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Abstract: The article contains a review of problems in Beijing's large scale urban renewal. The author also presents a case-study with an alternative, incremental, form of upgrading in an Old City neighbourhood. A scheme which considers economy as well as the existing context.

Keywords: Beijing, Fengsheng, Urban renewal, Incremental upgrading

Problems and possibilities in today's urban renewal in the Old City of Beijing

The Fengsheng project. Beijing's Old and Dilapidated Housing Renewal, part VIII

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Introduction

Beijing has made some impressive achievements in raising living standards for its residents during the past two decades. Commerce and services have perhaps never been as vital and prosperous as now. Combined with its rich historic heritage the prospects for a bright future could be promising. But how will this "brave new world" look like?

The present urban renewal in Beijing has been studied by many scholars from various angles during the past years. Among which, professor Lü Junhua at Qinghua University and her research team have systematically studied the change in the Old City of Beijing. Not only from a visual or historic point of view but mainly from economical, environmental, cultural and social aspects. From that work one may come to the conclusion that the major threat to Beijing as the "ancient capital of China" is not only the actual change of buildings. More the physical change of urban fabric and social change in the displacement of the people now living in the city.

After participating in the work for one and a half years, my article will highlight some of these problems and propose a solution applied on a city center neighbourhood.

General problems

"In the next decade or so, the battle for the urban heritage and indigenous habitats of many countries in Asia and the Pacific will be either significantly won or lost. The survival of civilizational records, diverse urban cultures and traditional building skills also hang in the balance. We need a strong movement to save our heritage habitats." (Khoo Salma Nasution, The Asia Pacific Network for Urban Preservation, 1997)

This is true also for Beijing, and at the present rate of renewal there will not be much left of the "ancient capital" but for a handful of monuments. Its characteristics will be of any Asian city of today and even the Beijing people will disappear from the inner city. Its old character is rapidly being replaced with no character.

The main problems encountered in the research are: street widening inappropriate to an old city center (visually and functionally); the large renewal parcels and the equally large scale of demolition which breaks continuity and prevent a more gradual and demand-oriented renewal, and, the massive relocation of original residents that segregates the city.

Physical threats to Beijing

The 800 year old layout of Beijing: Many renewal parcels of the size up to 40-50 ha totally disregard the existing street and *hutong* (lane) pattern. It makes it impossible to even preserve places, names and layout of the Old City. Continuity is broken and collective memory erased. But there are alternatives: A scheme and regulations for preservation and developing the network of *hutongs* have been proposed to one of the city districts' planning authorities by our research team (Abramson 1997).

Architectural character: For Beijing to lose the *hutong* environment is more serious than losing individual buildings. Since the traditional courtyard house faces inwards, the main architectural features of the city are not the building facades themselves but the lane, the trees, colour and materials.

The urban fabric of Beijing: Widened and new streets are cutting the inner city into large blocks and deteriorating community life for the dream of solving traffic problems caused by increased use of private cars. Site after site of protected cultural relics are threatened and sacrificed for this illusion that have been proved impossible by numerous foreign experiences and experts for decades. Not only do more road space attract more vehicles, the new wide streets also act as barriers between once close neighbourhoods and causes new troubles and costs for the public sector to ensure safe routes to schools and make public amenities accessible. For commerce, the number of potential customers are literally cut in half since they cannot cross from one side of the street to the other. Last but not least, the traffic-separated, pedestrian inconvenient street is removing from people their ancient right to walk as they please. Even if bridges or underpasses are built, they are useless for tricycles¹ and disabled people.

When Chang'an Avenue was widened and extended forty years ago, 5500 residential houses, a major temple and several *pailou* (memorial archways) were pulled down (Zhai 1996). Maybe that was considered correct and appropriate at that time for political and ideological reasons. But to build another "Chang'an Avenue" (like the 7 km "Ping'an Avenue" now under construction) purely for the sake of traffic is quite strange when the 21st century is almost here. Western traffic experts points out that to build a wide and straight thoroughfare like that is not only unnecessary, it also defeats the purpose of building the 2nd Ring Road. Is it worth more than 2 billion yuan, 11 hectares of demolition and relocation of 3300 families?²

For whom is the present renewal for?

