

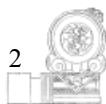


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**-Beijing Hutong Conservation Plan-**

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## Preface

*At present, the pre-eminent problem existing in our country's urban construction is that some city leaders only see the economic values of natural and cultural relics but know little about the historical, scientific, cultural and artistic value of them. They seek only economic benefits and development while neglecting protection, so damage to natural and cultural relics are occurring frequently. Some city leaders simply deem the constructions of high-rise buildings as urban modernization while paying insufficient attention to protection of natural scenes and historical and cultural relics. Their large-scale dismantling and building during old city reconstruction have damaged many traditional districts and buildings with historical and culture values. Some other city leaders prefer to demolish true historical relics and build false historical sites and artificial scenes. Though they have spent a large amount of money the results are neither fish nor fowl. We must resolutely correct such wrong practices.*

Quoted from a speech given by China State Council member Vice Premier Wen Jiabao at the 3<sup>rd</sup> representative conference of China Mayors' Association, entitled *How to properly handle the relationship between the modernization of a city and the protection of historical relics*.



## The Authors

The authors lived in Beijing for a year before starting work on this plan. They have extensive experience of building restoration, including many years working on the rehabilitation of central Lhasa. They have studied and visited similar rehabilitation projects in Berlin, Kathmandu and other Asian cities.

## Acknowledgments

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The Author's residencial courtyard in Beijing

## **Beijing Hutong Conservation Plan:**

### **The future of Old Beijing and the conflict between modernization and preservation**

#### **Introduction**

The topic of this plan is the conflict between the modernization of Beijing and the preservation of its cultural heritage. Over the past decade, rapid development has lead to a remarkable improvement in the quality of life for many citizens. At the same time, however, much of the historic urban fabric of the capital has been lost. Major roads now bisect ancient neighborhoods, whilst in many areas, recent redevelopment has wiped out the subtle architectural texture and spatial arrangement of the preceding centuries. The atmospheric Hutong lanes, the traditional residential homes, and the Si-He-Yuan courtyard houses - all are fast disappearing as the city races forwards into the 21st century. In recent years, the government has placed a number of Hutong lanes under protection, but what exactly this protection means is not clear. Many Beijing people are now concerned that, at the current rate, redevelopment will soon engulf and destroy the ancient courtyard houses forever. Groups and committees have formed to debate many of the practical issues surrounding redevelopment and conservation. Can a city the size of Beijing afford to have one-storey housing at its centre? Aren't the courtyard houses much too dilapidated, and lacking in comfort, to be saved? How can the local resident community be protected from relocation? How can rights of ownership be balanced against the needs of commercial re-development? Whilst these questions are being discussed, the re-development goes relentlessly on.

Many cities worldwide have found that rehabilitation, rather than re-development, of historic urban districts brings considerable benefits. This plan sets out to demonstrate that rehabilitation is also suitable for Beijing. The opinions of residents have been carefully researched and integrated into the plan. Some of the solutions proposed are self-contained, and could be used for the rehabilitation of individual courtyard houses. In order to preserve the character of a historic Beijing neighborhood, however, a larger cluster of Hutong neighborhoods must be targeted. This must be done with considerable urgency before the incursion of more major roads destroys the Hutongs' original urban context. The value of the Hutong lies in the spatial arrangement as much or more than in the architecture of the individual courtyard house. Therefore, concerned parties must be very clear from the outset about which remaining quarters of historic Beijing they intend to preserve.

Beijing is one of the world's most important historical cities, with a unique ambience balancing ancient and modern. Having reached this point of balance, Beijing planners must surely pause for thought. It would indeed be a great loss if this ancient capital were to become just another face-less mega-city.

## 1.Objectives of this Project

The objective of this project is to provide a concrete proposal for the conservation and subsequent rehabilitation of three of Beijing's historic Hutong quarters. The measures proposed could also be adopted for other neighborhoods, but the proposal focuses on the combined neighborhoods of Shichahai, Zhong-Gulou and Nanluogu xiang. These areas are rare examples of intact historic residential areas now remaining in Beijing.

The principles behind the Conservation Plan are:

- \* Preserving a maximum amount of the authentic historic building materials
- \* Preserving the townscape and original historic setting of Si-He-Yuan type housing in the Hutong lanes
- \* Retaining the current mixture of subsidised housing, private house ownership, commercial buildings and services
- \* Working with existing resident community
- \* Traffic regulation
- \* Bringing living conditions up to an acceptable standard

What can we leave in Beijing Hutong???



## 2. Beijing Historic Inner City Overview

### 2.1 Geographical setting

Beijing is located on a flat plain on 39.56 north latitude and 116.2 east longitude, with hills to the northwest. Several natural and artificial lakes and waterways within the central area are part of an ancient water-system bringing fresh water from Yu Quan Shan and providing recreational areas for the residential districts. The climate varies, being cold in the winter (-10 degrees Celsius day-time average), whilst hot and humid in the summer.

Beijing city has 13.6 million registered inhabitants. An additional estimated 3.8 million unregistered residents brings the total to 17.4 million people. The historic area of Beijing, bounded by the former city walls, housed 1.75 million inhabitants at the last census (1990). The remaining historic Hutongs are grouped in two main areas, with a total size of 62km<sup>2</sup>. The more important of the two is the 38 km<sup>2</sup> area originally contained by the old city walls. These walls were replaced by the second ring road in the 1960s (the first ring-road refers to the walls of the former Imperial City, of which only some fragments remain). The second historic location is the area known as the 'outer city'. This 24km<sup>2</sup> area, located south of Qian Men gate, was originally also a walled city. The target area of the Conservation Plan is located between the Forbidden City and the northern section of the second ring road.



Satellite picture of Forbidden city

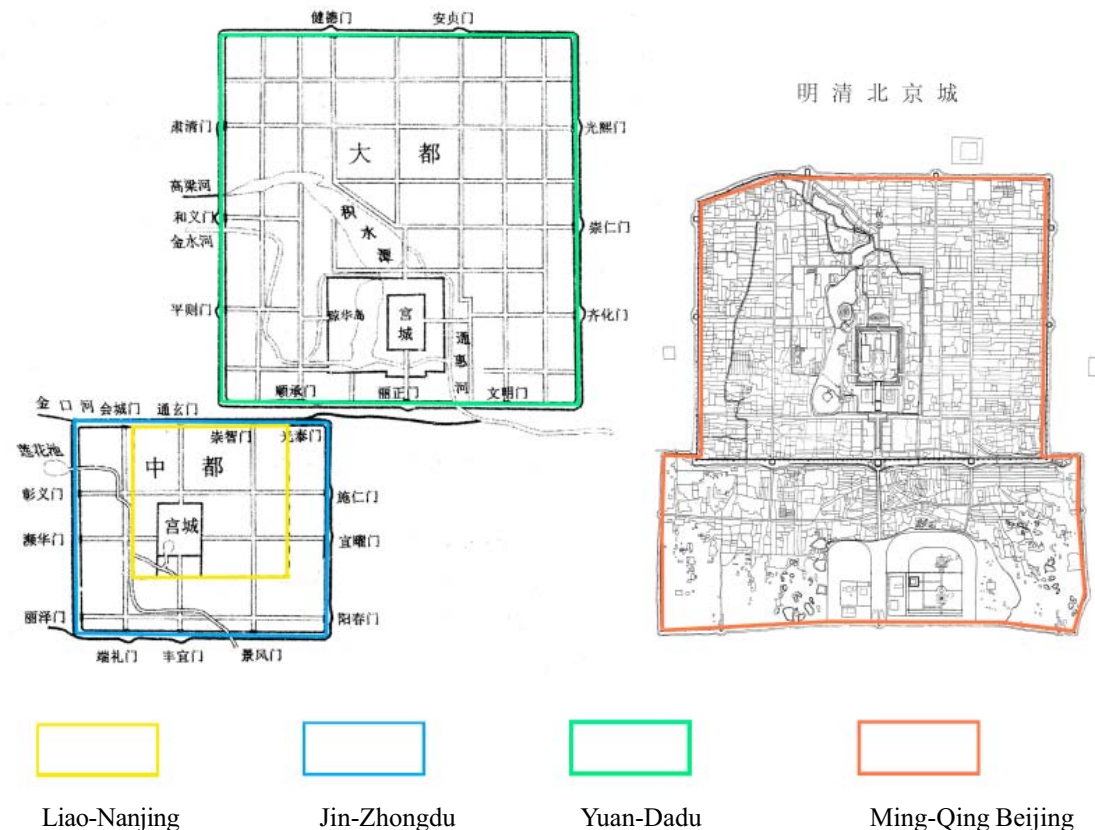


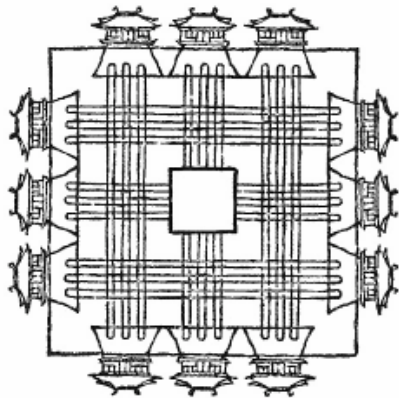
## 2.2 History

Archaeological findings suggest that the site of modern Beijing has been inhabited continuously for more than 3000 years. Its history as China's capital spans the Jin, Yuan, Ming and Qing dynasties.

In 936 Liao-Nanjing, on the site of modern Beijing, was established as the most southerly of 5 Liao dynasty sub-capitals. In 1153, under the name of Jin-Zhongdu, Beijing rose to become the most prominent capital of the Jin Dynasty. In 1267, Kublai Khan ordered the transfer of the Yuan dynasty's capital from Mongolia to a site located by north-east of the destroyed ruins of Jin-Zhongdu, naming it Dadu. Dadu is regarded as the precursor of present-day Beijing. After the fall of the Yuan dynasty, in 1368, Dadu-Beijing temporarily lost its capital status, when the new Ming emperor moved the capital to Nanjing. The third Ming emperor Zhu Di decided to reinstate the Dadu site as the Ming capital, building a new capital there under the name of BEIJING in 1421.

In 1644 the first emperor of the Qing dynasty, Shun Zhi, decided to retain the capital in Beijing. Apart from a brief period during the civil war, Beijing has remained as the capital ever since. (Source: 'BEIJING URBAN HISTORY AND GEOGRAPHY', Beijing Yanshan Publication, by Hou Ren Zhi, 2000)





<Zhou Li Kao Gong Ji>

## 2.3 Urban structure

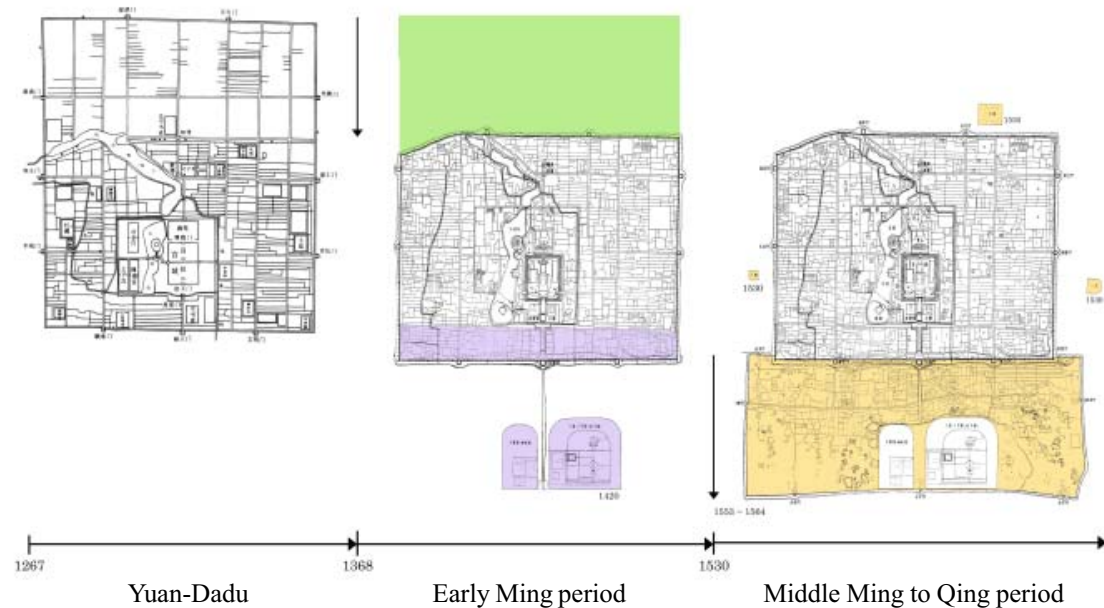
### City planning

The urban design of Beijing's historic city is based on the Yuan Dynasty's thirteenth-century capital, Dadu. This makes Beijing one of the world's oldest centrally-planned cities, and an important living example of ancient Chinese city planning.

Principles for ancient Chinese urban planning, compiled towards the end of the Chun Qiu period (BC770-BC476), favoured a rectangular street grid with a palace in the centre, surrounded by temples and markets, and an auspicious number of 12 gates in different directions.

This principle was followed in the Yuan dynasty when Beijing's historic Hutong grid pattern was laid down. The grid was subsequently enlarged and adapted, taking its final shape during the Qing Dynasty (1664-1911). The Yuan court's central palace compound was located slightly to the north of the present Forbidden City. It is a tradition that dynasties build their own palaces and temples, and demolish the old. According to archaeological research, the Coal Hill (Jin Shan) is in fact the pile of rubble resulting from the destruction of the Yuan dynasty palace.

### Development of Urban structure



Beijing is laid out on a rectangular grid. The city is bisected by its 7.8km north-south axis. In the centre lies the palace complex of the Forbidden City, flanked by four temples, one in each cardinal direction. Yue Tan, Temple of the Moon, stands to the West. Ri Tan, Temple of the Sun, stands to the East. Di Tan, Temple of the Earth, stands to the North, whilst Tian Tan, the Temple of Heaven, stands to the South. The temples' location, established during the Ming Dynasty, reflects Yin Yang Wu Xing, the ancient philosophical school of the 'Five Elements'. Yin Yang Wu Xing also determined that the 'inner city' had 9 gates, whilst the 'outer city' had 7.



*Qing period urban founction*



## Hutong

A 'Hutong' is a narrow lane. The term is believed to be Mongolian in origin, since it first appears in Beijing's Yuan dynasty records. There are several theories about the original meaning of the word, the most popular being that it means 'water well'. Yuan dynasty city plans show 3 types of street, big streets (around 37.2m wide), small streets (18.6m wide) and Hutongs (9.3m wide). Big streets and Small streets mostly ran North-South, whilst the Hutong lanes, mostly ran West-East.

