

# Renaissance of Cultural Identity

-historic districts regeneration in Beijing inner city



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P5 report

Complex city Studio, Urbanism

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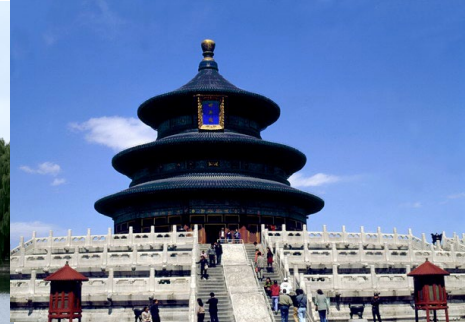
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# First impression on Beijing inner city

central axis and cultural heritage in Beijing inner city



hutong areas & hutong under reconstruction

new emerged CBD districts



good quality courtyard houses

houses constructed in 1990s

hutong housing regeneration project 1990





## Scientific and social relevance

### Scientific Relevance

The research takes on urban identity issues from an angle of spatial planning. Among others, the discussion of vitality and quality of urban, transformation of historic urban forms and housing types, public space are also considered from the spatial framework.

The main relevance is in combining spatial consequences with intangible 'cultural identity' intertwined with societal and cultural consequences.

### Key concepts: Urban regeneration, culture identity, Urban quality, city image

#### Urban Identity today

Rem Koolhaas declared that 'the contemporary city like the contemporary airport' (Koolhaas), that warned us the decrease of urban identity in modern world. Specially in many historic cities, the decay of cities' centers showed the failure of urban transformation from the historic forms to being adaptable to the modern terms and conditions. The city is the place of collective memory of people, and like memory it is associated with objects and places (Rossi P.130). The research puts the intangible cultural identity in discussion, and tries to reflect it in spatial aspects. Furthermore, the study also follows the typological method to explore the urban forms and housing typology in historic districts, in order to break the conflict between modern development and conversation of historic cities.

Urban regeneration has been an enduring theme in field of urbanism (Barnett, 1986). Since the Second World War, the concept of urban regeneration was emphasized, specially in western countries. The importance of urban identity in urban regeneration has been explored since 1990s (Mir, 1986; Raco, 2003; Rhodes, 2000; Stoker, 2000). In case of China, there was fierce discussion regarding the cultural identity as a city branding way for urban revitalization. This turned into search of a balance between modernization and conversation in the practice of urbanism, because that Chinese cities are going through rapid expansion and economic development. Now the tune focuses more on the problems of adaptability of historic forms in contemporary cities.

#### Urban quality wanted

The Chinese cities are under unexpectedly speed of transformation. At the brink of urban form's change, with the discussion on the level of political planning and doubts on whether the demolish and modernization is the right way to realize the urban quality. Cultural identity preservation, which aims at emphasizing character of the city, closely associated with the urban quality and vitality. Coupled with the continued trend for urban expansion and the request of densification, improving urban quality is the basic condition to archive urban revitalization and preserve the intangible cultural identity imbeds in the historic urban forms and social customs. The research directs towards exploring a refocus of urban regeneration practice.





## Summary of graduation project

The graduation project titled 'renaissance of cultural identity-historical districts regeneration of Beijing inner city' aims at researching the question about the role of cultural identity in the historical cities, specifically it is about testing and investigating proper ways to regenerate the historic districts in inner city of Beijing, in order to make it match the contemporary urban development.

The research started from giving the definition of cultural identity in Beijing inner city and investigate current situation for these constituent elements. I have stated that those elements are under threats under market oriented development, both of the spatial and social quality are declined. Cultural identity has been evicting from historic city core under modernization and marketization. Then my analysis focus on finding out the conflict between preserve historic identity in city center and modernization under influence of market. Strategy goal was to activating cultural identity and strengthen urban vitality. Meanwhile, social mix and vitality will be rehabilitated. Economic sustained urban regeneration is also a key point in Beijing inner city regeneration, it is investigated in the graduation project as well.

As most of the house property in Beijing inner city are belonging to government, it gives the advantage for me to propose a new strategy for government to regenerate historic districts. The whole process of regeneration can be seen as a process of urban management. Instead of giving all the redevelopment to market, new housing institution can be set up to do the management under government supervision.

According to study of Gulou, which is one of the historic districts, brought out the strategy to realize my goals. Under the management of housing institution, buildings in the site, according to their quality and historic value can be transformed into diverse housing types and functions, meanwhile adding more functional areas and public spaces. By spatial intervention, different social groups will be attracted to live in the districts, and some parts of the site can be activated for more users. And the operation between different construction programs makes the possibility of economic sustained regeneration.

In the design part there are three strategic projects have been chosen. One is the historic squares as a meeting place for diverse social groups and users as well as used spatially to link important nodes in the site. Second is the new site construction which can show the upgraded urban vitality by adding new programs and functions in the site. Also it shows the chances for introducing new users of space by adding new centralities. And the third projects about construction of social housing aims at illustrating the life quality for local residence after regeneration.

The process of the project is broadly explained in the booklet, which is divided into 5 main parts:

- 1 – introduction,
- 2 – research,
- 3 – strategy,
- 4 – design,
- 5 – evaluation and conclusions.



## Problem definition

In the last sixty years, the city of Beijing has experienced rapid transformation and developments. The scarcity of land available for construction, gives stress on historical districts conservation. Large scale of redevelopments in the inner city, which are led by private developers, seized the land of historic housing and gradually changed the urban form of Beijing. Four important elements, which spatially illustrate the cultural identity of Beijing had been interrupted.

Firstly, the strategic location of the central axis leads to absolutely top down, governmental-lead development. Volume of hutongs and their associated courtyard houses which formed the urban texture of Beijing inner city is sinking and their quality is decaying. Comparing with the high value of inner city land, there is shortage of retaining fund from the government. The closely connected social network, which is partly as result of the traditional living space has been changed, social segregation emerges between the new rich, and the original residents as a result of gentrification. All of these threats the strong cultural identity of Beijing inner city, as well as brings influence on urban vitality in historic districts.

For the unclear regulation and improper way of redevelopment, however, the historic districts conservation has been proceed in Beijing inner city, the elements which presents culture character of Beijing inner city are endangered. How the conflict between ruin and restoration can be solved through urban regeneration is the main research question of my graduation project.



## **Field of research and research questions**

### **main questions:**

**How to intervene the Beijing inner city regeneration to spatially and socially rehabilitate historic districts ,in order to re-naissance the cultural identity of Beijing inner city as well as urban vitality under the contemporary development?**

### **sub research questions:**

#### **spatial:**

How has been the Beijing urban form/ function transferred ?

what's the current situation of historical districts in Beijing inner city?

what's the value of historical districts in Beijing inner city, specially the spatial value?

How have the historical districts been regenerated in China?

#### **social:**

What is the social structure of historical districts and how has it been changed in rapid urban development?

#### **economic:**

What is the relationship among different stakeholders?

What kind of the new economic elements can be embeded in the historic distirct's regeneration?



## Methodology

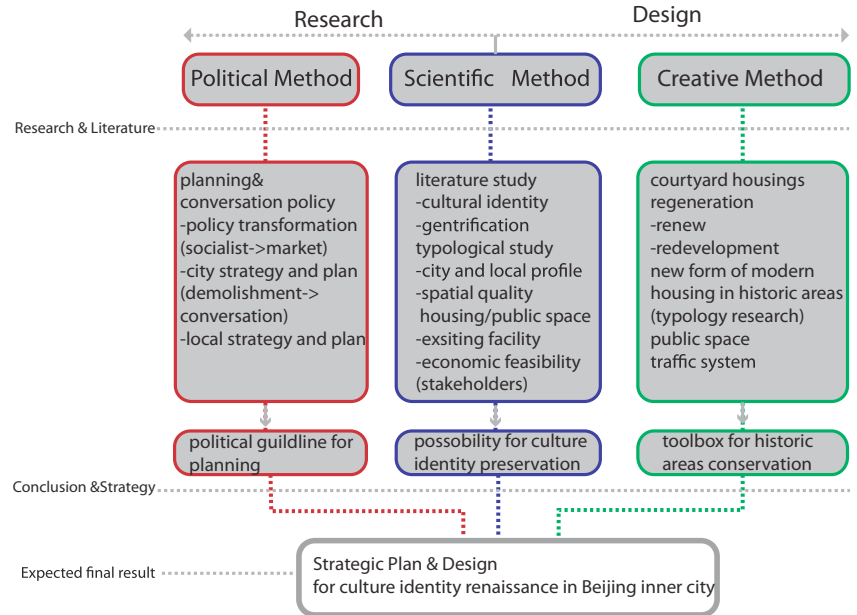
The graduation project is a research by design process. As illustrated in the figure, the whole process mainly divided into three aspects, which are political method, scientific method and design. Finally the combination of research and design consist a whole strategic plan for the urban regeneration in historical districts in Beijing.

Political study is going to define a political guideline for historic districts regeneration, specially when considering government as an crucial stakeholder in the regeneration process.

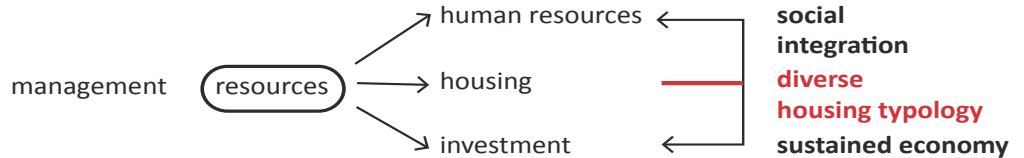
Theoretical research on cultural identity and gentrification helps to clarify the strategy for historic districts revitalization.

Typological method of study the historic space in Beijing inner city helps to understand the current situation and induce to the possibility exploration of different forms of space in historic districts.

And the stage of design will create a toolbox for historic districts conservation and rehabilitation.



## INNER CITY REGENERATION



Consequently, there will be a strategic plan and design proposal for urban regeneration in Beijing inner city, with maintain or strengthens the cultural identity as well as improved urban quality and social cohesion.

# Theoretical study

As inner city regeneration can be taken as a process of urban management, there are three main resources involved in the process, which are human resources, housing and finance flow. They are the crucial conditions for realizing urban regeneration with economic sustained, improved urban quality and strengthened cultural identity. And for diverse housing typology is the key elements to attract different social groups and balance finance sources, the typology study has been chosen to investigate the possibility to fulfill the demand of capacity, identity, and vitality.

## Social Aspects: gentrification & positive gentrification

### social capital

Foley and Edwards' (1999) conceptualization of social capital as 'resources + access' realizing the flow of social capital there are two important elements, one is networks and another is bonding and bridging.

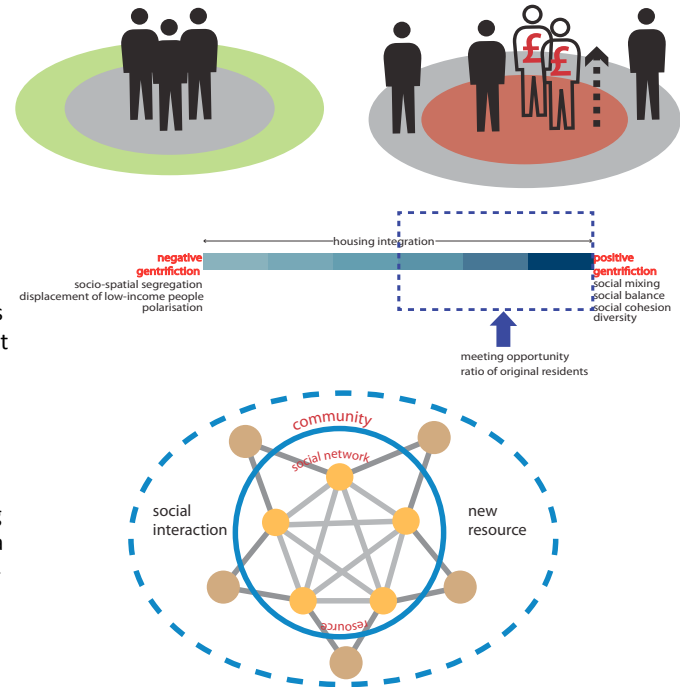
### positive gentrification

a policy of 'positive gentrification' or 'gentrification as a positive public policy tool'—in order to diversify the social mix and dilute concentrations of poverty in the inner city.

the liberal desires of the new middle classes for difference and diversity in the city as key to the process of gentrification and to the creation of a more diverse and tolerant city (Lees, 2000; Lees et al., 2008)

Socio-cultural diversity is a leitmotif in the new tastes for central city housing and neighborhood (Palen et al. 1984)

sociocultural, the inner-city was an "appropriate" and "viable" place to live, resulting in what is called "inner city chic" (London and Palen, 1984). people choose to live in a gentrified area to restore it, not to alter it, because restoration is a "new way to realize old values" (London and Palen, 1984).



## Final project

Aim of the project is to propose regeneration strategy and design for historic districts in Beijing inner city and rehabilitate cultural identity in the areas. Through regeneration, make historic districts fit into modern development with lively and attractive urban quality. The development strategy, should answer main research question: suggest opportunities to intervene in historic districts in city core and make them suitable the need of new urban development in order to activate cultural identity and strengths urban vitality. Main goal of the final product, strategy and design, is to shift decaying traditional districts in city center in to more attractive places and prevent cultraul atmosohere from decline.

Final project goals:

re-activating or adding new centralities

- More cultural facilities, attractions in historic areas

- Mix of functions encourages different groups of people to come for strengthing urban vitality and creating meeting opportunities for social integration

Encourage use of public transport

Create lively and walkable historic areas and neighborhood by promoting BMW(bike metro walk)system

- Social Mix + Land Use Mix + Density

Create attractive neighbourhood for people lo live, work and recreate

Create quality and diversity of public spaces

Improve accessibility

Housing demand

- Make use of existing houses and transform them into modern use by urban regeneration

- Less sprawling, Compact City concept

- Propose variety of typologies

- New housing types attracts different people and encourages social mix

Housing institution

- make management of houses

- create opportunities for realizing economic sustained urban regeneration

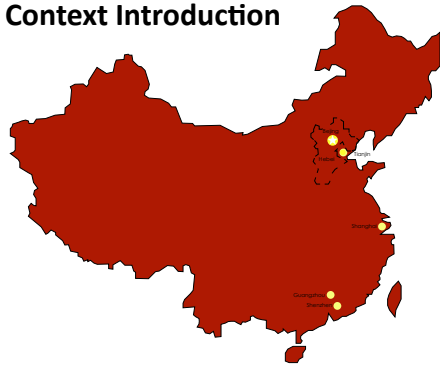
regional context  
historical development  
policy directed urban development

KNOWING THE CITY

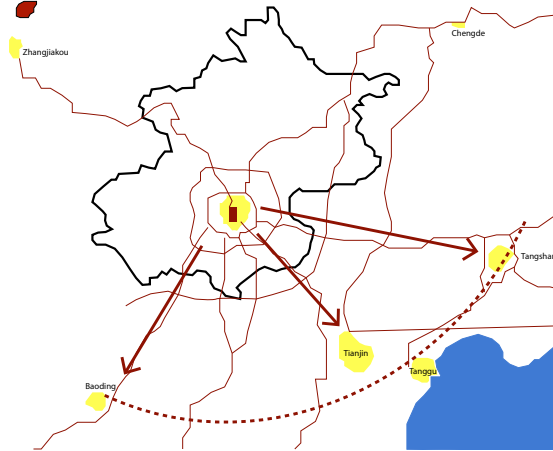
This part of the booklet explains background information of the project context: regional context, historical development and urban development with influence from policy changes. Conclusions of the research gives a direct understanding about process of urban development in Beijing context.

## Context Introduction

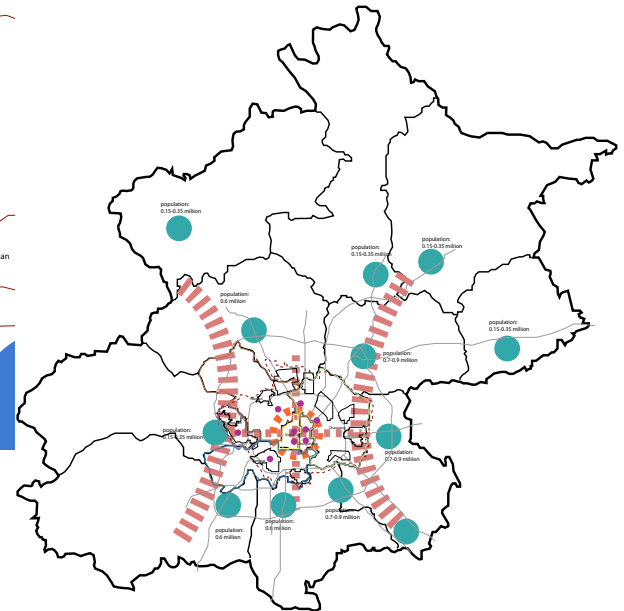
Beijing locates in the north of China. As the capital of the People's Republic of China, Beijing is considered as the political, educational and cultural center of the whole country. Economically, Beijing is included in Bohai Bay Delta, which is one of three major economic zones in China, the other two being the Pearl River Delta and Yangtze River Delta. The historical city core, central built-up area, ten scattered districts and 14 satellite towns form the Beijing Metropolitan area, which covers 16,400 square kilometers (Huang 2004). The population in the metropolitan area are exceeding 18 million by 2009 (source: Beijing Municipal Bureau of Statistics, 2009).



Beijing in China



Beijing in Bo Hai Economic Zone



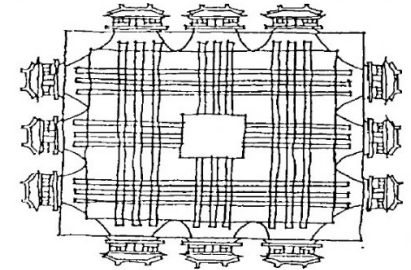
Beijing Metropolitan

## Historical Beijing

Beijing started as a city since more than 3,000 years ago, and the history of Beijing as a capital can trace back to A.D. 1272 since the Jin Dynasty. The layout of Beijing's structure is similar to other ancient Chinese capitals such as Chang'an, which was planned primarily according to traditional principles contained in the book of 'Kao Gong Ji' (Artificer's Record, Spring and Autumn Period, 770-446 BC). The historical city core of Beijing, which is used to be the whole city site was formed in Yuan Dynasty during thirteenth century.

Beijing's historical form is the expression of ancient urban planning principles. The arrangement of space, from the imperial palace to the neighborhoods, buildings were laid out according to strict order, which is reflection of societal order based on Confucian values. Such as the imperial palace was located in the heart of the Beijing and courtyard houses surrounded it. And among courtyard houses, there was also an order which reflected the hierarchy of the extended family dwelling in them.

The main roads of the Beijing inner city were organized as the chessboard pattern, and the residential 'super blocks' filled this grid streets network, which have an average size of roughly 750 meters on each side. Such mega-blocks are surrounded by main commercial streets where convenient shopping and public transport systems are located (He 1990). Smaller lanes within the super blocks which are called Hutong, are the connection with courtyard houses.

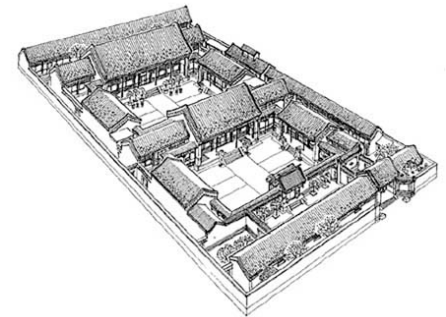
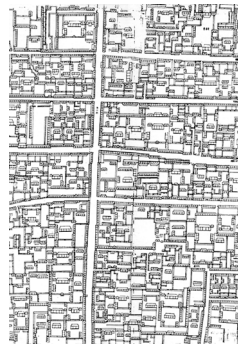


JIN DYNASTY (2nd century AD)

YUAN DYNASTY (1272-1368 AD)

MING DYNASTY (1368-1533 AD)

QING DYNASTY (1368-1533 AD)



## Contemporary Beijing

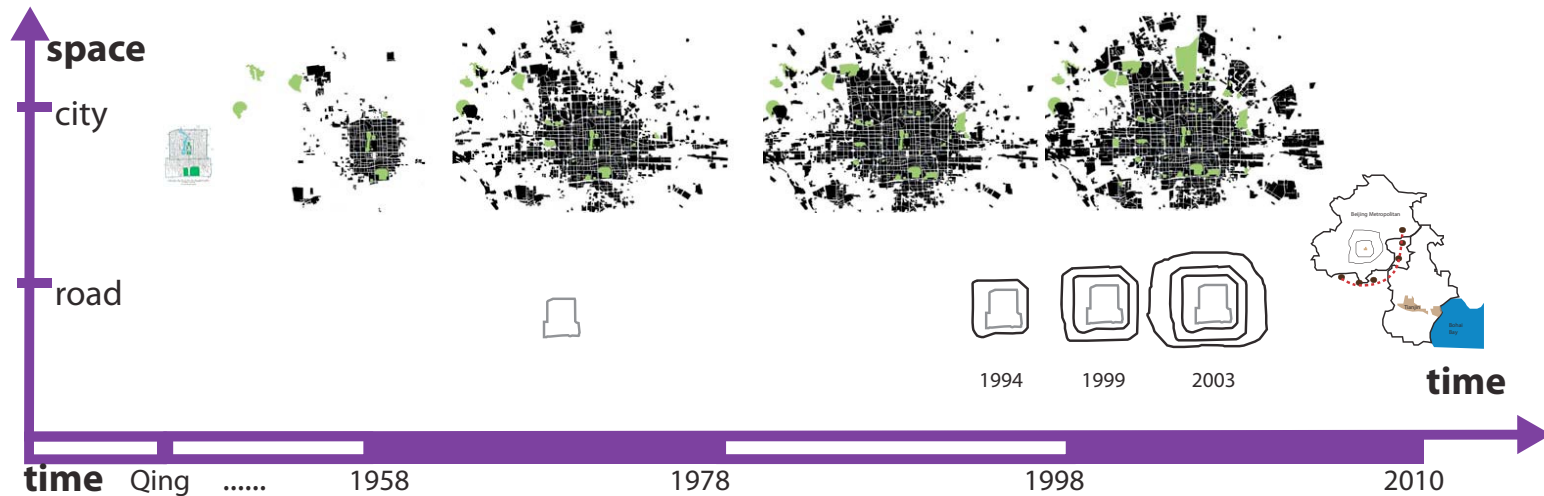
Urbanization in Beijing is urgent, incessant and gargantuan proportions. In the past 30 years, Beijing's urban population grows from 10 million to 18 million, and the urban areas has been extended 20 times. The ring road system, which started from the second ring road in 1990, expands to the seventh ring, which transcends the boundaries of Beijing municipality.

Area:

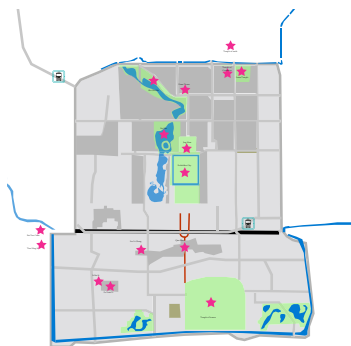
municipality: 16,801.25 km<sup>2</sup>

population: 22,000,000

density: 1,309.4 /km<sup>2</sup>



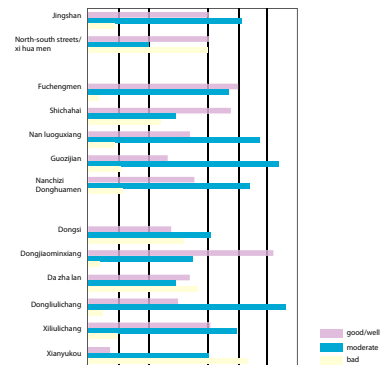
# Contemporary Beijing-inner city



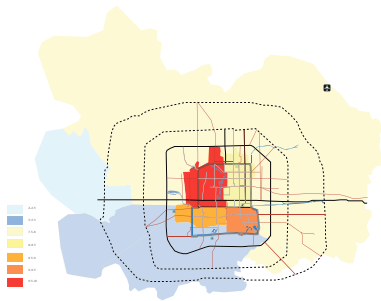
tourist attraction of inner city



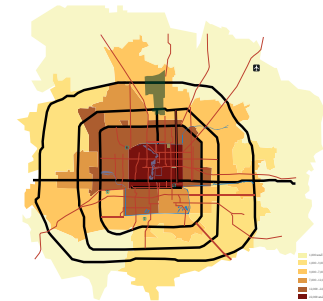
public facilities of inner city



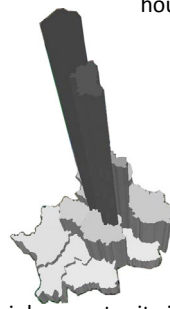
housing quality of historic districts



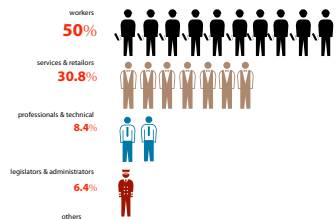
traffic congestion in Beijing



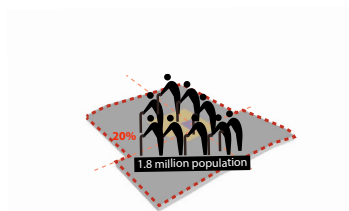
housing price in Beijing



job opportunity in Beijing



type of job for inner city residents



concentration of aged people in inner city

Statistics shows that Beijing inner city is a place with numbers of historic heritage and attractions, well organized public facilities and job opportunities. However, it also a place of low income residents, decaying housing quality and traffic congestion.