More than half a million residents in the Old City of Beijing are, or will soon be, affected by renewal projects covering 16 square km approved under the "Old and Dilapidated Housing Renewal Program" set up in 1990 (Wu 1993). One of the most important official goal is to improve housing conditions in these areas. But will the original residents benefit more than they lose? Even the compromise practice to give at least 30% a chance to move back at a subsidised price after renewal is difficult to reach since profits are increasing the more of the original residents can be replaced by high-paying buyers of commodity housing and commercial space.

Although it may be true that Chinese people are more used to sudden changes in their life than others, not everything passes smoothly. When the Old Beijinger gets a new apartment with modern (but basic) facilities in the far suburbs, he loses an environment which supports his daily life and social network. The weak sector of society (children, elderly, handicapped and families of low income) are the most dependent on their neighbourhood; ranging from good schools and hospitals to possibilities to find an income (Tan 1997).

Relocation also segregates people into poor and wealthy. Until a few years ago, the rich or high-positioned shared the same *hutong* and environment as their less fortunate neighbours. Now this pattern with roots long before Liberation in 1949 is rapidly changing into a more Western with poor suburbs and expensive downtown commodity housing. The costs for society may, as in the West, show to be higher than the short-time profits in immediate sanitary upgrading and income from fees related to new construction and land-lease³. A side effect of replacing poor with wealthy in the inner city is the worsened traffic situation. Not only do the richer people more often have access to cars than the original residents, the latter also creates a larger commuter flow every day (Liu 1995). To promote the fossil-fuelled technology as the "modern way of life" is perhaps the most backward thing Chinese policy-makers has done in the past decades.

The need to preserve diversity

If the Old City of Beijing develops monoculturally with architecture, people and land use of limited diversity, it will eventually offer significantly lower flexibility, attraction to tourists and in the future even for investors. European and American planners now struggle to overcome these mistakes done in the post-war period. China has not yet encountered the problem how to recreate a living and lively city centre once lost, but is in danger of soon facing it.

Preservation and mixed use are two among several interconnected factors contributing to urban vitality. Jane Jacobs' book, *The Death and Life of Great American Cities* (1961), warned that land use segregation and low density dispersal were killing off the diversity that is the basis of urban life. For Jacobs, the essential phenomenon of vital cities is the mixture of activities they support and encourage. Heretofore, urban renewal has been a process of replacing "blighted" areas with new development, analogous to a farmer clearing a field and preparing it for a new crop. But Jacobs' observations point to a different paradigm: that of a living forest, a complex ecosystem in which old growth coexists with new, dependent on each other for sustenance (Cohen 1995).

At present, Beijing is matching Jacob's criteria for a living city: Family restaurants crowds with department stores, specialised retailers with government institutions and housing next to historic relics. A commercial and social diversity which is a tremendous resource in the future development of Beijing's economy and cultural life. But unfortunately urban renewal in Beijing marches in the opposite direction. First bringing the suburban planning ideals of residential *xiao qu* (literally "small district") into the Old City with its inhabitants of similar class and income, disregard of existing social and physical conditions and limited neighbourhood interaction. Second, zoning plans that chops the Old City into large blocks of single land uses. Third, almost all new residential or commercial construction are for the high-end buyers only. Fourth, outdated traffic planning that encourages automobiles and discourages pedestrians.

Question renewal through allocation of large pieces of land to developers

To fulfil the Master Plan's roads and other infrastructure is considered to be a great political achievement for government officials at all levels. Many believe comprehensive renewal is the easiest way to fulfill the Plan and get rid of the burden of heavily subsidised and poorly maintained public housing and are very eager to push the process forward at a large scale.