Hutong lanes provide shelter from the wind and give a strong sense of privacy. Originally, many trees were planted in the courtyards, whilst more were planted later along the sides of the Hutong lanes. Maps from the Qing Dynasty and the Republican Era show that large numbers of important historic buildings, such as temples and monasteries (Buddhist, Taoist, Confucianist and local Deities) were once active throughout the Hutong areas. Many of these still exist today although many have been converted into housing.



Hutong alley structure (Qianlong map)

## Banchang Hutong facade



Public Toilet

Ruyi-men gate

Jinzhu-men gate



Xiao men lou gate

Guangliang-men gate

Local community office



Pass by bar

Western type gate

Guangliang-men gate



## Various types of buildings

The remains of Yuan, Ming and Qing period street patterns are of immense value to our knowledge of historic Chinese urban planning, archaeology and sociology. Beijing also retains thousands of historic buildings of various types, from different periods, contributing greatly to our knowledge of ancient Chinese architecture. These structures include palaces, imperial gardens, monasteries, temples, bridges, residential buildings, European style buildings and Revolutionary monuments from China's recent history. Of particular note are the Imperial Palace complex from the Qing and Ming dynasties, the temple of Tian Ning Si from Liao dynasty, Bai Ta Si temple and Wan Song pagoda from the Yuan dynasty.



f. Ming Qing Forbidden City -15 to 19 century-



a. Yong He Gong -18 century-



d. Tian Ning Si pagoda -10 century-



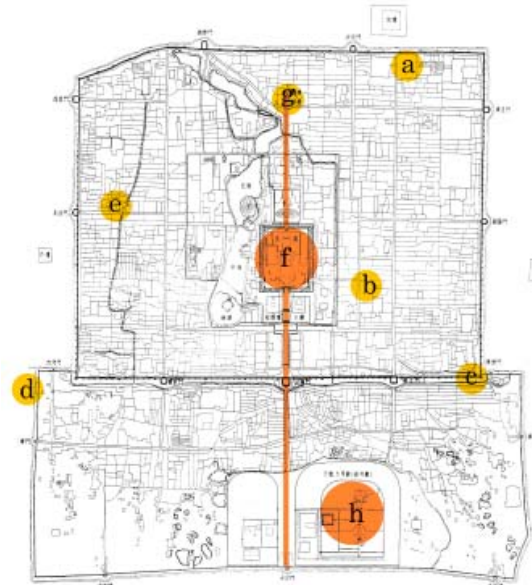
b. Dong Tang -1904-



c. Ming city wall -15 century-



e. Bai Ta Si pagoda -13 century-



g. Bell tower -18 century-



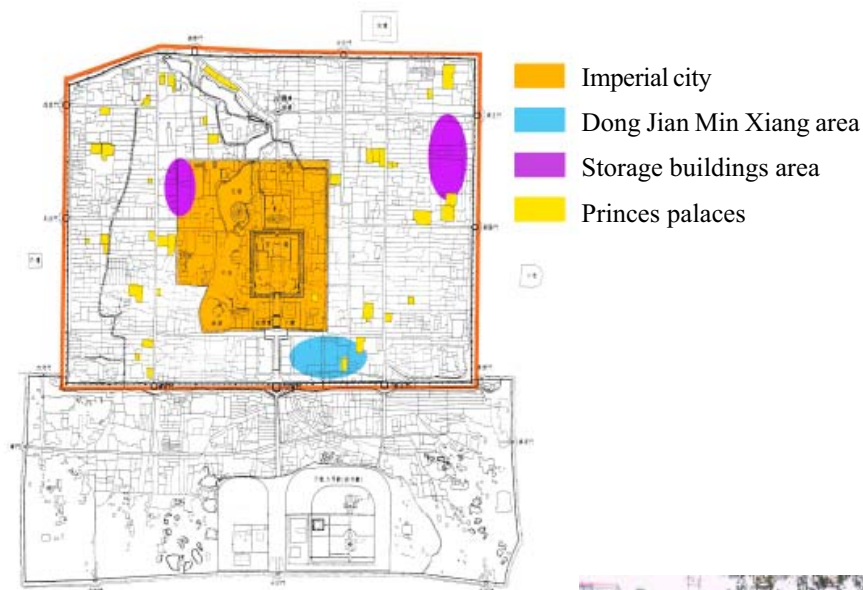
h. Tian Tan -15 century-

## Area feature

Despite a certain uniformity of height and limited variations in design, different residential neighborhoods still had distinct characteristics, reflecting the different social groups that inhabited them.

## Inner city feature

The inner city area measures 38km<sup>2</sup>. The imperial city stands in the center, and the city's planning was based on Yuan-Dadu. The streets were laid out mainly on a grid pattern. Most of the inner city was residential in character, with concentrations of large-scale courtyard homes of the upper classes. These include palaces and storage buildings of princes and other royals. Within a block located to the east of Tian An Men square known as Dong Jiao Min Xiang, there are many western-style buildings dating to the beginning of 20th century, mostly former foreign embassies.



Pince palace's gate



Big size courtyard house



Wide Hutong street in inner city



Dong Jiao Min Xiang, former French post office

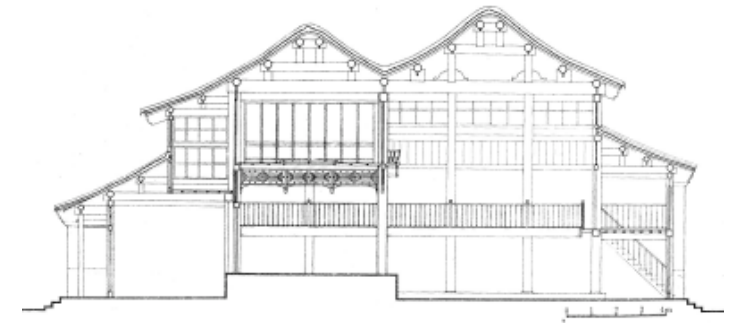


Stoorage house in Xin Nan Cang

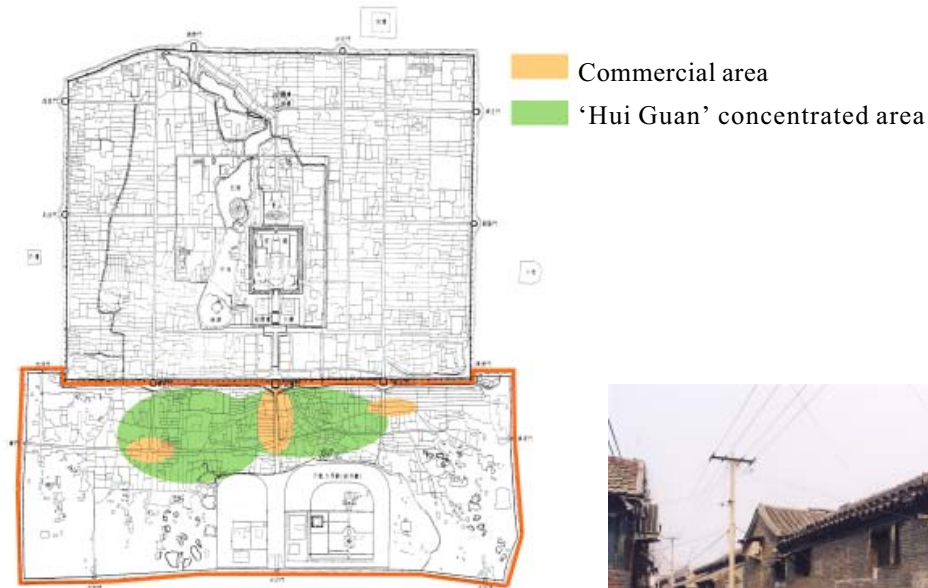


## Outer city feature

This area measures 24km<sup>2</sup>, with the highest concentration of buildings in the northern part. In 1648, the Qing emperor Shun Zhi settled his compatriots, the Manchus, in the quarters surrounding his palace. Mongols were located in adjacent zones in the inner city and Han Chinese in the outer city. The outer city was not laid out along a grid pattern, so there are many crooked streets and narrow alleys. Buildings are to a much smaller scale than in the inner city. The outer city has traditionally been a commercial area. Traders from China's provinces tended to form their own neighborhoods, each drawing architectural inspiration from their respective native region. The institution of 'Hui Guan' was a liaison office between Beijing and local regions for traders and immigrants. The 'Hui Guan' provided free accommodation for visitors from local regions and some of them had their own opera theatres. The 'Hui Guan' also worked as an active community center. There were around 460 'Hui Guan' located within the outer city at the end of the Qing dynasty.



Hu Guang Hui Guan theatre



Various types of commercial buildings



Small size courtyard house



Narrow Hutong street in outer city



## 2.4 Residential buildings

The traditional residential building of old Beijing is the Si-He-Yuan, or courtyard house, consisting of low buildings grouped around one or several central courtyards.

In the Si-He-Yuan house, the main building (Zheng Fang) is preferably located on the northern side of the courtyard facing south, with two sub rooms to either side (Er Fang). On the Western and Eastern sides are the Xiang Fang. The south side comprises a building facing the street (Dao Zuo Fang) and a shadow wall (Yin Bi). The courtyard is accessed through a main gate at the southern end, and often there is a back door on the northern side. Generally, the main residential buildings are south-facing, designed to block the fierce northern winds but allowing sunlight to shine into the main rooms. This design is well-suited to Beijing's climate. A major attraction of the courtyard house is its secluded and peaceful atmosphere, affording a degree of privacy and calm within the city's bustle. The ambience of the courtyard house is closely tied to the traditional lifestyle of China's urban families.



Zheng Fang (main building)



Gate



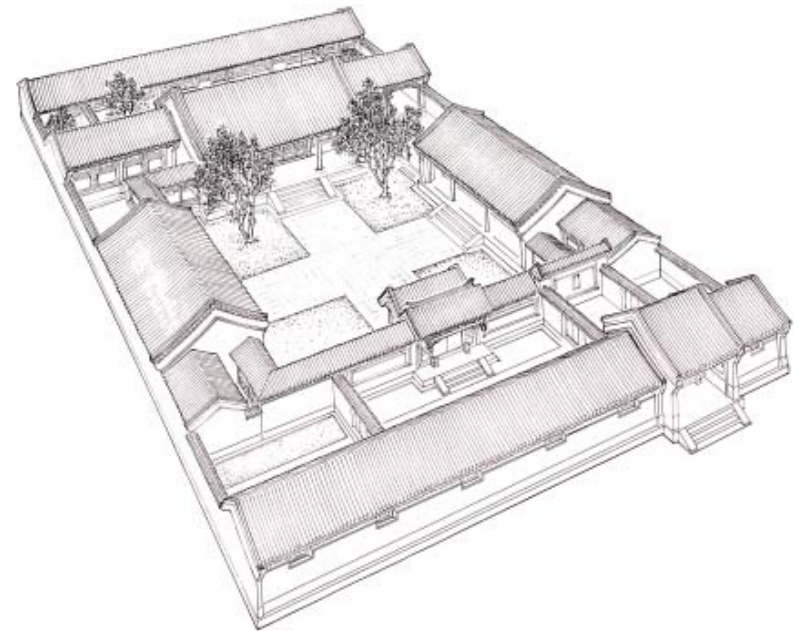
Gate decoration detail



Yin Bi (shadow wall)



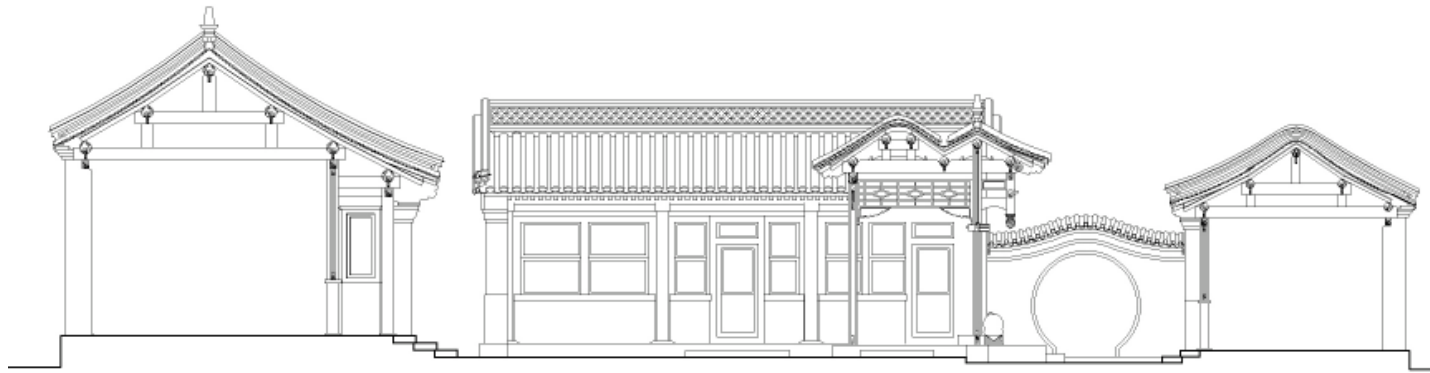
Men dunr (stone corving)





Si-He-Yuan buildings are timber framed, with brick walls and tiled roofs. The reddish colours of the painted timber beams pillars and pillars contrast with the grey bricks and tiles, creating the distinct Beijing Hutong combination.

Si-He-Yuan were subject to strict restrictions on height, design, colour and decoration in imperial times. The restrictions were graded according to the status of the owner. The limitations included rules on the colour and style of roof tiles, the colour of the outside walls and the decoration of the main gate. Within the inner city walls, before 1911, no residential building of more than one storey was permitted. It was considered unthinkable that ordinary beings should have houses taller than the walls of the Forbidden City.



Courtyard house section -Xian Ming Hutong NO.4- drawing by Liang Ya Qing

## 2.5 Courtyard houses in modern times

The Si-He-Yuan were originally designed and built to house one family, but since the 1950s many were converted to house several families as tenants. With the limitations of space and infrastructure within a Si-He -Yuan, the standard of living is not compatible with that of modern apartment flats. Yet many residents appreciate the living environment and quality of old Beijing, even if shared with three or four other families. The central location is convenient for work, schools and shops. If all the inner city Hutong residents were resettled beyond the fourth ring road, Beijing's traffic and transportation systems would collapse. Many Beijing residents also say that living on the ground floor is more healthy, since they remain in close connection with the Earth's energy. The Si-He-Yuan lifestyle has a long and ancient tradition, and is widely regarded as an essential element of Chinese culture.



A courtyard house shared by several families, extensional buildings covered original open space.

### 3. Present state of the old city

#### 3.1 Beijing's urban development over the past 50 years

In 1949, after the establishment of the New Chinese government, the city planners realised that Beijing could not fulfil the role of a modern 20<sup>th</sup> century capital. In the same year, the Beijing urban planning committee was established. This committee invited experts from the Soviet Union and China, to develop concepts for Beijing's urban development plan. These experts had diverse opinions and suggestions. Notably, architect Liang-Si-Cheng proposed “keeping the old city and building a new city outside of the city walls.”

