archways and etc. National Research Center of Historic Cites, guided by Professor Ruan Yisan, was in charge of compiling the Preservation Planning of Pinging Historic District, Suzhou. The whole historic district covers 116.5 ha and is located in the east of the historic center. As one of the best maintained historic areas which is rich of historic values, it faces to the dilemma of high density of inhabitants, dilapidated houses, poor living condition, shortage of public facilities, river pollution, some uncoordinated buildings, regeneration pressure etc., see figure 1-22-3, 4.

Adopting the policy of "integrated conservation of the whole historic city", seen as the unique resource of the city, the plan tries to identify the difference between the conservation planning and the renovation of common districts 97. Based on Identification of four degradation features, the plan proposes common heritage and its conservation boundary. According to this proposal, physical elements without official designation were officially considered as the ones acknowledged by the list, thus embodying the integrated conservation discipline. Then there were also special regulations on the identification of "open space", as this played an essential role in the feature, see figure 1-22-5. Then the plan also proposed two layers of intervention: site intervention and buildings intervention. In terms of buildings intervention, the suggested action repair, improvement, maintenance, demolition and rebuilding, see figure 1-23-6; while in term of built environment, the plan fostered conservation, improvement, maintenance, consolidation and regeneration, see figure 1-22-7. It was the extension of the solid space intervention. The conservation of Pingjiang historic district had an evident identification with the various degrees of intervention and it cast great attention on the types of building elements. Especially, as the waterfront area image was the key feature of the city, so the plan provided special regulation about the reinterpretation of the "river street" space, see figure 1-23.



Figure 1-23: facades embellishment and "river street" space reinterpretation.

This plan is the most successful plan, especially the site intervention, embodying an integrated perspective in the historic built environment, even though there are some ambiguity in the interventions, such as the unclear difference between site consolidation and improvement.

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⁹⁷ National Research Center of Historic Cites. Instructions of the Preservation Planning of Pinging Historic District, Suzhou, 51.

1.6.2.3 Historic Building conservation plan

1 Shanxi Qujia Dayuan Historic building conservation



Figure 1-24: Qujia Dayuan Historic building conservation plan

Qujia Dayuan Historic Heritage Conservation Plan (2008-2025) was compiled by the Tongji University in 2006. It is a national heritage representing the Chinese civic dwellings of the Qing dynasty and it covers 4,896 m² of land and 3,334 m² of built area, including 11 courtyards and 44 buildings, among which there are residences, a private school and a small theater. It was divided in 12 parts by different courtyards, see figure 1-24. Linked by corridors, a complex building aggregation accommodates the civic landlord family vicissitude, since 1750s to 1950. Qu family owner denoted it to the nation, which later be used for the army camp, hospital, sanatorium and museum in the last 60 years. While the status quo of the buildings is comparative good, suffering only dampened walls, missing elements, aging and disordered neighboring environment.

In the planning, it firstly fixes the protection area and construction control area. The

protection funding comes from public budget and it calls on private investment. The interventions to buildings include repairing the drainage of the roof, consolidating the structure, embellishing walls and façade and etc. Used as exhibition and tourism service, it is operated by a private company. The private company rent the houses for traveling business and providing a certain amount of money to the culture department.

1.6.3 Public and private integrated practices

1. Wuhan Tanhualin Traditional Feature Street Conservation

Tanhualin Street is a 1,200 meter-long historic street, full of historic buildings, representing the last 200 years' historic feature and culture of Wuhan. There are many traditional regional buildings mixed with several western missionary buildings, including some important educational buildings in the early history of Wuhan. After the street experienced great deterioration and much heritage loss, one professor appealed to the mayor directly and drew the attention of the official leaders in 2003. In 2004 the municipal and local government started the protection work, entrusting the Wuhan Planning Institute and the School of Architecture and Urban Planning of Huazhong University of Science and Technology with the compilation of the Conservation and Reuse Regulatory Plan⁹⁸.

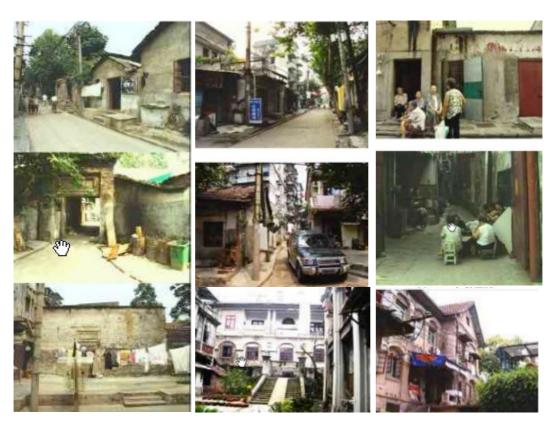


Figure 1-25: the status quo of Tanhualin Traditional Feature Street

The Conservation and Reuse Regulatory Plan was an official plan like the previous ones, but it only offered rough guidelines. Without a sufficient public investment, the whole work was inefficient. The government was in charge of the protection of several important historic buildings and of the construction of infrastructures. Most of the civic buildings were

⁹⁸ http://whty.whjs.gov.cn/content/2004-04/28/content 8906.htm.

conserved by the local inhabitants themselves: part of them were turned into restaurants, hotels and boutiques by private investors, while some still keep their deteriorated image because of the lack of investments. Those interventions were carried in various steps, but most of the modifications mimicked the western styles, embellished the facades or replaced the authentic elements with completely new ones. The roads were expanded and the gravel road was changed into a stone one, see figure 1-26.

The whole street is conceived as a modern relax destination for the youth, though it leaves a great deal of missing. The slow implementation turned out to be the best way for keeping the historic built environment during the fast regeneration years. A decade later, another professor appealed to the new mayor saying that the government should invest more to protect this historic area.