Our and others research have found that now after nearly ten years of renewal under the Old and Dilapidated Housing Renewal Program, there are hardly any larger, coherent areas of seriously decayed housing left in the Old Inner City of Beijing. The small pockets remaining, although serious enough for the affected, should no longer be the cause for a large scale, comprehensive renewal program. But the Program has been the excuse for an increasing number of profit-driven projects in Beijing in recent years and it is now time to evaluate and adjust it properly. Renewal approvals already granted should be scrutinised and, if necessary, withdrawn. According to our experience, it happens that when a downtown neighbourhood is surveyed as not being "old and dilapidated", it suddenly becomes so after the developer orders a new survey.

The Program has also made the land in the city center unbelievably easy to acquire for developers. In the early stages the land use right was more or less given away for free in exchange for promises of infrastructure upgrading and street widening. Nowadays the authorities are charging more fees, but it is a fact that entrepreneurs and developers are making enormous profits through just selling and buying the land leases, so called "stir-frying". Obviously, the government is still leasing out the land too cheap. Added are increased costs for public transport, less social stability, less commercial diversity which is more susceptible for market change and perhaps most significant: the loss of valuable centrally located land for future use.

A call for new approaches

The society must try new ways for what is left of the old but not necessarily dilapidated housing in the city center. Experiences and ideas from not only the West but also East and Southeast Asia are abundant and the level of knowledge among professionals in China is not low.

A detailed plan to promote small scale renewal

In many Western countries there are usually an overall zoning plan for the whole city but when it comes to detailed plans, the current preference is to wait until there is somebody that wants to build. The reason is that plans quickly gets outdated and planning too much and too detailed in advance may become an obstacle instead of an aid in future development. The situation in Beijing is different with a much higher pressure on redevelopment even in areas built after 1949. The developers have the initiative while authorities are under hard pressure. It may be more proper in this case for planners to be "one step ahead" of greedy developers⁴ and work out detailed plans that will benefit the city as a whole as well as local residents and activities.

An approved and fixed detailed plan can be the framework for individuals and workunits⁵ to upgrade, rebuild or rehabilitate their houses without fear that they any day can be expropriated and demolished. No doubt about where future infrastructure is to be built, historic relics and trees to be preserved and public access and safety to be kept and improved. With a detailed plan, the planning and approving authorities

can be more supportive to private and small scale initiatives and, most important, allow them to take place.

Integrate local character in planning

"City planning is nothing that can be done from above after general principles, that can be learned in one place and imitated in another – like the Haussmannism. It is instead the development of the local life and culture, the regional character, the spirit in society, an unique individuality, that can grow and expand". (Patrick Geddes, Cities in evolution, 1915.)

Integration is the key word to understand Geddes' work: Integration of different knowledge and integration of planning proposals in the life of the local society. Geddes grasped the question as a whole, tried to clarify the connection between all parts of society: geography, history, population, class, buildings, technology, art and economy. Every place has its own unique elements that may only latently be there and according to Geddes it is the planners task to discover and bring them up. Planning must be integrated in the life of the city, and the planning work must be built on knowledge and intuition in a synoptic, all-including view.

The ideas and work of Patrick Geddes (1854-1932) have been studied and found valid by many planners and researchers and are perhaps more modern than the modernist ideas of the 1920's and 30's now prevailing in China. But contrasting to the working methods of Geddes and all his successors, the present day planning and urban renewal in Beijing takes little if any of these topics into serious consideration. Not only does it implement damage to the city in cultural, contextual and social aspects as described above, it may also be costly in economical aspects. Professor Wu Liangyong at Qinghua University pointed out already in the early 1990's that to comprehensively renew one square km of land will waste hundreds of millions worth of previous public investment in infrastructure and buildings. He also calls for a deeper understanding of old patterns and structures in the city. *"To forget tradition hampers the development of something new"*.

After the post-war period with this kind of large scale clearance in the West, it was discovered that it costs more than it benefits with exception of perhaps the commercial businesses. But why should well-off companies be subsidised by the society on the expense of the citizens daily life, environment and cultural heritage?