# policy directed urban development

1. rapid urbanization



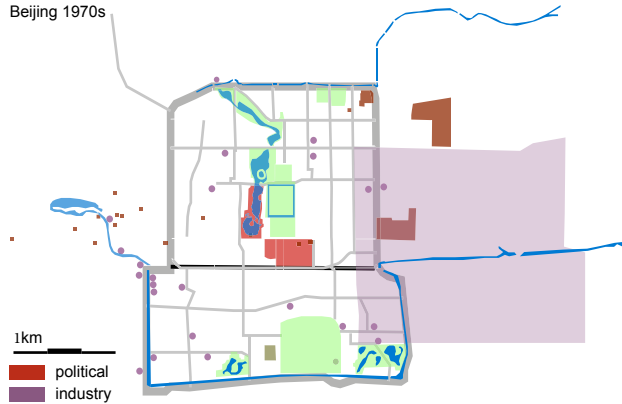
2. policy change

1950s	1960s-1970s	1980s-1990s	21C
urban expansion		globalization	
establishment of the regime	Industrialization	economic reform market oriented development	economic development historical and cultural centre
ownership of land (p->p)	welfare housing program	The old and dilapidated housing renewal programs(1990)	Conservation plan for Beijing historic city (2005)

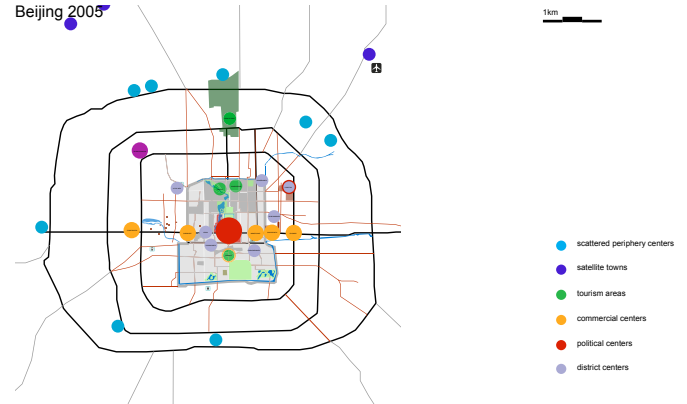
fig.27

3. from industrialization to marketization

Beijing 1970s



Beijing 2005



## process of urban transformation with policy changes

In urban China, policy change directly influence the transformation of urban form.

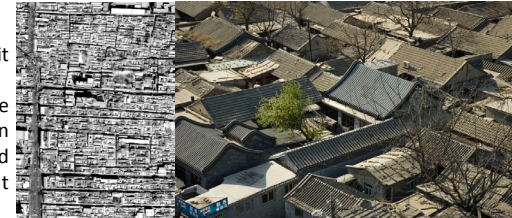
**stage 1: 1950s**-start of the new construction, widen the streets, demolish the city walls and gates

Refer to 'Draft plan for reconstruction and expansion of Beijing' in 1953, Beijing has been planned to be an economic, administrative, economic and cultural centre. A large-scale construction program has been carried out in the city, causing the demolition of historical city walls and gates, and hutongs in order to widen streets and obtain construction lands.



**stage 2: 1960s-1970s**: industrialization, welfare house system of social community( messy courtyards, work unit housing)

industrialization is the main theme for urban development. Beijing had fivefold population increase, and living space was the most urgent demand from the citizens. In this case, a new round of demolishment has been performed in Beijing, courtyards became messy courtyards according to their high density and informal structures. Hutongs and courtyards had been replaced by new three-to five-story apartment block based on Russian norms which were built by work unit.



**stage 3: 1980s-1990s**: economic reform, market oriented development, commercial districts and condominium

Since the economic reform in 1978, the housing system had been carried over from the work unit welfare housing distribution system to market oriented development. Large-scale disappearance of courtyards and hutongs began when the municipal government implemented a housing renovation policy that allowed developers to replace old and derelict dwellings with high-rise buildings. Large scale commercial construction also emerged during that time, such as New oriental shopping malls are located next to the Forbidden City. Between 1990 and 1998, a total 4.2 million square meters of old housing was demolished.



**stage 4: the 21st century**-conservation of historic districts in the inner city, market oriented development

In order to preserve the cultural character of Beijing, the central government has published conservation plan for Beijing historic city in 2001, including a plan to limit high buildings in the city proper to protect the historic districts in Beijing.

Since Beijing is still a city that is growing both spatially and in terms of population at a fast rate, the request of densification and allure of huge economic profit conflict with the historic districts preservation. The conservation plan intends to preserve only about 17% of the urban fabric of Beijing inner city, if the large-scale redevelopment of the rest of the city could be performed or not is still ambiguous.



## **Conclusion from study**

As a socialist country, policy change makes direct influence on transformation of urban forms and housing market. And as the housing market transformed from state-plan-oriented into market-oriented, there is always checks and balance between government and market. It is important to find an intermediate way to make cooperation between policy makers and developers, in order to soive huge conflict between obtaining profit from inner city land development and economical input for historic districts regeneration,which is not so refundable in a short term for private developers.

Definition of cultural identity  
current conservation study  
Consequence of current urban regeneration practice  
conclusion

## READING THE IDENTITY

This part of booklet shows the exploration about cultural identity in Beijing inner city, points out the main elements, which consist of cultural identity in the historic city core. The study on current urban regeneration practice illustrates problematic situation of cultural identity, also reflects key points of historic districts regeneration. Conclusion of the research becomes stepping stone for defining new strategy of historic areas transformation.

# What is the cultural identity in Beijing inner city?

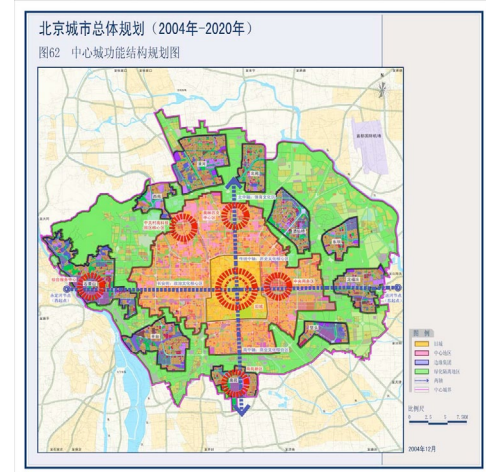
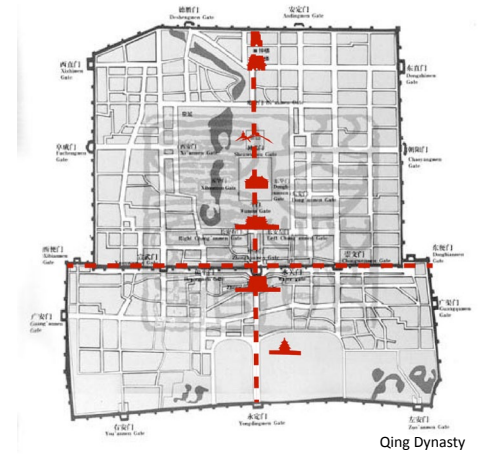
carriers and current situation

From urban study and literature review, there are four main carriers of cultural identity of Beijing inner city, which are central axis, hutongs, courtyard housing and local residents from spatial and social aspects. Each of them is under different situation since the urban regeneration and redevelopment.

## 1. central axis

the set of central axis of Beijing inner city can be traced back 850 years ago when Beijing had been taken as the capital at the first time. Since then, the central axis has been considered as the symbolic structure of ancient city. In the latest Beijing masterplan 2004-2020, the central axis of Beijing still the crucial elements for defining urban structure and locate new centralities alongside them.

the vertical axis 8 kms  
horizontal axis 7.7 kms



Beijing masterplan 2004-2020

## 2. Hutong

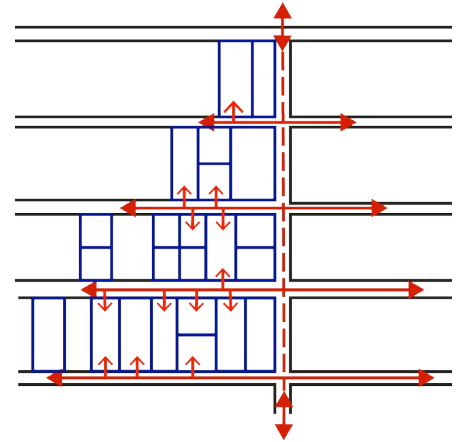
The term 'Hutong' means 'water wells' from Mongol language( Hutong:stone Arch, Saskia digital collection, Brigham Young University). Historically, hutongs were designed according to ancient governmental principal for urban planning. The inner city has been separated into administrative geographical divisions. Traditional courtyards, which were protected by walls and fences, were equivalent to current neighborhoods, and hutongs were passageways among the residential blocks.

### Spatial quality of hutongs

The direction of hutongs is mainly east to west, in order to let more sunlight into courtyard houses and prevent wind during winter time. The scale of hutong is highly humanized the width of hutongs is 3 to 9 meters, and the height of building facade alongside streets is normally 3 meters. With indispensable old trees, hutongs are delightful public space for residents and passengers.

The features of fish-bone-shaped lanes is one of the most important feature of Beijing historical street system can be traced back to Yuan dynasty. Hutongs is a hierarchical street system for a corridor transforming from the most public to the most private.

Additionally, in the whole urban system, the height contrast of hutongs and courtyard houses with historical monuments in the Beijing inner city, illustrated the hierarchy of space and Chinese philosophy of universe.





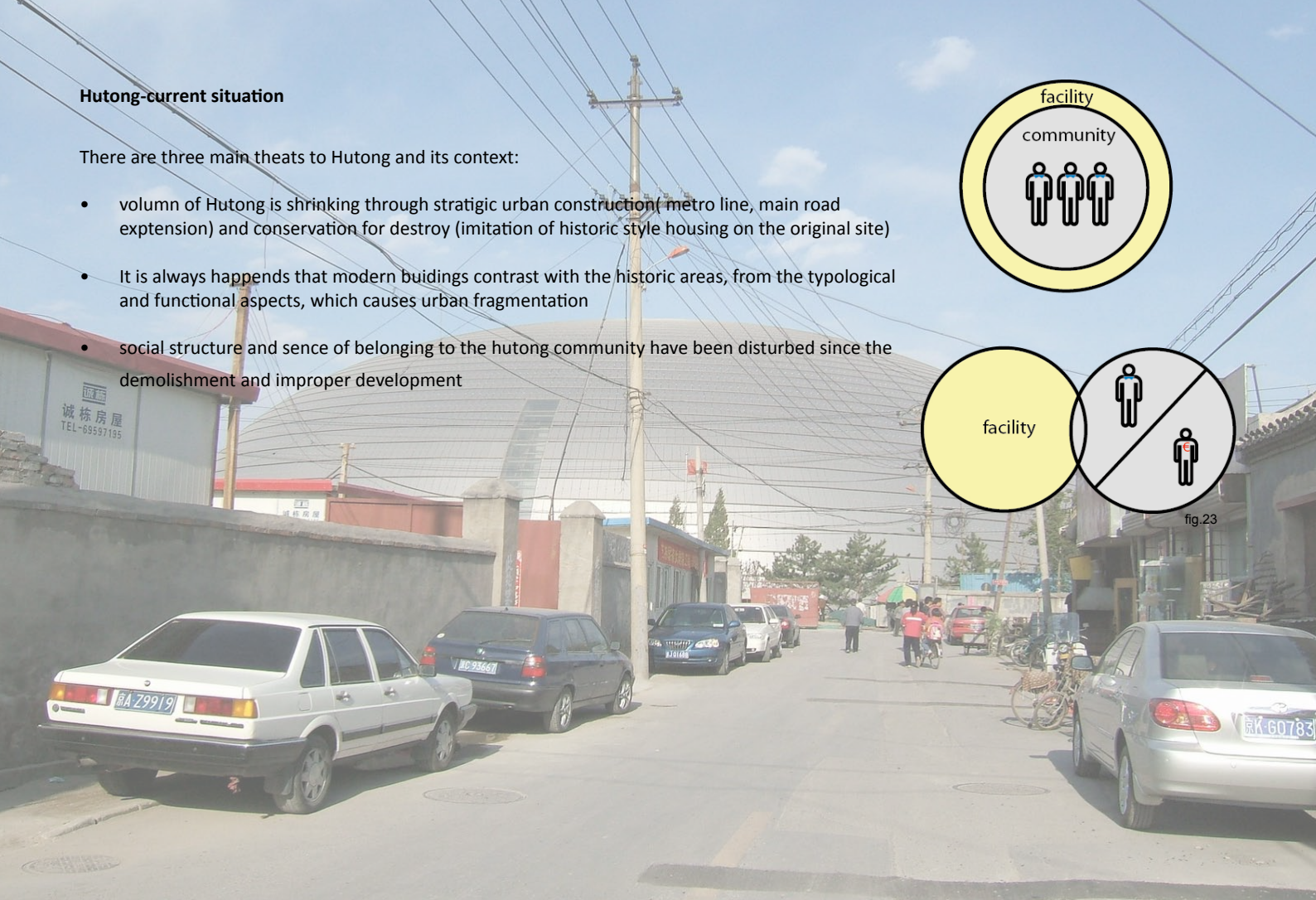
## Hutong-current situation

There are three main threats to Hutong and its context:

- volume of Hutong is shrinking through strategic urban construction (metro line, main road extension) and conservation for destroy (imitation of historic style housing on the original site)
- It is always happens that modern buildings contrast with the historic areas, from the typological and functional aspects, which causes urban fragmentation
- social structure and sense of belonging to the hutong community have been disturbed since the demolition and improper development



fig.23



### 3. Courtyard housing

#### Before

Courtyard is the most outstanding and fundamental characteristics of Chinese architecture, as a basic pattern in construction, it is used in residences, palaces, temples of ancient China.

The layout of a courtyards represents traditional Chinese morality and Confucian ethics, for example, the main house is normally occupied by the oldest member of the family . Spatially, the entrances and main houses of courtyards are mainly arranged along the north-south axes, and the side houses on east and west side of courtyard adjoin the main house with pathways. The open space, which is surrounded by houses in the middle, is the place for family activities, allowing ventilation and sunlight.

#### Now

Because there is no sewage and central heating system in courtyard housing as well as physical quality of the housing is decaying, there is urgent demand to upgrade the quality of courtyards housing.

As the extremely high density in Beijing inner city, the illegal added housing in courtyards change joyful courtyards to 'messy courtyards'.





#### 4. Typical Life style of hutong

Hutong is the symbol of the history of Beijingers' lifestyle. Firstly, the hutongs were named after the collective functions of hutongs, such as Duanku (storage of silk). Secondly, goldfish, trees, bird cages, which are the basic elements of Beijingers' lifestyle, are part of the hutong culture. Thirdly, shaped by spatial forms, close relationships among communities create strong sense of belonging for local residents. Meanwhile, the multiple ways of using space, such as local vegetable markets and small shops located in hutongs, create a commercial and social diversity which is a tremendous resource in the future development of Beijing's economy and cultural life'(Nilsson 1998, p.3)

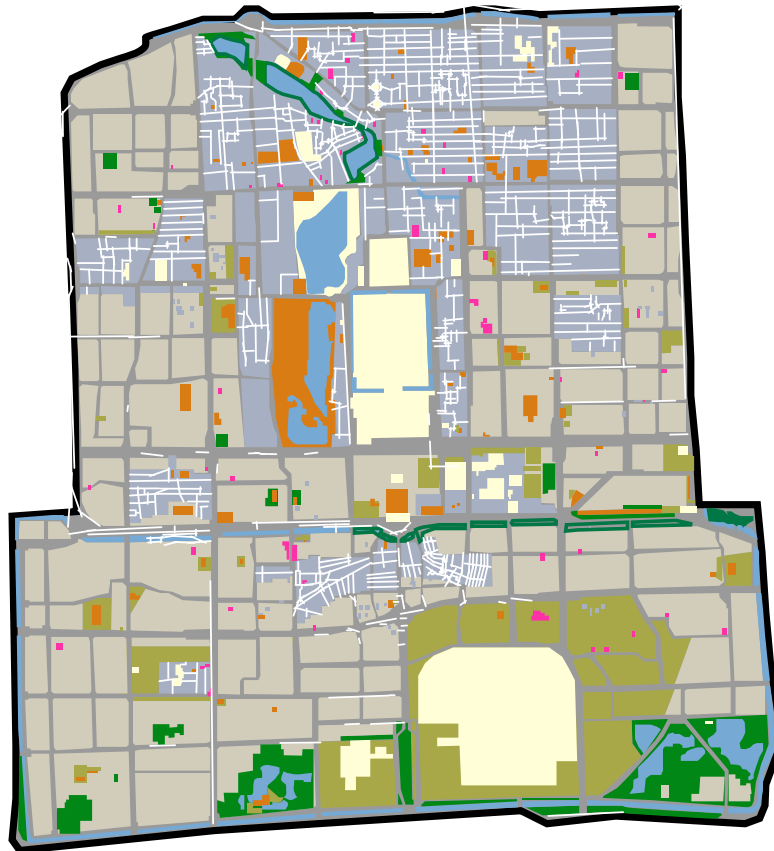
##### Current

Besides the low-income, old people concentrated in the Beijing inner city, as the redevelopment proceeding in the old city, many original residents have been relocated in periphery of Beijing, some of them consequently lose their daily social connection and job opportunity. Typical life style of Beijing embedded in Hutongs gradually disappear.



# What has been done for re-developing Beijing inner city?

## Urban regeneration practice in Beijing



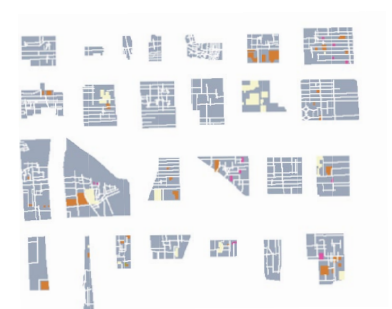
Conversation plan of 25 historic areas in Beijing inner city

Beijing Municipality approved conversation plan of 25 historic areas in Beijing inner city by 2002.

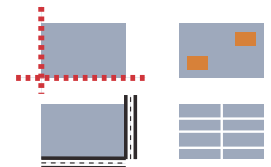
Area: 1.038 hectares,  
percentage: 17% of the total area of the old city  
population: 285,000  
density: 275 people/ ha

By adjustment of the land use, planning for moving out residential population, building preservation and regeneration plan, the conversation of historic districts in Beijing inner city has been improved since last ten years.

However, as the regulations have not been clearly defined and difficulties from economic, social and spatial aspects, the decaying of historic identity is still going on in Beijing inner city.



historic areas  
national heritage  
city's heritage  
0.5km



## Urban regeneration practice in Beijing

At the first International Seminar on Urban Renewal, in August 1958, the three principles of urban renewal were identified as redevelopment, consisting of demolition and reconstruction; rehabilitation, improvement of the original structures, and conservation, preservation of historical monuments, and generally not with residential areas (Miller 1959).

### a) Redevelopment

Redevelopment consists of the removal of existing buildings and the re-use of cleared land for the implementation of new projects (Miller 1959).

Redevelopment consists of the removal of existing buildings and the re-use of cleared land for the implementation of new projects (Miller 1959).

### b) Rehabilitation

Rehabilitation, often termed conservation or preservation, can be defined as the opposite of redevelopment. It is based on preserving, repairing, and restoring the natural and man-made environments of existing neighborhoods. Rehabilitation is applicable to areas where buildings are generally in structurally sound condition but have deteriorated because of neglected maintenance (Miller 1959). It takes advantage of the existing housing stock as a valuable resource and adapts old houses to present-day life and acceptable standards by providing modern facilities (Zhu 1989).

Citizen participation is a recurring theme throughout all phases of the rehabilitation process.

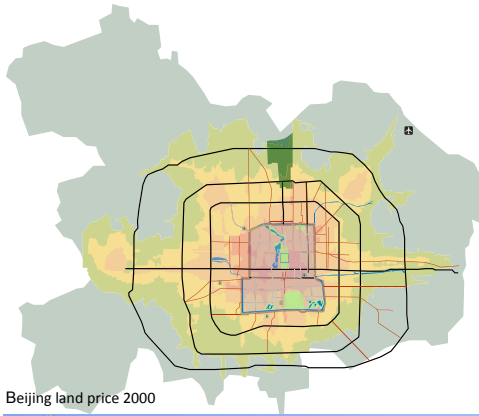
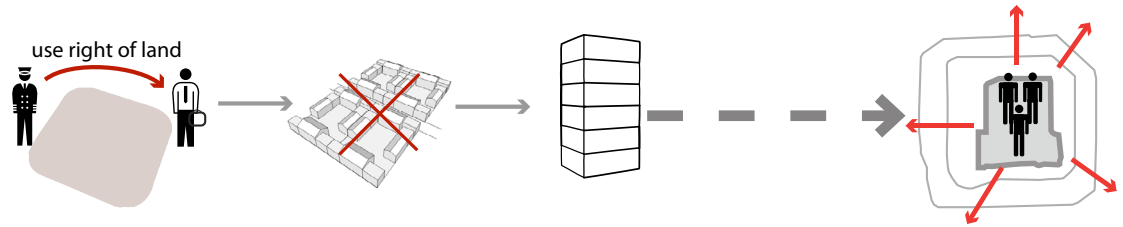
### c) Integration

views rehabilitation and redevelopment as complementary forces and combines the best aspects of both approaches. It allows for flexible project implementation which can preserve the traditional urban environment and its human scale while achieving respectable densities. It respects the social order of the community by rehousing the majority of the original residents on the site and invites mass participation.

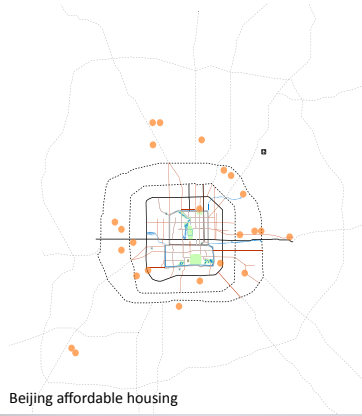


# What is the consequence of inner city regeneration?

## first phase of gentrification



Beijing land price 2000



Beijing affordable housing



commercial streets



affordable housing:Tian Tong Yuan

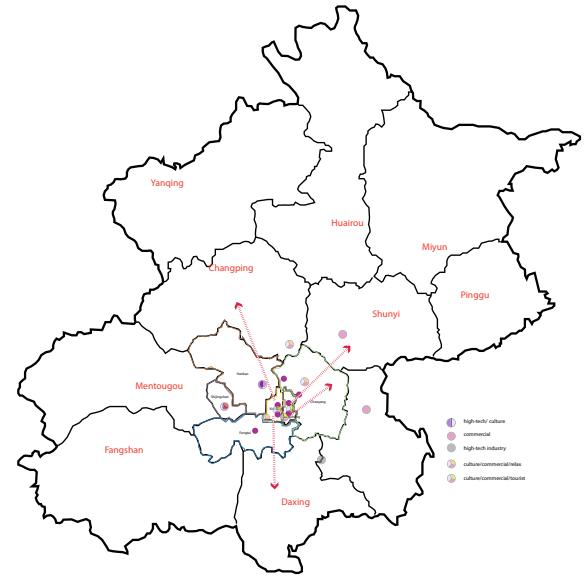
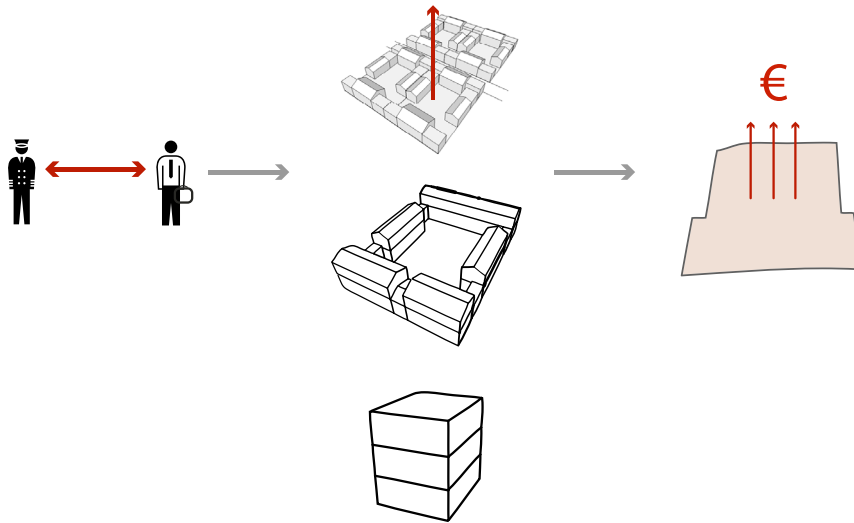
In the early 1990s, central government starts to realise the use right of land to private developers. The marketization has been done through land market.