The plans suggested had three common points:

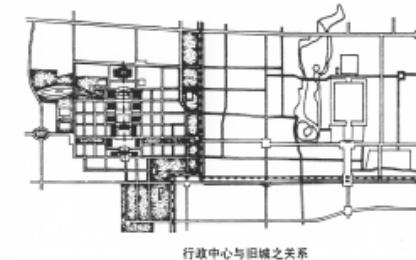
- 1) Beijing should develop not only as the political capital of China, but also as an industrial, cultural and artistic centre.
- 2) The population of the city centre should be controlled not to exceed 4 million.
- 3) The city layout should radiate from the centre, integrating a series of ringroads.

In the spring of 1958, the Beijing city government adopted the ‘Beijing City Construction Master Plan’. This plan is based on the “child- mother city” concept, proposed a main central city surrounded by 40 satellite towns. To promote industrial development, the Central Government announced that the character of Beijing should change from a Consumer to a Producer city. The **resulting** emphasis on industrialisation, including the construction of communal factories within the inner city, led to unforeseen levels of pollution and traffic congestion.

From 1966 to 1976, during the Cultural Revolution, Beijing underwent enormous changes and many of the city's ancient structures were irrevocably damaged. The Beijing City Planning Office was closed down, resulting in the uncontrolled occupation and development of land. Large numbers of people drifted into the city during this period, sowing the seeds of today's over-population in residential courtyards.



A draft plan of Beijing city in 50s'



Liang-Si-Cheng plan

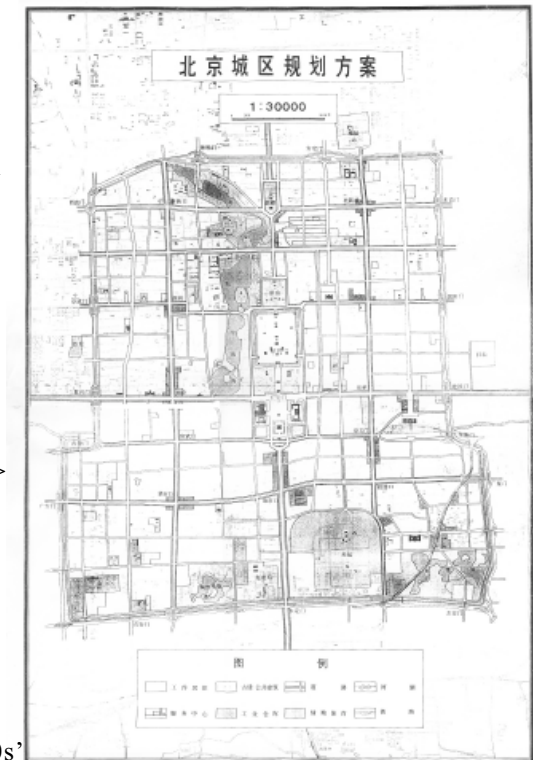
After 1978, the political and economical situation improved rapidly. In 1983, the State Council approved a new ‘Beijing City Construction Master Plan’. The plan included provisions for industrial development, population control, upgrading of the old city and improvement of basic infrastructure. This plan forms the basis of present-day road-building projects.

Under the Open Door Policy, China transformed from a planned to a market economy system. A new plan for Beijing’s development was adopted, reflecting the changing political and economic climate.

In 1993, the State Council approved the ‘Beijing City Master Plan (1991-2010)’. The Master plan established Beijing’s status as an aspiring international city. It highlighted the need for balance in integrating cutting edge modern development into Beijing’s unique ancient heritage. As a result, the municipal government adopted ‘The conservation plan for the historic and cultural city of Beijing’ in September 2002. This plan gives detailed guidelines for the protection of the old city. Implementation of this conservation plan is, as yet, unrealised.

#### Appendix: Relevant Laws and Planning Proposals:

<Law of People’s Republic of China Urban Planning>	December/1989
<Law of People’s Republic of China Cultural Relics Protection>	November/1982, edited on June/1991
<Detail Regulation of Implementation of China Cultural Relics Protection Law>	May/1992
<Regulation of Beijing City Culture Relics Protection and Management>	June/1987
<Management Regulation of Beijing City Cultural Relics Protect Site>	June/1987
<Points of Reconstruction and Extend of Beijing City Planning Draft>	September/1954
<Beijing City Construction Master Plan>	1958
<Beijing City Construction Master Plan>	1982
<Beijing City Master Plan (1991-2010)>	1993
<Planning of Preservation and Control areas for Historical & Cultural Conservation areas in Beijing Old City> (Define the 25 conservation area)	1993
<Conservation Planning of 25 historical areas in Beijing Old City>	March/2002
<Conservation Planning of Historical & Cultural City of Beijing>	September/2002

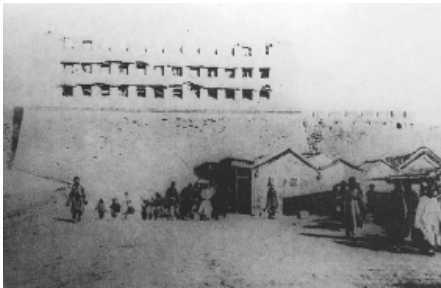


A plan of Beijing city in 1980s'

## 3.2 Dangers to the old city

### 3.2.1 Natural disasters

Beijing is located in the earthquake zone of the Hua Bei plain. In 1976, a major earthquake, measuring 7.8 on the Richter scale, hit the Beijing area, with its **epicentre at Tang Shan** (a town 180km from Beijing). Beijing was directly affected, with more than 28000 buildings collapsing in eight districts of Beijing. In addition, 100 000 buildings were damaged and classified as dangerous. In Beijing's old city area, it is still possible to see traces of damage from the Tang Shan earthquake.



Chong Wen Men in 1901

### 3.2.2 Damage and Development

Historic events in China's turbulent history have left their mark on the country's ancient capital. In the past century, the **Boxer Uprising, the Invasion of Eight-Powers**, the Japanese war and the civil war, and indeed the Cultural Revolution, have all taken their toll on Beijing's cultural heritage. Research carried by Tsinghua University indicates that over the past 40 years, especially during the Cultural Revolution, 22.5 kilometer of city wall, 22 turrets towers, and many famous imperial parks and Si-He-Yuan buildings, were damaged (Ref: "Contemporary Redevelopment in the Inner City of Beijing: Survey, Analysis and Survey, PhD study by Mr. Fang Ke, published by Tsinghua University in June 2000).

Since the late 1980s, and throughout the 1990s, China's social and economic systems developed with concomitant rises in land and property prices. The resulting property redevelopment business led to the dismemberment of many historic neighborhoods and buildings in central Beijing. Important sites were officially earmarked as cultural relics sites and were protected. Unfortunately preservation plans gave no detailed concept for the preservation of complete historic districts. The speed of the demise of the Beijing Hutong has been measured at 600 lanes per year, (ref: Xin Bao newspaper and research by the archaeologist Xu Pingfang). Most demolished Hutongs have been replaced with skyscrapers built by property developers. Developments such as Dong Fang square, Financial Street, and Jiao Dao Kou flats all stand on the sites of ancient Hutongs. The rapid decrease of Beijing's historic areas quickly became a nationwide and even international concern.

The government recognises that the extinction of the Beijing Hutong is undesirable, and has begun to develop more preservation concepts. The latest plan, published in 2002, is 'Conservation Planning of Historical & Cultural City of Beijing'. This gives 25 Hutongs protected status. Since the publication of this plan, 15 more Hutongs have been listed. The plan recommends protection. Its success hinges on strict implementation, which may well be hindered by the unsolved contradiction between Development and Preservation. If the government's preservation efforts succeed, they will bring huge cultural and social benefits. **The present report aims to support these ideas and develop them further to suggest some workable solutions.**



Jiao Dao Kou residencial flats built in 2002, a new building appearing in historical quarter.



### 3.3 Housing Reform and the Weigai System

Since the 1980s, China has been developing into a market economy. Amongst other things, this has resulted in a booming property market. In some Central European countries the pace of economic reform has been carefully controlled. A gradual pace ensures that less wealthy inner city residents are able to remain in their homes and are not forced out by sky-rocketing property prices. Countries that have reformed more rapidly, such as Russia, have seen a concomitant rise in the number of homeless people in urban areas.

China faced the additional problem that its densely-populated housing districts were centuries old and lacking in maintenance. The most recent solution implemented has been the 'Weigai' system. Under this regime, residents of dilapidated buildings are re-housed elsewhere, the old buildings are knocked down and the sites are redeveloped.

The onset of the Weigai at the latest has put an end to the idea of returning the houses to their former owners, which would have created a host of new regulatory and social problems (as experienced in Russia and former East Germany after 1990). Instead, Weigai gave the chance to start all over again, literally burying the past and building a new city.

After relocation, residents benefit from better facilities and increased living space. For the average resident, living space per head has increased from 6.5 square meters to 12 square meters in concordance with the national Xiao Kang ("modest wealth") standard. However, a different report, from McGill University, (HOUSING A BILLION Volume 3: 'HOUSING RENEWAL IN BEIJING – OBSERVATION AND ANALYSIS' by Zheng Lian) indicates that most residents' living space has actually not increased. In the 80s and early 90s, residents were often relocated on the same site, after demolition and redevelopment. They were often re-housed on the site of their original home. The living space was similar, but minus any extensions or courtyard space that had previously been theirs. Taking this into account, living space actually decreased. Since the late 1990s, relocation has usually been to the outskirts of the city. Under the Relocation Act compensation is paid. Payments increase with increased relocation distance, but decreased living space is not taken into account.

Over the last ten years, 200,000 families have been relocated as part of the Weigai (PhD study by Mr. Fang Ke, Tsinghua 2000). This has had a huge impact on the historic character of Beijing.



*Weigai project area in 1983*



*Weigai project planned area in 1991*



Unfortunately, the implementation of the Weigai has taken place without any reference to conservation planning. Property redevelopment companies have free reign to redevelop former residential areas, the only condition being that they re-house the original adequately. To maximise profit, many companies have chosen to situate relocation housing far from the city centre, where land is cheap. Once re-housed, the vast majority of residents are unable to afford the inflated prices of their redeveloped neighborhoods. Weigai's emphasis has shifted from its original aim to provide safe and modern housing for residents, into a drive to re-develop Beijing's most valuable land in the historic central areas.



The Weigai redevelopment has in some instances by-passed existing regulations, damaging historic character of Beijing. More than 4 million square meters of Hutong neighborhoods have disappeared between 1990 and 1999 (PhD study by Mr. Fang Ke, Tsinghua 2000); and relocated residents now live far from their daily workplaces and services. Many now need to commute, putting further pressure on Beijing's traffic system and contributing to pollution. From a social point of view, the residents have lost their sense of belonging, and are forced to live in anonymous high-rises with few social contacts. Lack of information about Weigai relocation makes residents fear for their homes, making them reluctant to invest in the maintenance of their homes. Some official planners now say that Weigai is failing because it doesn't allow people to remain in their own area. Some residents remarked, "for the benefit of the few, the majority must suffer".



Disappearing of Beijing Hutong.....  
Can we hand over the historical city  
Beijing to next generation?  
or we will not see them again forever??



If Weigai implementation continues without conservation and social project planning, Beijing will surely lose its famous ancient character. Prime minister Wen Jiabao has called on city leaders to place equal value on cultural and economic considerations. What happens in Beijing's historic residential areas will surely act as an example in deciding the fate of historic buildings all over China. In recent years, the historic areas of many Chinese cities have totally disappeared. In these cities, the priorities of commercial developers were given stronger weight than those of the Cultural Relics Department. In some cases, developers have totally missed the point as far as conservation is concerned. They have constructed replica historic streets as tourist attractions, having first demolished the original historic district. This kind of practice although criticised at the highest level, has as yet not been effectively legislated against. In line with the suggestions by prime minister Wen Jiabao, this Conservation Proposal suggests the immediate reform of the Weigai system. Conservation and Rehabilitation Planning should then become the principle consideration for the rehabilitation of historic areas.



The last meal in Hutong

The following measures are recommended:

- \* Weigai should be strictly limited where historic residential areas are concerned, taking into consideration the original structure (building material, height, open space etc) of the area.
- \* Housing standards should be improved with minimum relocation of residents, ensuring continuity of social structures.
- \* Residents should be given clear information about Weigai implementation. Transparency regarding planning guidelines and security of tenure will give residents the security needed to commit money to maintaining their homes.
- \* For the target area of the present Conservation Proposal, i.e. the Hutong districts between Ping An Da Dao, Xin Jie Kuo, the north Second Ring Road and Jiao Dao Kou, the Weigai system should be suspended with immediate effect, until a decision about the area's preservation has been made.



Looking for my new home....



Hope not to be demolished....



### 3.4 Present condition of remaining historical buildings

Since 2001, in cooperation with Tsinghua University's Architecture Department, THF conducted a study of the remaining historical buildings in Beijing's old city area. The first phase has been the identification of intact historic neighborhoods, remaining historic buildings and high-rise construction within the second ring-road.

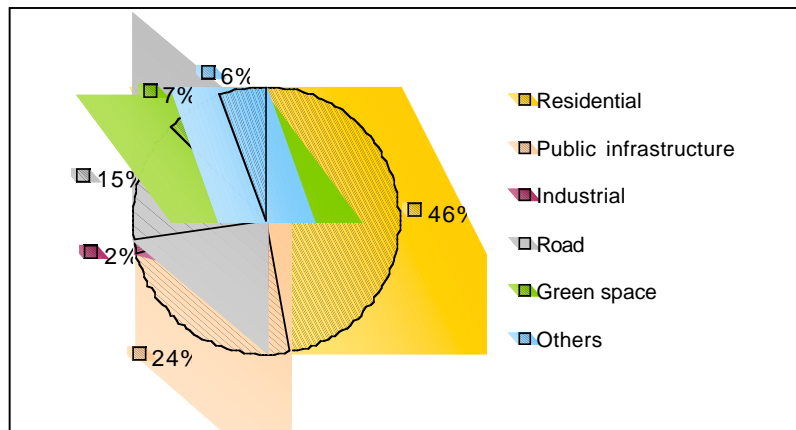
Many of the remaining historic buildings are concentrated within the 25 protected areas, but THF felt that historic neighborhoods should be preserved on a wider scale, as original city quarters rather than in the form of fragmented lanes and buildings area. Land use was also identified by the study as an important aspect for preservation, to retain the different characters of the areas studied.

