

Post-War Evolution of Housing Context——a Comparative Study of Public Housing in Stockholm and Beijing

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ABSTRACT. *Sweden is a global model for a “middle way” between capitalism and socialism, which shows similarity with Chinese institution more than other western countries. Therefore comparisons of housing context between the two countries would contribute to better understanding of the development path of them as well as foresee the future constraints and opportunities in term of sustainable housing development. This paper compares Stockholm and Beijing’s evolution of housing context, and comes to the conclusion that although the two cities show many similar perspectives in term of housing context, the evolution process as well as the inner cause is quite different.*

KEYWORDS: *Public housing, Evolution, Sustainability, Stockholm, Beijing*

1. Introduction

Housing has always been an important factor of urban planning, government management, as well as social development. Both Sweden and China have witnessed ups and downs in front of housing issue. At the same time, Sweden is a global model for a “middle way” between competitive capitalism and state socialism, which shows similarity with Chinese institution more than other western countries. Therefore comparisons of housing context between the two countries would contribute to better understanding of the development path of the them, and give objective judgement to current housing development as well as foresee the future constraints and opportunities in term of sustainable housing development. In this paper I take Stockholm and Beijing as two cases to study. Both of them are capital cities of the country and have implemented many governmental actions towards housing issue.

The building activities within a city region can be regarded from an evolutionary perspective. In this paper, the evolution phases of Stockholm’s housing development is divided according to housing construction quantity in Sweden (Figure 1), while in

Beijing's case policy revolution is the main evolving factor. The methodology of this comparative study is to analyze housing context of Stockholm and Beijing from an evolutionary sight, then compare the similarities and differences between them, making linkages and trend analyzes of the relations. Housing context in this paper is discussed in three perspectives: housing policy, physical structure, and social structure. Each perspective is analyzed in developing trend and leading factors. The conclusion is that although the two cities show many similar perspectives in term of housing context, the evolution process as well as the inner cause is quite different.

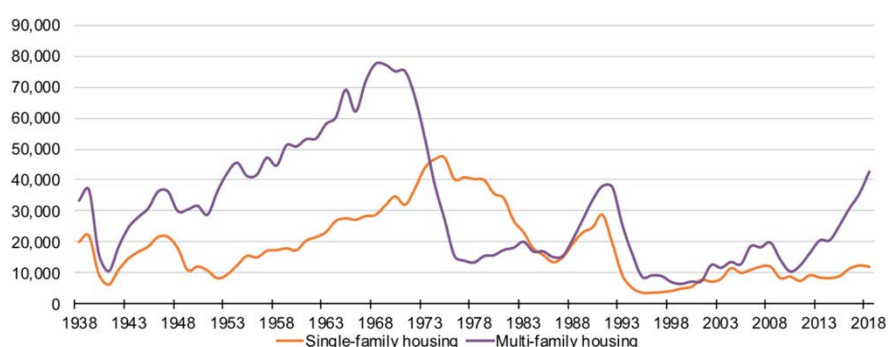


Figure. 1 Housing Construction in Sweden (Source: SCB)

2. Evolution of Housing Context in Stockholm

2.1 1945–1970: Municipal Multi-Family Housing with Infrastructure

The Second World War represented a turning point in the development of Stockholm in many ways. Firstly, the interruption of housing production during the war, the acceleration in urbanization, and the baby boom led to a tremendous demand for new dwellings in the Stockholm region. Secondly, after the war the leading municipal officials at the real estate division had powerful instruments at their management. The city owned most of the land in its southern and western parts, as well as the Stockholm Tramway Company which build the underground. Also, the municipality owned the municipal housing companies which contributed large amount of construction both on housing and commercial centers. Therefore, dominated by the concept of “People’s Home (Folkhemmet in Swedish)” derived from Social Democratic after the war, two important housing policies happened during this phase: ABC-suburbs and Million Dwelling Housing Program.

Inspired by the English concept of “new towns”, the concept of ABC-suburbs was derived from city planners in Stockholm. ABC-suburbs proposed suburbs were supplied with workplaces (“Arbete”), dwellings (“Bostader”) as well as commercial center (“Centrum”). The workplaces would then create traffic going the opposite

direction during rush hours and commercial and cultural center would stimulate traffic during day and night.