In order to purchase higher profit from the development, once the private real estate companies obtained the development permission from the government, the land use always has been transformed from residential (hutongs) to commercial or business . In this case, the local residents were mostly relocated in the periphery of Beijing, otherwise got the compensation from the developers to find their place by themselves.

Consequently, we could see the land price in the Beijing inner city is extremely higher than the others. And till the end of 1990s, there were several economic affordable housing started to constructed around the 4th ring of Beijing, with intension to resettle the migrants from the inner city.



## second phase of gentrification



Since 2000, the central government started to transform the marketization from land market to housing market.

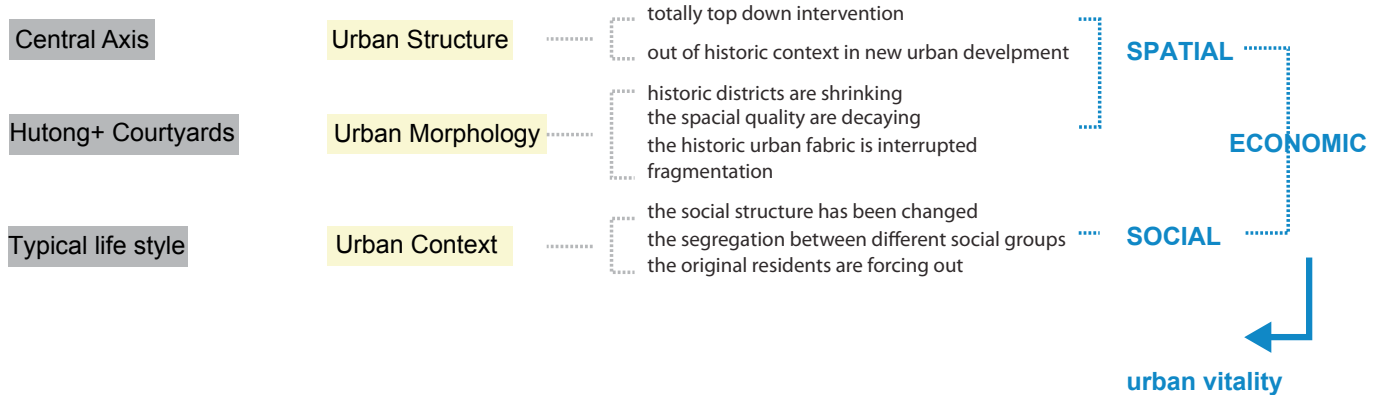


With considering the importance of preservation of Beijing historic areas, there were several experimental housing projects supported by Beijing municipality have been done. However, because of the low density demand and high cost of inner city development, the housing price goes much higher than before.

Some original residents choose to move out of the inner city for the unaffordable housing price or rents, with the policy from the government that release the population pressure in the Beijing inner city.

## Conclusion-problem definition

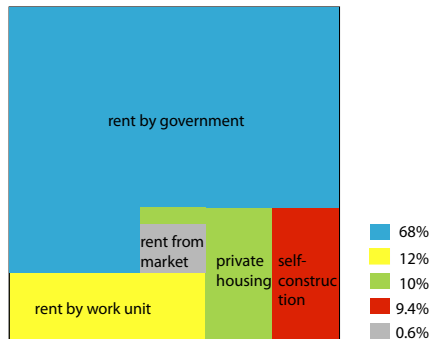
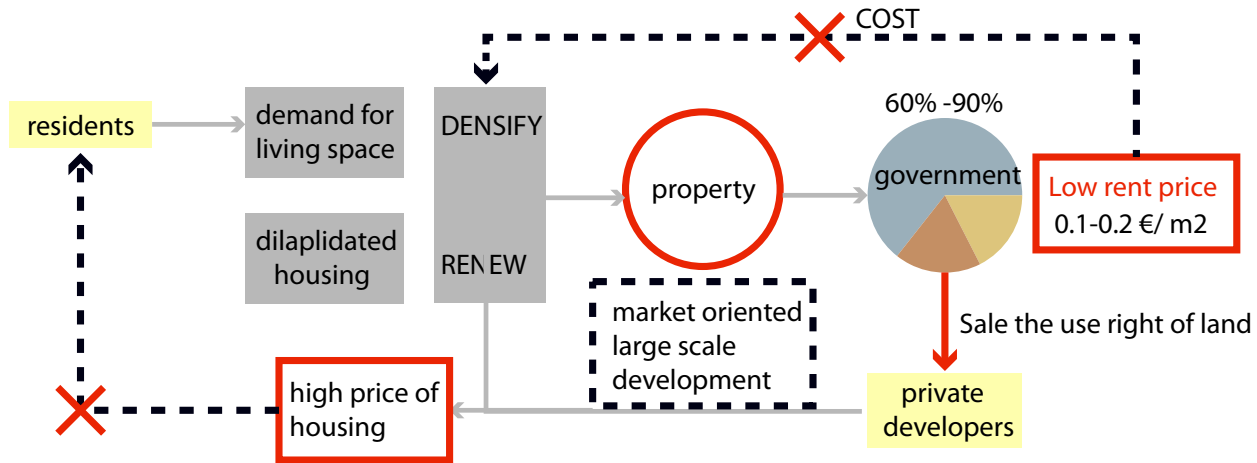
### Cultural Identity



Three elements, central axis, hutong and courtyard, typical life style which respectively reflect urban structure, urban morphology and urban context are carriers of cultural identity of Beijing inner city. But as all of these elements are under threats of instant modernization, cultural identity in historic city core is declining. With decaying spatial quality in traditional neighborhood and gentrification, urban vitality has been affected as well in historic districts.

Strategic intervention locates on entral axis is always proceeded without historic context consideration. Volumn of hutongs and their associated courtyard houses is shinking and their quality is decaying. And as a consequence of changed urban morphology, social segregation emerges between the new rich, and the original residents.

## Conclulsion-Why and What we learned?



Property in Beijing inner city

Market-oriented or government dominated urban regeneration does not fit Beijing inner city very well. The high value of the inner city's land and the property of the housing is the main cause of the conflict between conservation and development.

- market-oriented development take the profit as the first priority, commercial development always forces the historic districts out.
- top-down preservation can not realize the economic sustained urban regeneration, because around 70% land property in the Beijing inner city is owned by the State. And the collaboration development between government and private investors increases the housing price in the Beijing inner city, which lead to gentrification.

Gulou as a study case

Site analysis

Diagnoses

Generalized rules of strategy

Strategy for spatial intervention

Strategy for social intervention

Strategy for open spaces

Strategy for transportation

conclusion

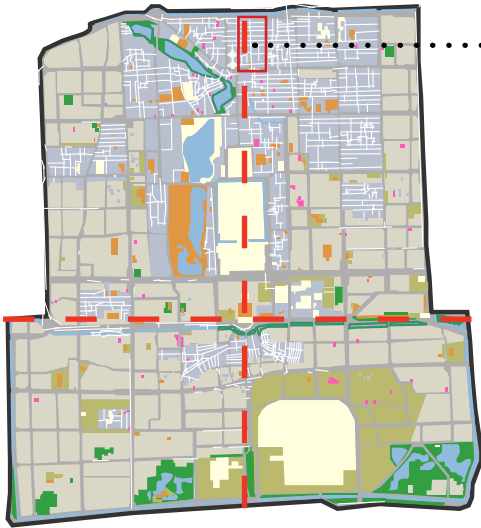
Strategy of regeneration

Took one site of historic districts for studying, this chapter of booklet explains regeneration strategy for the project area. Firstly, based on the former analysis and typological study, define the key points to consider in strategic planning. According to research conclusions, concept of strategy has been drawn.

In the next step, strategy for spatial and social intervention have been showed. It explained how spatial and social elements connected with cultural identity can be upgrades, and consequently changes historic districts in Beijing inner city into a place of good urban quality, vitality and social integration.

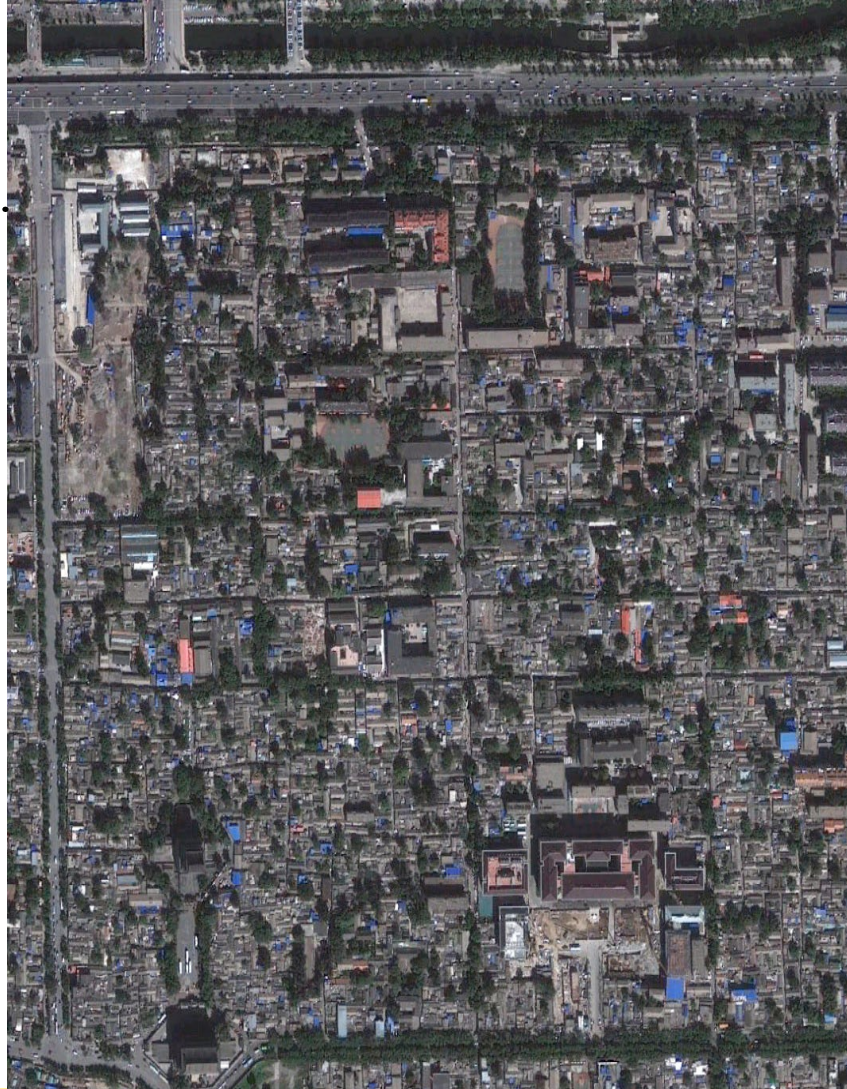


## Gu Lou: as a study case



**Area: 56 hectare**  
**population: 28,200**

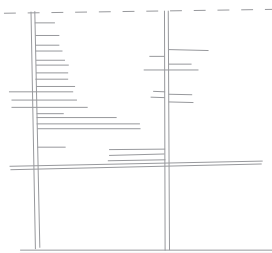
Gu Lou districts locates on the end of vertical central axis and has drum tower, bell tower and other historic monuments on the site. It contains all the common characters of historic areas in Beijing inner city. For deeper research and design, I choose Gu Lou districts as a study case.



## site analysis\_current situation\_streets

Since last 400 years, the street pattern hasn't changed much on the site. The clear structure of fish-bone hutongs still can be seen from the districts and the size of blocks which were shaped by alleys has been preserved. These elements, as important elements of typical urban fabric of Beijing inner city have to be considered in the urban regeneration progress.

The historic street pattern supplies a sample of organize streets system, combines different space (commercial streets and neighborhoods) according to human scale consideration.



YUAN DYNASTY  
1341-1368



QING DYNASTY  
1711-1799



CURRENT



site analysis\_current situation\_public facilities



commercial/retail/restaurant



historic monuments



governmental institution



hospital



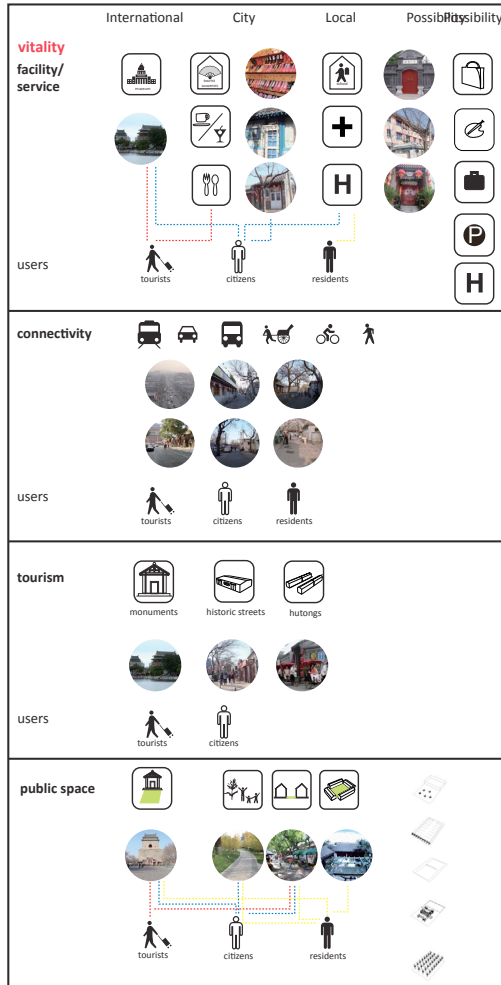
schools



office/company



# site analysis\_current situation and potentialities



facilities on the site:

- tourist related facilities
- public facilities in the site

lacking

- cultural related facilities
- commercial facilities serve the district and surrounded areas

strength:

- tourist related facilities

connectivity:

metro, car, bus, triple-wheel bike for tourists, bikes, on foot

minus use of cars

strength public transportaion network:

Metro + Bike + Walk

tourism:

historic heritage;  
historic streets;  
hutong neighborhood

public spaces:

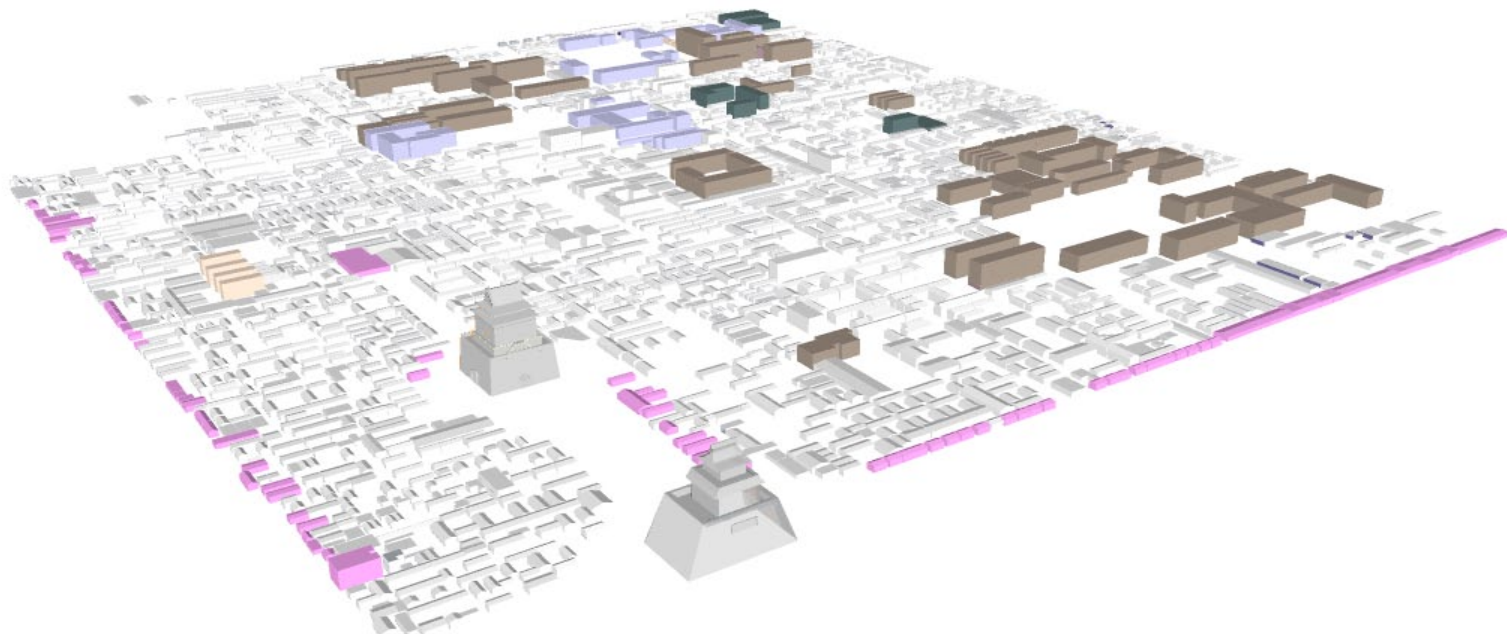
squares, city park, hutong

semi public spaces:

courtyard houses

add more public spaces

# site analysis\_current situation\_buildings



-  commercial
-  good quality courtyards
-  hospital
-  modern buildings
-  schools

# site analysis\_catalog of buildings

					<p>preserve</p>
					<p>maintain</p>
					<p>renew</p>
					<p>rebuild</p>
					<p>rebuild</p>
					<p>maintain</p>

According to the housing quality and historic value, buildings in Gulou districts can be divided into different groups and each of groups should be treated in different ways, which shows in the left catalog.

The divisions are mainly historic monuments, good quality courtyards, medium quality courtyards, messy courtyards, modern housing construct with historic scene, modern housing in harmony with historic districts.

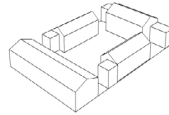


## site analysis\_current situation\_housing

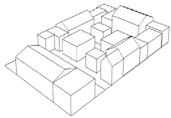
There are mainly four types of housing in Gulou districts:

- around 10% of good quality courtyard housing;
- courtyard housing with extended buildings;
- slab housing constructed during 1950s to 1960s in bad housing quality;
- small volumn of high rise housing built after 1990s

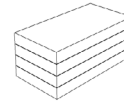
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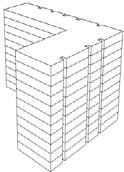
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4

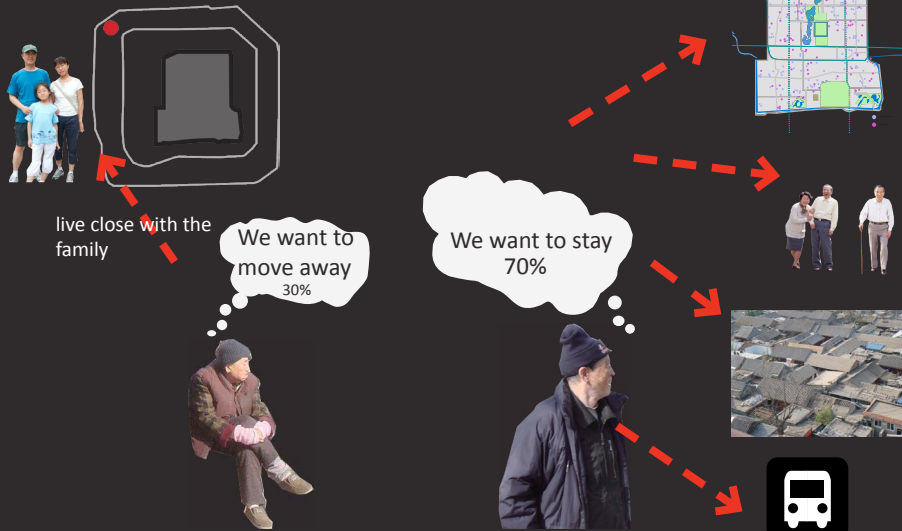


3



# diagnoses\_ current regeneration

## local residents' wishes



After survey and comparing with former urban regeneration cases in similar historic districts, it reflects an obvious contrast between local residents' willing and result of redevelopment.

Summerized from most of cases, there are always 30% of local residents agree to move away by chance of regeneration, while approximately 70% of them would like to stay in the site, because of their social network, joyful community atmosphere, better public facility and convinence traffic network.

However, the consequence of redevelopment shows in a totally converse way. Around 70% of local residents, who belong to low-income groups move out of their neighborhoods because the unaffordable housing price. And types of housing are limited.

## Consequence of former regeneration

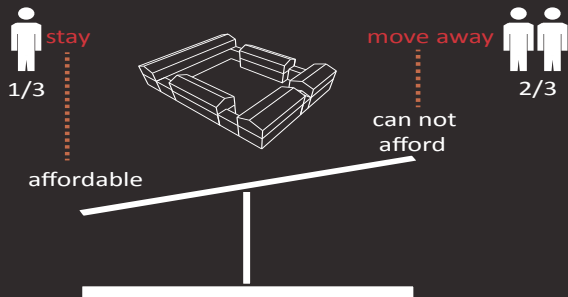
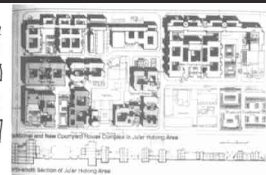


Figure 4.5: Original site plan



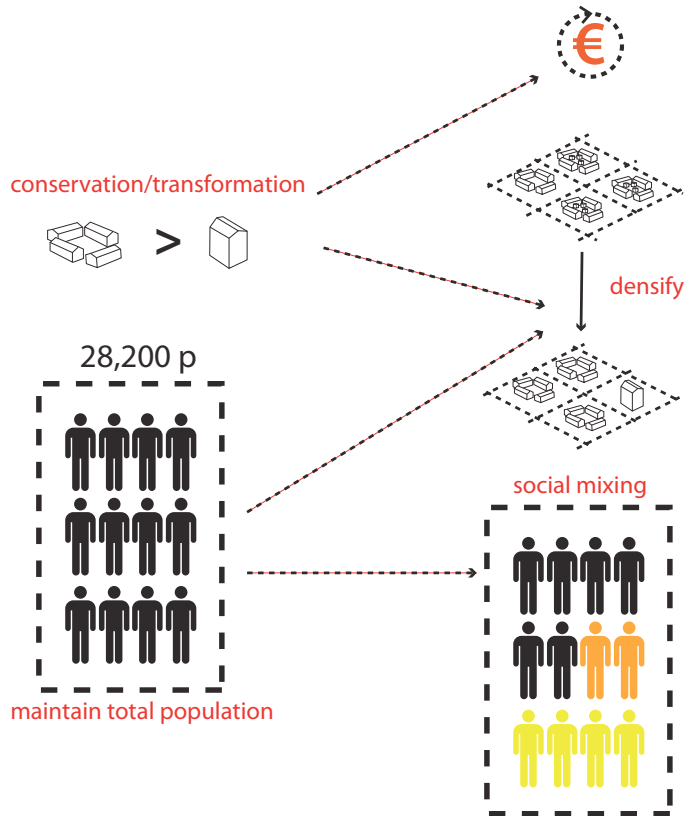
Figure 4.6: Project site plan



## diagnoses\_conclusion

### key points

- source of funds for regeneration
- social structure adjustment( ratio of original residents)
- historic urban morphorlogy(ration of hutong and courtyards)



There are three crucial points should be solved in order to make the historic districts regeneration possible:

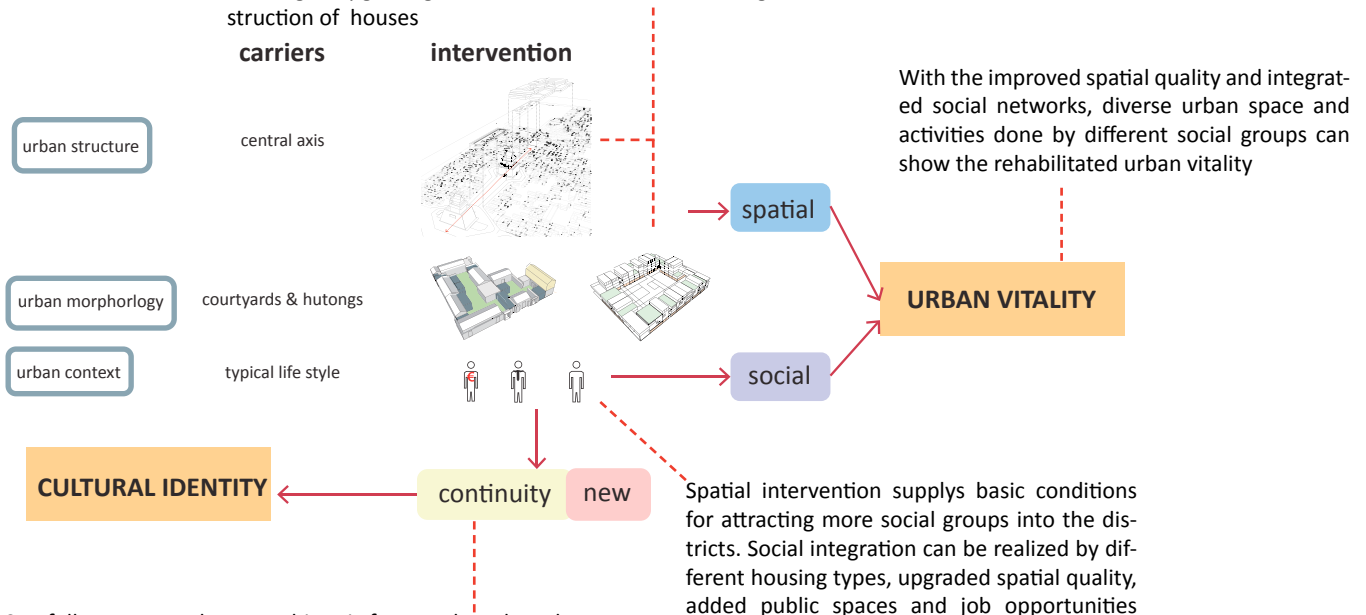
Firstly, the key point is the funds for regeneration. In order to avoid the vicious circle happened in the inner city regeneration before, economic sustain is very important. Government support, market operation and involve the housing management institution as the operator is a new exploration to break the former vicious circle and make the economic sustained urban regeneration possible.