The 'Conservation Planning of 25 Historic Areas in Beijing Old City' supplies official data analysing the land use:

Total size of the 25 protected areas: 1038 hectares (10.38 square kilometers)

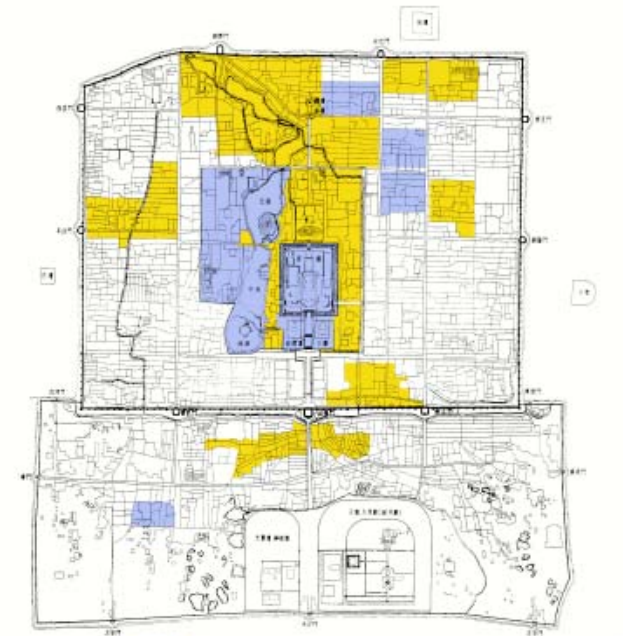
The population: 285,000 people (95,000 families)

Population density: 275 people / hectar



#### Current Land Use

Residential  
Public infrastructure  
Industrial  
Road  
Green space  
Others



25 conservation historic areas

5 additional conservation historic areas

#### Beijing Old City conservation areas

#### Area (hectares)

490ha (47%)  
247ha (24%)  
17ha (1.5%)  
154ha (15%)  
69ha (6.5%)  
61ha (6%)

The data shows clearly that almost half of all land in the historic areas is residential in function. In order to preserve the current balance, the present land-use proportion should be retained.





### 3.5 Management of the Old City

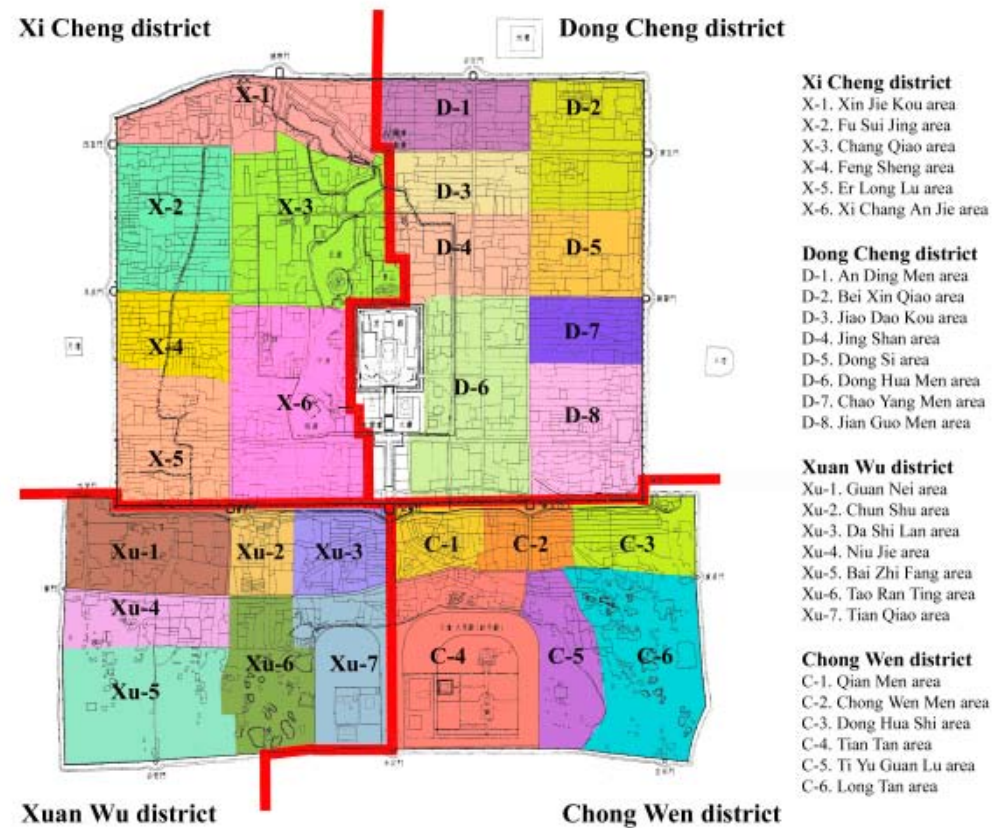
Beijing is divided into two counties, comprising 16 districts. The Old City area, inside the second ring road, is divided into four districts. These are Dong Cheng district, Xi Cheng district, Chong Wen district and Xuan Wu district. The day-to-day management of the Old City is handled by a number of departments, including the Capital Planning Committee, the Beijing City Planning Committee, the Beijing City Cultural Relics Office, the Housing Office and Beijing City Construction Bureau. City Planning issues need to be approved by the State Council. Details of Beijing's city management most relevant to conservation planning are summarized below.

#### City Planning Management

According to the stipulations of the Beijing City Master Plan 1991-2010, each District Planning Bureau is responsible for planning and supervising the implementation of road building, traffic management, environmental protection and historic conservation.

#### Culture Relics Protection

In 1982, China's State Council conferred the status of "Historic Cultural City of China" on Beijing. Under China's system of heritage protection, Beijing has 3550 sites listed as cultural relics under different levels of preservation. These sites cover an area of over 2 million square meters. Thus Beijing has both the largest cultural heritage area and the largest number of individual sites of any city in China. Five Beijing sites have been accepted as world heritage sites, a further 60 sites are listed under national level protection, 234 sites under municipality level, 517 sites under county and district level, and 2513 sites are locally listed. The protected sites include Imperial palaces, religious buildings, Imperial gardens, Guild buildings, the residences of famous people, remnants of the city walls, pagodas, bridges and revolutionary monuments. According to the laws and regulations of Culture Relics Protection, the local Cultural Relics Bureau in each district is in charge of management and maintenance of local-level protected sites.



Areas management in Beijing Old City quarter

## **Housing Management**

The Housing Department is in charge of the management of four types of housing, namely public housing, private housing, work unit housing and protected cultural relics. Responsibilities are divided as follows:

Public housing: the Local Housing Department is in charge of day-to-day management and maintenance.

Private housing: Private owners take full responsibility for maintenance. Their ownership claim can be superseded by higher-level area planning and redevelopment.

Work Unit housing: Government work-units provide housing for employees as part of their benefit package. Each work unit is in charge of management. Sometimes the employees contribute to maintenance if they have long-term tenure.

Cultural Relics protected site: the local Cultural Relics Office is in charge of maintenance. Where protected sites are inhabited, the residents are required to respect the architectural integrity of the building.

## **Economic management**

The Industry and Commerce Administration is in charge of economic activities, supervising markets, business licensing, etc.

## **Public Security and Population Management:**

For Public Security, there is a main police station in each district. Branch police stations manage security and safety of communities, with a lot of residential cooperation.

Residential management is the responsibility of the police, being divided into management of local and non-native residents (those without a Beijing residence permit, including migrant workers, temporary visitors, students and foreigners.)



Local police station

## **Environment and Hygiene Management:**

Environment and Hygiene Bureaus at local level are remarkably efficient at keeping the Hutong lanes clean and collecting and recycling rubbish.

## **Greens Management:**

Although there are not that many green spaces in the Hutong area, there is a great variety of trees, both in the lanes and within the courtyards. The Green Office is in charge of recording and maintaining these trees.

## **Tourism:**

Cultural heritage is one of the main features of Beijing city, making Beijing one of China's top tourist destinations.

The conservation of the remaining historic areas is vital to Beijing's identity and for the city's long-term commercial interests.



Keep clean street day to day

## 4. Social Survey and Conservation Studies in Target Area

### 4.1 Introduction of the Three Target Areas

In early 2002, the Architecture Department of Tsinghua University and THF began a cooperation project to identify an alternative to the current practice of commercial redevelopment of Beijing's historic residential areas. The project looked at three neighborhoods in the northern part of Beijing's old city. All fall within the area bordered by Jiao Dao Kou street (to the East), Xin Jie Kou street (to the West), Ping An Da Dao (to the South) and the 2<sup>nd</sup> Ring road (to the North). When the project started, this was still a reasonably well-preserved coherent historic residential area.

The three areas studied were in the Gulou, Shichahai and Nanluogu xiang neighborhoods. All three areas fall within the bounds of the "25 historic and cultural preservation areas of Beijing"

From the start the aim has been to look at the three areas as a whole, with a view to creating a larger protected area within the boundaries described above. The preservation of a comparatively large intact area, free from major roads and multi storey buildings, would help to maintain the true flavour of Beijing's ancient centre.





### Zhong-Gulou area (Bell and Drum tower area)

The Gulou area, centred on the famous Drum and Bell towers, is one of Beijing's most atmospheric neighborhoods. It is located at the northern end of the axis that runs North-South, through the centre of the Imperial Palace complex. Originally built in the 13<sup>th</sup> century, the towers were used throughout the Ming and Qing dynasties to sound out the progress of time. The ringing of the bell and beating of the drum informed citizens of the time of day and also indicated the specific days of the lunar calendar. The towers are now museums recognised as important historic monuments. Today, the two towers stand at either end of a small square surrounded by old residential courtyard houses. The square is a popular recreation area for local residents, both young and old. An important feature of the Gulou area is the integration of historic monuments within a vibrant residential area. Plans to replace residential buildings with a parking lot for tourist busses are akin to killing the goose that lays the golden egg. A view of a car park from the two towers would hardly rate as a tourist attraction.

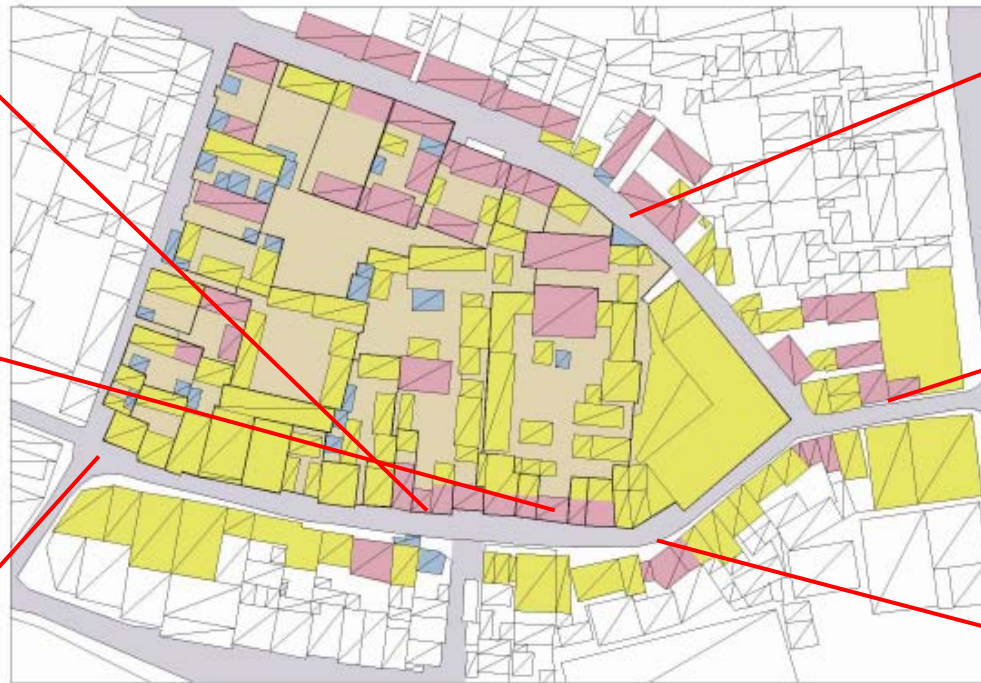
The survey focussed on 16 courtyards that face the small public square between the towers.



## Yandai Xiejie area

Yandai Xiejie is a historic residential and commercial street located between Dianmen wai dajie (road) and Shichahai lake. This is one of the oldest Xiejie (sloping streets) in Beijing. It was known as Da Yu Ting Xiejie during the Yuan period, later becoming Gulou Xiejie. At the eastern end of the street was a famous tobacco shop, built during the later Qing period to satisfy an increasingly popular habit. As its signboard, the shop displayed a huge Tobacco case - a 'yindai'. Such was the appeal of this local attraction that the street was officially renamed Yandai Xiejie during the late Qing period. The Guan Fu Guan temple, in the middle section of the street, was established during the Ming period. Currently residential, it is one of the oldest buildings in the area. Most of the buildings that face onto the street now house small shops selling antiques, clothes, snacks or stationery. Many of these still retain the architectural features of traditional Chinese shop buildings, with old carved windows and screens. Yandai is quickly developing as a tourist sight, boasting a harmonious combination of residential and commercial buildings.

The Survey area included 23 courtyards within a triangle formed by Yandai Xiejie and Da Shibei and Xiao Shibei Hutongs, inhabited by 160 families.





## Chaodou Hutong area

Chaodou Hutong is located towards the southern end of Nanluogu xiang street. This area has kept the ancient street grid pattern dating back to the Yuan dynasty. Close to the northern end of the Imperial City wall, it was a high-class neighborhood, housing members of the Qing aristocracy. Today, the area contains some of Beijing's most perfectly preserved Hutong structures.

The survey area falls between Chaodou and Banchang Hutongs, with 104 courtyards inhabited by around 600 families. The detailed survey was made in selected courtyards.





## 4.2 Survey questions

The team consisting of THF experts and Tsinghua students conducted a social survey, by interviewing over 80 families in the three target areas. The aim was to gain an understanding of the problems, conditions and residents' opinions, in order to create an adequate program for the conservation of these neighborhoods.

Each courtyard was surveyed, using a questionnaire to interview each household (see appendix). The questions fell under four categories:

- a) **Occupancy and ownership**
- b) **Building condition**
- c) **Understanding the community**
- d) **Residents' opinions regarding conservation and tourism**



Meeting with students before starting social survey



Social survey on the fields



## 4.3 Survey results and analysis

### a) Occupancy and ownership

#### a-1. Population

Beijing has 13.6 million permanent residents and an additional floating population of 3.8 million. According to our survey data, around 70% of residents in the Yandai and Gulou survey areas are original Beijing residents; in the Chaodou area only 55% are from Beijing. In the Chaodou area, many courtyards belong to work-units that house their employees, many who come from other parts of China.

60% of the residents in the surveyed areas have lived in their homes for more than 30 years (i.e. since the Cultural Revolution), and their off-spring are still living with them or nearby. This shows that the area's residents have formed a comparatively deep-rooted community. Because of the deep social changes and upheavals in China during the Cultural Revolution it is rare to find a family still inhabiting their ancestral home anywhere in urban China. A residential community that has developed over the past three decades is therefore a healthy development for Beijing, and the community should be spared from new uprooting. Preservation of the community is an important aspect of the preservation of the historic buildings.