Million Dwelling Housing Program is for an ambitious public housing program implemented in Sweden between 1965 and 1974 by the governing Swedish Social Democratic Party to make sure everyone could have a home at a reasonable price. The aim was to construct a million new dwellings during the program's ten-year period. At the time, the Million Program was the most ambitious building program in the world to build one million new homes in a nation with a population of eight million. At the same time, a large proportion of the older housing stock was demolished. Over the lifespan of the program, 1,006,000 new dwellings were built. For the houses designed for the lowest- income group, the government would bear 66% of the initial costs and this would be repaid by the customers and residents in a 30-year period [1]. For other categories such as students and blue collar workers and immigrants, the government provided subsidies and incentives to building companies in order to start construction. The result was an increase in Sweden's housing stock of 650,000 new apartments and houses with a general rise in housing quality.

2.2 1970–1980: Single-Family Housing in suburbs

In the 1960s, the large-scale construction of huge housing areas in far away suburbs came under sharp criticism, the same as the entire modern city building tradition. Conflicts and bottom-up movements about environmental issues happened. At the same time, the population of Stockholm decreased for the first time in half a century and newly produced flats remained without tenants. These facts led to the dramatic decrease in multi-family housing construction and brought the booming of single-family housing.

The trend of multi-family houses construction were replaced by single-family houses, in the form of detached houses and terrace houses. This new trend was primarily based in the independent suburbs of Greater Stockholm. Several hectors stimulated the demand for single-family houses. First, many households had considerably increased their incomes during 1960s and looked forward to dwellings on the ground. Furthermore, an inflationary economy and government subsidies stimulated families to invest in private houses. As a result, the production of single-family housing surpassed the production of multi-family housing in the second half of 1970s. A large number of these houses were built in suburban municipalities far from the city. However, the overall production of housing was much lower in 1970s than in previous decades.

2.3 1980—2000: Commercial Building with Liberalized Market

The financial market was liberalized in 1980s, which is a turning point of Swedish public housing. Liberalized market allowed a great amount of borrowed money to circulate and soon brought up the prices and productions. Simultaneously,

governmental subsidies had supported an overproduction in the housing sector particularly in Million Program. Hence, market liberalization and deregulations on the housing market from the 1980s have altered the advantaged position of the public housing companies and has put them under economic and managerial stress.

One consequence of the neoliberal turn in housing politics of Sweden has been the privatization of public housing. In combination with a vast housing shortage in cities, the issue of public housing has been increasingly politicized in Sweden. Another consequence is the increasing gentrification process led by liberalized housing market. Like many of the Million Program projects, while the original projects was built in the mid-1960s to early-1970s with the native white Swedish working class in mind, growing gentrification since the late 1980s to mid-1990s has resulted in a vast majority of such projects being inhabited by the non-white immigrants and their descendants, as the white working class managed to move out by growing into the middle class.

Overall, the liberalized market since 1980s shifted the housing regime and condition to the privatization of public housing, which brought new problem of increasing gentrification.

2.4 Until Today: Sustainable Community both Environmentally and Socially

Over the time of half a century, Stockholm's house construction has witnessed its ups and downs. It is time for government to slow down and review the escalating construction over decades. As the rising senses and movement of community and environmental issue, the sustainability of neighborhood has been in heated discussion, which consists revolutions like neighborhood renewal, social transformation and sustainable technology. Such as New Urbanism, Ecological Urbanism, Landscape Urbanism, Green Urbanism, etc. Although they share different attitudes on methods of neighborhood building, a common agreement is the principle of regarding sustainability both environmentally and socially [2], especially the later.

Indeed, Social sustainability is among the challenges of today's community. For example, the suburb Alby in the southern region of Stockholm was one of the Million Program projects which was built in 1970s and has tradition of citizen dialogues and invited participation for over two decades. However, equality and democratic issues have seen its seriousness since the liberalized market and gentrification process. The peak conflict was around 2013 when the municipal owned housing company decided to sell 1,300 public housing apartments to private company. Habitants fought against the privatization of the apartments but finally failed to change the decision [3]. It seems that community like Alby and invited participation failed to act democratically, which is exactly the trend of most so-called "integrated community" today.