Secondly, the ratio of original residents should be carefully considered. Because they are the groups carrying typical vitality of Beijing and have social networks embedded in the hutong community. Based on this, the social mixing associated with spatial intervention can be proceeded.

Finally, the historic urban morphorlogy as the most important elements of cultural identity in the inner city should be considered carefully. How to upgrade the spatial quality to fit the modern life with respecting historic urban typology and demand of density will be the emphasis on the design part of the project.

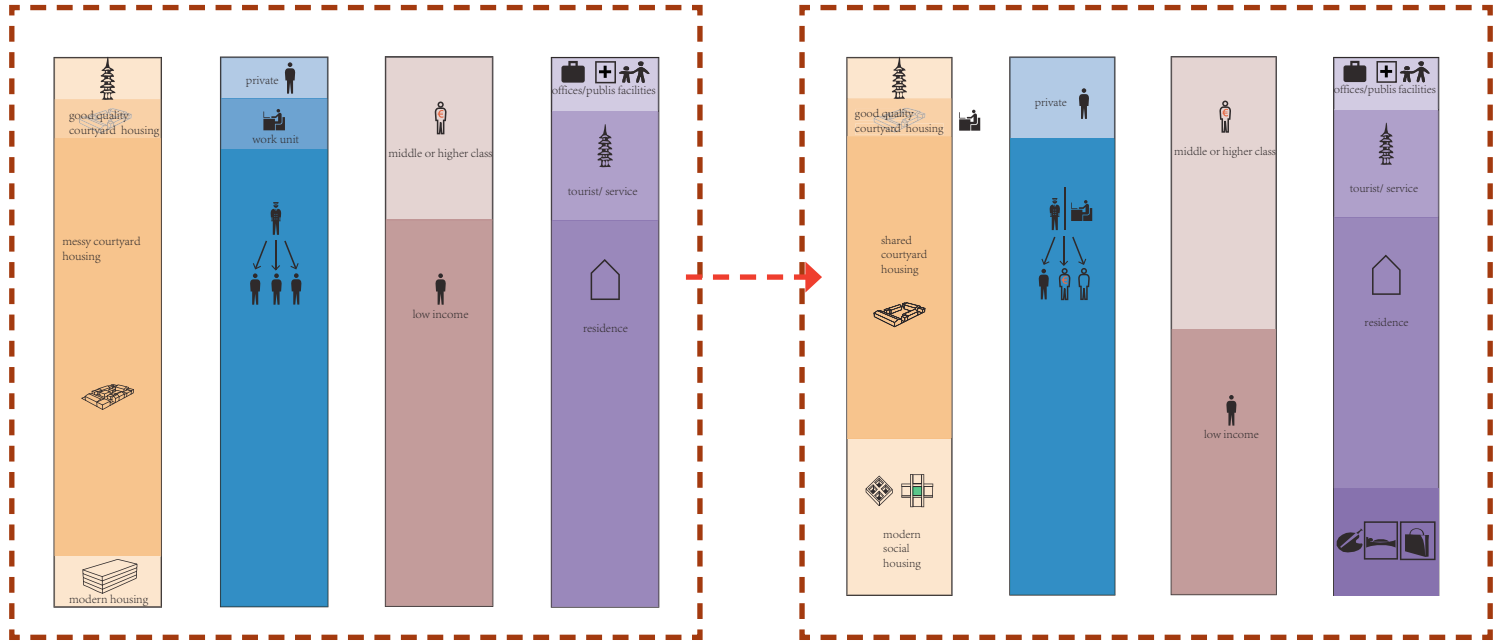
# proposal for historic districts regeneration

As carriers of cultural identity, spatial intervention mainly concentrate on creating or upgrading centralities on central axis and regeneration and construction of houses



Carefully treatment between historic form and modern development can maintain the historical continuity in the process of regeneration, contribute to cultural identity and in put new activity in the traditional neighborhood of Beijing inner city.

## proposal for historic districts regeneration



The main strategies are :

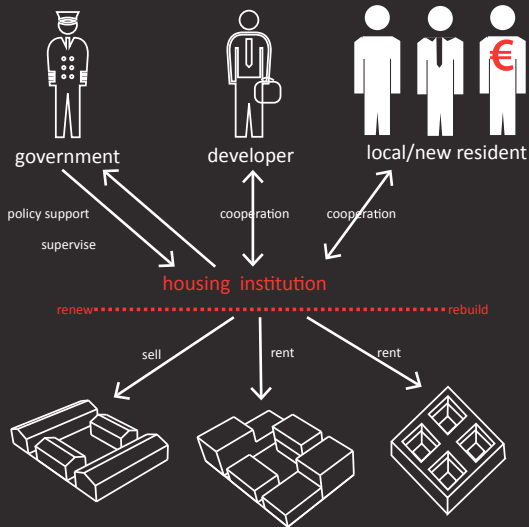
- introducing more housing typologies into historic sites by renew, rebuilt and new construction
- attracting middle and higher social groups move into the project area and realize social integration
- balance consistence of social groups
- adding more functions and programs in the site

## proposal for historic districts regeneration

Housing institution will play an extremely important role in historic districts rehabilitation. It can be developed from housing management office from the government.

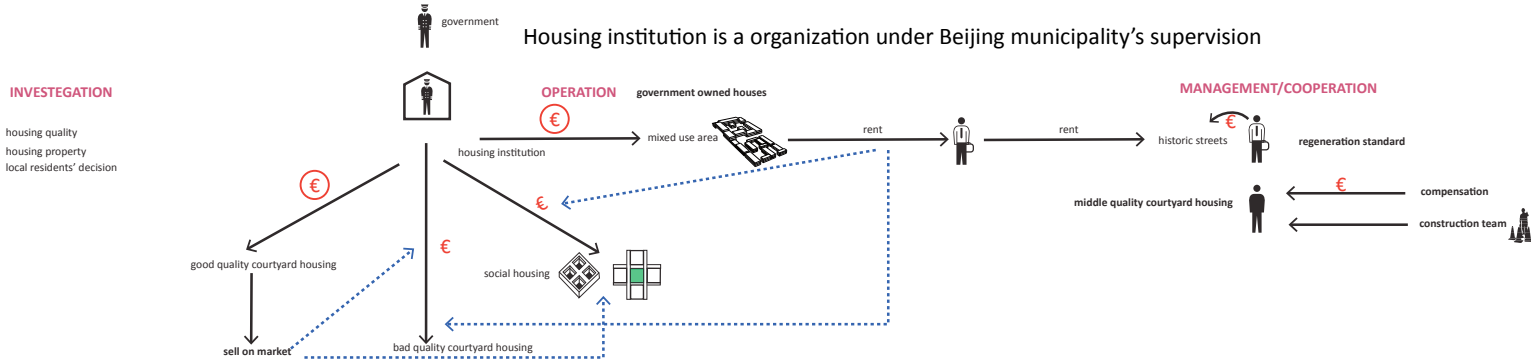
With the policy support from government and cooperate with different developers, housing institution can provide diverse types of houses to attract different social groups. In case of these, houses on the site which sell or rent through market can supply finance support for courtyard housing conservation and social housing construction. Socially, mono social group can be broken as middle and higher class people move in and integrated with local residents.

There will be a 'win-win' situation between government and local residents, operations of historic districts conservation and modernization.





# What is the role of housing institution?



Three key words of housing institution's obligation:

**investigation: prepare information for urban regeneration in historic districts**

**operation: housing construction, upgrade public facilities**

**management: management finance flow, supervision on housing quality after regeneration, maintaining housing quality in historic districts, local residents**

# Definition of strategy

## STEP 1: How to fulfill the density demand with consideration of historic housing typology?



FAR Study

## Definition of strategy

### STEP 2: How to treat different types of buildings?

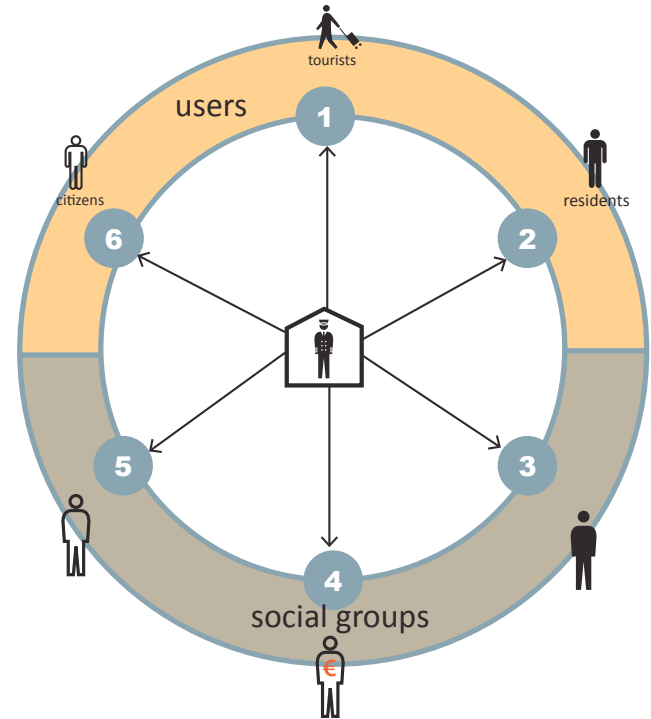
**key words: conservation, upgrade spatial quality, diverse housing typology**

After define different housing quality and hierarchy for conservation of buildings on the site, housing institution as a management department from government can proceed different treatment to them.

It gives chances for creating attractive public spaces and adding new-functions in the site to bring in more users, meanwhile creating possibilities to reuse, renew and rebuild traditional houses for attract new social groups come to live in the neighborhood.

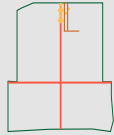
Spatial intervention and social integration can be archived with combination.

The following explanation of strategy has been divided into two parts: spatial intervention and social integration.



# Strategy for spatial intervention

urban axis associated conversation

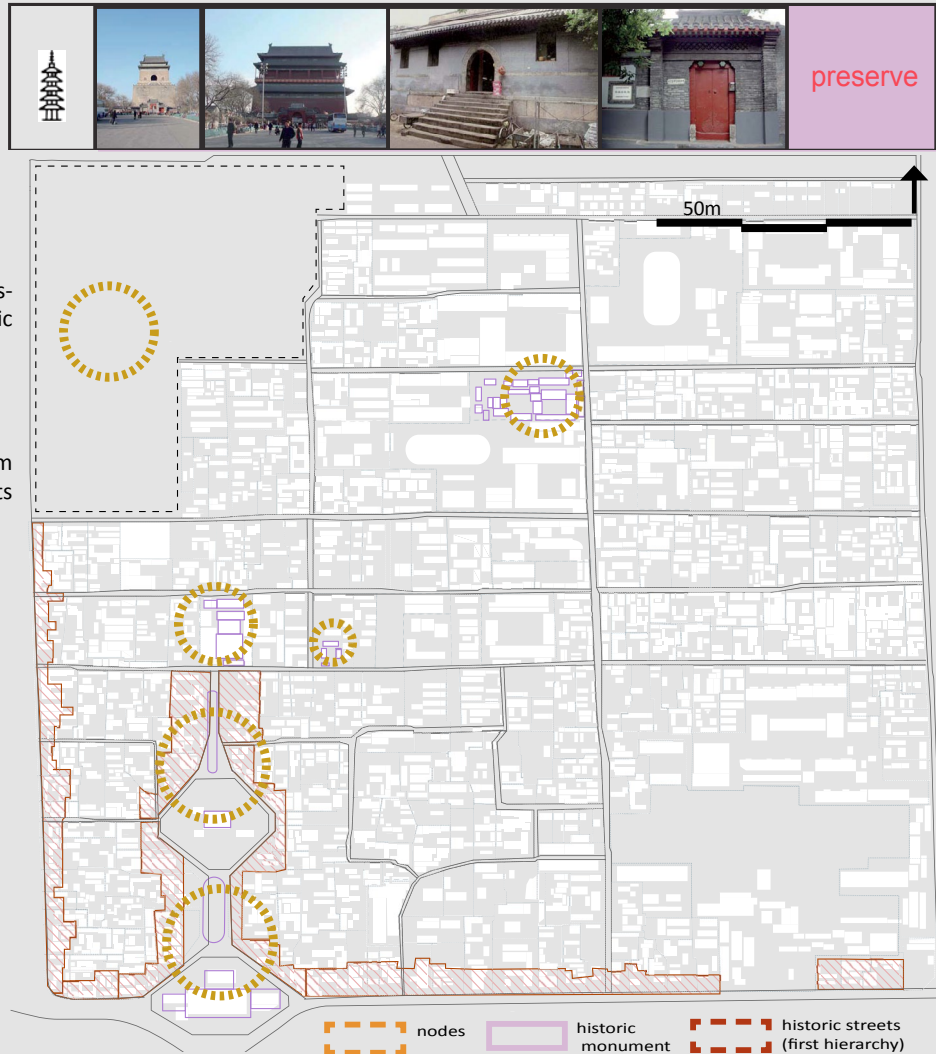
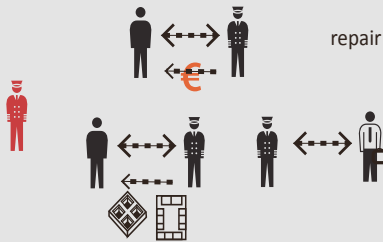


Urban axis associated conversation mainly about preservation of historic heritage and regeneration of historic streets alongside them.

Housing institution takes charge of quality control.

Finance of historic streets regeneration comes from private developers who rent houses on historic streets from government.

organized renew/reconstruction



## guideline for facade renewal of historic streets

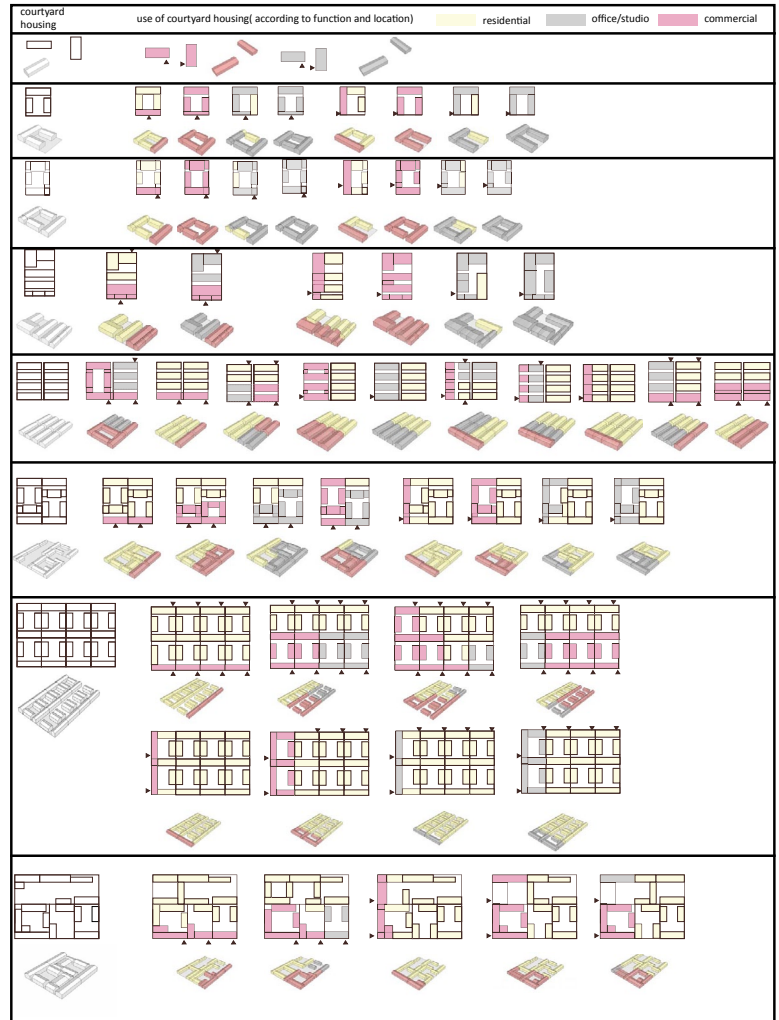
		residential	residential	grocery	homes for the aged	tea house	restaurant
current							
evaluation		maintain	maintain	rebuild	maintain	renew	maintain
guideline example							
	residential		residential	restaurant	residential	toilet	shop
current							
evaluation	maintain	renew	renew	renew	maintain	renew	renew
guideline example							

## Types of courtyards and function

There are different types of courtyard housing in Gulou districts as showed on the left of the list.

According to different direction facing the historic streets, the openness to the main streets can be changed, as well as the function arrangement. The houses facing the main streets can be taken as commercial use or offices, studios etc. and the back of the courtyard housing can be maintained for the residential use.

The redevelopment program can be very flexible based on each unit of courtyard housing.





## Strategy for spatial intervention

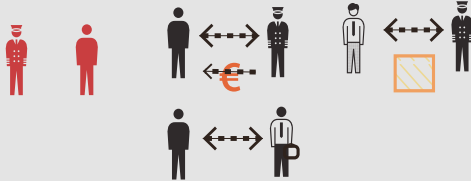


### Good quality courtyard housing regeneration

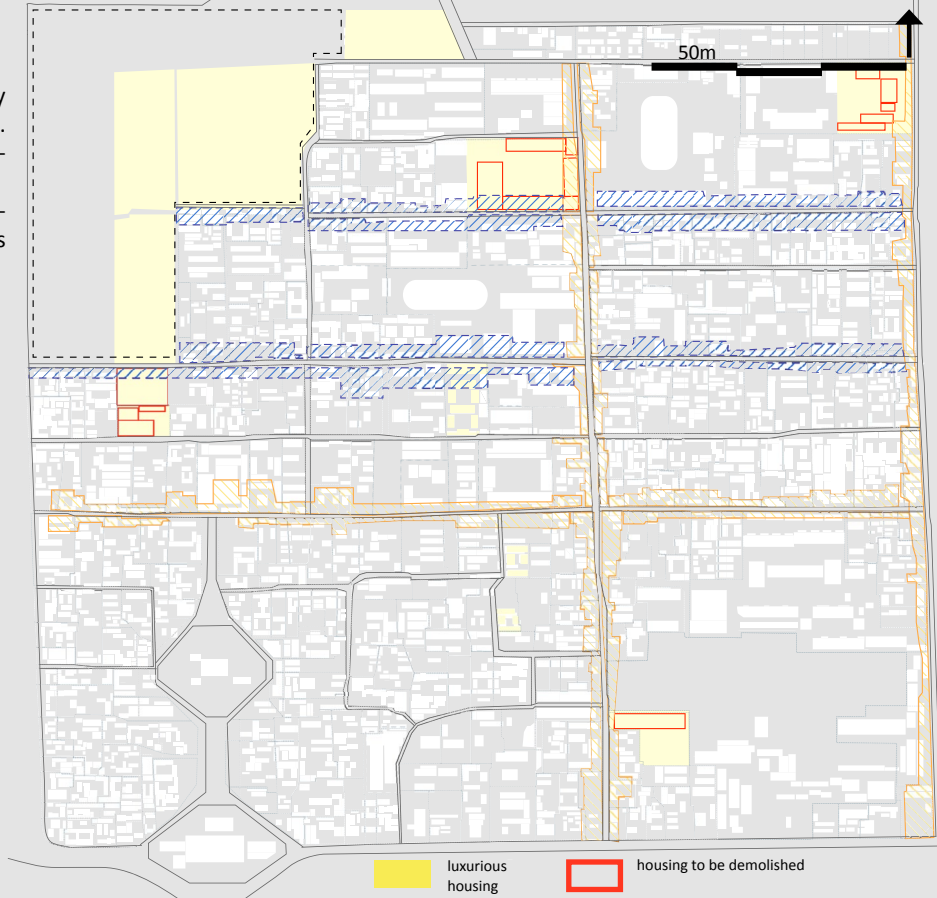
Good quality courtyard houses on the site can easily transformed into luxurious houses sell through market. Also part of bad quality houses can be rebuilt for high-class houses.

Rich income of them can be used for financing regeneration projects on the site, and high price of houses make rich people as target groups.

#### Developers:



#### Target groups:



## Strategy for spatial intervention



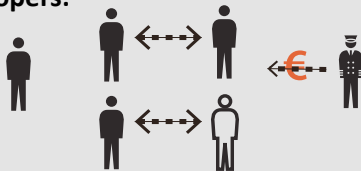
### Middle quality courtyard housing regeneration

Middle quality courtyard houses regeneration is the largest part of residents participation process.

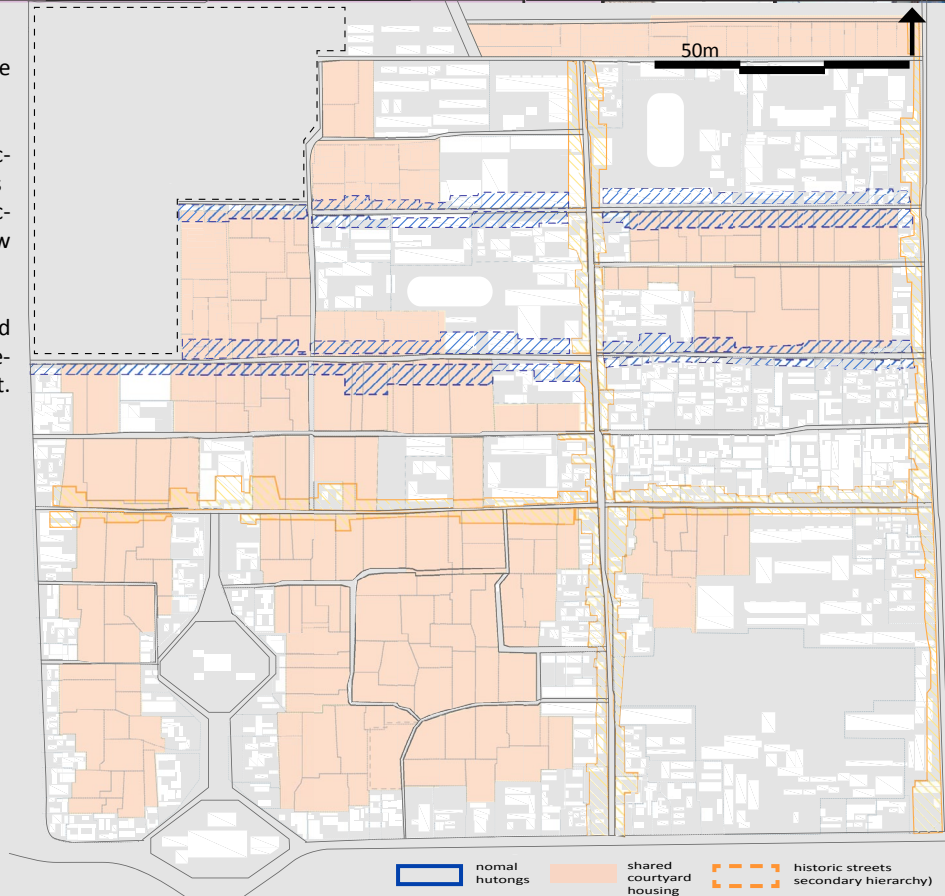
Housing institution takes charge of supplying construction teams and architecture consultant, local residents can improve their living conditions, explore new functions in their houses and have chance to live with new social groups who will move in after regeneration.




Middle quality courtyards will transformed into shared courtyard houses rent through market. Renew and rebuild project on the site can benefit incomes from rent.