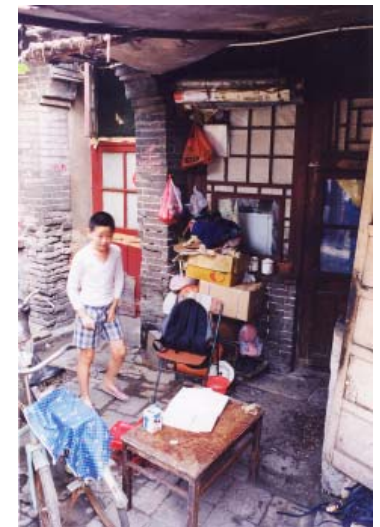
#### a-2. Living space

In the three surveyed areas, the average living inner space per residential unit, which we define as family, is two rooms (around 15m<sup>2</sup>), with each family consisting of an average of 3.5 members. The living space per person here is much less than China's official average of 20.23m<sup>2</sup> per person, and also still far from the "Xiao Khang" (modest wealth) standard of 12m<sup>2</sup> living space per person.

In the Chaodou area, the residential space is larger, there are on average three rooms per family. The other two areas with their higher density are suffering from the frequent problem of overcrowding within a courtyard. To increase the available space per family unit will be a key factor for achieving successful rehabilitation.



A kitchen set up in extension building



Children make homework at courtyard

### **a-3. Property**

There are three main categories of housing in urban China: public housing (government owned and housing-bureau managed), work-unit owned and privately owned. In 1982, according to official data, 53.6% of all municipal housing floor space was owned by state enterprises and institutions, 28.7% was managed by the municipal housing bureau, and 17.7% was in private hands. Over 80% of housing were thus indirectly controlled by the central government.

20 years later, according to the THF survey, 65% of all surveyed buildings in the Yandai and Gulou areas are public housing, with the remains being privately owned and no work-unit housing. In the Chaodou area, 63% are work-unit housing, 26% privately owned, 11% public housing.

#### **-Public housing-**

Public housing has been established in China in the 1950s. Residents live in government-owned buildings (mostly nationalized since the 1950s). The buildings are managed by the local housing office. The rents are subsidized and are only a fraction of rent for comparable housing on the private market. According to our survey, in 2002, the average rent paid by each residential family rent is 44.30 rmb per month, around 2 rmb per square meter. Since the early 1990s' private property development has been allowed as part of the economic reforms. This quickly saw the land prices in central Beijing soar after having been kept artificially low for 40 years. The public housing rents increased only nominally. This protects the residents from market forces, but also had negative effects. Housing in old courtyard buildings was so cheap that it seemed to many residents not to be worth any investment of effort or money in upkeep (especially combined with the insecurity about the length of tenure- most residents are convinced that sooner or later their courtyard will be demolished and they would have to move away). The housing department had no sufficient budget for regular maintenance, either. After 40 years of neglect, many buildings have assumed a run-down appearance, making them easy prey for the Weigai replacement system.

#### **-Work unit housing-**

Work units used to be government companies or institutions, and they often provided free or subsidized housing for their employees, a practice established in the 1950s. These days, there are still government-owned work-units, and some privatised companies are still retaining the practice of supplying housing to their employees (as part of a parcel also including salaries, medical care and sometimes even schooling for the employees' children). The average work-unit housing rent is 64 rmb per month in the surveyed buildings. In general, we found much better conditions (including better sanitary and heating facilities) in work-unit housing than in public housing.

#### **-Private property-**

Despite the upheavals of the late 1950s and 60s, there are still some people living in their ancestral courtyard. Others bought courtyards or received them from the government. In cases where private owners rent out rooms, the average rent can be as high as ten times as much as in work-unit housing and 15 times as much as in public housing – we found people paying between 400 and 800 rmb per month to private owners for one room. This gives a useful indication of the market value. Even a private owner has no secure tenancy, however, since if an entire neighborhood or lane gets demolished and redeveloped, private homes are also routinely bulldozed. Lawsuits against redevelopment schemes so far have always been lost. So the real market value for a room with secure tenancy is likely to be much, much higher. Generally private housing is in good or reasonable condition, because despite the insecurity mentioned, the owners maintain their property. There is also more space per person



## **b) Building condition**

### **b-1. Condition**

The strict traditional space delineation of the Beijing courtyard house started to become more flexible after the fall of the Qing dynasty. Rules proscribing designs and sizes in relation to the hierarchies of imperial society were no longer in effect. During the social reforms of the 1950s and the Cultural Revolution, courtyards were sub-divided, and in order to accommodate thousands of homeless people after the 1976 Tangshan earthquake, further sub-division were made, leading to a sprouting of flimsy extension buildings that fill up most of the courtyards of publicly-owned housing. Residents have also often modified or reconstructed the original buildings. However, during our survey, we found it was possible in many case to determine the historic structure.

Courtyard houses converted into public housing have been most drastically modified, but some buildings in the survey area marked as cultural relic sites have preserved their original structure reasonably well, even if used as housing. Grading the three areas, in Chaodou we found the largest number of intact structures, in Gulou most courtyards have been filled with extensions, and in Yandai, the street fronts with their old carved windows are preserved, but inside the original structures have been lost in almost every case.



Courtyard open space is occupied by extension buildings

#### **b-1-1. Common structural problems**

The most common building problems that we found were roof leaks, damages to the timber structure caused by insects and rot, and ground humidity creeping up the walls. Most problems were caused by lack of maintenance. Poorly-lit rooms with poor ventilation increase the problems caused by humidity, and rehabilitation must include mechanisms to correct these faults. In regards to rehabilitation, several of the sites require extensive repairs of the roofs, but after an initial investment to correct decade-old damages, regular maintenance will be not very costly if done on an annual basis. We found rehabilitation preferable to reconstruction.



Timber structure damaged by roofleake, in many cases structure problems caused by water and humidity

### b-1-2. Present state of maintenance

We found buildings in the Chaodou area to be comparatively better maintained, probably due to the high amount of work units and cultural relic-designated sites. In Yandai and Gulou, the facades have been maintained and sometimes repeatedly restored, but not much work has been done inside, this is probably due to the exposure of these two areas to tourism. We found many cases where the residents had done some maintenance work, but we were told that because of financial limitations and insecurity of tenancy, these residents could not address all the problems of their homes. In addition, they also often lacked technical knowledge about how to solve problems in the roof or timber structure, or how to deal with humidity infiltration. In the public housing, the housing department sometimes fixes roof-leaks and paints facades, but clearly the responsibility for upkeep was very unclear. Many residents simply blamed the government and were unwilling to undertake any major repair works.



Roof covered by waterproof sheet, lack of technical knowledge for proper maintenance

## B-2 Infrastructure and facilities

### Water

We found at least one water tap in every courtyard, but sometimes that would be shared by up several families, with a common water meter. Many families extended waterlines into their homes on their own. Raising water fees are now causing concern or disagreement about water usage, and some residents have said they would prefer that each resident should install their own line (or at least their own meter) to avoid disputes over water bills.

Most residents rely on public shower facilities (cost about 10rmb per shower). Many people have built simple solar shower systems that can be used during summer, but these systems are currently not available to all due to restrictions of space and lack of drainage facilities. In the Chaodou survey area, 63% have access to a shower in some form (even if only during summer).



Simple solar shower system setting on the roof



Common water tap

## Sewage

We witnessed new sewage pipes being put underneath many Hutong lanes in the Chaodou area in 2000-2002, but the majority of courtyards had only very basic drainage facilities, with one drain hole connected to the street sewage. Many residents have built makeshift drains from their rooms connected to the drain hole.

To improve the living conditions in the courtyard houses it will be an important task to upgrade and redesign water supply and sewage and drainage facilities, including separation of rain water and sewerage for treatment to combat Beijing's chronic water shortages.



Sewage installment in Hutong alley

## Toilets

90% of residents in the survey area are using the public toilets in the streets, usually located very nearby.

In the Chaodou survey area there are 8 public toilets. This area has 600 families, so each toilet is shared by 77 families on average. But a few families have private or shared toilets in their courtyard.

In the Yandai area, there are 3 public toilets serving 160 families. On average 53 families share a public toilet in this zone.

In the Gulou zone are 3 public toilets, serving around 100 to 130 families in the 16 courtyards. On average here, 40 families share a toilet.

62% of the surveyed residents said they had a negative opinion about the toilets, citing both inconvenience (especially at night and during cold winters) and lack of hygiene. The public toilets are maintained by the government, and in residential areas, their usage is free of charge. They are usually not connected to any sewage system, but emptied regularly via pump trucks. Traditionally, every courtyard had at least one composting toilet, but the system of manure collection became obsolete as tenants, desperate for space, took over most of the toilet spaces for building extensions. In some cases near Yandai we still found the original composting toilets.

Some people wish to install a water-flush toilet in their home or courtyard. But space for such an installation needs to be identified, and a connection to the sewage needs to be made [and paid for]. In the Chaodou area, 22% of the resident families already have at least one water-flush toilet in the courtyard.

New public toilets appearing in the Hutong area within water flush system, improving the hygiene conditions considerably, especially in the summer.



Public toilet (left) regularly need to clean up by pump truck



New public toilet (right) with waterflush system, improving of hygiene conditions





### Heating system

95% of residents in the survey area use coal heating during the winter period (November to March usually has sub-zero temperatures). The system commonly used is not very efficient, and causes air pollution, but it is very cheap as the coal prices are believed to be still subsidized, though the subsidies are being phased out and the coal prices are now rising. Some residents in the Chaodou area spent around 300-400 rmb per winter to heat a single stove with coal.

In the Chaodou area, some residents used central heating based on oil, put in place by their work units. We also found various electric systems (air-conditioner, electrical heater), but because electricity is comparatively expensive, it is not a common solution. In the Dongsi and Xisi areas, electric heating systems have been recently installed and will be used for the first time in the winter of 2003/2004. Gas heating systems are not yet available in Hutong areas, but would be a 'clean' alternative to coal.

The municipal government has announced plans to ban the use of coal heating systems before the Olympic Games to be held in the city in 2008. So it is necessary that some new heating system should be installed urgently. From an economic point of view, a centrally-installed scheme would be practical if an adequate metering and payment scheme can be put in place. After the experiences many people have had with centrally-planned schemes, individual solutions put in place by the residents and owners might actually be more economical, but any improvement of the air quality would then be subject to annual monitoring of each individual heating scheme. For this reason, we would propose a central scheme.



Coal heating is the most popular system in Hutong residential area

### Extension building

More than 70% of all resident families surveyed have one or more extension buildings, usually makeshift constructions out of bricks with asbestos or tin sheet roofs. These rooms are mainly used as kitchens, but in some cases also as bedrooms or for storage. Officially it is necessary to get permission from the housing authorities to erect such structures. Apart from the flimsiness of design and often hazardous nature of materials used, extension buildings have also filled most of the public courtyards of the surveyed buildings, blocking sunlight access and causing a slumification effect, responsible for much of the bad image of Hutong residences. Removal or modification of extension buildings is will be necessary, but are subject to whether the underlying problem of finding adequate space per resident can be satisfactorily solved.



Extension buildings, which built front of historical buildings, occupy open space and block sunlight in the rooms

## Living space improvement

Since most of the courtyard houses were originally designed for one family and are now inhabited by several separate families, lack of space is the greatest challenge to any rehabilitation effort. The installation of new facilities like toilets and showers is hampered, and in many cases the available space is simply too small to allow a dignified existence. We have identified a number of solutions:

A). Redesigning the courtyard space and the extension buildings. By allowing some extensions to the original buildings, to be built with adequate materials, we can ensure that people at least do not have significantly less space than compared with before the rehabilitation. Present extensions are built with poor planning and without consultation of the other residents.

B.) We found a lot of public space cluttered with stored construction and heating materials, and other strange things. New storage facilities can be created underground.

C.) Interior upgrading: Some old buildings have quite high ceilings, sufficient to create loft spaces. At present, the space underneath the ceiling structure is unused and blocked, and the usual roof leaks need to be fixed before that space can be utilized.

The government has also expressed concern about the possibilities of fire hazards to communities living in crowded courtyard homes in narrow alley ways, and any rehabilitation plan needs to incorporate a fire control system.



Many materials are occupied public space, need to be cleaned up and get more open space



Original facade of building with much of light in the room

### **b-3. Summary of common problems**

Most of the structural problems that we described above can be fixed reasonably easy. We identified a number of factors that are currently preventing the residents from doing so.

- \* Insecure tenancy – as we have described above, residents generally assume that sooner or later their courtyard will be torn down under the Weigai system. Even private ownership is insecure, as the current practice favour area redevelopment schemes over land ownership.

- \* City plans are not transparent – most residents usually only learn of their relocation as little as ten days before demolition starts (official regulations merely state that developers need to inform residents after demolition has been decided). This further undermines any good will from the residents to undertake regular maintenance.

- \*Most residents don't have enough money to undertake extensive repairs, such as roof repairs. The insecure tenancy situation prevents them from obtaining bank loans. Most residents also lack technical skills to identify the root causes of problems and adequate repair methods, opting at the most for temporary patch-ups.

- \*Lack of responsibility for housing management, especially for public housing.

- \*Lack of infrastructure, improvements of water supply and sanitation facilities are dependent on the area's overall infrastructure

We asked the residents how satisfied they felt about their present homes, not connected with choosing between moving or staying. 64% of the residents were mostly satisfied and like their home, 26% were dissatisfied and disliked their home, 10% said simply that they have gotten used to it.



### c) Understanding the Hutong community

Hutong residents often see themselves as the true Beijingers, and they speak their own Hutong dialect, which is quite distinct from Putonghua, with unique words, expressions and ways of greeting. We found that even though in some courtyards there is little contact between different resident families, overall people have cordial relations and help each other out whenever necessary. People also like to spend their free time sitting on little stools in the alleys and talking to their neighbours. When one strolls through the Hutongs, despite of overcrowded dilapidated courtyards and often-smelly public toilets, there is a special idyllic atmosphere of a community at ease with its environment.

So it came as no surprise that surveyed residents expressed general satisfaction with their environment. Daily transportation (work, school etc), shopping, garbage management system (operated by the government), relationships with their neighbours and the central location within the city were all overwhelmingly rated as positive.

80% of surveyed residents are of the opinion that the ‘Hutong lane’ is an important public space. Visitors and passers-by immediately notice people chatting in the lanes, doing their exercises, sitting on little chairs playing chess. The lanes are perceived as a pleasant environment, sunny and green, where people can relax a doorstep away from their homes

Local vegetable markets and small shops are located in most Hutong lanes. These provide convenient supply of daily necessities for the residents, and additional spots to meet and interact with other residents. Most residents do not need to leave the Hutong environment in order to fulfil their basic needs. Public sanitation and garbage collection is well-managed by the government. Most residents expressed their satisfaction with the garbage management system, with only Garbage separation for easier recycling named as possible improvement.