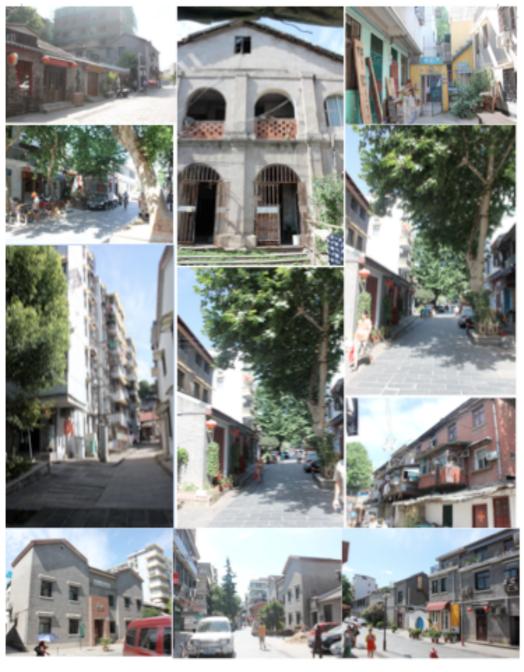


Figure 1-26: the intervention of Tanhualin

2 Yangzhou "Our community, we build it"



Figure 1-27: the Yangzhou "our community we build it"

Technically supported by the "Ecology Yangou planning and management program", by German GTZ and City Alliance, the Yangzhou 5.1 km² historic city conservation plan makes a detailed analysis of the local inhabitants economic status and living conditions⁹⁹. The program encourages public involvement. The slogan "Our community, we build it" stimulates local inhabitants to cherish their "collective memory" built environment. Depending on the political decision, local citizens will pay for about 25% of the conservation fees, while the government will pay for 75-85% of the house preservation fees and all the investment in the public facilities. Local inhabitants will not be relocated. As a trial run, only a few small-scale districts were involved, but the cost of the change of courtyards was so expensive (up to ¥1 million) that the program is not carried out broadly.

1.6.4 Historic city conservation planning problems

After the study of the comprehensive theory and practice, the great loss of historic built environment is testimony to show that conservation plans are too rough to control conservation effectively, too general to master it and too loosen to guide it. The main problems include:

1. Complex background --- Quick urbanization, modernization destruction

Against a background of quick urbanization, which led China to economic development, historic environment has been sacrificed for commercial and real estate profit in the land-oriented economy model. Looking at successful examples of New York's "Manhattan", Shanghai's "Pudong" and Singapore's skyline full of skyscrapers, officers imagine that one was the only "urbanization" model. Seen as the most valuable resources on the market, historic centers are still experiencing a violent regeneration. The leaders confuse dilapidated heritages with historic ones and, more seriously, they want to erect the new political achievement immediately, like Taiyuan Mayor Geng Yanbo embarks 56 projects in the historic center to "build a new city" so now destruction is prevalent.

⁹⁹ Zhu Longbin (GTZ), Peter Herrle, Sonja Nebel. *Urban Upgrading, Yanghou Old City conservation renovation strategy*. Phoenix Press Company, Jiangsu Science technology Press, 2007.

The "political project" and "image project" are the two ways to erect the leaders' ability. It can change the old image in a short time, and it brings out great GDP gains. Like Geng Yanbo who is eager to embark large scale

2 Missing identification of historic values---Misinterpretation of conservation

Western conservation theories and international charters were introduced in China 30 years ago. However, the value of historic buildings only refers to their whole physical form, there is no identification of time values, aesthetic values, art values and culture values. The lack of dialectic identification of the "being" values and the different contexts leads to misinterpretation of the basic concepts and disciplines, such as the "authenticity" theory and "integration". Authenticity is interpreted as "original appearance", while integration is viewed as "completion". "Form completion" has the priority over authenticity, using the new to make up for lost parts and substituting the "real" to represent the original appearance. The unique Oriental historic construction techniques are used as an excuse to challenge the discipline of "authenticity". However, the Japanese Ise Shrine's tradition of ritually rebuilding the shrine every 20 years (式年迁宫, shinianqiangong), which is a very unique phenomenon, does not apply to the Chinese context. So rebuilding is the main way to apply.

3 Imprecise and primitive technical tools

In the cases previously analyzed, plans only proposed ambiguous physical interventions. All official intervention definitions are different from western ones, showing a complete misinterpretation of conservation concepts. "Repair, protection, conservation, renewal, and rebuilding" and "improvement, consolidation and rehabilitation" firstly refer only to the single building embellishment of facades, modifying the layout, rebuilding the missing parts or demolishing. Secondly, those terms do not consider the historic environment. Furthermore, planning completely depends on the political support in order to get investments and to achieve planning, implementation and relocation of the population.

4 Evident side effects of the single unitary official conservation mechanism¹⁰¹

Planning aims at development: the legislation serves capitalistic interests, while the governance bows to development projects. In practice conservation planning and height control cannot control actual construction. From planning to application, planning depends on the leaders' will, which creates many side effects for conservation. Firstly, conservation is seen as a heavy burden to the public budget. Secondly, plans cannot be applied completely as the leaders' will is arbitrary. There is no effective supervision by "NGOs". Thirdly, inhabitants cannot carry out any construction without the political permission.

5 Lack of valid supervision and feedback

In most Historic Cities, historic buildings' lists are not made known to the public. Even though some Historic Buildings and Heritages are marked on those lists, they can easily be demolished. Furthermore, a great deal of buildings with great historic value but without the title have been swept away, like the Liang Sicheng, Cai Yuanpei's former residence and Hubei guildhall. There is almost no supervision in the implementation of plans and in the evaluation of their results. Public participation is an empty term, so there is a saying that "the part which is published is not important, while the unveiled is vital".

6 Lack of regular maintenance

Historic Heritages maintenance is entrusted to the cultural affairs departments, but there

projects in historic center, in Datong and Taiyuan in them name of conservation and rehabilitation. Almost all the projects are in a rude way, but and he was promoted to higher positions

projects are in a rude way, but and he was promoted to higher positions.

101 Li Hongli. *The governance of Historic environment, theoretical innovation and empirical model.* China Architecture and Building Press, 2011. p.74.

are not enough financial resources to support regular maintenance. Some heritages are "rent" to the tourism business, which only cares about economic return and does not pay enough money for maintaining them, but overuses the heritage.

7 Participants are lack of effective awareness and short of methods

The knowledge of planners, developers and leaders is too poor to allow them to suggest effective proposals. Sometimes they declare they have solved conservation problems, but in fact they cause more serious damage, by violating the basic disciplines of conservation laws. They pay much attention to the physical form in an over-simplified way. They are also indifferent to social relationships, preferring to move out inhabitants, which makes social relations collapse.