### Developers:

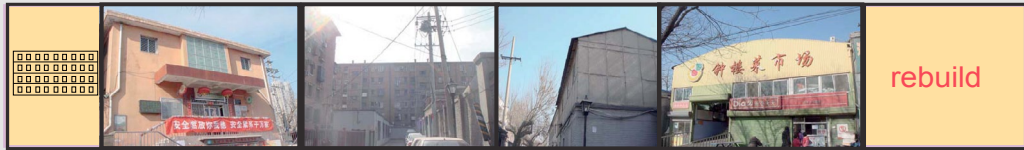


### Target groups:



 nomal hutongs  shared courtyard housing  historic streets secondary hierarchy

# Strategy for spatial intervention



## social housing-transformed from bad quality courtyards

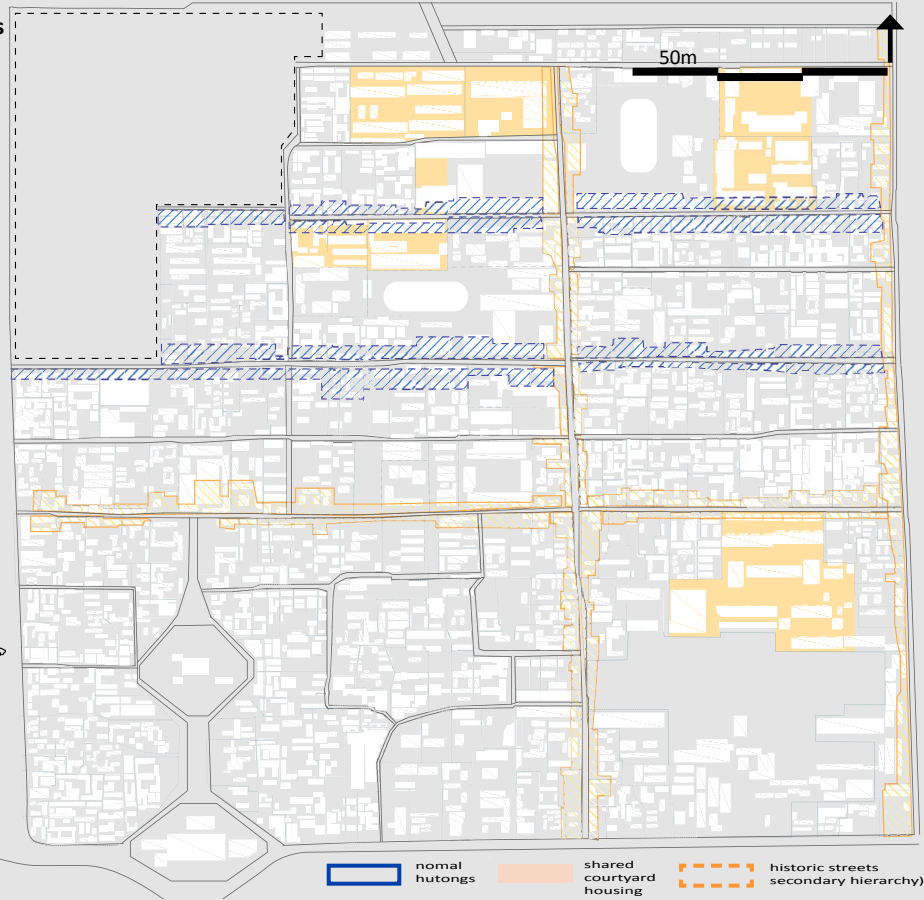
As most of local residents are low income groups, consider their unaffordable situation for shard courtyard houses, government supported social housing construction can be done on the site.

Instead of gentrify low residents into periphery of Beijing metropolitan areas, social housing gives them opportunity to stay in their original community, social network and close to their job opportunities.

### Developers:

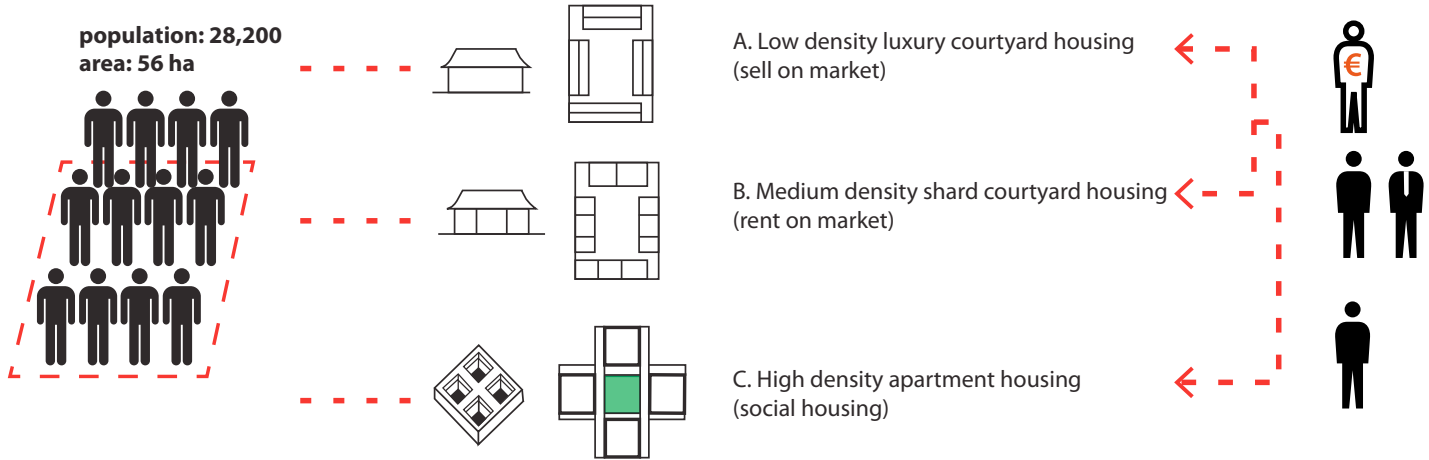


### Target groups:





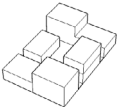
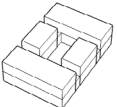
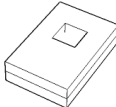
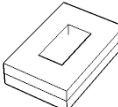
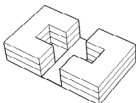
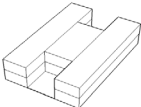
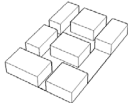
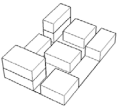
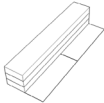
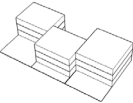
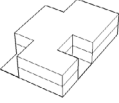
- normal hutongs
- shared courtyard housing
- historic streets secondary hierarchy

## Spatial intervention\_conclusion\_housing types

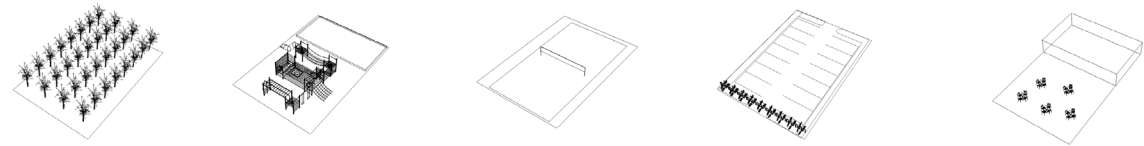
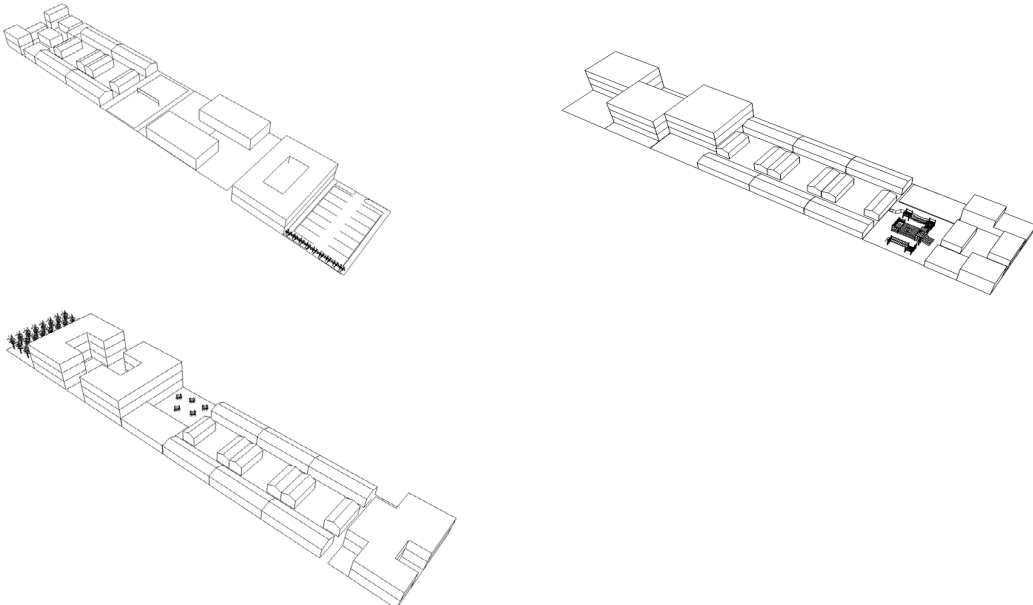


Based on different treatment of buildings in the site, consequently there are three types of housing can be supplied for different social groups after housing transformation. These diverse housing types firstly upgrade the spatial of quality of the historic neighborhood, secondly the close location of each housing types brings more meeting opportunities among different social groups. And operation with disparate housing types give possibilities for balancing finance for the historic districts regeneration. All of these will spatially and socially contribute to strength cultural identity and urban vitality.

# housing typology research

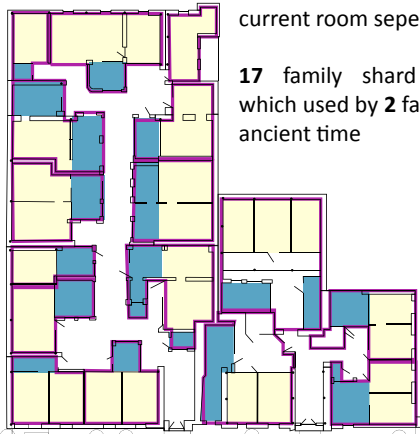
typology				
luxurious housing				
shared housing (middle class)				
				
apartments (social housing)				

# housing typology research

<p>public space program</p>	
<p>sample</p>	



## Courtyard housing transformation\_current situation



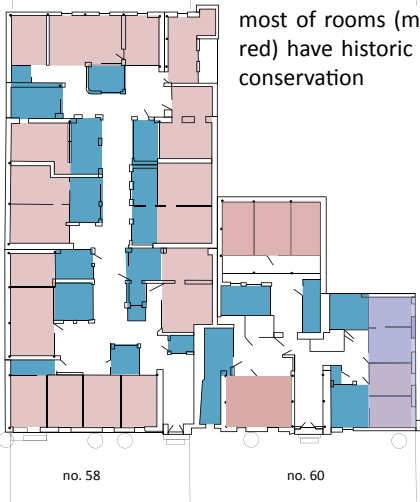
current room separation

17 family shard spaces  
which used by 2 families in  
ancient time

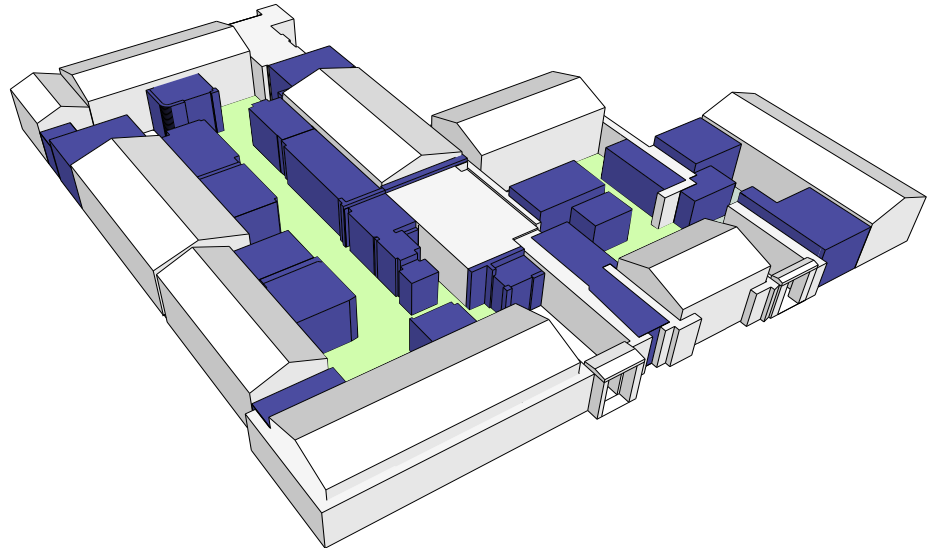


current spatial quality

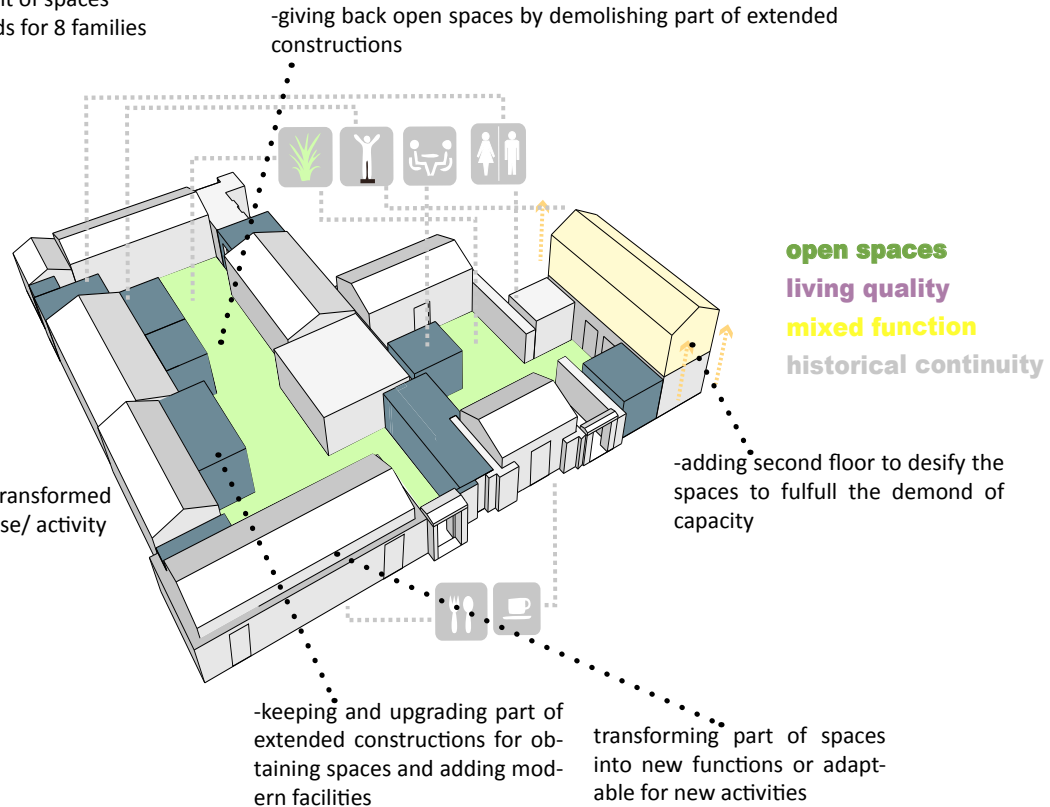
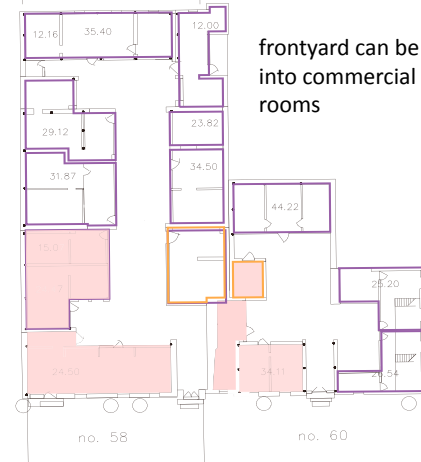
extended constructions occupied almost all the open spaces in the courtyard



most of rooms (marked in  
red) have historic value of  
conservation

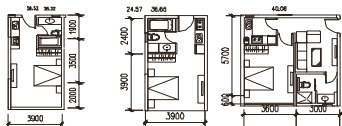


## Courtyard housing transformation

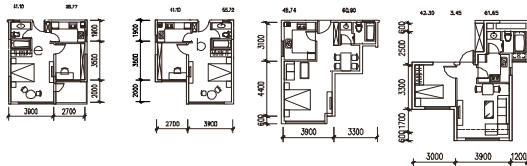


# flexible combination of room types

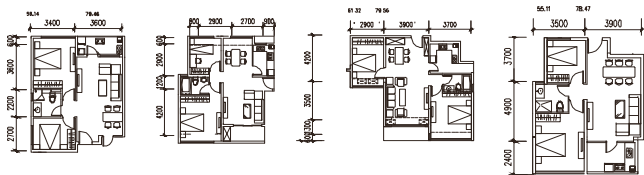
20-40m<sup>2</sup>



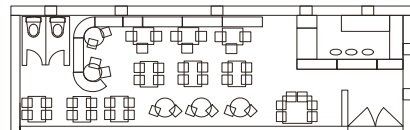
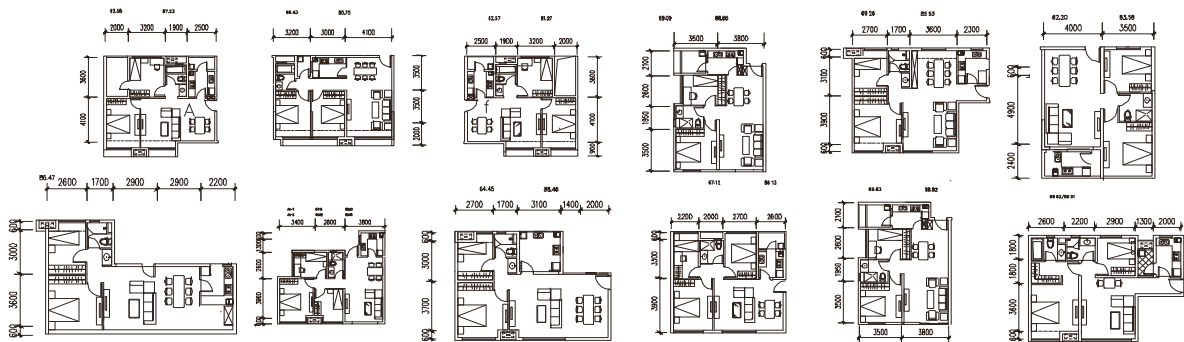
40-50m<sup>2</sup>



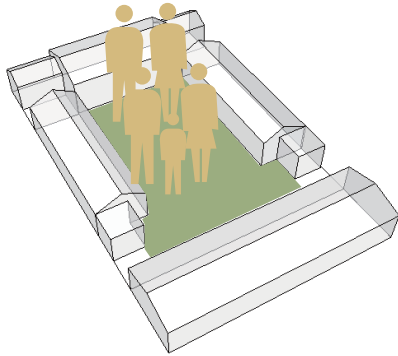
50-60m<sup>2</sup>



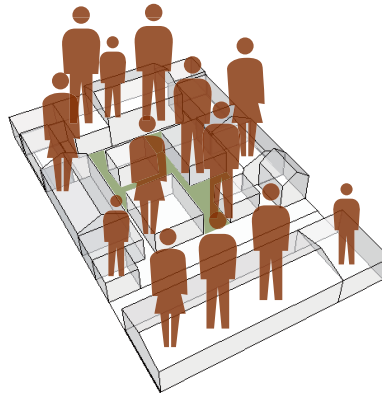
60-80m<sup>2</sup>



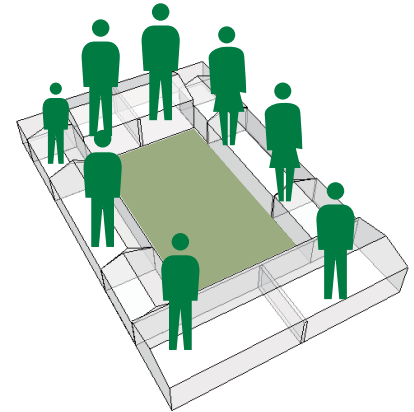
## Courtyard housing transformation



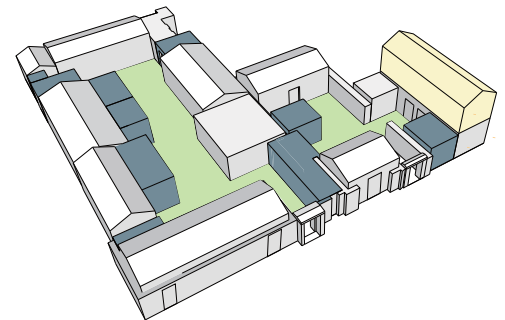
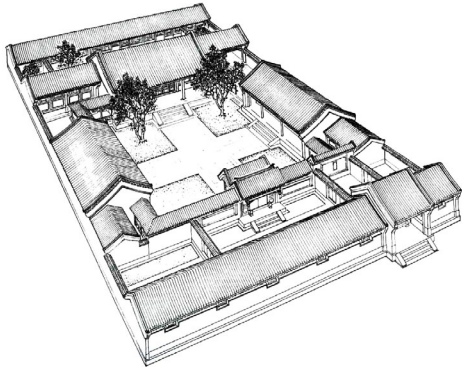
private owned courtyard housing  
private owned open space



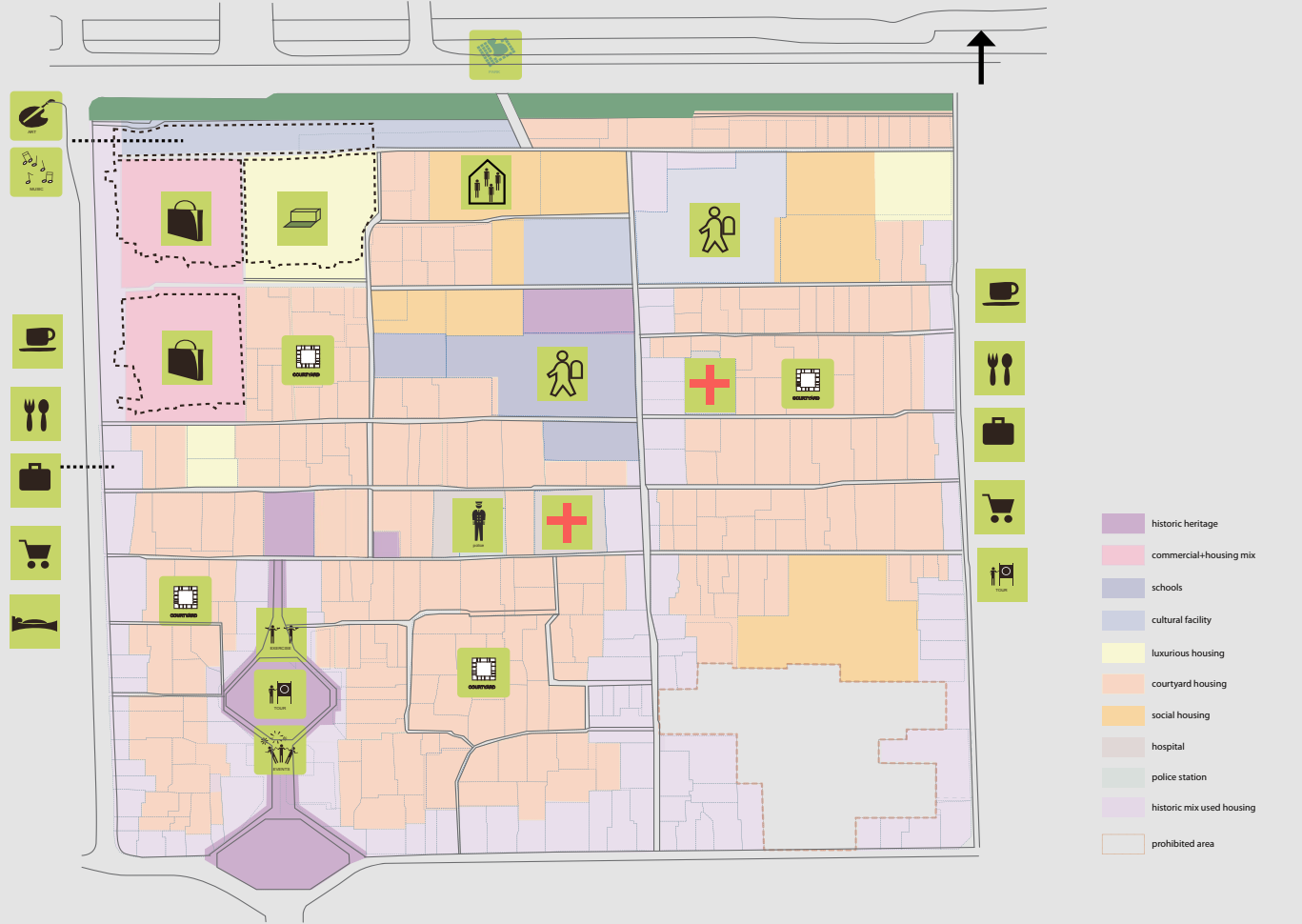
over crowded courtyard housing  
limited open space