Children playing on Hutong street, a safe place without traffic



Most of daily necessities are available in Hutong lanes



People enjoying chess, Hutong is an important public space



The traffic situation inside the lanes was not rated well. Most residents, who in their majority don't own cars, wanted to see some form of traffic control, as they felt that outsiders brought too much car traffic into the alleys, causing noise and air pollution, danger from accidents, traffic jams and general disturbance of the otherwise serene environment. If more big roads will be cut through the Hutong areas (or if existing roads are increasingly being widened), residents and traffic experts think that this will bring more traffic into the inner city, and so instead of solving the traffic problems will make them worse.



Parking violation in alley



Cars jamming narrow Hutong alley



Danger to cross the road

The big advantage of Hutong neighborhoods is that life is usually within walking distance – residents can walk to do their shopping. And the bicycle, despite being regarded as somewhat old-fashioned, is still the most convenient, environmentally-friendly and congestion-relieving mode of transportation, and will rightfully remain an integral element of day-to-day transportation within the historic neighborhoods.



Hutong alleys designed for non-motor facilities, life is enough convenience within walking distance



Therefore transportation within the areas is already quite convenient, and the best service one can do to Beijing is to prevent this mode of life from being spoiled by car traffic blocking the narrow alleyways.

Suggested ideas for traffic control (for example, allowing limited access only for residents), developing central parking facilities from where residents would have to commute by foot or cycle to their homes, and the development of public transportation schemes, e.g. electric mini-buses that serve the Hutongs via easy-to-reach collection points that would not have the busses go through the narrow inner alleys.

#### -An idea of traffic control-





In summary, the surveyed community sees the advantages of living in Hutongs as being conveniently located, making transportation, working and shopping easy. In addition, the rents are cheap, the neighborhood is pleasant and safe, the community is closely-knit, the environment is peaceful and quite, and the atmosphere is that of cultured traditional Beijing life.

The disadvantages were identified as having too little space, and correspondingly overcrowded courtyards, as well as poor infrastructure, many houses being in poor condition, and having an uncertain future under the Weigai system.

When the surveyed residents were offered the hypothetical choice to move into a newly-built apartment block, more than 60% expressed their preference to stay in their present Hutong lane under any circumstances (even if offered additional compensation, and only 34% agreed to move out if offered what they regard as adequate financial compensation, and depending on the suitability and location of the new flat. Without sufficient compensation, 82% would refuse to move.

Under the present system, residents are usually located quite far from the city center in high-rises with central heating, shower and flush-toilets, and they receive some compensation, but have to buy their new flat upfront for an amount higher than the compensation, so in most cases people get relocated and need to pay for it. The developer not only obtains highly-valuable inner city lands, but makes additional profit from selling flats in undesirable locations.

The local community is a core element of a city, which helps people to organize their activities and which fixes social rules of hygiene, safety and environment. The level of interactivity is determines the efficiency of organizing the necessary actions for the proposed improvement and rehabilitation works. Different communities are part of the individual character of Beijing's different residential areas.

The long-term residents are the core element of a community. They spent their life within their neighborhood, most are strongly attached to their homes, take more care and represent continuity.

Temporary residents have few connections to their areas, usually care less and are not willing to invest in building or area maintenance from their own money. The current population mix in the Hutong quarters is a result of the social developments of the past 50 years. Many of the eldest residents have already spent several generations here. These residents form the core of the communities and without them, Hutongs would be much more life-less. Urban planning can't ignore the participation of communities if it is to achieve healthy urban development. Encourage the residents for participation of Hutong preservation is one of the most important issues.



Repair shoes & bicycle service

Selling home-made pickles



Community activity participated by local residents

## **d) Residents' opinions regarding conservation and tourism**

### **d-1 Conservation**

68% of surveyed residents were aware about the regulation adopted in 2002 that officially declared 25 historic areas in Beijing as protected, and they were further aware that their area (i.e. each of three surveyed areas) was also included. But some of them expressed their doubts of the meaning of this "protection", citing the example of Nan Chi Zi conservation area, another of the 25 protected areas, which was partly demolished in 2002.

80% of the residents suggested that the Hutongs should be preserved and passed down to the coming generations as an important part of Chinese cultural heritage. So we found the majority of inhabitants being concerned about the issue of conservation.

The following suggestions were collected from the residents during the survey:

- \* Extension buildings should be removed and density within each courtyard should be regulated.
- \* Their area's overall environment and especially the sanitary conditions could still be further improved.
- \* Well-preserved courtyard houses should be restored and ordinary courtyards should be reformed [i.e. rehabilitated including some reconstruction].
- \* The Hutong lanes should be preserved in their entirety.
- \* The green environment within the lanes should be preserved.
- \* It is necessary to have a good overall plan in order to successfully preserve the Hutong areas.
- \* "If there are no more Hutongs then there will be no Beijing" many said.
- \* Maintenance and improvement of the houses should be done building by building, i.e. organized at courtyard level.
- \* Co-operation between the government, residents and foreign investors/donors was suggested as beneficial for conservation.
- \* Any conservation would depend on government intervention in the form of regulations and laws that should protect homes and residents.

Many residents think that small-scale repairs and regular maintenance at courtyard level will be the realistic methods for preservation of the Hutongs, at the same time many thought it necessary to have strong support from the government with effective conservation laws that protect both the community and the physical structures (Hutong lane structures and individual courtyard houses). When asked to consider all the positive and negative aspects of Hutong life, and then decide whether they would agree to move under the present system, 82% would choose to stay in the Hutongs. If they would be offered what they would regard as adequate compensation and reasonably acceptable new housing, still 60% would refuse to move.



Modern and Traditional life style, which would you prefer?



## d-2 Tourism in Hutong

77% of the residents think that tourists like to see Hutong life and Hutong culture, because Hutong tours already bring lots of visitors from all over the world. But only 35% would welcome tourists to enter their courtyards, while 39% would disapprove and 26% said that they did not care whether they came in or not. Some were worried that their living conditions were too poor to be seen by outside visitors, so they thought that repairs and improvements would be necessary before they would welcome visitors.

23.6% of the residents thought that tourism will directly benefit the Hutong community and area, because the government would need to pay more attention to the area and improve the infrastructure, offer tax reductions to businesses in the area, and direct economic benefits from money that tourists would spend in the area (shopping, eating, entrance fees etc).

65% of the residents were sceptical suggesting that the government and the government tourism department would absorb the benefits with little left for the residents, and a negative result would be that rents were likely to increase if the areas became more popular, which would force many residents to leave.

But the majority, 60%, thought that Hutong life and tourism could co-exist and prosper together.



Selling Chinese opera goods



Tourist enjoy shopping souvenir

Popular Hutong tour -Go to Hutong-, carry tourist by Rickshaw through Hutong alleys



Foreign tourist enjoy walking in Hutong





One of the survey areas, the Yandai street, is now rapidly evolving into a popular evening entertainment district, with many recently-opened bars, restaurants and souvenir shops. From the historic building conservation point of view, the shops exceed the height limit of the traditional tiled-and-gabled roofs and fill up the street with their tables and parasols. At night, loud music and flashy lights are disturbing the surrounding residential areas. Traffic pressure is increasing, with the surrounding alleyways increasingly jammed. Given the natural attractiveness of the area (by the Hou Hai lake) such change is unavoidable under a market economy. However, this development cannot be seen as a blueprint for the future of Hutong areas, but merely as a special case. Transformation of all Hutong lanes into entertainment districts would also lead to the demise of Beijing's historic neighborhoods. To protect the historic areas from excessive tourism and commercialisation, a healthy balance of **50%** residential use with the balance made up by administrative and commercial use should be the official aim of the rehabilitation project. To create fake historic streets for tourists, such as in Beijing's Liu Li Chang, may be attractive for commercial reasons, but has nothing to do with the aims of historic preservation and neighborhood rehabilitation, so this practice is also not recommended for the remaining Hutong areas.



Bar opening at night, loud music will disturb residential area



Over height-limitation buildings



Same point of view at Yandai street in 2001(above) & 2003 (right)



Guang Fu Guan, the taoism temple is surrounded by bars



#### **4.4 Conclusion of the Survey**

Despite various problems relating to the housing conditions, the majority of residents, more than 60%, want to continue to live within the Hutong community even if offered reasonable alternatives. Much more serious than leaking roofs and missing toilets is a general feeling of insecurity regarding their homes, because demolition and relocation could arrive any day at their doorsteps. This prevents residents from maintaining their buildings. The residents also overwhelmingly praised the life-quality within a Hutong environment in terms of quietness and green-ness, convenience of location for working and shopping, security, and having excellent social relations with the neighbours. For most, this outweighed the lack of space and facilities within their homes. Many residents expressed awareness that the Hutong residential system has not caught up with the rapid changes in the rest of the society, where the economic reforms abolish old subsidies, and so there was a general feeling of anticipating some kind of change. The communities in the surveyed areas consisted of a high percentage of native Beijingers and long-term residents who have lived there for more than 30 years.

The survey has shown that the ancient Hutong system is an ideal form of organizing a residential area, and the area has completed the transition from feudal one-family ownership to modern multi-family tenancy reasonably well. In our opinion, the residents would make an important and highly valuable contribution to any reform of the Hutong system, and should be actively involved. The best solution for rehabilitation lies in micro-management, finding solutions best-suited for each individual lane courtyard and utilizing contributions by the residents. Each area also requires investment in infrastructure upgrading, traffic restriction controls and protection of the environment. This is the most realistic way to preserve The Hutong of Old Beijing.

Because of the high cultural and historical value to Beijing, the current redevelopment program of Hutong areas should be halted immediately.



## 5. Pilot project plan for rehabilitation of courtyard house and community

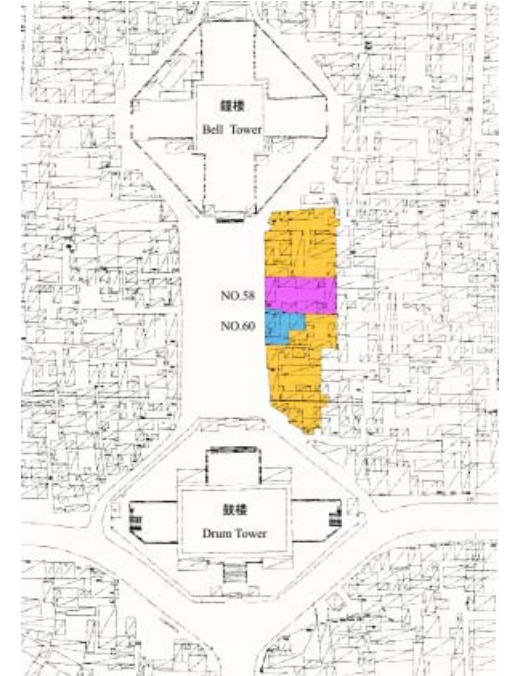
### 5.1 Aims of Pilot project

The aims of the project are:-

- 〈 To improve living conditions
- 〈 To avoid relocation of the majority of residents
- 〈 To take into account the opinions of all concerned parties (according to survey results)
- 〈 To preserve historic buildings and courtyards according to relevant government regulations for the protection of cultural heritage
- 〈 To create a new form of cooperation between the major stakeholders to achieve conservation and rehabilitation of Hutong areas

The pilot project sites located at east side of the squair between Drum and Bell tower.

Objects are 'Zhong Lou Wan Hutong NO.58 and NO.60 courtyards'. This area is one of the social survey and conservation study area, implemented by co-operation between THF and Tsinghua university school of Architect in 2002.



Bird's-eye view of the pilot project area



## 5.2 Structural analysis

### 5.2.1 Historic background

Zhong Lou Wan Hutong NO.60

This house was built during the Guang Xu period, about 150 years ago. The main building, which originally housed the ancestral shrine of the Yan Family, was not inhabited since it was considered improper to live in a building containing Buddhist images. During the Cultural Revolution, the house was confiscated and all the rooms, including the shrine, were converted into housing for several families. The original owners, the Yan family, still occupy some of the rooms. The house is built around a courtyard, with the main buildings facing east instead of the usual southern orientation. Despite some additions and alterations to the courtyard structure, the building retains many original features including the roof tiles, timber structures, carvings and painted decorations.

Zhong Lou Wan Hutong NO.58

This house was built towards the end of the Qing period, more than 100 years ago. During the Republican period, the courtyard belonged to the Bao Ding county magistrate. After the Cultural Revolution, it was owned and inhabited by a woman who later emigrated. Her relatives lost the ownership certificate and the house was given over to public housing. The Main gate of the house collapsed in 1976 during the Tang Shan earthquake and was rebuilt to a much simpler design. In middle of the courtyard is an 2 x 10m drainage pit. Originally this was an air-raid shelter, built at the beginning of the 1960's under the anti soviet 'Build deep shelters, Keep grains, don't bow to hegemonism' policy.



-Zhong Lou Wan Hutong- West elevation

NO.58 courtyard

NO.60 courtyard

### 5.2.2 Population and owner ship

**No.60:** 4 families, 14 people.

The main building is privately-owned by the pre-Cultural Revolution owners, all other buildings are public housing.

**No.58:** 12 families, 33 people.

All the buildings are public housing.

### 5.2.3 Space arrangement

**NO. 60:**

Total area: 245.35m<sup>2</sup>

Original buildings: 89.55m<sup>2</sup> (as resistered at the Communal Housing Office)

Extension buildings: 50.06m<sup>2</sup>

Open space: 105.74m<sup>2</sup>

Average space per person: 9.97m<sup>2</sup> including extension space  
6.39m<sup>2</sup> without extensions.

Most of the original buildings are now taken up by combined living and sleeping rooms.

Each family has built extensions. The extension space is used as kitchen space (16.36m<sup>2</sup>), living space (30.84m<sup>2</sup>), and storage areas (2.86m<sup>2</sup>).