A question of affordability

The goal China has set for its housing standards are high. According to the *xiao kang* ("little wealth") program, every family should have at least 12 sqm of living space per person, modern facilities, sufficient green space etc.⁶ Impressive results have also been achieved recently. The problems are that most people's income is still not high enough to buy such a high standard dwelling at the same time as authorities does not like anything of lower standard, self building or other low-cost housing schemes. Some fear these approaches are unable to give enough revenues for infrastructure construction, others do not realise the variety in housing needs. As a result, renewal with relocation on site is very difficult and is a kind of state-driven gentrification process. A solution could be to let high profit projects on site or elsewhere finance the infrastructure. Or simply accept that, as in any other country, there is a need for low-cost rented housing (Andrew 1987). Beijing has in its experimental renewal projects Dongnanyuan and Xiaohoucang interesting examples to study and follow (Abramson 1994, Tan 1994).

A case study - the Fengsheng research area

Starting in fall 1996, professor Lü Junhua and the research team consisting of staff and students (master, PhD and post-doc) started an extensive survey of the northeast quarter of the Fengsheng subdistrict. The work included questionnaires and interviews with the residents, documenting and measuring a number of existing courtyards, surveying public space, activities and *hutongs*. Valuable resources from architectural, historic and contextual points of view were mapped. Figure 1.

The Xicheng (West City) District's government initially wanted this area to be an experiment and model for future renewal in the Old City, based on the possibilities and restrictions of an old downtown neighbourhood. Later, this statement proved to be of little value when the development company (ironically owned by the Xicheng District government itself) disregards all aspects except maximum profit and want to turn the area into a high standard *xiao qu* for wealthy families and workunit officials. The "experiment" is reduced to a question how to implement sealed-off monocultural residential compounds of suburban model into a diversified and living neighbourhood with a long history. To show the possibility for another solution, the author of this article designed this counter-proposal. It attempts to

be reasonably profitable without forgetting the existing environment, resources and the 15524 *lao bai xing*, the townsfolk like you and me, living and carrying out their daily life in the neighbourhood.

Comments on present conditions

Fengsheng shows a different street pattern compared with the neighbouring Xisibei traditional courtyard house preservation area. The winding *hutongs* gives the area a special character as well as some problems in safety access. Most of the lanes were laid out in the 13th century, of which Zhuan Ta Hutong (Brick Pagoda Lane) even has kept the original name.

Other special features in Fengsheng are the large amount of workunits of various sizes (166, excluding all small shops) and the mixed property rights. More than one third of the total 44.1 ha (measured from the centerline of the streets) are occupied by workunits and their mainly multi-story housing, schools, high leader's residences etc in no need of large scale renewal. 27% of the one-story housing is privately owned. For the Old City of Beijing, this is a quite high number and reflects the relatively good housing quality in the area.

Officially, neighbourhoods in the Old City are usually described as overcrowded and decayed. The first official survey of the area supplied to us was no exception. Based on further surveys done by our research team, there are a number of comments to be made:

