrated with land transaction, housing and planning issues. There are no easy answers, nor right answers. If the profession continues to work with the old mindset, and refuses to intervene early in the large-scale neighborhood clearance project, it will be too late when the bulldozers come. The result will be a fragmented urban landscape, where the new is engulfing the old rather than growing out of it.

The preservation of residential compounds therefore needs to be a process that manages
the direction and degree of the changing urban fabric. It means to acknowledge:

Contemporary buildings that are probably not eligible for listing also deserve preservation mainly for its socio-economic value;

New tools need to be devised to preserve recent heritage;

Saving all the structures might not yield the optimal outcome for all stakeholders of residential compounds, and not the goal of preservation;

Preservation should focus on a transparent and equitable process that balances the need of the residents to improve living condition, while meeting the financial constraints for district government and developers;

Preservation does not rein a separate territory in the city; rather, it should be part of a healthy, sustainable urban development culture.

Specific policy recommendations are drafted below for residential compounds:

1. The city should survey and document the existing residential compounds.

A database needs to be established to record the location, age, structural stability, infrastructure, related redevelopment projects, land prices and other factors of existing residential compounds. It will retain historic information before bigger changes happen, and will also help to prioritize preservation efforts based on different factors.

2. The city should establish conservation districts for selected neighborhoods built after 1949.

Conservation districts are neighborhoods designated by the BJMCUP and exhibit distinct
characters, or are associated with important historical events or social changes after 1949. They should not overlap with existing historic districts and over 50% of the residents’ consent is required to be eligible for the listing. Upon designation, the BJMCUP will be responsible to draft conservation plans and design guidelines with participation of the residents, professionals and developers.

The purpose of establishing conservation district is to avoid undifferentiated clearance in the city and provide an opportunity for all stakeholders to discuss and reach a transparent, equitable decision. A conservation plan might range from total demolition to saving all structures. However, the most important goal is to strike a balance between the fabric and the present-day needs of all stakeholders. Along with a conservation plan, a detailed design guideline should be drafted regarding new construction and renovation. New design should interpret history and be compatible with the scale of the neighborhood. Renovation should not undermine key character of the neighborhood.

3. The city should devise a set of preservation-oriented incentives

The case of Cao-Yang New Village in Shanghai is a positive precedence of financial subsidies for homeowners. Residential compounds in Beijing can adopt similar strategy. On the one hand, the district government should provide subsidies to each Neighborhood Committee for annual renovation of shared infrastructure and amenities. On the other hand, residents who renovate their own units according to the guidelines of the conservation district should be reimbursed of part of the cost by the Neighborhood Committee.
Creative incentives should also be devised for the developers. The National Development Bank, which is the key loan provider for urban redevelopment projects, should start loans that offer favorable interest for developers that engage in the redevelopment of conservation areas and follows conservation plans and design guidelines. In cases where part of the conservation neighborhood is demolished for redevelopment upon the consent of all stakeholders, the district government should encourage the developer to build at a compatible scale with existing fabric by offering discounted favorable land transaction fee, or compensating unrealized development rights in other places.

4. ODHR Projects should be re-evaluated

A handful of neighborhoods that are declared to be ODHR sites might be potential conservation districts. Therefore apart from building quality assessment, the historical and social assessment should be added to the ODHR designation process to identify neighborhoods worth preserving. Conservation districts, in that case, works not in contradiction with ODHR projects, but as an alternative designation of ODHR. It mothballs a neighborhood from immediate demolition that ODHR designation implies and saves the neighborhood by encouraging renovation and discussion among stakeholders, all of which are currently missing from the ODHR initiative.

5. The BJMCUP should make sure of the integration of preservation in the redevelopment process as well as the equitability and transparency of it.

The following chart shows the proposed redevelopment process.
Traditional development route goes from neighborhood assessment directly to ODHR designation, leaving no channel for the public or preservationists to intervene. The proposed process opens intervention opportunities by first adding historic and social research to the ODHR designation assessment rubric, which helps to identify potential neighborhoods worth saving. The residents can push forward preservation by asking BJMCUP to establish conservation districts. Buildings eligible for listing will be listed, and the neighborhood will be redeveloped.
according to a sensible conservation plan and design guidelines, avoiding reckless large-scale clearance. For ODHR sites, preservation incentives for residents and developers are provided to encourage more preservation-minded developments.