Although there are different views among urbanism movements on design methods and vision, it is without dispute that not one of them can solve the 21st

housing issue independently. What we need is a holistic urbanism which consist of methodology integration and mind corporation.

2.5 Conclusion of Stockholm's housing evolution (figure 2)

Time	Evolution Phases	Housing Context			Leading Factor
		Housing Policy	Physical structure	Social Structure	
1945 — 1970	Municipal multi-family housing with Infrastructure	ABC-suburbs; Million Dwelling Housing Program	"Hand" shape; central to city center	The regime of powerful government	Municipal housing companies; Large land owned by Stockholm municipality; Underground system construction
1970 — 1980	Single-Family Housing in suburbs	Government subsidies with an inflationary economy	Decentralized morphology around suburbs	Middle class's growth in wealth	Transportation: from subways to cars
1980 — 2000	Commercial Building with Liberalized Market	Privatization of public housing	Booming of commercial buildings	Growing gentrification; Government's financial crisis	Liberalized housing market
Until today	Sustainable community both environmentally and socially	Neighborhood regeneration	From sprawl to compact	Large scale tenure restructuring and upgrading	bottom-up regeneration
Trend		up-down ⇕ bottom-up	expansion ⇕ decentralized growth ⇕ compactness	state dominated ⇕ social transformation	sense of urbanization ⇕ sense of community

Figure 2: Evolution of housing context in Stockholm (self-made)

Time	Evolution Phases	Housing Context			Leading Factor
		Housing Policy	Physical structure	Social Structure	
1949 — 1978	Welfare-Oriented Public Housing	Housing Allocation by Danwei (the working unit)	Independent Danwei as development unit; Decentralized suburbs	Centrally planned welfare	Centrally planned economy
1978 — 1998	Market-Based Reform	Open Policy Land Policy	Danwei as dominant factor; Little housing construction	Complicated relationship between central-local government and Danwei	Transition to socialist market economy
Until today	Mutual development of the housing market and affordable housing	Affordable Housing Program	Periphery areas around "rings"	Deep gentrification; Gap between rich and poor	Balance between government and market
Trend		state owned houses ↓ state owned land	decentralized suburb spots ↓ periphery growth around "rings" ↓ compactness	equally shared wealth ↓ fair but not equal	socialist soley ↓ socialist market

Figure 3: Evolution of housing context in Stockholm (self-made)

3. Evolution of Housing Context in Beijing

3.1 1949–1978: Welfare-oriented public housing system under a centrally planned economy

Under the planned economy after the found of Republic of China in 1949, urban housing was a part of the socialist welfare system. Welfare housing was simple: the government assigned land to the working unit (Danwei in Chinese). Danwei is a generic term that denotes the working unit place in China [4], and it provides employees with comprehensive welfare and services, including housing and medical supplies, that are separate from their salary [5]. Danwei is responsible for housing, which is assigned to the individual employees. This is considered a part of the socialist system and communist ideals. Welfare housing embodies the superiority and justice of socialism. However, equalitarian allocation was mixed, and housing shortages and poor housing conditions were also problems. In 1978, with the significant arrival of “Open Policy”, market was liberalized. Before that, there was no private urban housing market in China.

3.2 1978–1998: Market-based reform under the socialist market economy

In 1988, the State Council held the first national conference on housing work, thereby marking the start of housing system reform. However, because of the complicated relationship between the central government, local government and Danwei, Beijing’s housing reform actually started in 1990. Reform was characterized by increasing rent in small increments and increasing housing expenditure to individual workers in order to gradually achieve housing commercialization. Market-based reforms were established to facilitate the transition of housing from a welfare item to a commodity. With these major changes in the housing allocation system, urban populations now have to buy housing on the market at the family level, and the cost of residential housing has very quickly increased [6].

3.3 Until Today: Mutual development of the housing market and affordable housing

When new housing system reforms emerged, two major housing programs were introduced: Affordable Housing Programs and the Housing Provident Fund (HPF) program. Four key policy measures were enacted under the Affordable Housing Program: (1) the government plays a leading role and establishes the land supply scheme; (2) housing is built by real estate developers on the market, but the sale price and profit margin are established by the government; (3) low- and middle-wage earners are allocated housing, who also need to have the local urban “hukou” (registered residency status); and (4) three main forms of affordable housing were established, including price-limited commercial housing

(xianjiashangpinfang in Chinese), economic-comfortable-housing (ECH) (jingjishiyongfang in Chinese), and low-rent housing (lianzufang in Chinese).