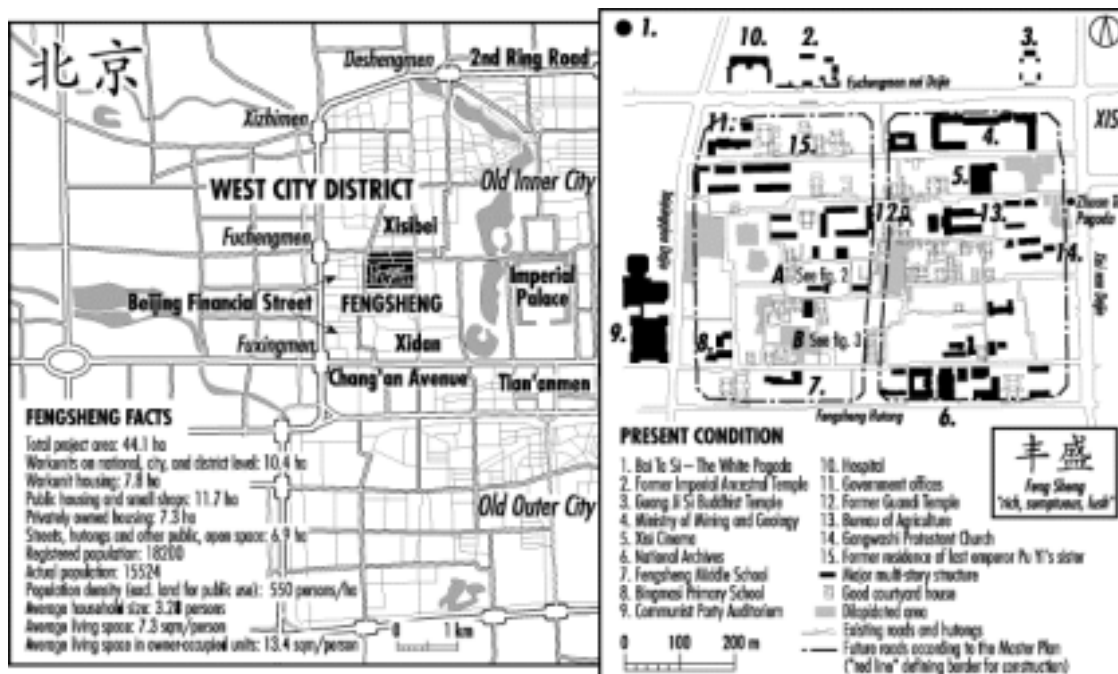


Figure 1. Location and existing condition. Illustration: Johan Nilsson.

Distribution of living space

7.3 sqm is the average formal built space per person (not counting kitchens etc). But it is not enough to look at the average, the distribution is equally important. If excluding a few examples of overcrowded workunit and public housing of the "simple type"⁷ built mainly during the Cultural Revolution, the area per person is often quite high: i.e. 13.4 sqm in the owner-occupied units and only slightly lower in many of the rented. See figure 2. The national goal for living in large cities, 12 sqm/person, is in many cases fulfilled. Additionally, there are quite a few households living elsewhere but keep their *hukou* (household registration) in the old neighbourhood to be able to let their children attend good downtown schools or enjoy a subsidised new dwelling in case of renewal.



Figure 2. **4 Xianming Hutong** ("A" in figure 1): A traditional courtyard renovated to its original shape by the owner at his own expense. Apart from the owner living on site, a couple of families rent some rooms in the side buildings. No informal additions cluttering the courtyard and original pavilions in excellent condition. Average space per family is 90 sqm. Photo: Shao Lei.

Housing quality

To be able to define a housing area as "old and dilapidated" under criteria set by the Municipal Renewal Office, at least 30% of the housing stock must be of "#4" or "#5" quality and a minimum of 70% should be of quality "#3, 4 and 5"⁸. In the first survey material supplied to us by the Housing Management Bureau in 1996, only 5000 out of 88000 sqm fell into the two lowest categories (5.7%) and they were all privately owned. Among the public housing 3% was said to be of quality #3, nothing of lower standard. According to these numbers, Fengsheng is clearly not "old and dilapidated". Our conclusion is the same even if our own surveys judges things differently and from different viewpoints.

The problem with official statistics in this area is not the actual condition itself but the sometimes very inconsistent way of judging it. Figure 3. We suspect this may be the case in other renewal areas as well. "Adjusted" figures are often in line with interests of management bureaus and developers. The local management office confess they sometimes over-evaluate their public housing and under-evaluate the private. Otherwise, if they list their own housing as poor they would be urged to quickly repair them and if the private housing proves to be good they need to pay more to compensate them in case of expropriation. But even if some evaluations need to be adjusted, one must not forget that the local management office has done a good job considering their limited resources to keep up their housing stock. Most complaints are not on buildings themselves but on outdoor environment like insufficient drainage. Generally speaking, Fengsheng is well kept although individual houses may need to be replaced, repaired or improved but the whole area do not need to be comprehensively rebuilt.