1.7 An overview of Beijing's conservation

From a city level point of view, plan tries to maintain traditional space structure and accommodate it into current drastic morphological change. At district level, plans try to hold traditional physical and ethic characteristics in unprecedented and astounded speed and scale urbanization and modernization. A deepened insight on the Beijing city-scale conservation cases and plans can give us a more detailed idea of the situation. The embodiment and performing in such a long-standing dilemma outline gains and defects much clearer.

1.7.1 The basic condition about Beijing "old city"

With a 900-years-long capital history since the Jin Dynasty (1115-1234), Beijing city plays a vital role as the political, military and commercial center in Chinese history. As a center of traditional culture and art, its historic center is renowned for its opulent historic built elements, including the forbidden palaces, temples, stonewalls, gates, civil lanes, and Chinese courtyard houses. Embodying our traditional city construction art, it originated from a small walled city, was set the basic urban form during the Yuan Dynasty and was completed under the Ming and Qing Dynasties. It has a mounting north-south axis and 3-wall characteristics: the Forbidden Wall, the Inner Wall and the Outer Wall. The roads are vertical and horizontal, crossing each other in a hierarchical order, while the residential streets and the traditional "courtyard housing" form its basic block. The whole city was divided into dozens of homogeneous residential blocks, see figure 1-28.

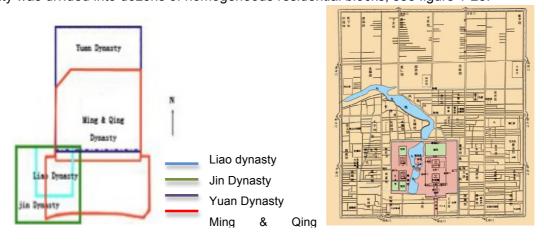


Figure 1-28: the evolution of Beijing Old city.

Figure 1-29: the city form of Yuan Dynasty

During the Yuan Dynasty, according to the Chinese city construction traditional ways, the basic space structure was set -- three walls city¹⁰², including forbidden wall, Empire wall, and inner wall. The layout of the city was a regular 6km× 8.5km rectangle, and then it was divided into a 44 bu×50bu (1bu=1.5m) grid net. The Forbidden wall was laid in the south of the Empire city. The streets were located vertically and horizontally and the first level streets were 28 meter wide, the second level were 25 meters wide, the third level is half of the second, and then the lanes were half of the third. According to the residents' need, public facilities, such as the markets, temples were mixed with the residential area in a feasible walking distance, see figure 1-30. In Ming Dynasty, the new emperors modified the form based on the Yuan Dynasty's inner wall. They demolished some northern wall and embraced some southern land into a new inner wall. The king ordered to build the outer wall in south, forming the "\perp" form 103. The roads and residential courtyards followed the uphold tradition. "Street-courtyard" unit, as the basic cell forms most of the fabric. There were 2211 hutong in the Old City in Qing Dynasty¹⁰⁴. The north to south courtyard house is 9-15m long, 21-24m deep, see figure 1-29¹⁰⁵. An array of 5 to 11 groups will be banded together transversally. The east-west lanes between the arrays are about 6-7 meter wide¹⁰⁶, see figure 1-32.





Figure 1-31: the typical "courtyard" house

Figure 1-30: the city morphology in Qing Dynasty

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¹⁰² http://www.lvyou114.com/changshi/9/9356.html.

Beijing usually calls the historic center Old City, referring to the inner walled area and outer walled area. The inner wall city is a 5.5 km×6.5km rectangle, and the outer wall city is a 3.1 km× 8.2km rectangle. The whole Old City is about 60.5 km² area.

104 Thang Oingchang Registrate and longer pages history. Beissen Beis

¹⁰⁴ Zhang Qingchang. *Beijing streets and lanes; name history*. Beijing, Beijing Language and Culture College Press, 2004.

¹⁰⁵ Ren Huaiyiang. *Research on the conservation and development of the "Hutong Silvarian greater" of the state of the "Hutong Silvarian greater".*

Ren Huaixiang. Research on the conservation and development of the "Hutong-Siheyuan system" of the old city of Beijing. Ph.D thesis, Tsinghua University, 2008. Ni Yuehong. Study on typology of Beijing Hutong sheyuan. Beijing, China Architecture and Building Press, 2007. Ma Bingjian. Beijing Siheyuan Buildings. Tianjin, Tianjin University Press, 2004.

Deng Yi, Mao Qizhi. Beijing Old City Community Pattern Elements Quantity Analysis, to interpret the Qianlong Capital Map. Urban Planning, 2004, Vol.5.

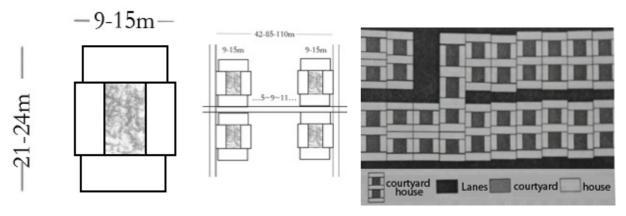


Figure 1-32: the yard unit dimension and organization

1.7.2 The process of destruction of modern city

The transformation of the ancient city by means of demolition and reconstruction began in 1914, as the prime minister of the Republic of China Zhu Qichen orderwd to demolish a part of the wall and the bulwarks for the railway, as well as the "One-Thousand-Steps Gallery" in front of the rostrum of TianAnMen. The constructive damage became much more seriously since the foreign construction style invaded into. As Osvald Siren worried "only the western style and semi-western style architecture can stand upper the ancient wall, just as an unexpected guest, break the harmony of the original peace, scoffing at the shield of the wall ¹⁰⁷. Numerous old wooden mansions with galleries and private gardens were razed to the ground and replaced with brick buildings. At the same time, lanes and streets were expanded for trams.

The ethic and historic buildings and context were seen as hindrance of the new government's ambition to change the country. Liang Sicheng¹⁰⁸ and another planner Chen Zhanxiang¹⁰⁹ proposed to keep the old town and build a new town to the west of the old in "the Proposal about the Location of the Central Government Center"¹¹⁰. The proposal indicates that the traditional physical buildings and whole space structure have great artic values as a symbol of our traditional urban construction theory achievement, see figure 1-33. In 1953, the wall was demolished even after a vehement quarrel with the mayor. Liang then pronounced the famous words "a brick as a piece of my skin and "In 50 years' time I will be proved to be right"¹¹¹. Some of the traditional courtyard houses had

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¹⁰⁷ Siren O., *The City Wall and Gate of Beijing*. 1924. Translated by Zhou Gucheng, Hou Renzhi. Yanshan Publish. Beijing,1985.