Process-oriented preservation does not guarantee outcome, but rather focuses on a full participation of all stakeholders. It is a response to the contested urban development process, which pertains to various fields and interests that are not in the control of preservation. It is also an acknowledgement that a balance between preserving the fabric and meeting present-day needs can be achieved. The loss of the preservation battle, more often than not, is not only a result of demolition, but also the marginalization of the field from the whole urbanization process.
Bibliography

“A Legend: How did an Old Factory Gain New Life”, May. 11, 2015
http://www.sasac.gov.cn/n1808314/n1896754/n1896770/c1897186/content.html;


“Beijing announces it 2016 ODHR Plan”,
http://www.gov.cn/xinwen/2016-02/23/content_5044855.htm;

http://www.bjghw.gov.cn/web/static/articles/catalog_26/article_ff808081312d665701312d7c97880005/ff808081312d665701312d7c97880005.html;


Beijing Municipality, “Decision on Speeding up ODHR Projects in Beijing (关于加快北京市危旧房改造的决定)”, (Government document, April, 1990);

Beijing Municipality, “Comments on the Implementation of Improving Old Neighborhoods in Beijing 北京市老旧小区综合整治工作实施意见”, (Government document, 2013);

Beijing Municipality, “Comments on the Implementation of Improving Old Neighborhoods in Beijing 北京市老旧小区综合整治工作实施意见”, (Government document, 2013);


Bray, David. *Social Space and Governance in Urban China: The Danwei System from Origins to Reform* (Stanford University Press, 2005);

Compound in Beijing”, *Journal of Beijing University of Civil Engineering and Architecture* vol. 28 (Sept. 2012), 76-80;

Dong, Guangqi. *Fifty Years Evolution of Historic Beijing 古都北京五十年演变录*, (Southeast University Press, 2006);

Du, Chunlan et. al “Comparision of Danwei space and Xiaoqu Space from the Neighborhood Unit Perspective”, Urban Studies (May. 2002), 88-94;


Guo, Mianyu. “Residential Compounds and Beijing Culture”, *Journal of Beijing Normal University* (Apr. 2005);

Hayden, Dolores. *The Power of Place: Urban Landscapes as Public History* (MIT Press, 1997);


Jia, Rongxiang and Sun, Ying. “The Cultural Character and Value of Bai-Wan-Zhuang Residential;

Lefebvre, Henri. *The production of space*, (Wiley, 1992);

Lü, Hsiao-po and Perry, Elizabeth J. edit, Danwei: the changing Chinese workplace in historical and comparative perspective (Armonk, N.Y.: M.E. Sharpe, 1997);

Lü, Junhua. Peter Rowe and Jie Zhang, Modern Urban Housing in China 1840-2000 (Tsinghua University Press, 2000);

Li, Dongquan and Li, Xian. “Spatial Differentiation Analysis in City Blocks from the Perspective of Environmental Quality Assessment: The Case of Four Residential Neighborhoods in Sanlihe District Beijing”, Urban Studies (Feb. 2014), 126-129;


McClurg, Jessie. Alternative Forms of Historic Designation: A Study of Neighborhood Conservation Districts in the United States (Research paper, University of Minnesota), 2011;


Rypkema, Donovan. “Historic Preservation and Affordable Housing: The Missed Connection, National Trust for Historic Preservation”, August, 2002;


Qian, Duansheng. “How to solve the housing problem for the people of Beijing”, People’s Daily, May 21, 1949;

“Regarding the nature and policy of urban housing and rent”, People’s Daily, August 12;

State Administration of Cultural Heritage, Law of Preservation of Cultural Heritage of People’s Republic of China;
State Administration of Cultural Heritage, *Requirements on Drafting Preservation Plans of National Level Protection Units*, 2003;


Tuan, Yi-Fu. “Space and Place: Humanistic Perspective” in Philosophy in Geography, ed. S. Gale and G. Olsson, (Springer, 2012) 387-411;


“The Beauty of Bai-Wan-Zhuang cannot be forgot”, *Beijing Youth Daily*, Nov. 23, 2015;


Wei, Ke. “1990-2004: Two Large Scale Redevelopment of Dilapidated Housing in Beijing”, *Beijing Planning and Construction*, (Nov. 2005);


Zhang, Qun. “‘All Shall Have A Shelter Over The Head’－Analysis of the Housing Policy of the 50s ‘居者有其屋’ --1950 年代的住房政策剖析”, *Modern China Studies* 105 (Jun. 2009);


Zhang, Song and Zhou, Jin. “On Devising Protection System for Modern and Contemporary
Heritage”, Architectural Journal, (2005.5), 5-7;

Zhu, Ming. “The People’s Court Dealt with Housing Disputes Discretely, Over 2000 Cases in the Past Year”, People’s Daily, June 15, 1950;

Zhu, Xiaoming. “Planning, Design and History of Shanghai Caoyang No. 1 Village”, Housing Science (No. 2011), 47-52;

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Beijing Municipal Commission of Housing and Urban-Rural Development
BJHURD ................................................................................................................ 44, 45, 59, 97, 106

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