The final result became like this, believe it or not: A new housing quality survey was ordered by the developer. According to the new evaluation, Fengsheng is now officially listed under the Old and Dilapidated Housing Renewal program! This case alone is a reason to review the already approved projects under the Program.

Comments on Master Plan requirements

The edge streets are to be excessively widened from present 20-30 m to 50-70 m wide according to the Master Plan. Additionally, a new 30 m wide street is to cut the area in half, which will damage the city's structure, its historical context and disrupt the local community. The need for this new street seen in a city perspective to solve traffic problems is questionable and the neighbourhood will hardly benefit from it. My opinion is that local traffic, safety access and infrastructure can be served more efficiently by several smaller 10-15 m wide streets which are positioned where they are needed.



Figure 3. **83 Bingmasi Hutong** ("B" in figure 1): Originally a dormitory with 16 rooms à 9 sqm, a canteen and some side buildings. The compound has contained barracks for soldiers since the Ming Dynasty which also the hutong name reflects. Now home for more than 40 families living in crowded conditions with bad ventilation and outdoor space that floods during rain. Almost all space in the yard is filled with self-built additions containing kitchens and additional bedrooms, leaving only a narrow path. Some families are living in the old canteen's kitchen, others in small rooms without sunlight. This compound is owned by the public housing authorities and is listed as "#2" (second best) quality in the material presented to our project team. Our judgment is "#4" with some buildings close to being listed as "#5" (dangerous). Fortunately, this yard is an exemption. Photo: Johan Nilsson.

The plan for Fengsheng

According to my own understanding and experience plus the surveys undertaken by professor Lü Junhua's research team, there are some conclusions about the Fengsheng subdistrict to be drawn.

1. The Fengsheng area is **not** in such a bad shape that it can be considered for renewal under the "Old and Dilapidated Housing Renewal Program". The general housing conditions are very seldom extremely bad, on the contrary better than average for the Old City. The neighbourhood is fully serviced by all kinds of public and commercial facilities.
2. The existing street network serves the area quite well except for some problems in safety access. Minor improvements for the sake of infrastructure are also necessary.
3. Since it is so close to various preservation sites (like The White Pagoda and Xisibei courtyard house area in the immediate vicinity) it is reasonable to promote low-rise, high-density schemes with traditional characteristics.
4. The high number of dispersed workunits is an obstacle for comprehensive renewal but an advantage for incremental change. So are the relatively high proportion of privately owned houses.
5. To carry out the developer's idea and create a *xiao qu* for wealthy families will be totally opposite to our team's research.

The plan in brief

The main idea is to keep Fengsheng as a mixed residential/commercial area for all classes. Considering the fact that it is expensive, troublesome and time consuming to relocate a large number of residents (not to mention the social costs and effects), most of the workunits, individuals and public housing authorities should be allowed to upgrade their living conditions according to actual needs. Self-building, housing cooperatives and small scale developer-initiated renewal are just a couple of examples. But necessary infrastructure, safety access and city streets must be coordinated and funded in a joint effort with the

government. All to be guided by a detailed plan protecting the historic heritage as well as the needs and common good of a modern city.

In implementation, most important is the possibility to really improve the worst conditions and to control a gradual upgrading and installation of modern infrastructure. In this way most people, commercial activities and their culture have a possibility to stay and develop. This is also in line with the local residents' desires. According to our survey, 92% of the residents prefer to stay in Fengsheng compared with moving out to the suburbs even if given a dwelling with higher standard.

Since the plan is based on actual conditions instead of general recommendations, it can allow higher exploitation in less sensitive areas in return of a much more detailed urban design in more important parts. It also proposes a network of pedestrian *hutongs* and creates a framework for infrastructure and circulation based on the original layout.. To consider existing property rights ease implementation and minimise costs.