#### Proportion of land area occupied by buildings

a) original proportions (original buildings without extensions)

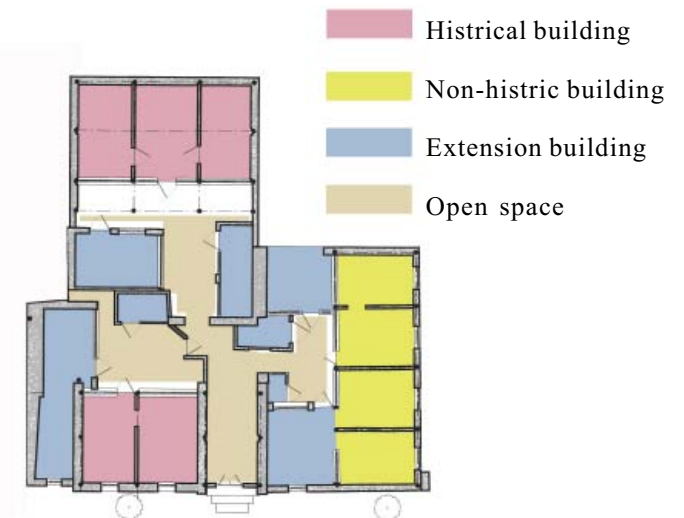
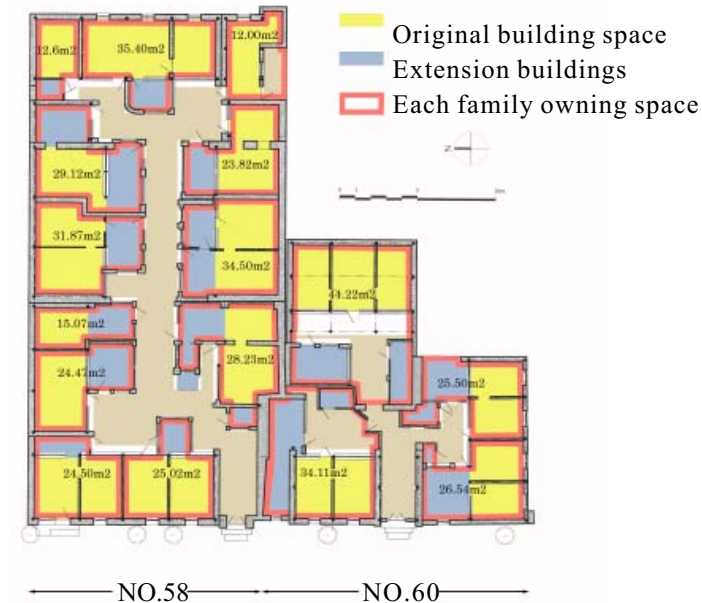
building area: open space=89.55m<sup>2</sup> : 155.8m<sup>2</sup> = 36.5%: 63.5% .

The original design was roughly one third building and two thirds open courtyard

b) present proportions (Including extension space)

building area: open space=139.61m<sup>2</sup> : 105.74m<sup>2</sup> = 57%: 43% .

Now half of the land is taken up by buildings.



**NO. 58:**

Total area: 534.15m<sup>2</sup>

Original buildings: 219.89m<sup>2</sup> (as registered at the Housing Office)

Extension buildings: 76.72m<sup>2</sup>

Open space: 237.54m<sup>2</sup>

Average living space per person: 8.98m<sup>2</sup> (including extensions)

6.66m<sup>2</sup> (without extensions).

The rooms in the original buildings are mainly utilised for living and sleeping .

Each family has built extensions. The extension space is used as kitchen space (49.17m<sup>2</sup>), living space (23.47m<sup>2</sup>), and storage areas (4.08m<sup>2</sup>).

**Proportion of land area occupied by buildings and courtyard**

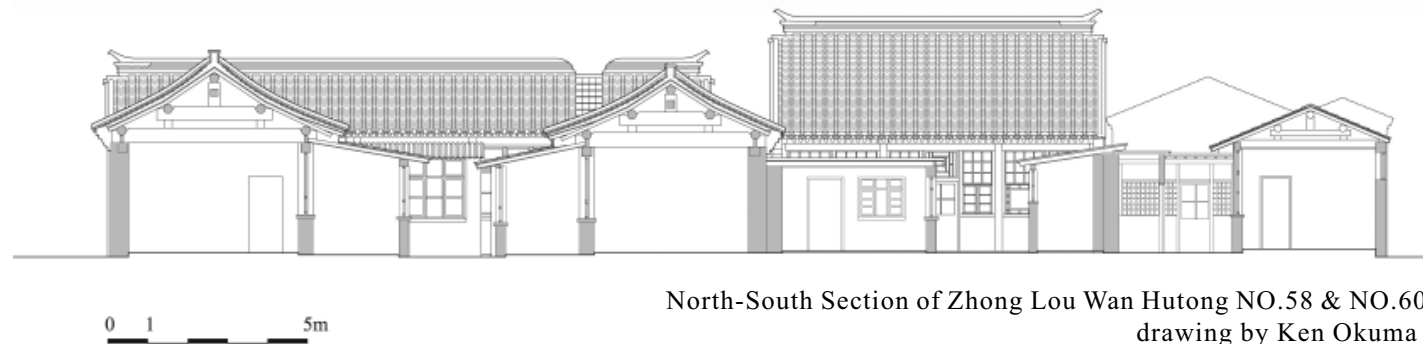
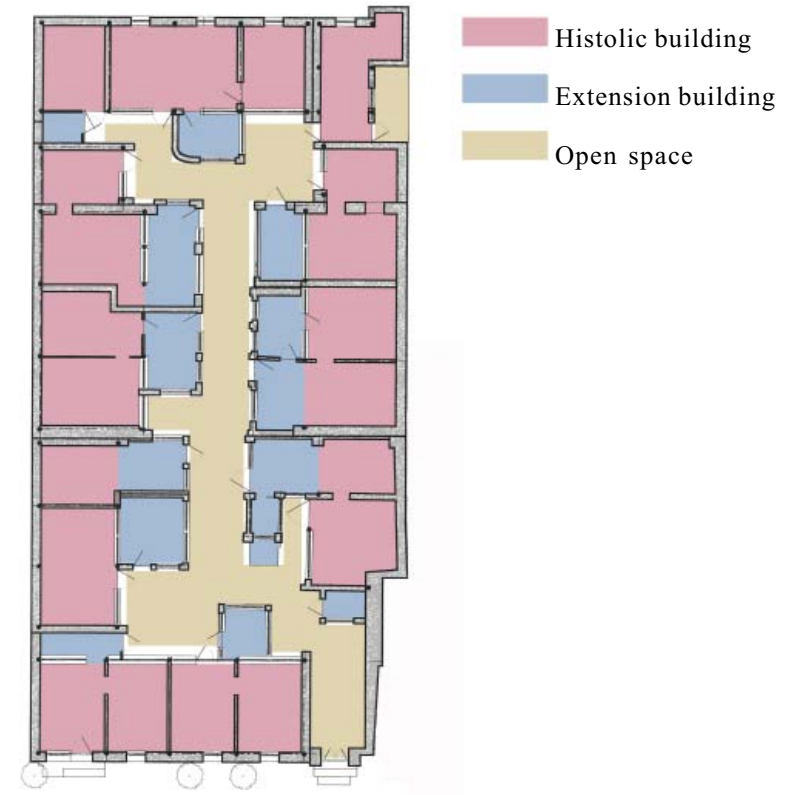
a) original proportions (original buildings without extensions)

building area: open space = 219.89m<sup>2</sup> : 314.26m<sup>2</sup> = 41% : 59%

b) present proportions (including extension space)

building area: open space = 96.61m<sup>2</sup> : 237.54m<sup>2</sup> = 56% : 44% .

In both buildings, the extension buildings have cluttered up the courtyard area, leaving only narrow passages leading to the individual homes. Even so, the available living space per person is quite limited, being less than half of the national average (20.23m<sup>2</sup> per person). We propose to increase the per capita living space without overtly changing the historic building structure, as outlined below.



North-South Section of Zhong Lou Wan Hutong NO.58 & NO.60  
drawing by Ken Okuma



#### 5.2.4 Present facilities

Most families have a kitchen area with running water, but no sewer connection. There is a common courtyard drain with sewer connection. Some residents have built their own shower system, either electrical or solar powered. Inadequate drainage has led to rising damp, which has weakened many of the buildings. There are no private toilets in the buildings. Residents use the public toilets in the street nearby. All residents used coal heating in the winter.



Common courtyard drain



Simple solar shower system



Storage space

#### 5.2.5 Structural problems

These structural problems observed at the two sites are typical of Beijing courtyard houses. The buildings have rising and falling damp, with leaky roofs, partially rotten timbers and damp walls. The progress of damage has been gradual and much could easily have been prevented by routine maintenance. Timely roof repair would have prevented rotten roof timbers, the replacement of which now involves taking off the roof. Improper disposal of waste water has also contributed significantly to the damp problem. Any renovation plan must address both infrastructure improvement and motivation of residents to maintain their own homes.



Historical parts, which needs to be preserved

Present condition of courtyard's space



### 5.3 Cooperation between residents, officials and experts

Residential communities are now recognised as being an integral component of any historic area. Many international projects such as the IBA in Berlin, the Main Street Program in the USA and the rehabilitation of the Zanzibar have demonstrated the successful use of community-based area rehabilitation. The Hutong survey confirmed that the present resident community is deep-rooted and is inseparable from the atmosphere of the old city. Beijing already has one of the world's largest out-door museums, the Forbidden City. The Hutongs now have a unique vitality, which will be destroyed if they too are made into museum towns.

In the Ya er Hutong area, an attempt has already been made to re-establish one family courtyards by relocating present residents and redeveloping the courtyards for wealthy families. So far, this has not been economically successful. One of the problems with this solution has been that the lifestyle of today's wealthy owners no longer fits into the Hutong community. The wealthy tend not to use local shops and markets, keep their gates locked and use the private cars to get around. Thus they contribute little to the local community (and bereaving Beijing of one of its tourist attractions) whilst overstressing the transport infrastructure - the Yuan Dynasty lanes. Over the past century, a feudalistic system has transformed into a popular social community. To forcefully remove thousands of residents for the benefit of a few owners would harm this social system and create a feeling of unfairness and inequality.

If the present residents were to be given security of tenure (in varying degrees for private owners and long-term tenants), many of the current problems would be solved. Much of the maintenance responsibility could be taken on by residents. To facilitate this, Government officials, technical experts, and investors need to work together closely with the community. In such a network of co-operation, each group would have designated responsibilities, which might include:

a) Government input

Strong regulations and enforceable laws for the preservation of historic areas and residence rights for the original long-term inhabitants.

Infrastructure improvement (sewers, drains etc).

Financial support (especially compensation for voluntarily moving out)

Population control (limiting number of new residents moving into the district)

b) Residents' input

Regular building maintenance, verified and checked annually by the local Neighborhood Community Office

Infrastructure upgrading (for example paying for sewage connection, new waterlines within the courtyard area, heating)

c) Local experts input

Technical advice

Feasibility studies

d) Third (outside) party input:

Limited financial support, international experience, additional technical advice

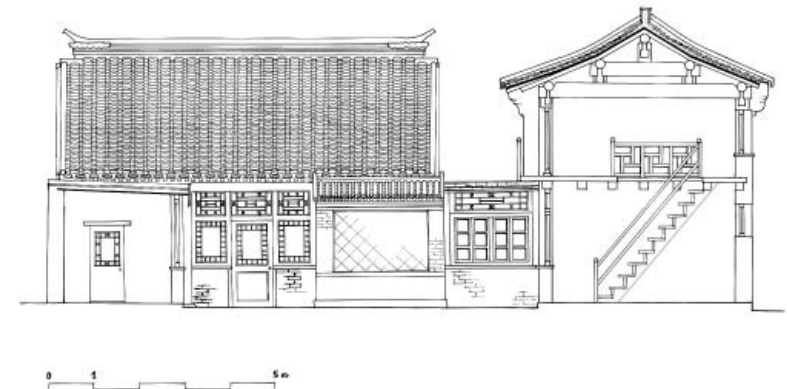
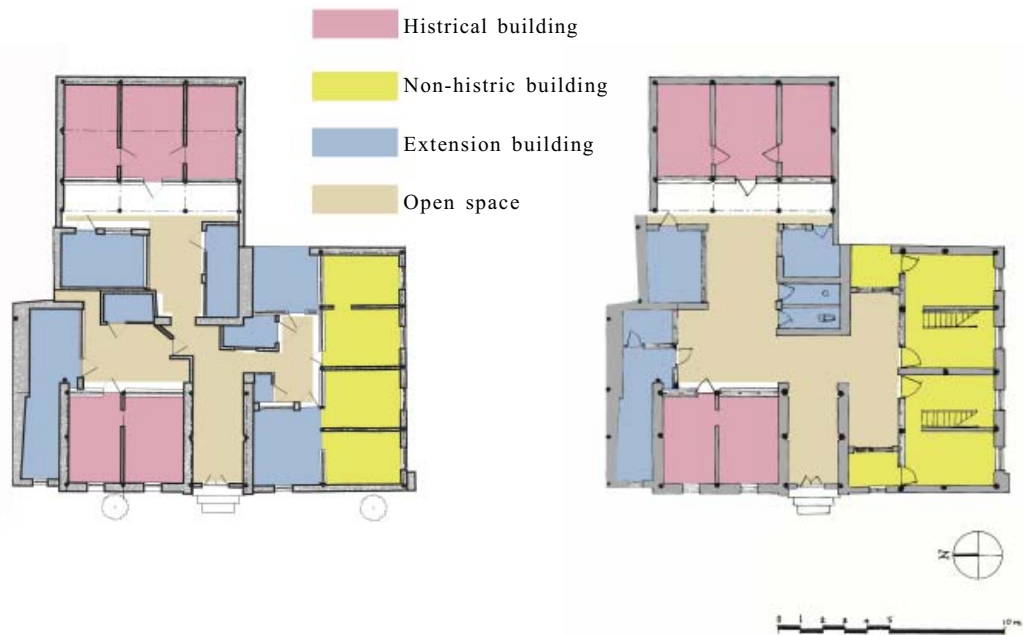


## 5.4 Proposed plan for rehabilitation work

### 5.4.1 Rehabilitation & Rebuilding, courtyard NO. 60

This complex has already lost some of its historic structure, since the southern part is not original. The main building and the smaller building near the entrance are however original and have conservational value. The central courtyard area has been filled with extensions, leaving only narrow pathways to reach each home. The number of resident families is low and suitable for the building's size. In this case the following approach is suggested:

1. The two historic buildings should be rehabilitated and restored to their original state as possible, using traditional materials such as roof-tiles, grey bricks and carved windows.
2. The modern buildings can be rebuilt with traditional material, but re-designed to create additional space underneath the gabled roof without altering the original height limitation of 6m. Creation of this additional space, which can be used as storage or even sleeping, means that some of the extensions can be removed without diminishing the area. The extensions should be re-designed to free some courtyard space, and rebuilt with traditional and semi-traditional materials. Traditional grey bricks, roof tiles and timber frames should be used throughout. Concrete frame with tiles and brick infill can be a solution especially for building new residential wings. The residents have participated in the design of the proposed building layout.
3. The public space in the courtyard, once reclaimed, can be improved by restoring the traditional brick paving and by planting flowers, bushes and trees.
4. Population adjustment is not necessary