Liang Sicheng graduated from a traditional Beaux-Arts architecture school, University of Pennsylvania and he had a study tour in 1928 in western European countries, where the conservation work impressed him deeply.

Chen Zhanxiang, guided by Sir Professor Patrick Abercrombie, influenced by the new town theory. He participated in three zones of the Greater London Plan (1944),
 Liang Sicheng, Chen Zhanxiang. The Proposal about the Location of the Central Government Center". Liang

Liang Sicheng, Chen Zhanxiang. The Proposal about the Location of the Central Government Center". Liang Sicheng Corpus (4), 1966.

Around the development of the new capital Beijing, there was a hot and democratic discussion at the beginning of the new China. Liang and Chen favoured to a new town to avoid the damage to the old city. But the Soviet Union professionals, insisted on one center and ring structure expansion model like Moscow to prompt the communist powerful image. On one hand, the new communist party thought there was not enough financial support for the new town. They think tit would cost less by changing the existing fabric but Liang and Chen viewed that it cost more to rebuild the city. At the same time, another architecture Hua Lanhong, who studied in France, was influenced by Haussmann's Pairs Plan proposed a plan like Pairs was modified based on the existing fabric by Baroque axis roads, pure and great palace facades, and squares to show the new bourgeois powerful

been divided and reconstructed to accommodate up to ten families. On the other side some parts were demolished to rebuild modern 6 floors buildings. So in this way, the basic living unit fell into pieces and the traditional morphology changed to a completely unacquainted environment.

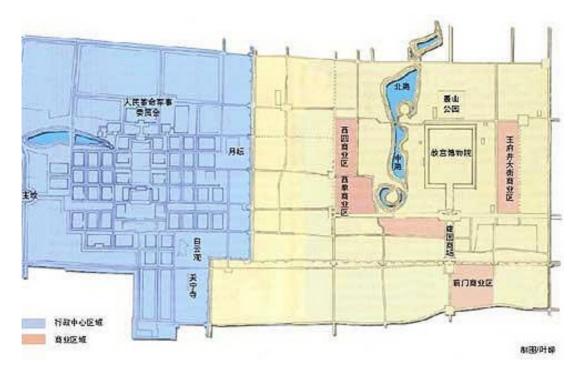


Figure 1-33: the new city proposal by Liang and Chen

In 1953, "Beijing Municipal Planning Team" proposed "Beijing rebuilding and expanding Plan Draft", pointing that the existing palace and temples as the symbol of the feudal governance. The reconstruction and expansion should break the old structure and modify extant buildings to meet the civic needs. In 1957, "Beijing Municipal Urban Planning Committee" put forward "Beijing urban construction master plan draft", indicating the duration of the demolition and rebuilding in the Old City should be 10 years. Every year there will be 1 million square meter old house to be demolished and 2 million square meter new living room would be built. In 1958, the municipal report about the prior document confirmed to demolish the city wall for the second loop road, and ordered to build the national offices and public halls along the main roads. In the following 20 years, civic limited living room dilemma trigger danwei to build new houses. After 1976, most of the "courtyard" buildings experienced "demolition, addition, expansion".

In 1983, "Beijing urban construction mater plan (1982-2000)" asked to "maintain good quality courtyard buildings", and regulates "height control of the historic blocks". The "maintenance" only refers to the listed historic heritages, while the common historic

aesthetic tendency. It can be applied the new worker class's value too. The leaders played a vital role in the decision rather than the professionals'. The communist party treat the empire city as the symbol of the feudal, which should be destroyed completely but not as the subject to conserve. The old town can accommodate all the function and inhabitants temporarily. Liang and Lin were labelled as the reactionaries, so their proposition was abandoned. On the other hand, leaders encourage people to expand making living condition short.

buildings could be demolished directly. Along with the popular application of "high scrapers", a great many high buildings were erected along the main roads. In 1985, Municipal Planning Bureau put forward "Beijing City Building Height Control Proposal", regulating new buildings can not over 45 meter in the Old City while new ones can not reach 60 meters out of the Old City. The "height control" could not prevent the high buildings construction. In 1980s, there were some small-scale pilot dilapidated houses renewal projects. All these projects depended on the municipal investment, caring social impact so that most of the inhabitants didn't move out. In 1990s, the "dilapidated housing renewal projects" were carried out popularly. In this model, the prompters were mainly District governments who cooperated with Real Estate companies. The land-based property speculation brought political results encourages this model. 1991, there were 120 dilapidated housing areas, mainly in the Old City, covering about 30 million square meter land. All the "dilapidated housing renewal projects" paid little attention on historic conservation. In this way, 2/3 of the traditional physical context on the local inhabitants were off-site relocated.

In 1993, the "Beijing Master Plan (1991-2010)" appealed to fix the boundary of 25 Historic Districts and conservation planning was presented as an independent chapter in planning for the first time. On the other side though, the master plan stated that the "Financial District" should be located in the historic context, which had a profound influence on its neighboring areas. This "Financial District" model has been carried out by the other parts of the Old City. In 1949 there were 11.6 million built areas, mainly made up of 1-floor buildings, while in 1997 there were 48.6 million built areas, among which only 9.7 million ones were historic, and this phenomenon became more and more serious, between 2001 and 2003, when 4.45 million built areas were demolished, which is equal to the total demolition between 1990 and 2000. Most of the common "courtyard" buildings were involved in this redevelopment process.

"Dilapidate housing renewal projects¹¹³" were seen as a "benefiting the people" policy, as they follow the scheme: "government organizing, private company investment, inhabitants participating", see figure 1-36. However, in fact they were real estate development projects. In theory they aimed to decrease population density, but redevelopment strengthened the other public functions, aggravated the traffic burden and led to social structure collapse. Companies that were in charge of demolition and rebuilding had to pay very little for the land and tax, while government was in charge of moving the inhabitants and these had to pay much more for the new buildings than the compensation they received if they wanted to move back. The government pretended that this was a democratic decision with public participation, but businessmen with capitals of

¹¹² Bai Baoquan, Bai Hequn. *Beijing Streets Hutong typology mams*, Beijing, Jincheng Press, 2006, p. 19. And Ni Yuehong. *Study on typology of Beijing Hutong Siheyuan*. Beijing, China Architecture and Building Press, 2007, p.