Approach and feasibility in the part comprehensively redeveloped

The proposal suggests 5.9 ha along the planned major streets surrounding the project area to be the profit-making part including commercial space, offices and commodity housing. Then the developer is requested to invest in another 6.0 ha in the interior of the block to upgrade the worst dilapidated housing, build a sport- and recreation ground, improve safety accessibility and infrastructure. Totally 40000 sqm of commodity housing, 40000 sqm of housing for relocation on site, 90000 sqm of commercial space and some space for community use will be built. More than 2100 households will be affected, whereof 800 can move back.

After calculation we found that this approach will give the developer a reasonable profit and give the government an income through various fees to construct the city level streets according to the Master Plan. (Questionable or not. It will then be inevitable to relocate another 800 households elsewhere because of the exorbitant road space requirements.) Remaining housing upgrading should be according to actual needs and resources. Instead of bother with residents reluctant to be relocated, authorities can spend their efforts in supervising, guiding and enforcing regulations.

Distribution of benefits

The proposed comprehensively redeveloped parcels will: 1) Give the government an income of 460 million yuan to spend on construction of all roads, infrastructure and future housing upgrading. 2) Give the developer a 9.4% return on invested capital which equals 160 million yuan in profit. 3) Give schools and residents a new sports and recreation ground. 4) Rebuild the most dilapidated housing. All calculations are based on figures given by the developer. 1 yuan RMB = 0.12 USD. This approach is economically feasible for both the local government and developing company. In spite of the reduction of residential land due to road widening and increased commercial space, two thirds of the residents can remain within the research area in housing of various standards compared to one third in the standard case.

Epilogue

This renewal proposal aimed at presenting an alternative in a complex situation through adapting to the existing in an incremental way. In this way it is easier to keep historical continuity and reduce social impact following large scale relocation in a short time. The area marked for comprehensive renewal in the proposal is a compromise according to my own knowledge and need two comments: 1) Although the calculation is based on the area as a whole, each small parcel can and should be carried out individually together with implementation of infrastructure, streets and cross-subsidy projects. 2) The proposal is still based on the prevailing practice that each renewal project must be self-supporting and bear the costs of widened streets and other infrastructure. That is why the parcels are quite large and return ratio of residents too low compared to what I originally wanted. If a non-profit approach was possible and funds for infrastructure could be found elsewhere, the building density could be lower at the same time as much more housing could be assigned for the original residents.

Unfortunately, after one and a half year of surveys and several rounds of presentations and discussions concentrated on three different plan proposals from our team (of which this was one), neither the Xicheng government or the developer accepted this kind of idea. What they want is a *xiao qu* for rich families and most of the original residents relocated ("such a good location in the city should be for rich people"), "parking and convenient access by car to every apartment", plenty of "green space" and "a clear and orderly" layout.