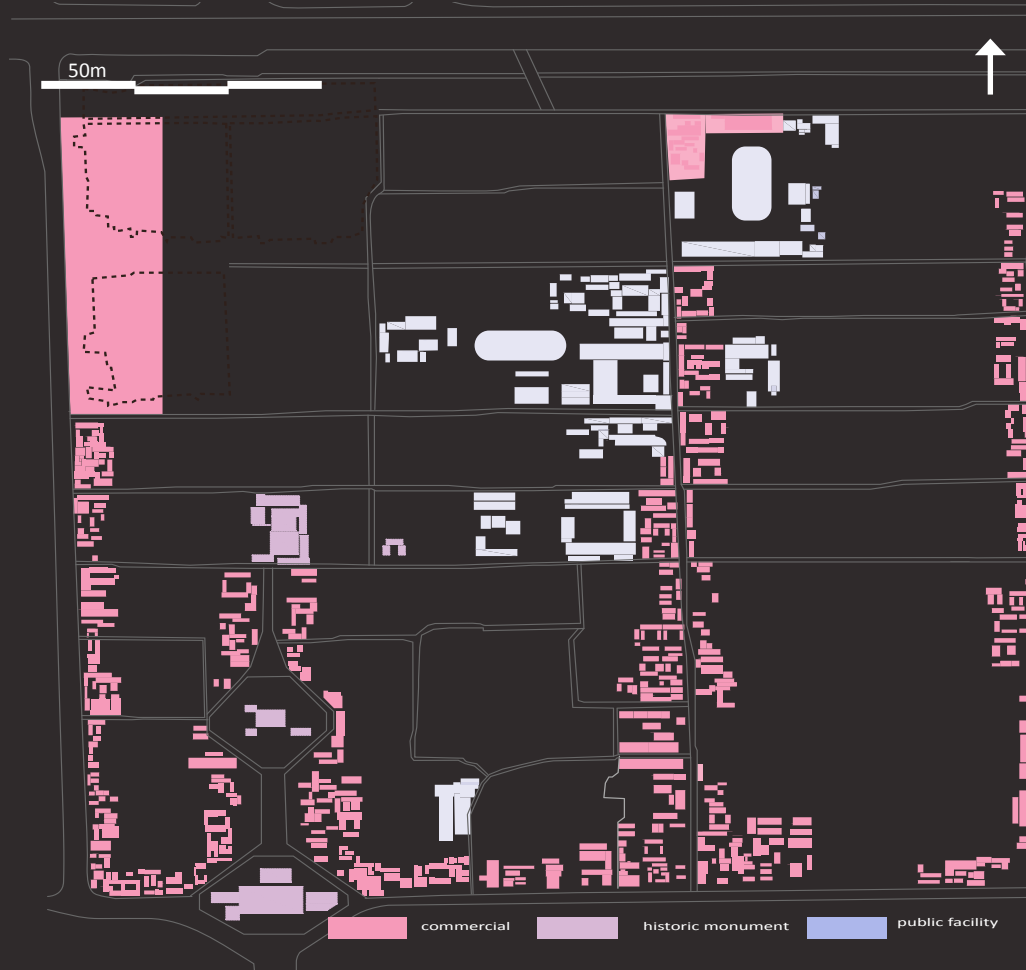
shared courtyard housing  
shared open space



# spatial invervention\_conclusion\_land use



# Strategy of social inversion





# Strategy of spatial intervention



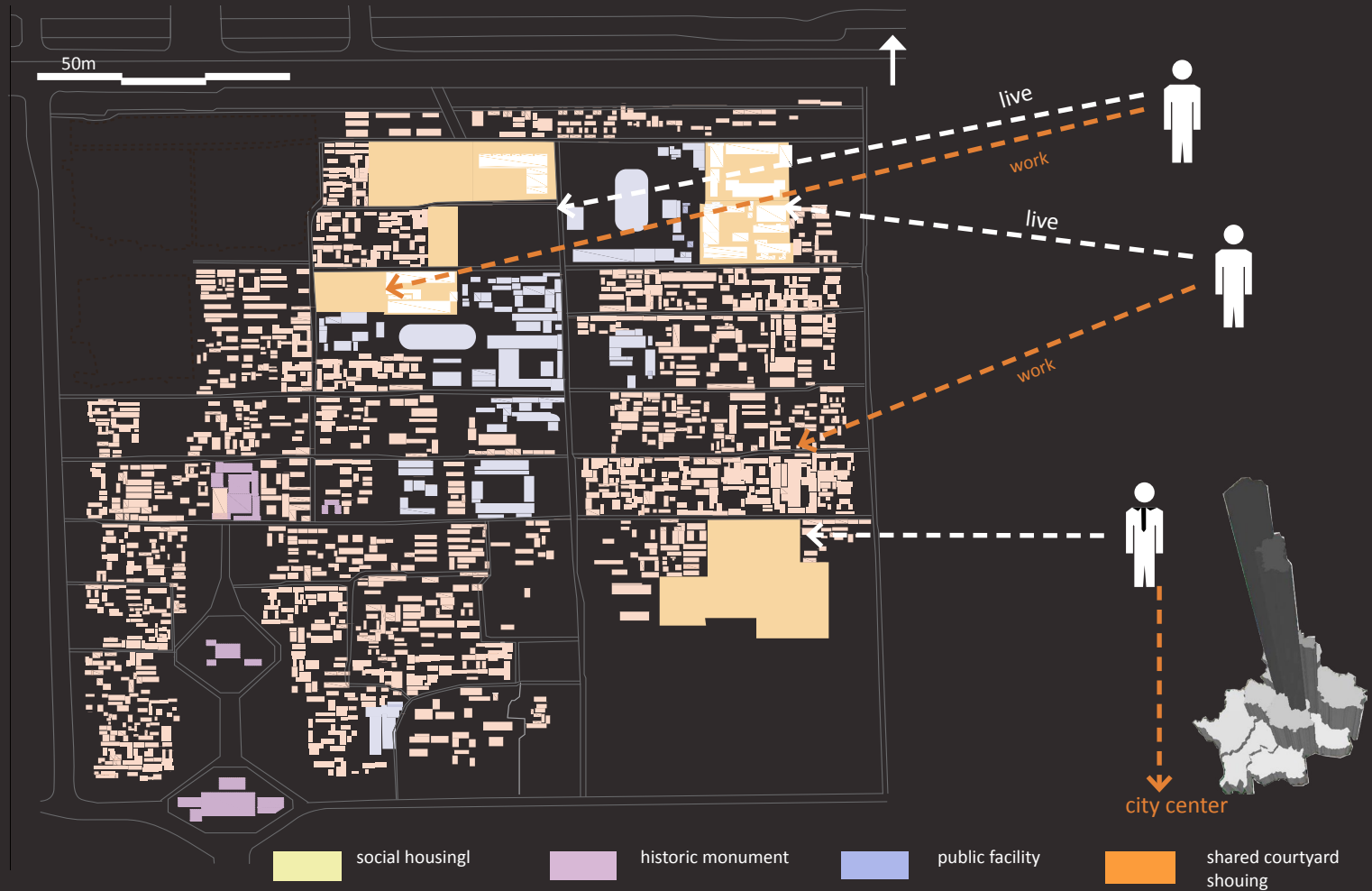
I would live here



I can work for him



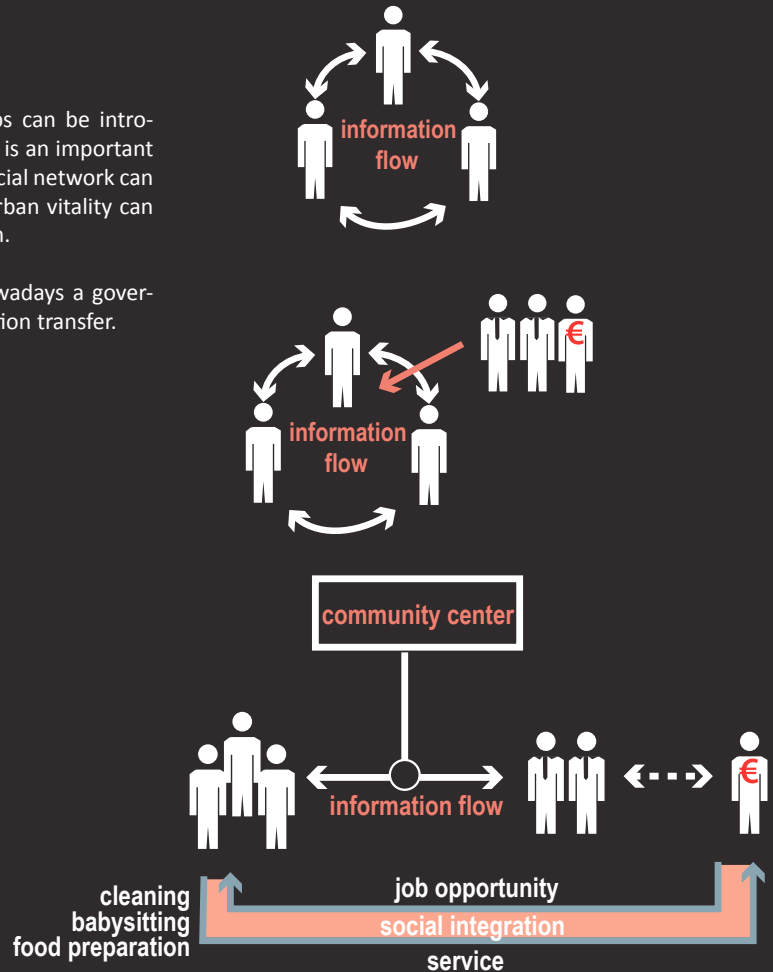
# Strategy of spatial intervention



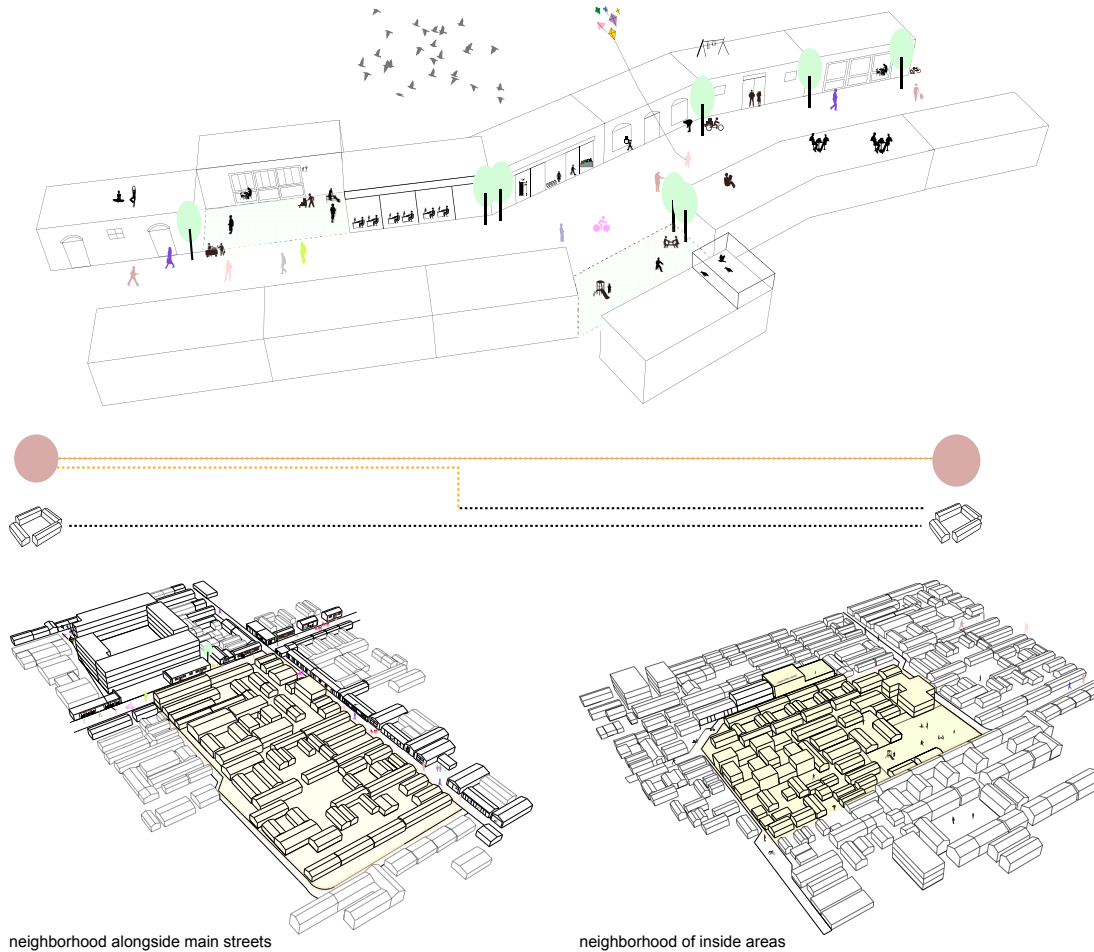
## social intervention\_conclusion

Through intervening diverse housing types, more social groups can be introduced into the districts. Compared with information flow which is an important source of social capital goes in mono- social groups, extended social network can bring more social activity, job opportunity into the area. The urban vitality can also be strengthened through the social and spatial intervention.

Considering the Chinese context, community center which nowadays a governmental institution can play a role during the process of information transfer.



## Strategy of open space



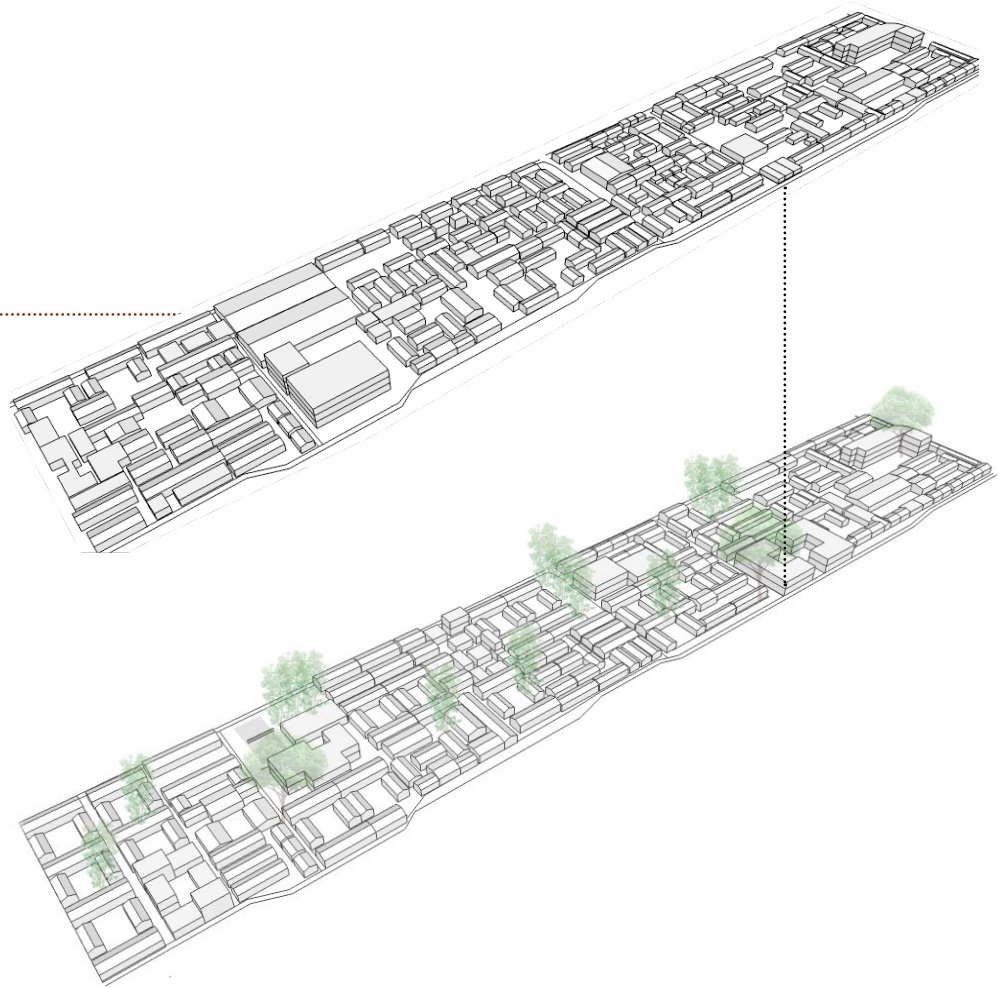
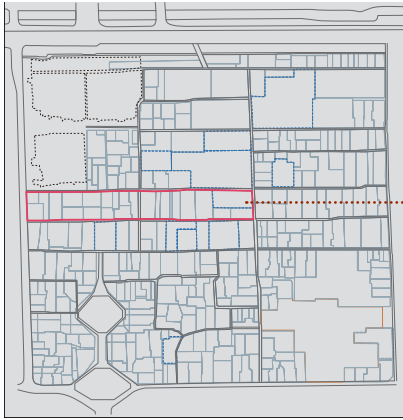
Hutong, as an important passages between nodes, courtyards and in between both of them can be strategic locations to use as public spaces. Transformation of hutong spaces will emphasis on adding more public programs, creating more green spaces and meeting squares or pocket parks. It will contribute to urban vitality as well.

However, there will be different treatment to public spaces of neighborhood according to their locations. The comparison in the left shows two kind of atmosphere. One is adapted for tourists, visitors and local residents, more public activities happens on streets; another is an inside neighborhood, with open space and community center for residents.

neighborhood alongside main streets

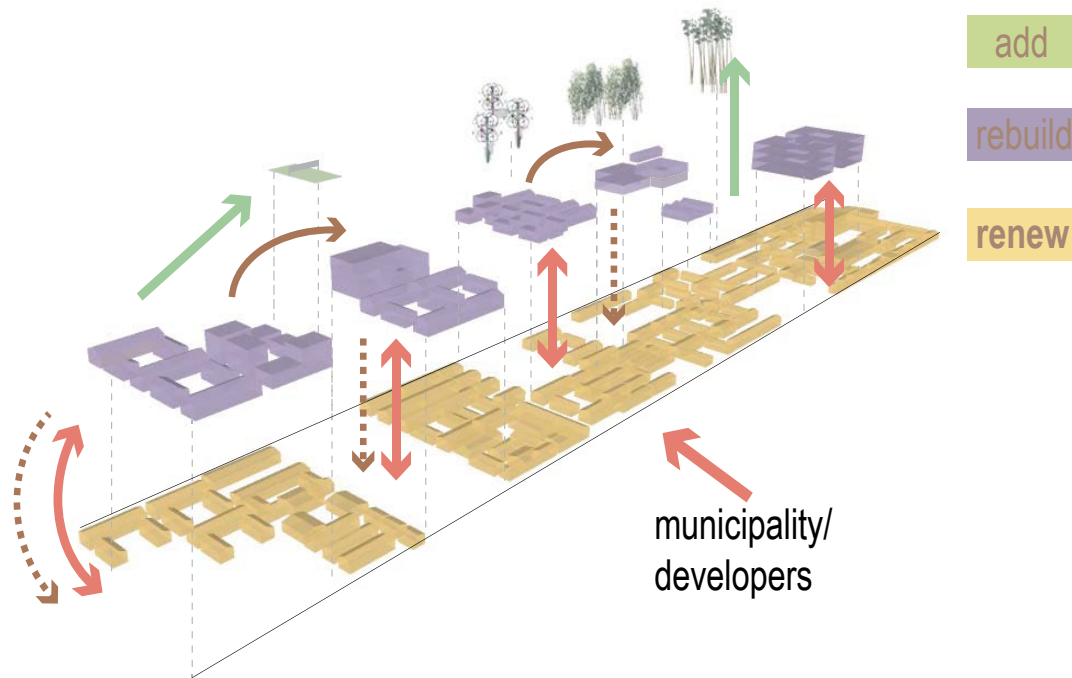
neighborhood of inside areas

## Testing of strategy



By replacing bad quality modern housing and dilapidated courtyard housing with different housing types, meanwhile adding more public space in the neighborhood, the spatial quality of the site has been upgraded. The continuity of historic urban form has been preserved during the process.

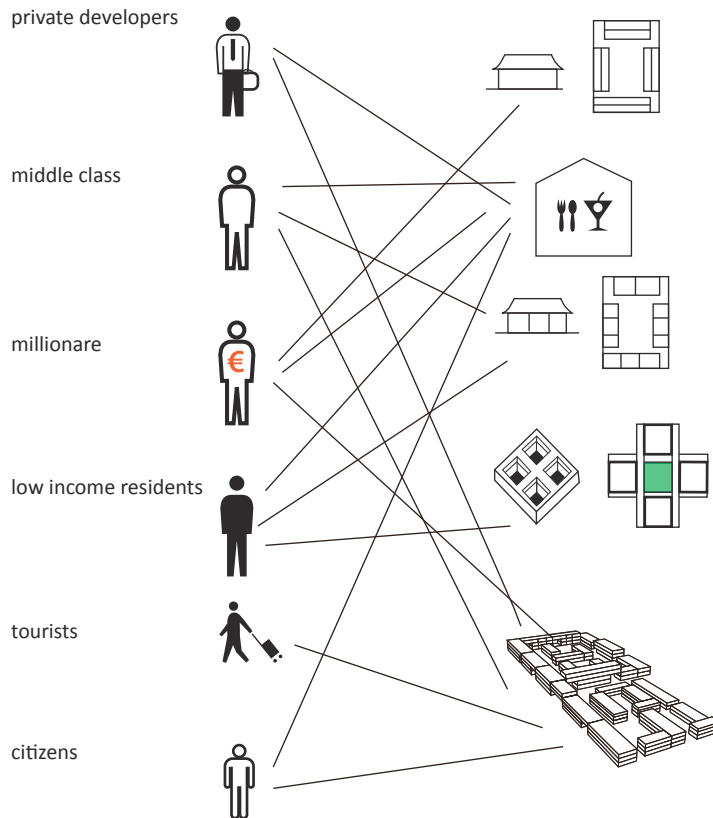
## Testing of strategy steps of transformation & flow of currency



The diagram indicates the currency flow. In first step, with the investment from municipality and cooperated developers, the courtyard housing in medium quality can be renewed. The income from renting them or selling them can finance the rebuild of dilapidated housing which can be transformed to social housing or shared renting housing. The circled finance flow can balance historic housing renew and new construction. Meanwhile, more public facilities and spaces can be considered to plug in.



## Strategy of socia-spatial invervention



Diverse housing typology, qualified spaces, new construction with new function, renewed historic streets can trigger social mix in the areas. Different users and social groups can find their own interests in the areas.

private developers- historical streets, new site development

rich people-luxurious houses, public facilities, historic streets, new functions in new site, added open spaces

middle class-shared courtyard houses, public facilities, historic streets, new functions in new site, added open spaces

low income local residents- shared courtyard houses, social housing, public facilities, historic streets, new functions in new site, added open spaces

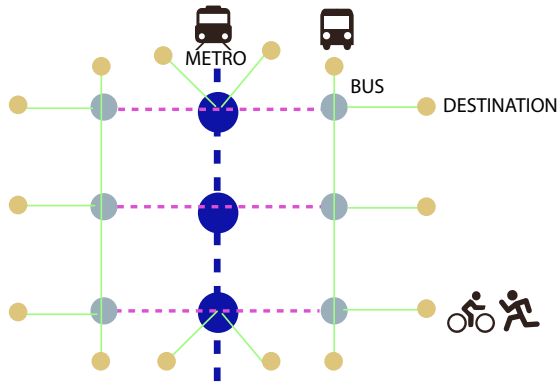
tourists/ citizens- historic heritage, hutong visit, new functions in new site

All these attractions happens interrelated in the site.

## strategy for transportation

### BMW SYSTEM

### BIKE METRO WALK

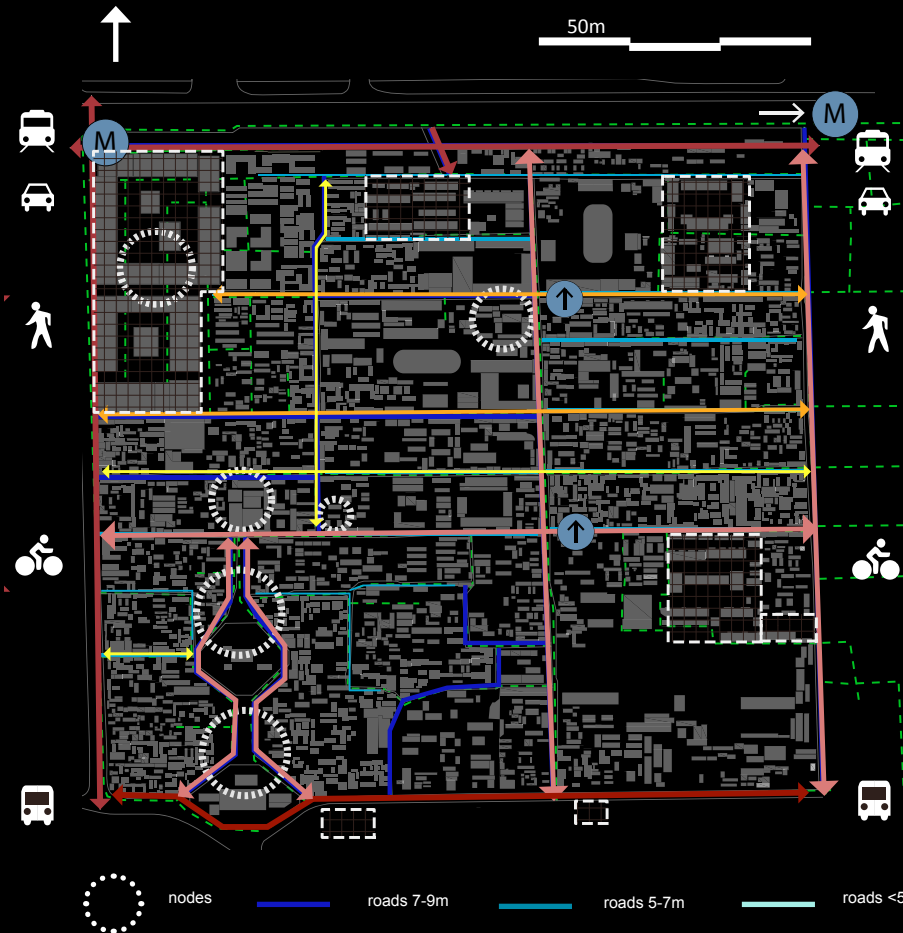


Take advantage of convenient public transportation in Beijing inner city, access of historical districts can be organized by BMW systems. People commute in between their destinations by walk, bike and metro, create the opportunity for sustainable living environment in traditional neighborhood, meanwhile supply a 'slow way' to experience historic districts.