<sup>5.
113</sup> We have motioned in the first section, because of the population expansion; the courtyard houses were overused since the new China. Most of the buildings were lack of regular maintenance but experienced great modification and addition. Hence the courtyard houses quality became quite bad. Then the living quality of the inhabitants was quite poor as the average living room was 3.7 m² per person in 1957; and it was 10 m² in 1990. This project was seen as a social welfare to meet the living need of inhabitants.

profit-driven nature applied rude ways to demolish and provided little compensation to local inhabitants. The government hoped to achieve results as soon as possible, so they used force to relocate inhabitants violently. Therefore no participant cared about the conservation of the historic buildings. More seriously, in 2004, the Municipal Land Bureau issued the "regulation to encourage danwei and private person to buy Beijing Old City Historic District Courtyard Building". This regulation led to an unbalance of the private investment: because of the excellent location and the scarcity of courtyard houses, some upstart bought the good quality courtyards for residential or business use. The buyers then renewed the existing courtyard buildings modifying the inner layout arbitrarily, as it had become a private property. Common historic courtyard houses, though, could not receive private investments. Between 1990 and 2003, more than 179 million dilapidated houses were demolished, covering and area of 9.75 million square meters, and 0.4 million families were relocated. This way, the "dilapidated housing renewal projects" exerted a very negative influence on the existing historic context. In 2003 only 1,502 ha of traditional feature areas were left, covering 24 % of the total area, while the area where modern styles are mixed with the traditional feature was 1,049 ha, covering 16.8% of the whole, and the modern feature area was 2,136 ha, accounting for 34.2% of the Old City see figure 1-35.



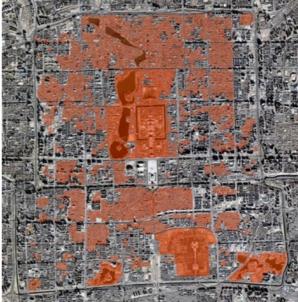


Figure 1-34: The dilapidated projects sites

Figure 1-35: the existing historic context (red)

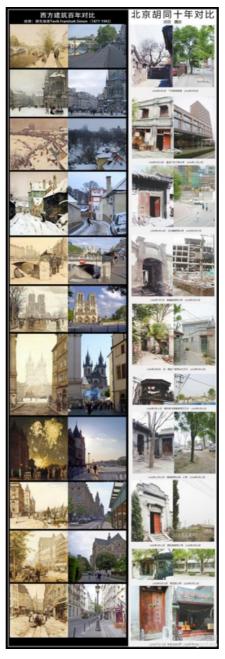
It is necessary to point out the property and **cadaster** of the historic elements. All the properties belonged to the country and were managed by the party, especially lands and houses before 1978. Danwei¹¹⁴, represented the government were in charge of every aspects, such as the management, production, dividing, exchanging and consumption. Constrained by limited resource, house managements were usually absent but leave it deteriorates. As owned by the country, though the inhabitants have lived for half centuries, it is easily that they can be sold wholly to the real estate businessmen for redevelopment.

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Danwei, the name given to a place of employment, is a work unit acted as the first step of a multi-tiered hierarchy linking each individual with the central Communist Partyinfrastructure. Each danwei created their own housing, childcare, schools, clinics, shops, services, post offices, etc.

Compared to more than 2000 lanes and thousands courtyard houses in Qing Dynasty, in 2002, 2003, there were only 658 courtyard houses to be conserved 115 and no special plan for the hutong conservation 116. Gulou area is in the buffer area of the World Heritage Forbidden City; it experienced great demolition, fake replacement and street expansion in 2004. Streets were expanded 10-15 meter, using the space where courtyard houses were previously located. The municipal government insisted they were following the discipline of authenticity and maintaining the feature established in the "Buffer area of Beijing Forbidden City Plan". In that plan they used the planning communication network in place of the status quo to cover up. Though criticized by the UNESCO, they still implemented it

quickly.



1-36: Left, comparison of some place change in Western courtiers over 100 years,

Right, the comparison of the some buildings in recent 10 years in Beijing

¹¹⁵ 2003 Beijing Evening, in http://news.sina.com.cn/c/2003-12-03/17102274912.shtml. There were there batches, among which the first batch includes 300 courtyard houses, the second 239, and the third 119.

116 Jen Huaihsiang. Research on the conservation and development of the "Hutong- Siheyuan system" of the Old

City of Beijing. Beijing, Tsinghua University, Ph.D thesis, 2008. P 92.

Accompanied with great morphology transformation, the rare extant built environment suffered great change in detailed level. The "courtyard-Hutong" has been modified, each of which was added more than double built area to the extant in 1970s. Inhabitants rebuilt the affiliated buildings, such as the toilets, kitchens, storehouse and etc. This low quality arbitrary addition seriously destroyed the traditional feature, see figure 1-37, 1-38¹¹⁷.

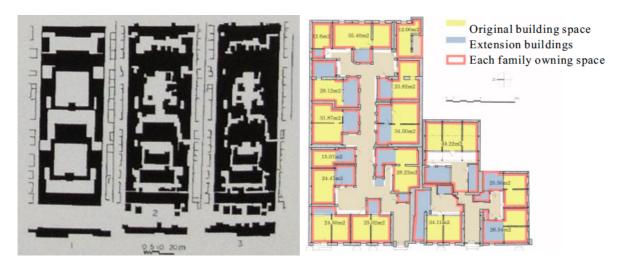


Figure 1-37: historical changes of a quadrangle in Beijing. Figure 1-38: a historic site transformation analysis 1:earlty 1950s, floor space 2440 m², a complex courtyard

2:late 1970s, floor space 3196 m², 131% of that in early 1950s, a multi-house hold compound

3: the compound in 1987, floor space 3787 m², 155% of that in early 1950s, a courtyard-less compound

1.7.3 Beijing historic conservation plan

Because of the huge destruction, the municipality has been faced with pressure from both professionals and the civic power, as the rare historic extant triggered a feeling of nostalgia in the citizens. The "Beijing Historic Cultural City Conservation Plan (2001)" was compiled to protect the "\(\text{\text{\text{D}}}\)" space pattern, to protect the chessboard shape road structure, to control the Old City height, to control buildings' shape and color and to foster the renewal and conservation based on the "courtyard" as a unit. In 2005, the "Beijing Historic City Conservation Regulation" established height control, construction volume, color criteria for feature maintenance and off-site relocation to decrease population density. The "Beijing Comprehensive Plan 2004-2020" proposed to reshape the space order of the Old City, maintaining the traditional space structure and feature. In 2007, the "Beijing 11th Five-year (20006–2010) Historic City Conservation Plan" introduced "integrated conservation of the Old City, which included space pattern protection, improvement of public infrastructure and maintaining the feature".