Affordable housing is reasonably designed for low- and middle-wage earners and is not so expensive that a household is unlikely to meet its basic needs. Affordable housing is a very important adjunct to the market-based housing market required to maintain social stability and achieve a harmonious socialist society.

3.4 Conclusion of Beijing's housing evolution (figure 3)

4. Contrast between Housing Context in Stockholm and Beijing

4.1 Different evolutionary process but similar current housing context

In the second decade of 21st century, both Stockholm and Beijing witness the similar housing context of compactness trend and gentrification phenomenon. However, the evolutionary process is different. This is partly because both cities regarded market as a dominant perspective of housing profit. In light of this, we can raise the hypothesis that gentrification is an unavoidable and necessary part of housing evolution under capitalist regime.

This hypothesis can be explained by Lefebvre's theory of space production. According to Lefebvre, lived space is a unity that contains constant struggles and compromises between spaces of representation and spatial practices, which is a symbol of social relation. Conflicts and contradictions would happen during this process, since the top- down authority does not always match the realistic spatial practices. Therefore the production of space presents itself in a sense of social political order, in which bias shape the space. Lefebvrian theory is based on the logic of commercialization and consumption stratification. In this context production of space happens in a capitalist way where the property ownership is private and the market is free. And the whole process is unavoidable.

At the same this paradigm may shift in socialist society where people share the public ownership and central government have powerful right to allocate, which is exactly the case of Beijing before 1978. However, although China is a socialist country, its policies since 1978 have always acted with a sense of capitalist, treating market as an important, if not dominant, factor of developing. Thus we can say China's socialist market policy has strong atmosphere of capitalist. Then it is easy to digest the different evolutionary phases of Stockholm and Beijing, in sight of similar external housing context with similar internal causes.

4.2 Powerful Government has similar important role to play in housing context but different reaction to the market

Reviewing the evolutionary development of housing context in both Stockholm and Beijing, it is without doubt that powerful government has similar important role to play in housing context, in perspective of leading significant construction activities. However, this role was decreased by the liberalized market, and the two cities differ in the reaction to this process.

In Stockholm's case, there are 3 important factors for the rising of public housing in the post-war time: municipal housing companies established by Social Democratic, the large land owned by Stockholm municipality, and underground system construction since 1941, which were all generated by a powerful government regime. First, the establishment of municipal housing companies is fundamental to the first round rise of public housing in Stockholm. When the Swedish Social Democratic government came into office in 1933, the quality of Sweden's living condition and housing is quite low with Stockholm owning the second lowest per-capital dwelling space of all European capitals [1]. However, things changed as municipal housing companies were established with government's financial support on multi-family houses. These companies start building houses in the late 1930s, which was interrupted by the outbreak of the war.

Another prerequisite for post war housing booming of Stockholm is the large area of land owned by Stockholm municipality. Early in 20th century, the city of Stockholm bought very large estates south and west of the city, and a few years later these areas were also politically incorporated into the municipality of Stockholm.

However, geographic conditions made it difficult to exploit the new areas for housing, which brought the third factor: underground system construction 1941. After the First World War, the tramway companies were taken over by the city and the municipally owned Stockholm Tramway Company was established. Ultimately in 1941 municipally owned tramway company managed to carry through a formal decision to build underground system, which was actually realized after the war.

In case of Beijing, we can also recognize the significant leading role of powerful government. With the deepening of the post-1998 market-oriented housing system, housing prices has been rising dramatically, which caused a lot of low income families unable to buy the house. In order to solve the problem of housing shortage of low income people, the central government of China established the Affordable Housing Policy in 1998. Within it an important program is the Economic and Comfortable Housing Program (ECH) which is a home ownership-oriented program that until recently had been the core pillar of affordable urban housing policy in China.