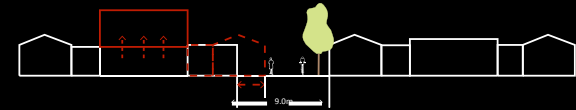
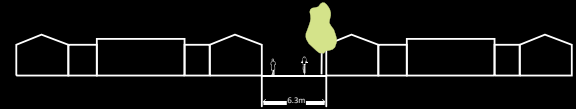
Parking for cars can be mainly put underground, and lease spaces on streets and neighborhoods.



# strategy for transportation\_road upgrade



For further development, with consideration of current wide of hutong, at least two hutongs need to be widen for plugging in traffics, flows of visitors and concentrated functions.



- car accessible hutongs
- main streets
- car accessible hutongs
- car inaccessible hutongs
- cycling lines

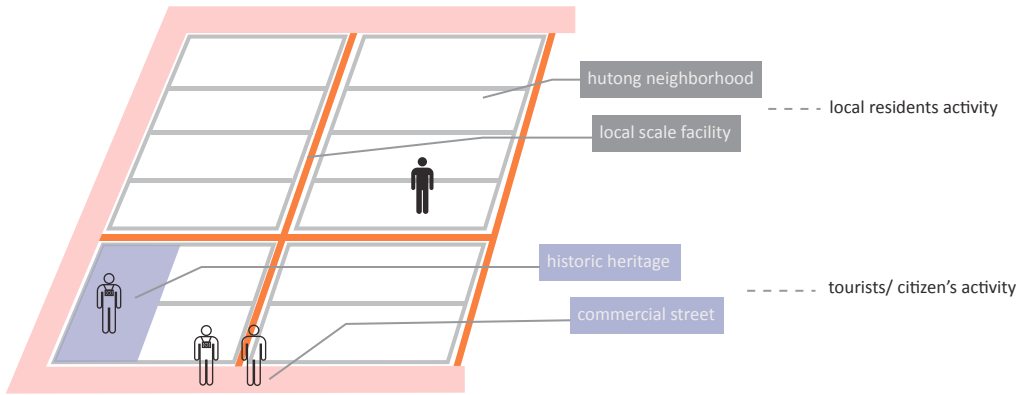
## Design

focus of design  
strategic design  
-historic squares  
-mixed use area  
-social housing  
conclusion

First part of this chapter explains the focus of design, which focus on supplying qualified public spaces for people's meeting, adding new functions to attract more users into the site and showing the improved living quality for local residents and new social groups. Followed with introduction, three strategic projects showed how the target can be achieved.

# Design Proposal

## intension of design

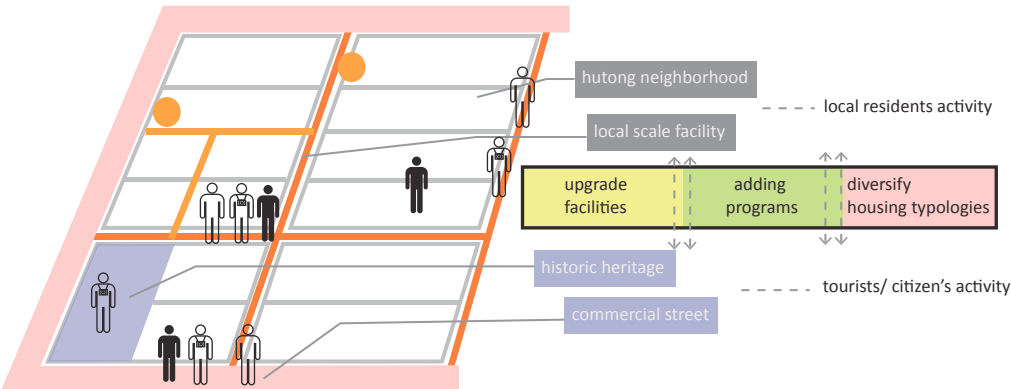


### Step One: Linking the nodes

As the historic district is an attraction to tourists, it is unavoidable to make the linkage among historic monuments and important nodes on the site. Hutongs play the roles as passages.

### Step Two: Adding programs

For direct visitors move from one location to another, new programs should be added on the route. Space of Hutong and frontage of courtyard housing are the carriers of new programs.



## Design

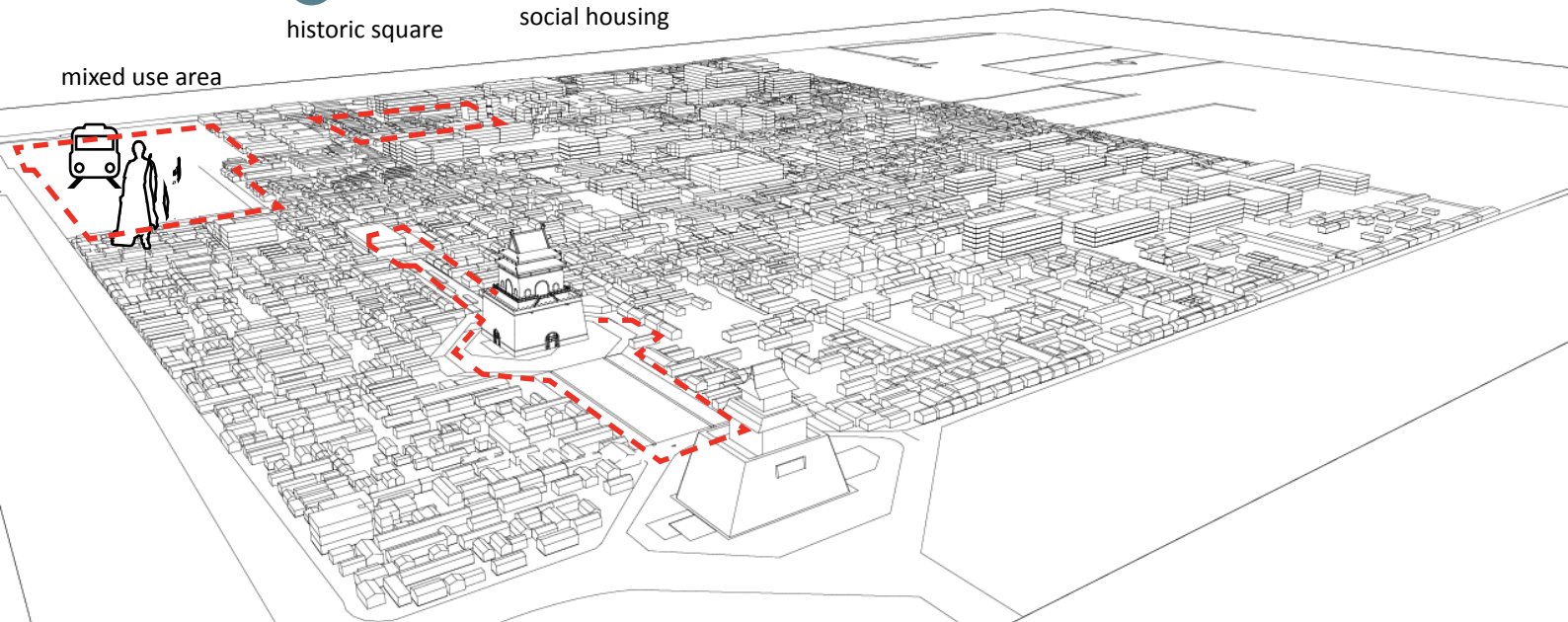
3  
empty site

2  
bad quality slab housing

1  
historic square

social housing

mixed use area



These three strategic design project present three themes of intervention, which are:

- upgrading public spaces, for creating meeting places for different social groups;
- adding new nodes in the site, and introduce in new functions to the hutong neighborhood, for upgrading level of centralities and exploring architecture typology learns from traditional antetype;
- improving living quality for low income residents and investigating new housing types in the site



## Design\_historic squares



Market behind Bell tower



Hongen Temple



Local activities



Bell tower and square

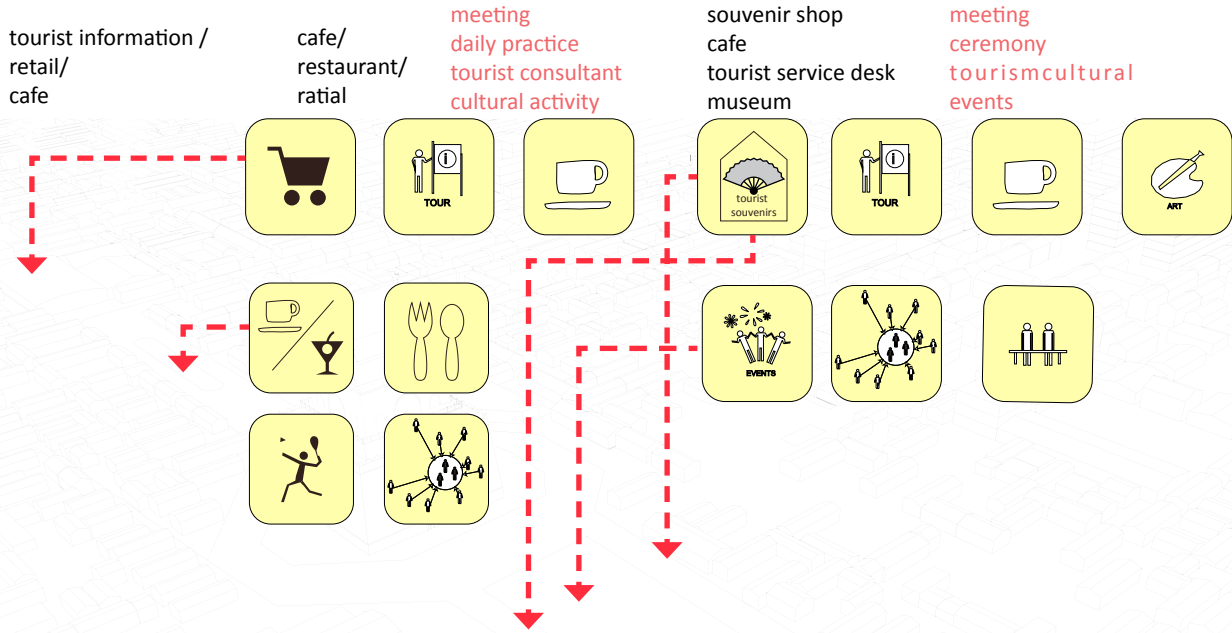


cafe around squares

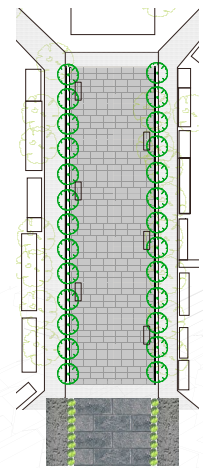
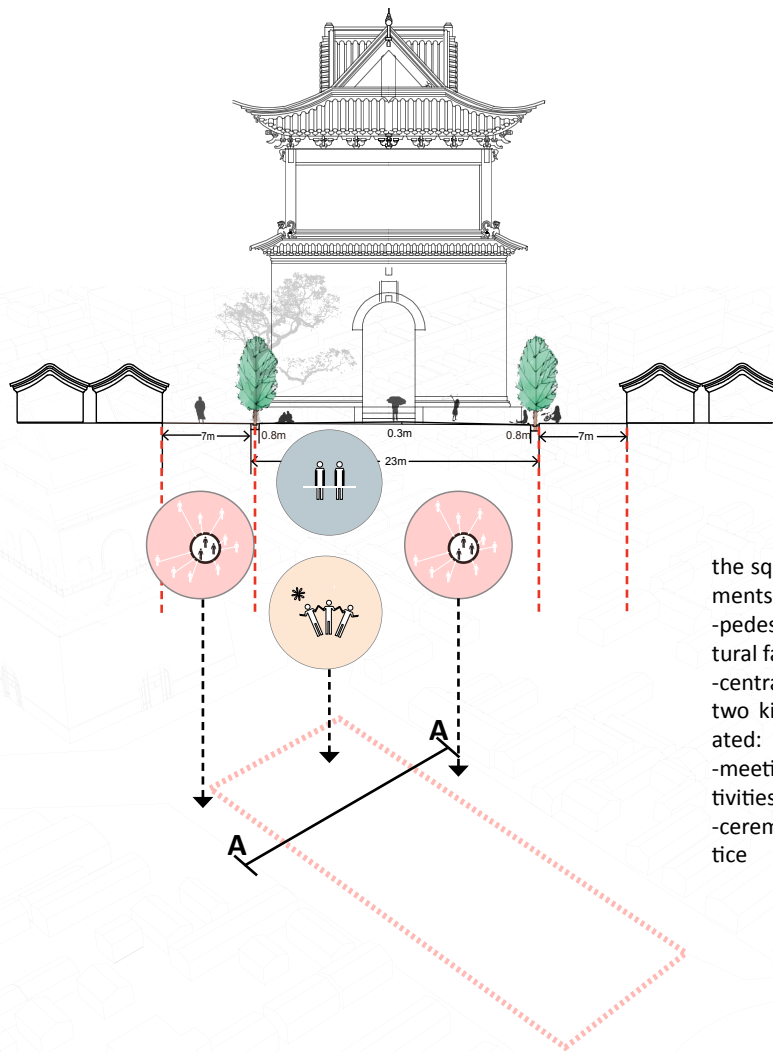
Drum tower and square



# Design\_historic squares\_function definition



## Design\_historic squares



the square has been separated by pavements and trees into to parts:

- pedestrian road with shops/cafes/cultural facilities alongside
- central squares

two kind of atmosphere has been created:

- meeting, social activities, commercial activities, tourist, cultural activities
- ceremony, events, meeting, daily practice

## Design\_historic squares







CEREMONY

EVENTS

TOURISM

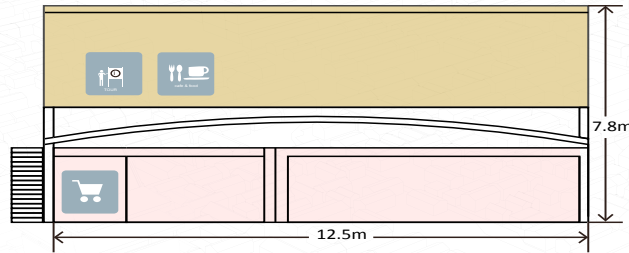
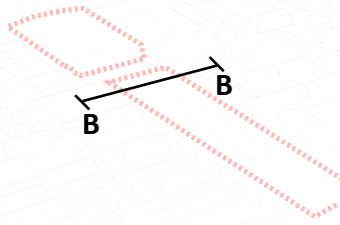
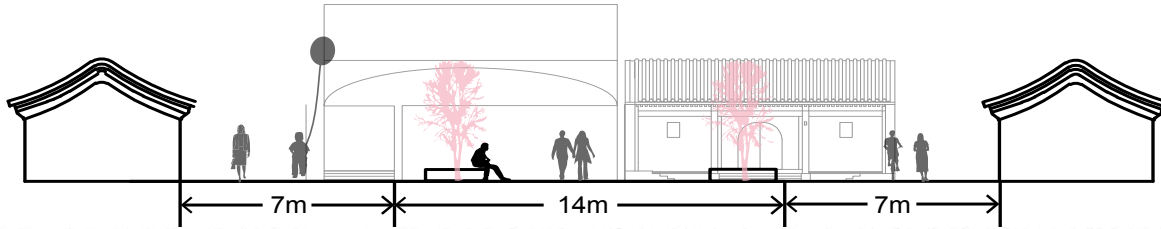
LOCAL ACTIVITY







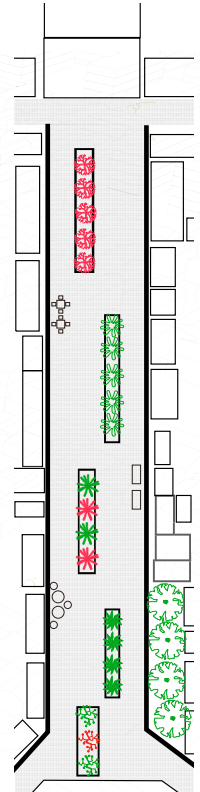
# Design-historic squares



transforming of local market

- tourist information
- sight seeing
- local market
- open market on square
- landscape

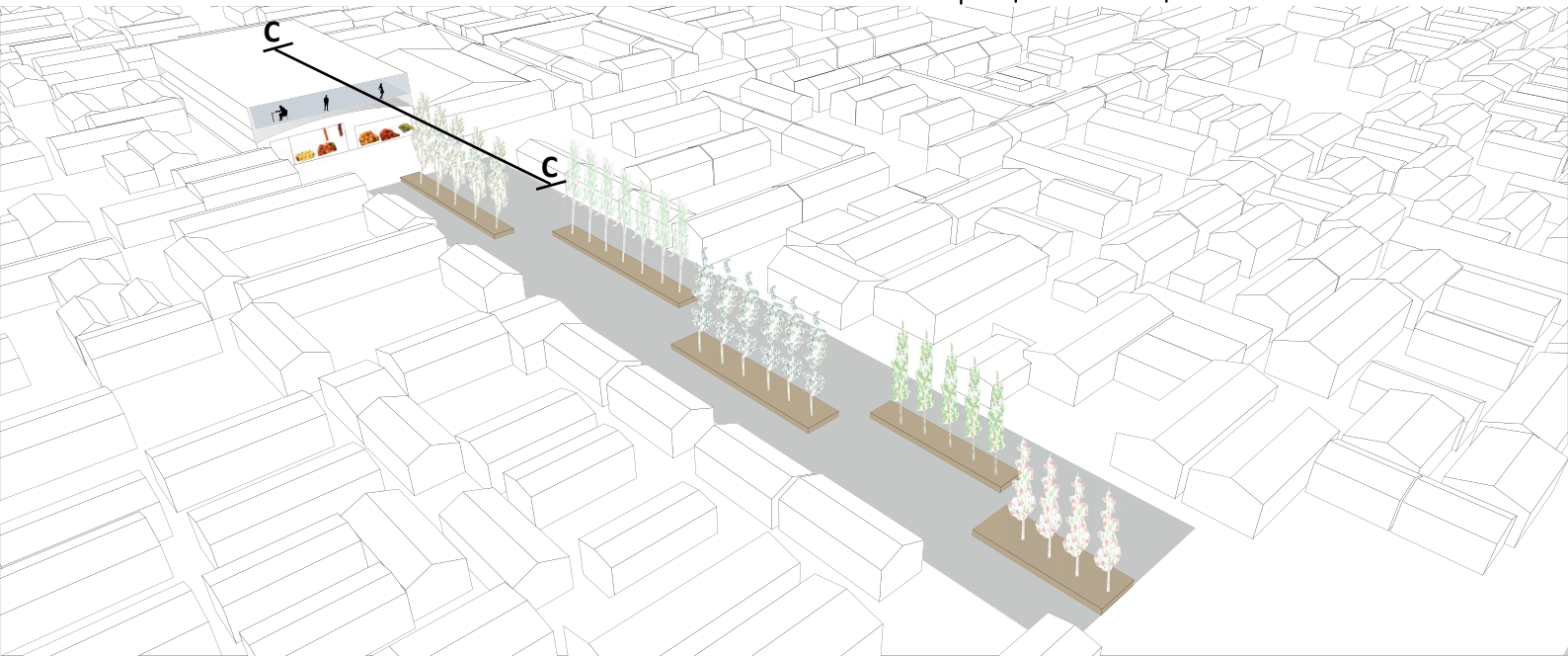
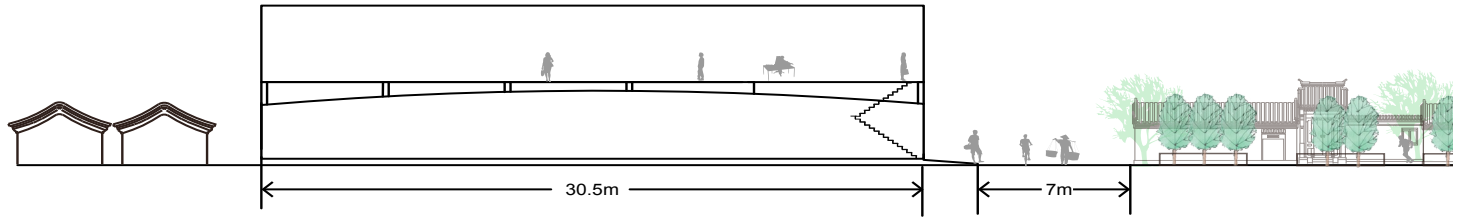
adding urban furniture in square



current situation



## Design-historic squares



## Design-historic squares

back square in daily use



back square used for open cafe



back square used for open market

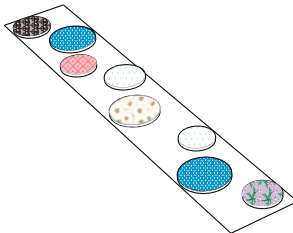
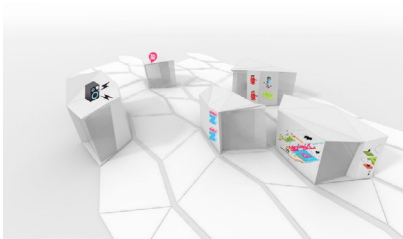
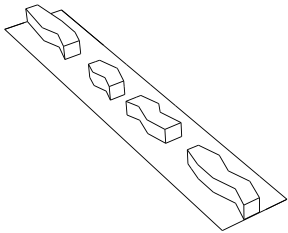
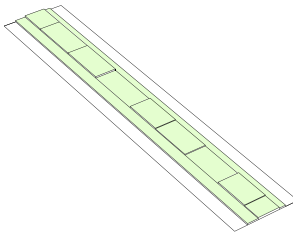
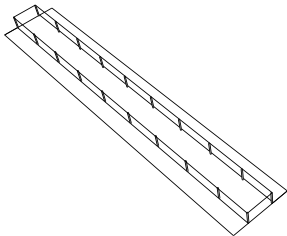
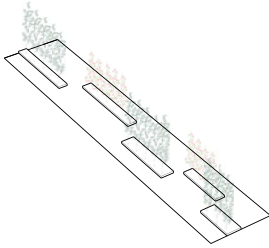
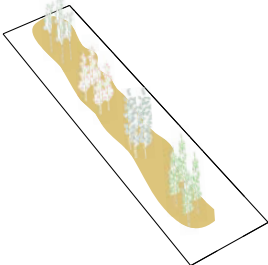


top view from market to square



# Design\_historic squares

alternative options



square during daytime





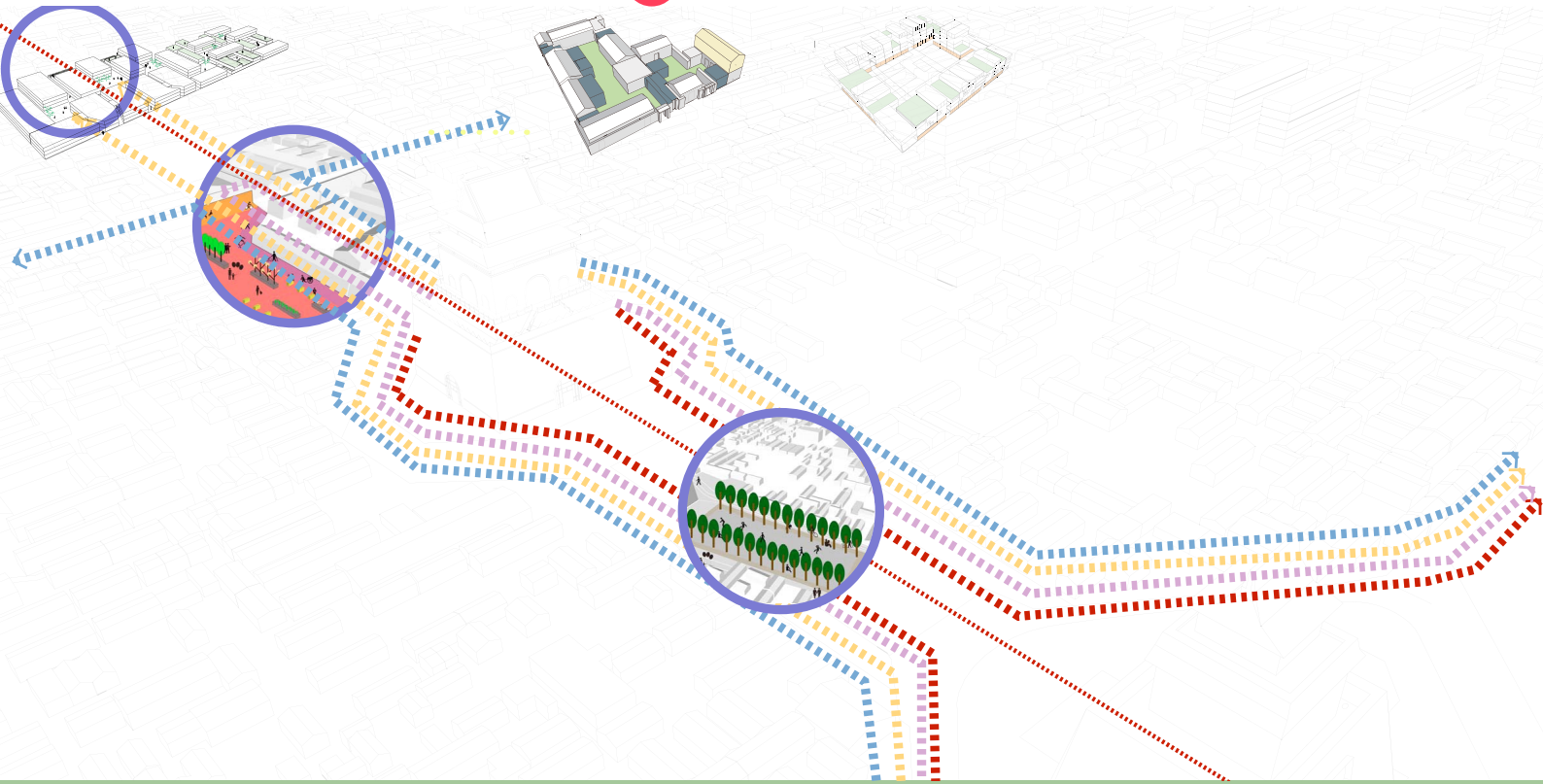
square at night



# Design\_historic squares

## loops around historic heritage and squares

- 4 loop around heritage and historic square,back square,market, hutong neighborhood
- 3 loop around heritage and historic square,back square,market, mixed use area
- 2 loop around heritage and historic square,back square,market
- 1 loop around heritage and historic square