1.7.3.1 The 12th Five-year (2011–2015) Municipal Economic and Social Development Plan Outline¹¹⁸

As the basic guide for social, economic, construction development, the "12th five-year

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¹¹⁷ Zhu Jiaguang, Fu Zhijing, *Historical changes of a quadrangle in Beijing*. In China Planning Institution, Beijing 25 historic Districts conservation (8 districts of Jingshan) project.

¹¹⁸ Beijing municipal commission of development and reform. *The 12th Five-year (2011-2015) Municipal Economic and Social Development Plan Outline*, 2011.

(2011–2015) municipal economic and social development plan" proposes to slash the population density and traffic in historic center and to optimize the old town functions. The basic physical form, like the axis and main streets is to maintain in order to strengthen the identity. The plan gives little specific regulation on the investment in the conservation work, few guidelines on implementation and it lacks a feasible application.

In the light of space structure, this plan attaches attention on the "one axes and one line" structure, referring to the north-south middle axes and the Chao (yangmen)-Fu (chengmen) Street line. They make up the backbone of the historic center. The plan cars about some vital nods, backfilling historic elements, reviving classic feature, blending in modern culture, in order to create an urban attractiveness corridor, see figure 1-39. The "Middle Axis Project" firstly proposes to improve the feature of the buildings along the way from Drum-tower and Bell-tower to Dianmen Gate and create a green belt along the river. Then secondly the Qianmen Gate area is to become a commercial feature area with improved facilities. Tianqiao area will be a traditional cultural performance district, in which a new group of theaters will be constructed. The south end of the axis will be an imperial garden after the removal of Tiantan Hospital, which coordinate with the northern Olympic Park's efforts from afar. The west-east Chao (yangmen)-Fu (chengmen) Street locates divides the Old city into two parts. Along these two streets, the vital religion temples, regal temples and courtyard houses should be conserved. Some courtyard houses will be adaptive reused as hotels and theaters 119. This plan proposes to work under the disciple of integrated conservation rather than isolated one. It tries to set up conservation foundation and encourages private capital to engage 120.





Figure 1-39: one axes and one line design. Left, the main axes of Beijing, right the Chao-Fu Street

11

¹¹⁹ The "one axes and one line": The axis is the south-north city axis, starts Yongding Gate from south to the Drum-Tower and Bell-tower. It has 7.8l km long. It was initially designed in the Dadu planning in Yuan Dynasty and formed in Ming and Qing Dynasties. The most important buildings locate along it, such as the Gongwang Masion, Forbidden City, Zhongnanhai, Tai Temple. The unique magnificent and mighty order is established on it. And the one line is the west-east two street Chao (yangmen)-Fu (chengmen) Street, separated by the Forbidden City. It starts from Fucheng Gate from west to the east Chaoyang Gate. It has 7.45 km long. Numerous historic elements are affluent along this line. The residents and palace, temple and campus, garden and lakes, yards and commercials have various feature architectures, displaying the empire power and multi-cultural mixture. It is attached the most graceful street in Beijing.

attached the most graceful street in Beijing.

120 Even the plan give a basic guide for the historic conservation, but actually its implementation is quite aberrant. For example, the Drum-tower and Bell-Tower area project, named Beijing Time, was complete a development project. It is a 2 km² area, in which the north part was demolished for the metro, the south part was demolished for a shopping mall then it was changed to a museum, and the part between the two towers are demolished for a green piazza. The adjacent residents are to demolish while several listed historic buildings are modified greatly.

1.7.3.2 The Master Plan of Beijing, 2004-2020 121

The master plan sets conservation as one of four important work, designating the city as a famous historic capital. It aims to combine traditional culture with modern civilization (Article 2-4, Article 4-3). It proposes an organic evacuation of the historic town to conduct a suitable structure (Article 14-3). The conservation of the old town aims to improve inhabitants' living condition and to promote tourism to enhance the vitality of the area (Article 159-5). It encourages to carrying out population decrease. In the space part, it tries to extend the existing space axis.

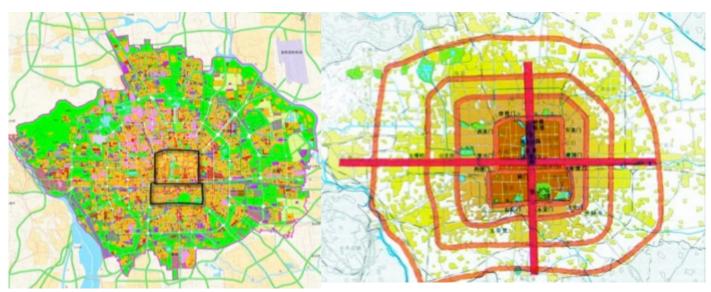


Figure 1-40:left, the historic center and its relationship with the other parts, right, the expansion of the Beijing city and its five ring-rods.

The suggested strategies for conservation are "historic-city-wide integrated protection" and "small-scale organic and gradual regeneration". The first task aims to balance the relationship between living condition improvement and feature maintenance. The second problem is to deal with the conflict between economic developments with the cultural conservation (article 60). It proposes "holistic conservation" disciplines, includes ten aspects: 1) maintaining the middle axis feature; 2) maintaining the "\(\sigma\)" form, creating green belt along the city wall, maintaining four city walls layout form 3) conserving the Forbidden city holistically; 4) conserving rivers and lakes, recovering some part of the historic river and lakes; 5) maintaining the chessboard roads and lanes structure; 6) maintaining the "lane-courtyard house" types; 7) controlling building height to maintain the mild skyline; 8) maintain vital landscape corridors and scenic focal points; 9)maintaining

The Master Plan of Beijing 2004-2020, was compiled by the Beijing Municipal Commission of Urban Planning, http://www.bjghw.gov.cn/.