Comparing cases in Stockholm and Beijing, it is definite that government has strong power in gathering sources and leading construction projects. What is interesting is the common trend of government losing its power in front of the liberalized market. The difference lies in the reaction towards the market. Stockholm shows a subject will of government in accepting market liberalization, releasing

power by privatize municipal housing companies. In contrast, Beijing has witnessed the weak intervention of government in preventing the soaring housing price, and government is presented as following the market and reacting to it rather than controlling it subjectively.

4.3 Two cities have similar spatial structure of housing context with different inner cause

Both Stockholm and Beijing have similar spatial structure of housing context, centralized and compact development in inner city and decentralized structure in suburbs. However, the inner causes of this similar spatial structure are different.

For Stockholm, in the second half of 20th century, the spatial structure of housing context in Stockholm was presented as “pearls around necklace”, with certain housing community developed around certain subway station and the stations were organized on independent lines toward central Stockholm. This is because Stockholm’s spatial structure of housing is largely shaped by strong connection between infra system and housing companies---new plans should be centered around an underground station. Therefore, the physical context of Stockholm developed as “pearls around necklace”, with the overall morphology of the city like the shape of hand. However, in the following decades, new transport technology of cars presented a serious role. Unlike the strong cooperation existed in the former period, this phase of housing production was largely depended on the network cohesion among private building companies, local municipal authorities and infra system.

For Beijing, the discriminatory site selection practice is a result of strategic policy implementation by city governments, who strive to balance the top-down political pressure with the local fiscal interests. It has been proved that land-based interests of city governments contribute to many unintended consequences of affordable housing programs at the local level. In other words, China’s central-local relationship creates incentives for city governments to locate affordable housing in the urban fringe. Compared to commercial housing, affordable housing projects tend to locate in the peripheral locations in Chinese cities. Locations with higher land-leasing prices have a lower probability to be designated for affordable housing developments.

Overall, Stockholm’s spatial structure of housing as a strong relation to the development of transportation, as well as the corporation between infra system and housing companies. In contrast, Beijing’s spatial structure of housing is shaped largely by land-based interests of city governments.

4.4 Social sustainability is both constraints and opportunities for two cities

Both Stockholm and Beijing is now facing the severe issue of social sustainability such as segregation and gentrification. Stockholm has already drawn

and practiced many projects in neighborhood revitalizing and regeneration, and Beijing has just started in building sustainable community.

There has always been a long-existing social paradox in urban development: cities can maintain socio-cultural diversity within a large population while simultaneously providing a sense of identity for neighborhoods, social groups and individuals [7]. This shed an illuminating light on the vision of social inclusiveness which is a dynamic balance and also one of the many merits of cities. I regard the social paradox of city as a dynamic balance because it would go to different extremes. On the one hand, areas where the diversity outweighs the equality and identity integration would end with segregation or gentrification, which is not an uncommon phenomenon even in most democratic countries like Sweden. On the other, powerful regulation and tight surveillance in order to avoid conflicts generated from diversity would also lead to banned spatial engagement, which does no good to vibrant city and livable built environment. This is vividly illustrated in examples like Beijing where many public spaces are created for social integration but soon become “POPS (Private Owned Public Spaces)” [8].

Therefore I see opportunities lie in sustainable neighborhood development, for both Beijing and Stockholm. Since urban diversity is more of a neutral element in sustainability development which would become a treasure if managed properly but a demerit if not taken good care of.

5. Conclusion

This paper analyzes housing context of Stockholm and Beijing from an evolutionary sight, and then compare the similarities and differences between them, making linkages and trend analyzes of the relations. Housing context in this paper is discussed in three perspectives: housing policy, physical structure, and social structure. Each perspective is analyzed in developing trend and leading factors. The conclusion is that although the two cities show many similar perspectives in term of housing context, the evolution process as well as the inner cause is quite different. First, Beijing and Stockholm show different housing evolutionary process but similar current housing context. Secondly, powerful government has similar important role to play in housing context but different reaction to the market. Finally, the two cities have similar spatial structure of housing context with different inner cause.

However, problems still exist on social sustainability of housing, especially the interaction between spatial form and interplay exclusion. From policy level this would lead to studies on social structural change, and from city design level it draws more and more attention on public space around neighborhoods as new urbanists have stated. So for both Stockholm and Beijing, constraints and opportunities lie in social sustainability which is the future direction of housing development.

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