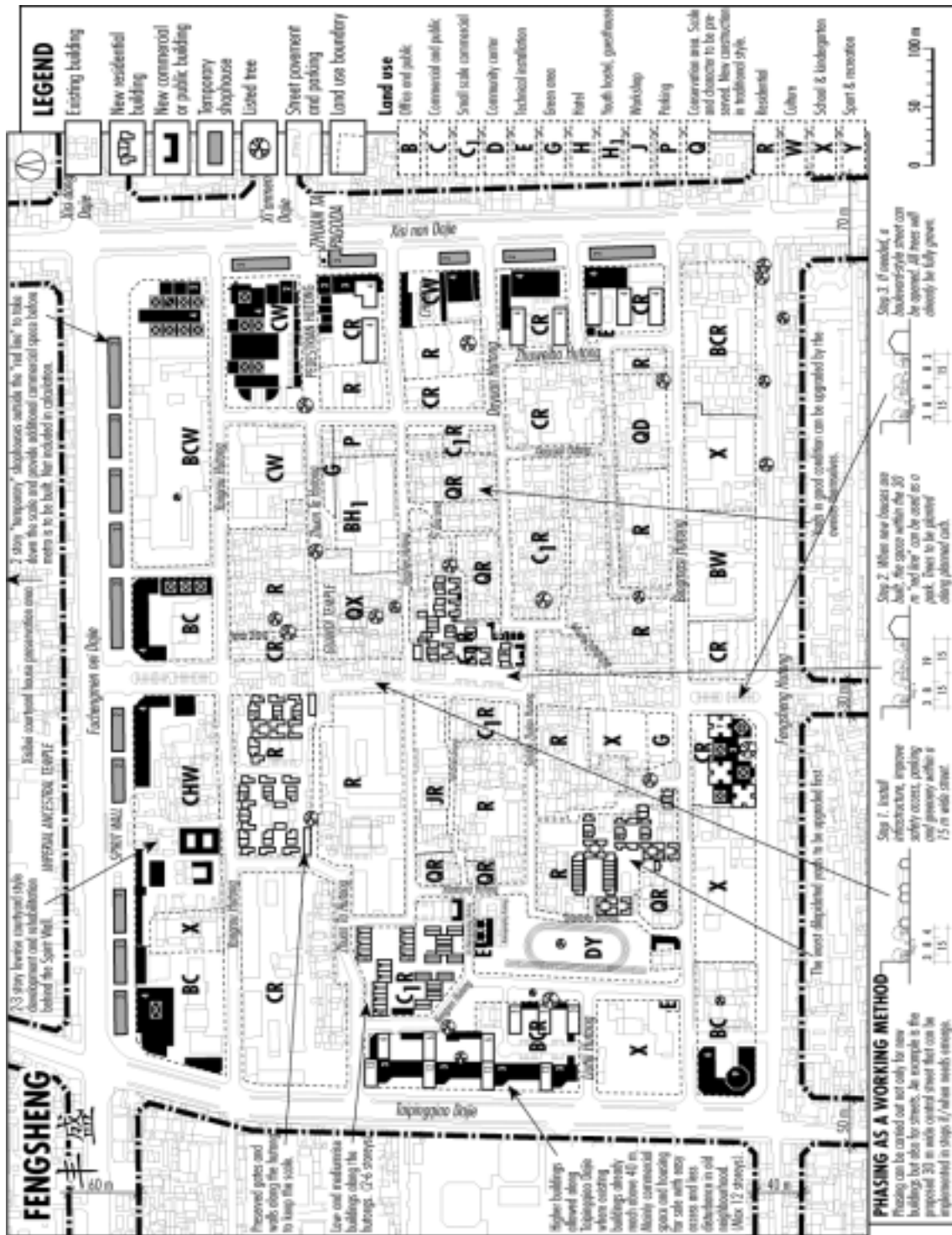


Figure 4. The parcels proposed for comprehensive renewal.

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Notes

¹A substantial part of the goods deliveries are by tricycles. Then there are the growing number of individuals, especially elderly, who use tricycles for shopping and social visits.

²According to a news report in China Radio International, 1998-03-01. Later reports mention costs 50-100% higher than that.

³To maintain and rehabilitate public housing areas usually costs much more than to initially build them. To provide convenient public transport is expensive. Due to the high concentration of low income residents, the social costs are also high as combined negative factors often multiply.

⁴Lim, William (president of AEA Asia), quote from the "Contemporary Vernacular" conference hosted by Qinghua University in September 1997: "There are three aspects that differs the city development in Asia from the West: *Speed, Density* and *Greed*".

⁵Workunit, *dan wei*, is usually a state or city owned company who historically as well as present supplies welfare and housing for its employees.

⁶Living area is the net "livable" part of an apartment. A typical *xiao kang* apartment tends to be from 70 sqm and up. 120-140 sqm are not unusual.

⁷Simple type housing are the mainly two or three story brick buildings with thin walls where each unit consists of a small room with only shared bathroom and kitchen facilities. This kind of "temporary" solution has now lasted for more than 30 years.

⁸Rating of structural quality: #1 is best and is given mainly to newly built concrete structures, #2 is good, #3 is in good structural condition but in need of basic maintenance, #4 is more urgently in need of repair or replacement. #5 is the worst with serious structural problems and perhaps even dangerous to live in.