¹²² Holistic conservation, (整体性保护 zhengti xing baohu), emerged in 1970s in western courtiers, was introduced to China in 2000s. It can be translated into holistic conservation, integrated conservation, general conservation or wholly conservation. The "holistic conservation" discipline, as an outline guide for the intervention, set a basic foundation for the future work. But it just an empty idea, makes the dilemma that "to conserve all, but to lose all". The extreme perfectionist usually becomes an inane Nihilist. It should protect the historic buildings and its environment. It is lack of correct definitions, concrete research, justice decision procedure and scientific implementation, so it becomes an empty slogan.

building colors and materials, such as steel grey residents to strengthen the image of the palace group with its red wall and yellow tiles; 10) maintaining historic trees, lane's green and yard's green. At a more detailed level, it advocates "original site conservation". Historic district conservation is based on courtyards to conserve the fabric and feature. It aims to improve the living quality and to maintain the feature at the same time. Besides the physical terms, some social and economic issues have been mentioned. Industrial and manufacture function are relocated out and the traditional cultural and tourism economy are fostered. These actions attempt to minimize the population density and to optimize the inhabitant's structure. Traffic and communication will be controlled (Article 60,61). Finally, it tries to confirm the property right in order to encourage owners as main participant of the conservation.

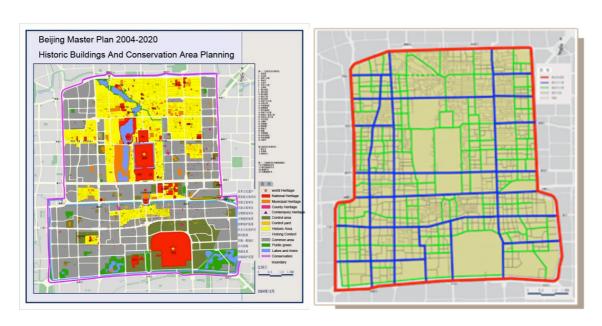


Figure 1-41: conservation elements (not grey blocks)

Figure 1-42: the three layers roads networks in old city

1.7.3.3 The Conservation Planning of the Historic City, 2001-2020

The "Conservation planning of the historic city (2001-2020)" sets three hierarchy conservation levels. There are about 800 listed historic heritages and 19 (14 of which belong to the first batch and 5 to the second one) historic districts. The conservation method is based on "yard unit" to keep the original layout. The buildings are divided into six types, including heritage buildings, conserved buildings, reformative buildings, preserved buildings, regenerated buildings, rebuilt buildings. In 19 historic areas, three–floors and more than three–floors buildings will be not approved and the flat–roofed building should be modified into double–sloping roof. It proposes to depend on public communication to constrain private cars use. The whole area is divided into three-height control area: historic buildings should maintain its original height, the construction control area is constrained by the planning and the other place is also controlled. Then it advocates the traditional events, such as the temple fairs, theater and opera performances. It also encourages traditional commercial activities and historic brands. The government is responsible for the planning, implementation and the financial support, and encourages capital participation.

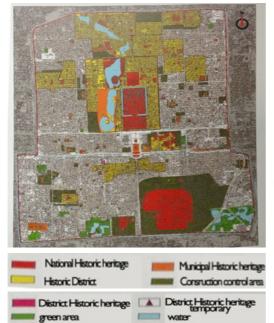




Figure 1-43: the distribution of the conservation district in Beijing Old City.

Figure 1-44: yellow, conservation historic districts Blue, 5 additional historic districts



There are some further studies on the 19 historic districts, see figure 1-44. The aim of the land use modification is to reduce residency, slash the number of industrial plants and increase offices, roads and green parts. At the moment there are 95,000 families living in he area, for a total of 285,000 people and the plan aims to reduce them to 167,000 people, so that about 40% of the population will be moved out, see table 1-9. The "yard unit" is the base of the planning for management. Buildings are divided into 3 types according to their quality, see figure 1-10; and into 5 categories according to the feature, see table 1-11. 52% of the buildings are worth maintaining or conserving, while 48% of them don't match the feature.

Land use	Existing (ha)	Planning (ha)	Percent (%)
Residence	490	409↓	40
Office	247	266↑	26
Industry	17	1.6↓	0.2
Road	154	213↑	20
Green	69	97.3↑	9
Others	61	51↓	4.8
Total	1038		100

Category	Percent (%)	
Good	42	
Common	41	
Bad	17	

Table 1-10: building quality of the historic areas inner Empire City

Table 1-9: land use ratio of the historic areas in the Old City

Categories	Name	Percent	Conservation ways
1	Historic buildings	7	Reserved
II	II The buildings with certain value		Reserved
Ш	The traditional buildings concerted with the feature	36	Maintained
IV	The modern buildings concerted with the feature	14	Modified
V	The buildings NOT concerted with the feature	34	Reconstructed

Table 1-11: building categories of the historic areas in the Old City

Building categories	Interventions	Percent (%)
Historic Buildings	Conserved	7
Protected buildings	Conserved outer feature	9.3
Improved buildings	Repair or rebuild	23.8
Reserved buildings	Maintenance	7.3
Regenerated buildings	Demolish and rebuild	49.2
Along the street buildings	Modified	3.4

Table 1-12: The inventions of buildings in the historic areas in the Old City

Based on quality and value, interventions are divided in five types: 7% of buildings are to be conserved, while 9% of them will have their external facades conserved. Then 24% are to be repaired or rebuilt, see table 1-12. It is quite strange the portions are not match the table 1-10. The previous table indicates that there are 36% of traditional feature buildings, but in the table 1-11, only 16.3% are conserved. More than 52% will be demolished and rebuilt. This vague categories and chaotic interventions elucidate the unprofessional quality, which leads to a great deal of demolition and damage to authenticity.