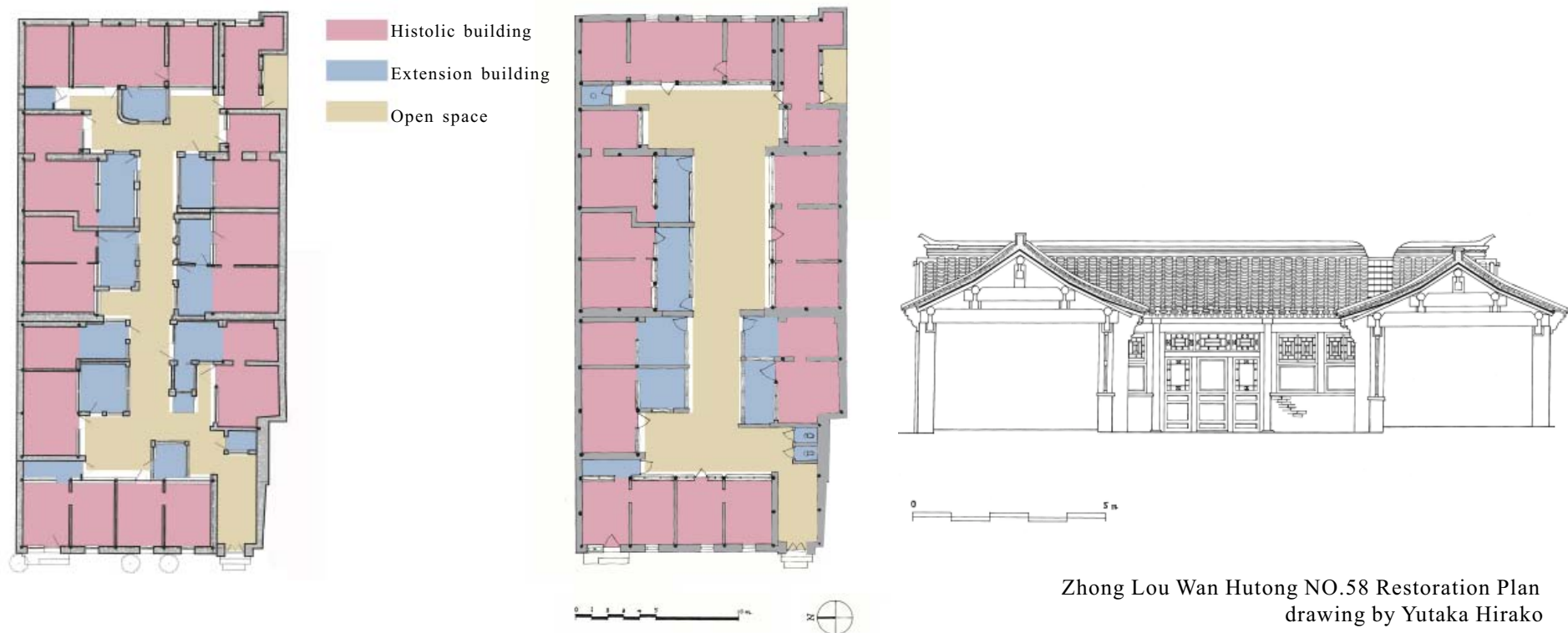
Zhong Lou Wan Hutong NO.60 Restoration Plan  
drawing by Yutaka Hirako



### 5.4.2 Rehabilitation & utility rooms case Courtyard no. 58

This courtyard still preserves enough of the original structure of an old courtyard house to attempt to restore the original layout. There are 12 families living here under very crowded conditions. It will be necessary to create additional living space.

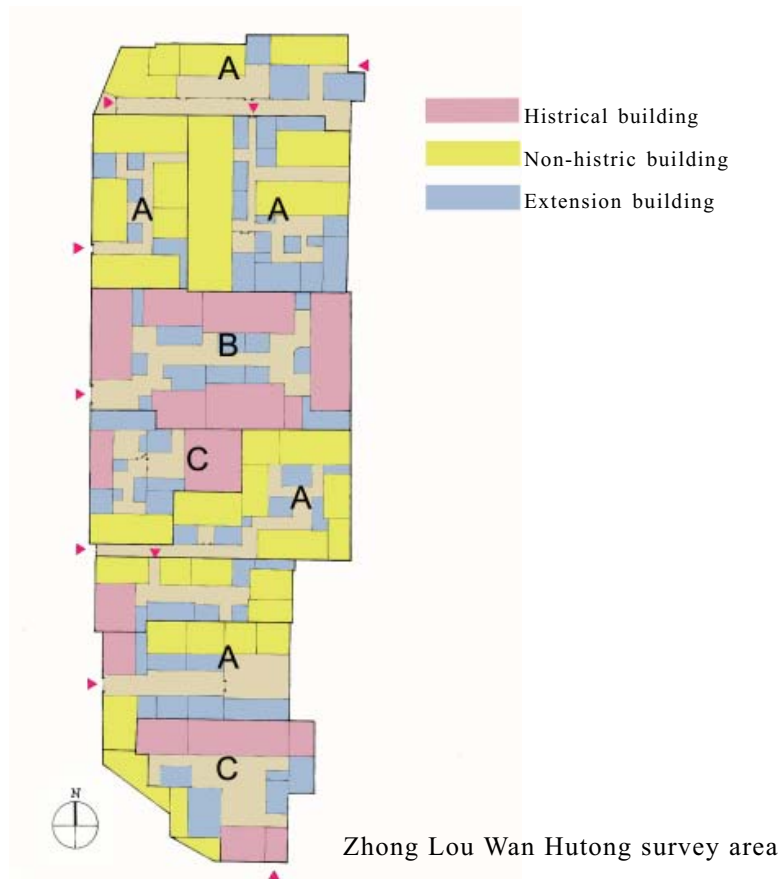
1. Rehabilitation of the historic buildings as authentic as possible.
2. If the population can be adjusted to 6 families, there would be enough living space with the original layout, without the need for any extension buildings.  
This would require government assistance to identify suitable alternative housing for the rehousing of any willing residents. Residents have said their willingness to be rehoused would depend on the location and condition of the new housing offered and on financial arrangements compensation arrangements.
3. If the population is not adjusted, we have proposed designs for extension buildings based on residents' requirements, including utility rooms.
4. The rehabilitation includes installing water and sewage systems, correcting structural faults, waterproofing the roofs, getting rid of damp, improving ventilation and sunlight, and opening the space underneath the roof structure for storage or sleeping space. All this must be done in harmony with the historic building design. One communal flush toilet and one communal shower unit will be installed within the courtyard.



### 5.4.3 Population adjustment within the community

Some courtyards have already lost much of their original layout, sometimes having no remaining historic buildings. In such cases, the compound can be rebuilt to a different design, better accommodating the resident families. It is possible to fit two floors within the height limit of 6 meters of the traditional pitched roofs, and it can be so designed to appear as a one-storey building from the outside. The historic one-storey limit on residential construction in Beijing is unique, and should therefore be preserved as much as possible. Traditional materials should be used so that new structures blend well with the historic buildings. Internal concrete members could be used where they are not visible.

The original and long-term residents should always have a say in re-designing the courtyard layout. In some cases, it may be possible for reconstructed housing to absorb residents from nearby overcrowded courtyards. Such adjustments must take into account the entire community of a given area. Population adjustment within the neighborhood is always preferable to relocation to areas outside the inner city.



### 5.4.4 Work Required for Rehabilitation

Courtyards can be categorized as follows:

**A type courtyard:** All historic buildings of the original structure still exist.

Measures to be taken:

Restoration and upgrading of original building materials; This will be termed “**rehabilitation**”

**B type courtyard:** Some historic buildings with preservational value remain, but the original courtyard house layout has been lost.

Measures to be taken:

Restoration and upgrading of the historic buildings with some demolition and rebuilding of the modern structures according to the population adjustment scheme. This will be termed “**rehabilitation and reconstruction**”

**C type courtyard:** No historic buildings, no original layout, no traditional building material.

Measures to be taken:

Re-design and reconstruction aimed at increasing the living space for community residents. From here on, this will be termed “**reconstruction**”

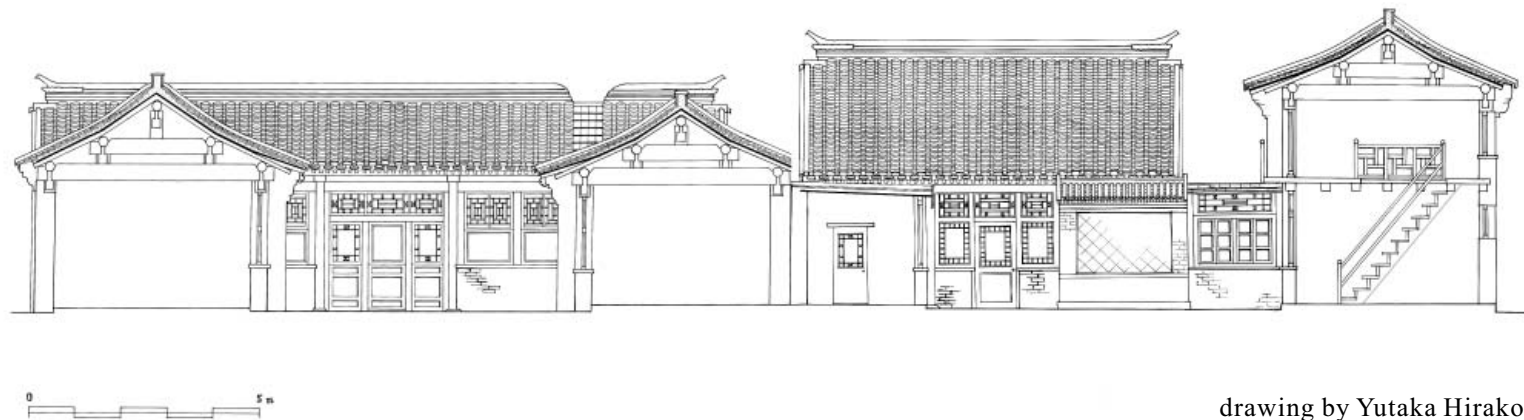
## 5.5 Residents' direct participation

### 5.5.1 Planning and implementation stage

Residents should participate in the rehabilitation program right from the initial planning stage. Any plans made must be firmly based on field research in the community and finding a suitable solution for each individual courtyard house. In discussions between residents and project implementors, residents will be asked to propose their own level of input. It is expected that they will make financial contributions towards the cost of water connection, sewerage connection and repair work. Contributions could be a fixed percentage of the actual cost, graded according to family income. Having contributed to costs, residents will also have an interest in ensuring the proper use of their money. It is suggested that residents should be strongly involved in the supervision of contractors. It is important that all stakeholders have a clear understanding of the division of responsibilities throughout the planning and implementation processes. In some cases, where preservational considerations clash with the desires of some individuals, it may be necessary to promote the interests of the larger community over those of individual residents.

### 5.5.2 Maintenance

Once residents have security of tenure, they should be made fully responsible for maintenance. Regulations from the Beijing Cultural Relics Office should make private owners responsible for upkeep of their historic buildings. Such regulations might be similar to those in Britain, which forbid alteration to the outward appearance of listed buildings. The local housing office should facilitate the establishment of a reputable maintenance contractor for tenants to employ as necessary. A detailed cost-sharing agreement should be developed so that costs and responsibilities for major repairs, such as roofing, will be shared between the government and residents. Although it may be necessary to increase rents after rehabilitation, this should be done fairly, giving regard to resident's ability to pay. Increased revenue from rent must be used exclusively towards the upgrading and major repair of the resident's buildings.



drawing by Yutaka Hirako



## 6. Applying the project on a wider scale

### 6.1 Financing the program

THF offers to provide some financial input for the pilot rehabilitation project as outlined above. The work should be carried out by local craftsmen, using locally produced materials. This will not only revive central Beijing's historic splendour, but will also create many new jobs and encourage the renaissance of ancient craft skills. The success of the scheme depends on high quality workmanship and competitive pricing. One of the aims of the project is also to preserve the individuality of each building. Although they share a basic design, each Si-He-Yuan has its own character. A broad brush housing-estate approach, where houses are repaired to a standard design, would be highly inappropriate for this project.

The participation of residents in funding and supervising the work is seen as a key measure to keep down costs, ensure good workmanship and increase residents' sense of ownership. Recently, such an approach proved very successful. At No. 8 Banchang Hutong, the private owner paid 700rmb/m<sup>2</sup> for a new building in traditional style. All the construction materials and workers were arranged by house owner with the permission from the district government.

The pilot project includes the establishment of clear agreements for the maintenance of renovated buildings. The establishment of security of tenure and fair cost-sharing agreements is sure to attract further project funding.

THF proposes to create a revolving loan system where residents can borrow additional funds for the rehabilitation at low or no interest. In such a way, the governments' contributions could be limited to cover only upgrading of infrastructure and technical monitoring.

The option to offer residents to buy their homes would still need to be discussed. This would release local government from maintenance responsibility. Since few residents will be able to come up with so much money at once, a system of payment by installments could be devised, requiring in turn measures to prevent re-selling for profit while taking advantage of the assistance offered by the project.

## **6.2 Government support**

To create favourable conditions for the successful rehabilitation of historic Beijing, government support is essential. Without security of tenure, which only the government can guarantee, residents are unlikely to participate in the project. Coordination of residents, experts and foreign agencies can best be facilitated through the Government's local housing office and local neighborhood committees. It is suggested that counterpart agreements should be made between THF and these offices. Then these departments and the invited partners can work out the details of loan systems, house maintenance standards, house ownership rules etc. Transparent information and fair rules will expect to attract wide participation of people for Hutong conservation.

## **6.3 Population control**

Local community offices and the housing office should establish an effective control mechanism to prevent sub-renting of public housing or use of residential buildings for commercial purposes.

If legal tenants under the public housing system want to move out, they should get adequate compensation by the government. The free housing space must be distributed among the remaining residents to improve the living spaces. The adoption of new compensation regulations is recommended, for example, increase of compensation according to length of tenure. Residents need to be presented with clearly defined choices, to achieve any desirable voluntary decrease of population density in the inner city area.

## **6.4 Publicity**

After the completion of the pilot plan and the creation of the necessary logistical framework, information systems should be set up to publicise the project to residents and offices in the affected Hutong areas. The neighborhood committees will play a key role in disseminating information to residents about the rehabilitation program, details of building conservation regulations, infrastructure upgrading, and the role that they are expected to play. A campaign to explain the importance of preservation and highlight the privilege of living in the protected area will aim to motivate residents to participate.

## 7. Conclusion

Beijing is rightfully described as being a master piece of mediaeval urban planning. The few remaining patches of historic Beijing are of immense value, and the urgency of their preservation is widely recognized. A recent municipal regulation, 'Conservation Planning of Historical & Cultural City of Beijing' is a great step forward recognising the potential of old Beijing, without compromising the modernity of China's bustling capital. Beijing should preserve aspects of its unique historic urban character, and develop modern up-to-date methodology to upgrade and rehabilitate the historic neighbourhoods instead. Once the historic aspect has been completely changed into a new aspect, the city will have lost its own original character forever. The Hutong lane represents an integral part of the unique character of this historical city. People now say "If there are no more Hutongs then there will be no Beijing". For sustainable urban rehabilitation, all sectors of society must be encouraged to participate for the greater benefit of Beijing. A permanent effort will be needed to sustain the city's unique character. The present conservation proposal is only a start. The rest is up to the government and people of Beijing, determining the shape this city will take in the following decades.



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