1.7.3.4 Beijing 11th Five-year Historic City Conservation, 2006-2010

Based on the Conservation Plan of the Historic City 2002-2020, 11th Five-year Social and Economic Development Plan, Beijing municipal government made the "11th Five-year Historic City Conservation (2006-2010)".

The plan stressed dilapidated buildings renovation as a conservation way in the historic areas. The renovation of deteriorated houses is a small-scale, gradual and micro circulation modification, following the concept of "maintaining the original appearance, organically regenerating the dilapidated housing and recovering the traditional feature". It is a too general plan, without any effective guideline and it contains some paradoxes (article 1-6). In 2010, the Beijing Historic City conservation committee was set up, including the major officers and national planning professionals, such as the mayor, the chief of the Bureau of Urban Planning and senior professors.

1.7.3.5 Beijing 12th Five-year Historic City Conservation Planning, 2011-2015

Conservation follows the discipline "managed by government, invested by government, voluntary participation by inhabitants, guided by experts, supervised by the society". It addresses the role of cultural activities in historic areas. The plan establishes the "Project-oriented Program" as a management way, but it lacks of indications about its implementation.

Several proposals are made in this plan, such as those about the various financial supports, the public participation mechanism, the management law compiling, inhabitants relocation, housing property and cadaster renovation, adapted reuse almost absent. Historic areas are divided into 3 categories: the traditional residential type, the capital function type and the comprehensive development type. This shows that the plan aims to explore the land potentiality rather than to conserve it.

Area categories	Content	Interventions	
Traditional residential	Residential	Maintain the living environment	
type			
Capital function type	Official function	Repair, be vacated and restored to one's	
		original style and reuse	
Comprehensive	Partial residential, and other	Redesign	
development type	commercial activities		

Table 1-13: The adaptive use of the historic areas in the Old City

1.7.4 Some detailed practices

1.7.4.1 The morphology and uses analysis in Imperial City area

This paragraph is going to present a deep study of the changes in the morphology of the Imperial City from the Yuan Dynasty (1271-1368) to the period of the Republic of China (1911-1944). The whole area kept the same shape, but the institutional buildings were changed into residences. The big scale yard changed into denser courtyards. Constrained by the less developed economy and by its vital location, the whole area maintained its original appearance: 1- or 2-story low buildings, gray material residences accompanied

with the red-yellow Forbidden City. In this area, the main conservation method is to preserve and maintain the original appearance. Some regular maintenance is carried out. The traditional feature is kept and most buildings are adaptively reused as museums, residences or shops. This case reminds us that little intervention is the best way, but unfortunately this strategy was neglected.

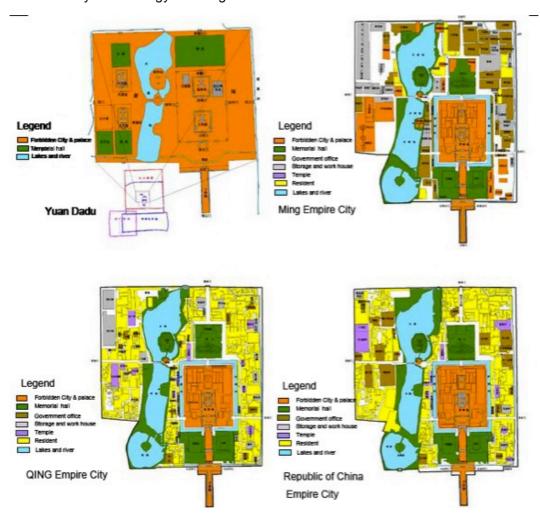


Figure 1-46: the morphology evolution of Empire City

1.7.4.2 Nanchizi case study

1 Basic information

The Nanchizi historic district abuts on the east of the Forbidden City. Its conservation was one of the initial six projects implemented by the government in the early 2000s. Its gains and losses have set a pattern for future conservation plans and have provoked a wide range of debates. The existing situation will be firstly interpreted, then planning intervention and results will be studied and at last we will give some critical views

The whole Nanchizi area is about 17 ha, but the implementation area is only 6.4 ha, see figure 1-47. During the Ming and Qing Dynasties the district housed several offices and storehouses, see Figure 1-46. After 1911, some storehouses were modified into residential buildings after a fire which caused great damage, so it became a pure residential area. Due to the population expansion, the status quo at that time was a dense and low-quality residential area. Inhabitants confusedly built many buildings adjacent to

the original ones because of the lack of kitchens and sanitary facilities. The population density reached 480 people per ha, which was double than in any other place at that time. There are affluent historic houses and some important historic temples. The Pudu Temple was the former mansion of a prince and then was modified as a Lama temple in the Man-Ethic style, featuring low windows and a wooden sloped roof. 180 families were housed on the former yard, without any drainage facility. Some accessory buildings were demolished and the main hall was used as a primary school. There were 1,076 families, 3,038 people, 3,000 decrepit houses, 103 courtyards and 9 lanes. The average built area per family was less 27 m². Decrepit houses accounted for 92%. The historic appearance still existed, but the densities of buildings and inhabitants were extremely high. Public facilities were extremely deficient and lanes could not accommodate cars. Some inhabitants had to walk more than 100 meters to reach the nearest toilets.

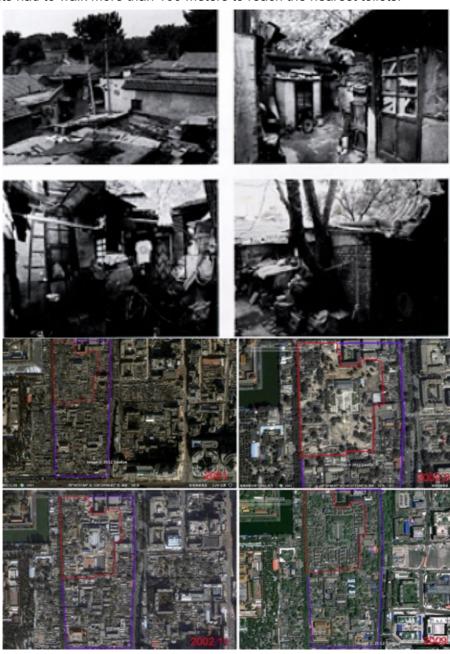


Figure 1-47: top, the existing building image; down, the process of the change of the context in Nanchizi