## Design mixed use area



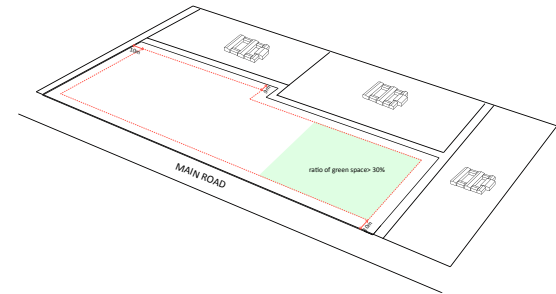
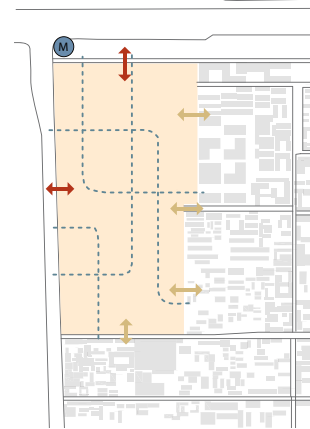
Idea of the empty site:  
connectivity: accessible to metro station,  
main streets, neighborhood, other nodes of  
the site

function: used by tourist, citizens, local  
residents, open spaces

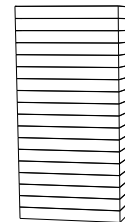
cultural related facility, shopping, leisure,  
offices, apartments, cafe/bars, hotels,  
supermarket underground parking

setback from main streets, surrounded  
neighborhoods  
ratio of public spaces

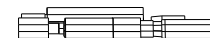
scale: transforming from Mega scale from  
surrounding sites to small scale traditional  
neighborhoods  
forms: inspired from traditional prototype  
of historic forms



**MEGA**



**MEDIUM**

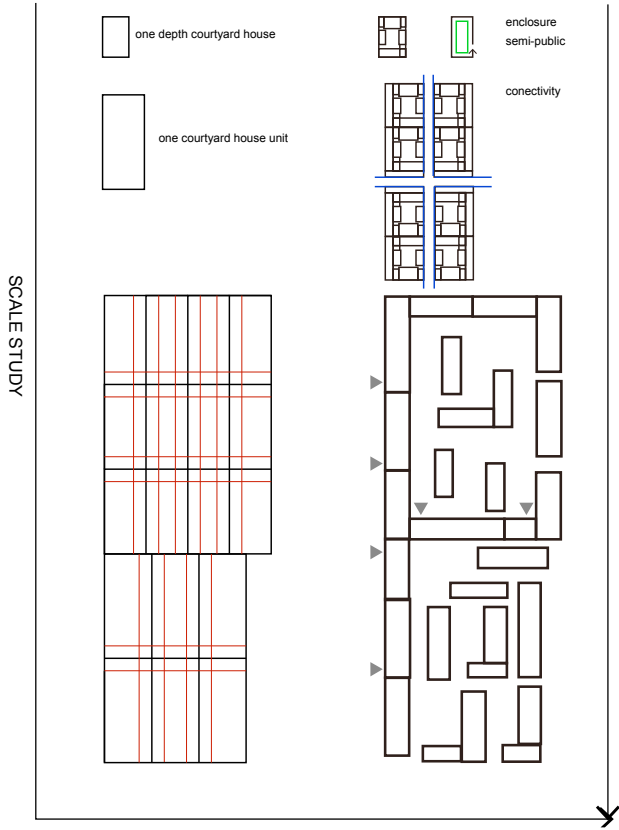


**SMALL**

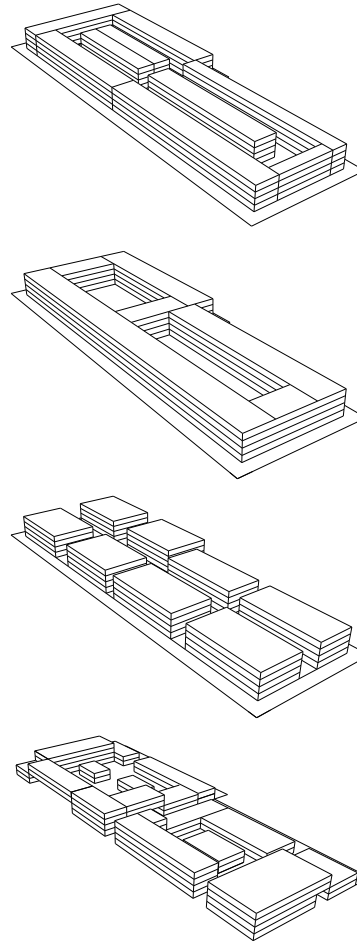


# Design\_mixed use area

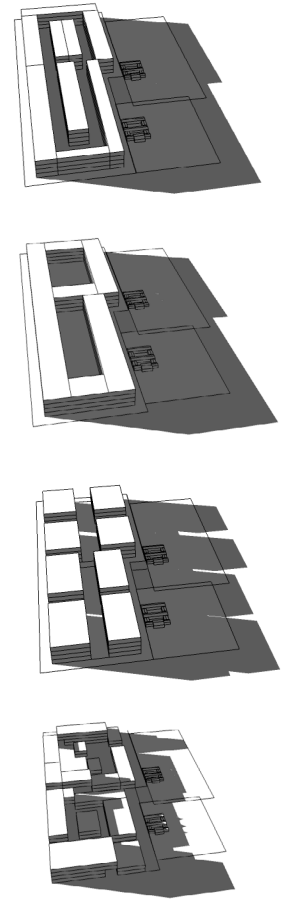
defining scale from historic prototype



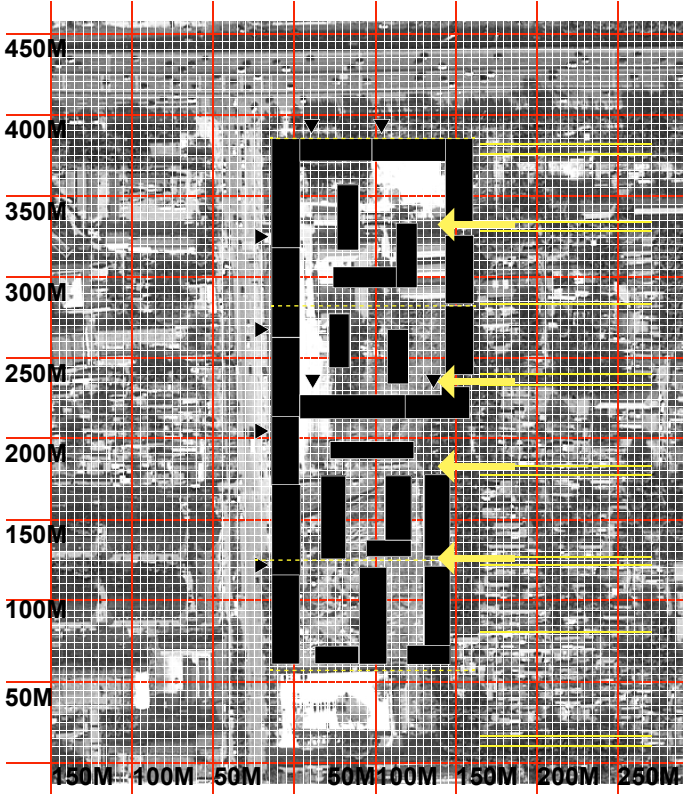
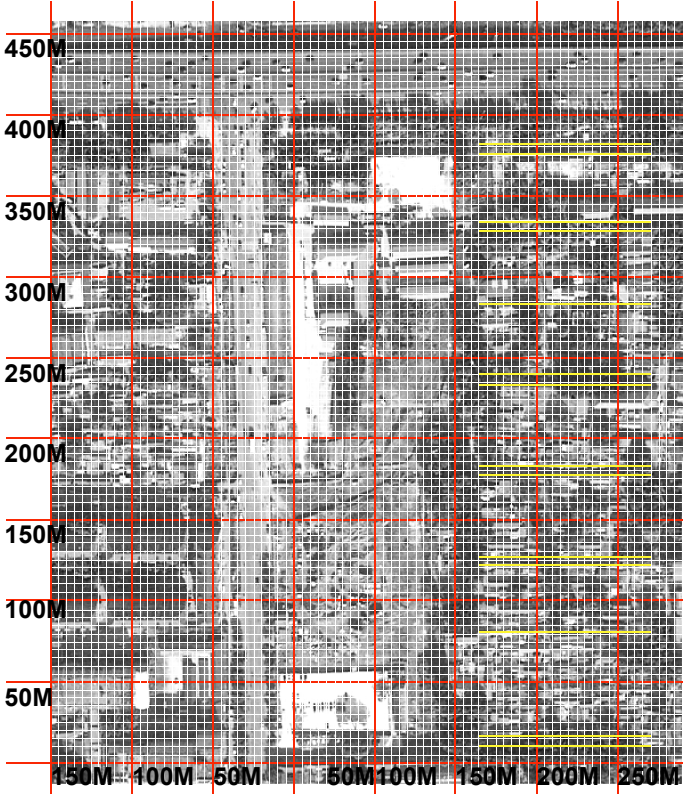
## study of spatial forms



## research on shadow influence

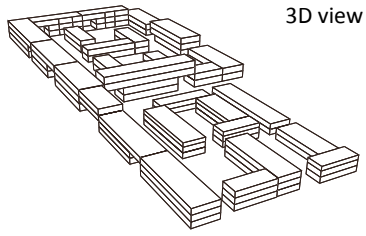


Design\_mixed use area



## Design\_mixed use area

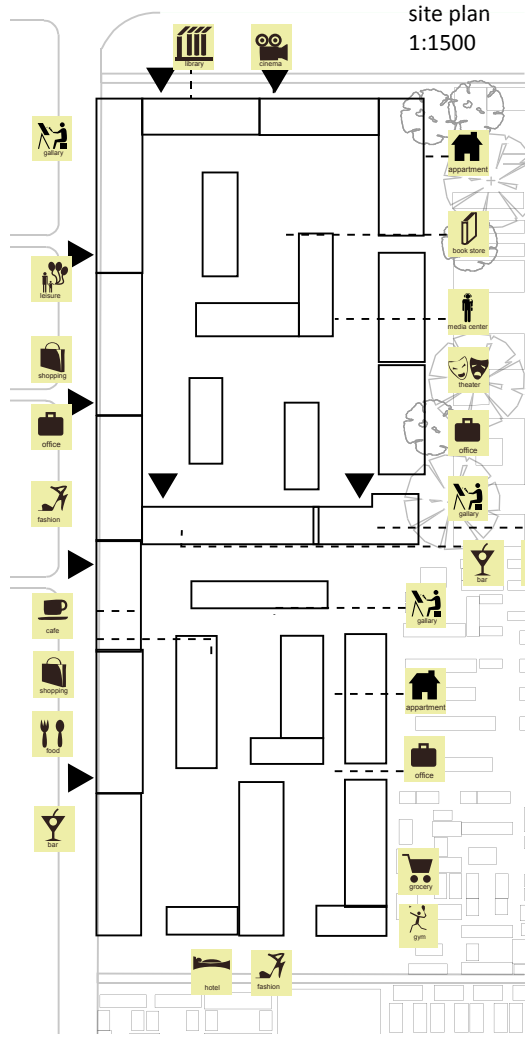
### selected proposal



The idea of the mixed used areas is going to create an 'open city'. Space in this site has been organized in courtyard way. Commercial functions are mainly locates in the western buildings alongside the main streets, in ther eastern part, there are cultural, offices and appertments. Central courtyards has been considered as public spaces for visitors.

The openness to the main streets and neighborhood makes the area an place of activity and easy accessibility.

And the scale shows the transformation from city scale to traditional neighborhoods.



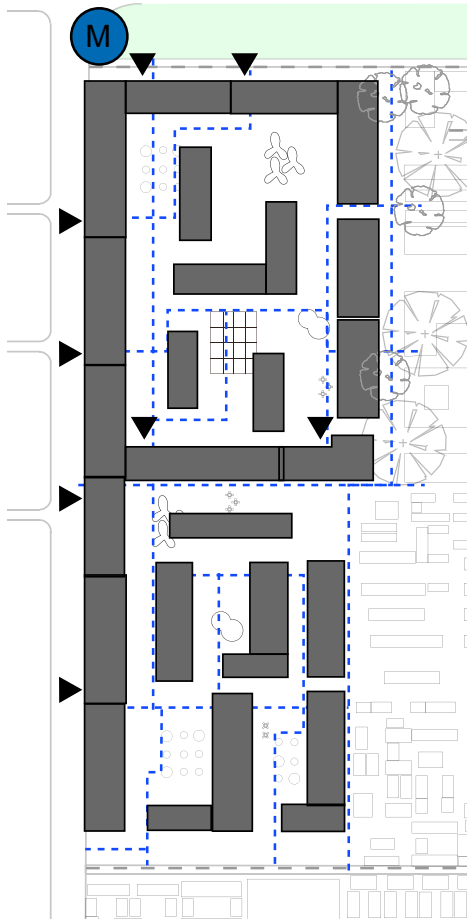
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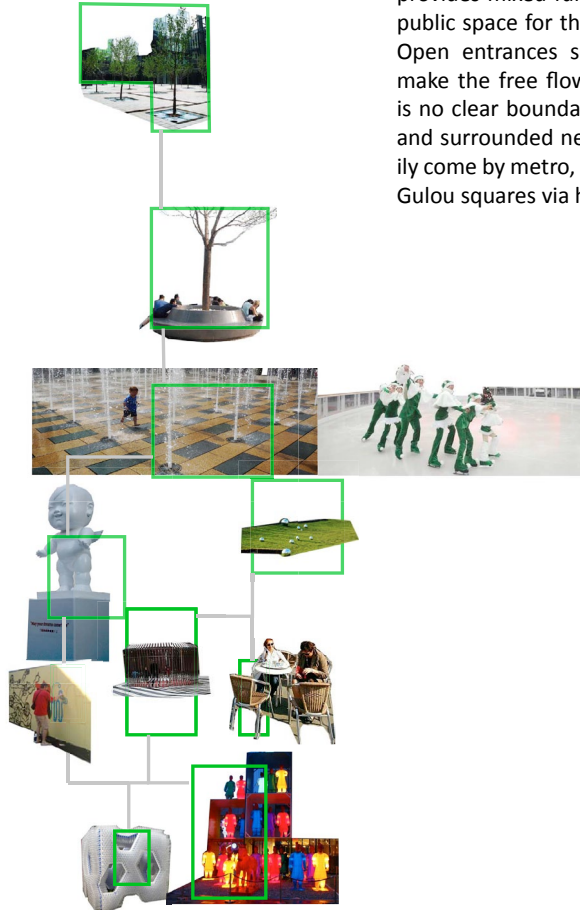


## Design\_mixed use area

public spaces and routing

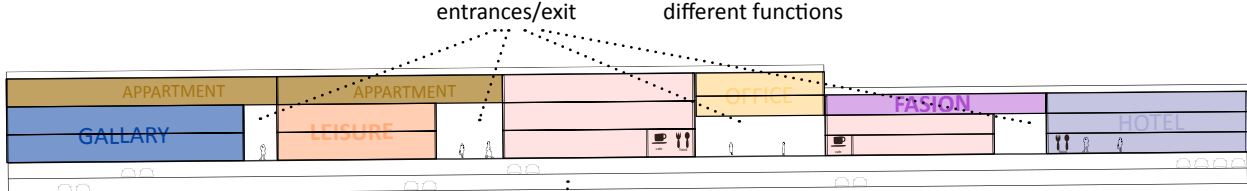


programs for public spaces



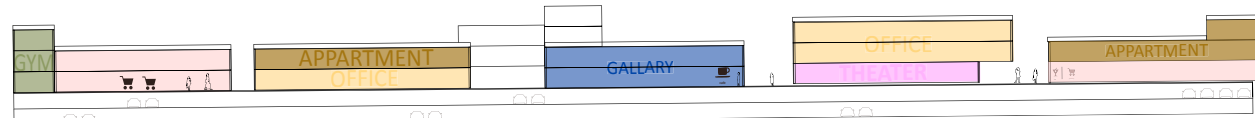
As a small open city, the mixed use area not only provides mixed functions, but also create more public space for the visitors and local residents. Open entrances setted in different directions make the free flow possible in the area. There is no clear boundary to sperate mixed use area and surrounded neighborhood. People can easily come by metro, by car as well as walking from Gulou squares via hutongs.

# Design\_mixed use area

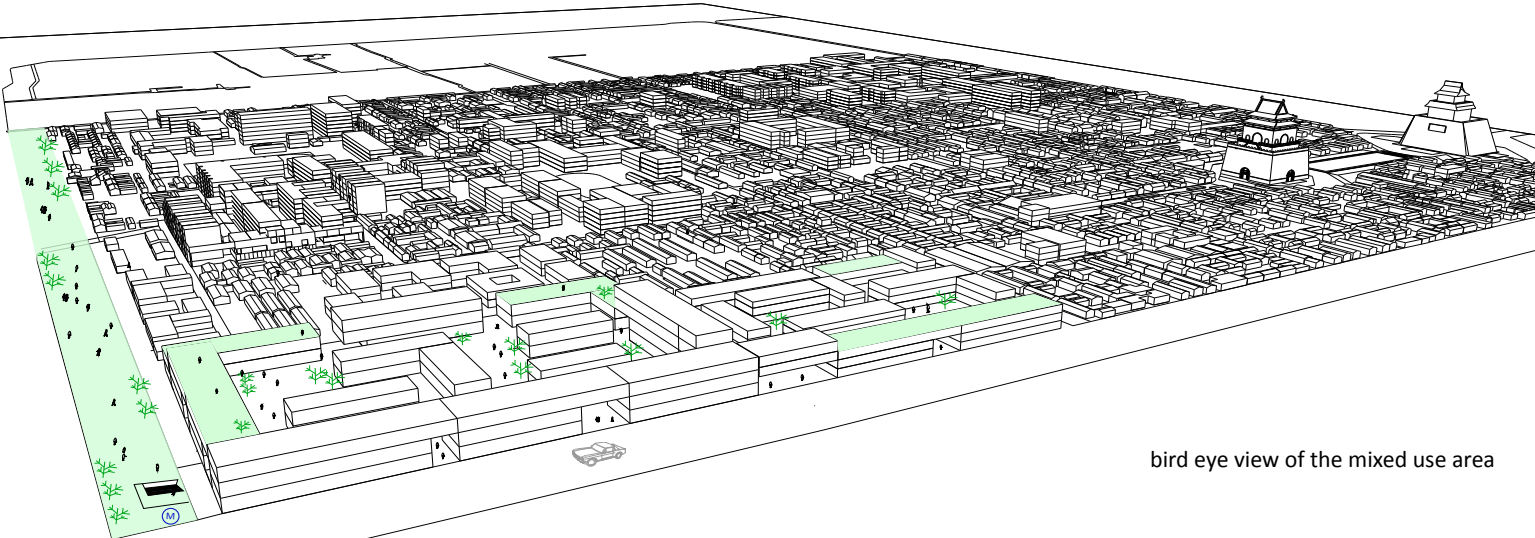


west section 1:300

underground parking



east section 1:300



bird eye view of the mixed use area



streets of mixed use area



streets view of mixed use area



## Design\_mixed use area

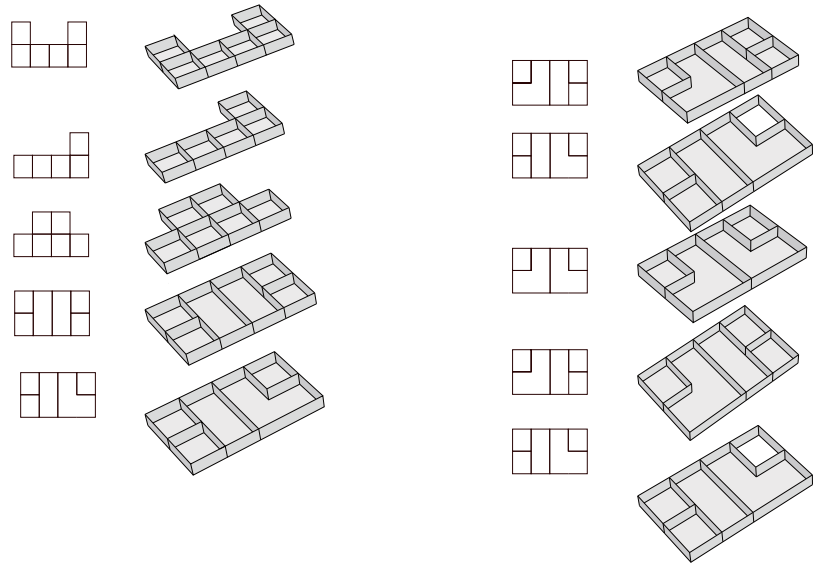
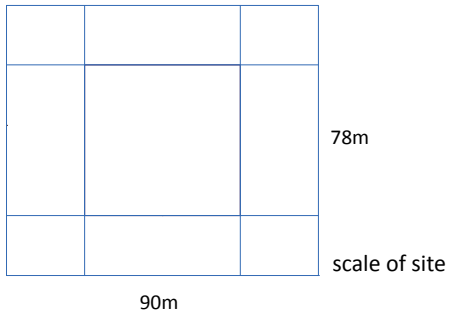
### mixed use area\_economic feasibility

site area=29690.51m2	constructed area=52552.2m2	FAR=1.77	$a=v_r/12*[1-1/(1+r)^n]$		
function	percentage	area(m2)	profit ( rmb/m2/m)	profit	cost
commercial areas	40%	21020.8	202(730)	424201.6	
office/apartments	10%	5255.22	131.1	688959.3	
culture	35%	18393.27	92.24	1696595.2	
leisure(cafe/bar/gym)	15%	7882.83	138.3	1090196.3	
open space	30%	15765.66			
parking	750	30000	61 (360)	270000	
				4169952.4	

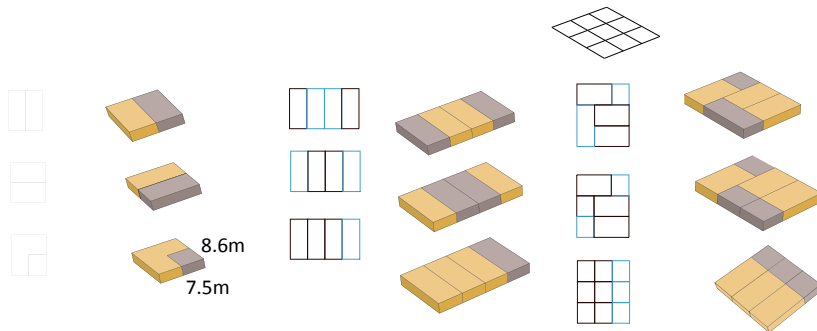
The mixed use area developed by governmental institution, and profit from lending it to shops, offices, apartments etc. will finance the historic districts regeneration, the calculation based on the minimum benefit from each functions. From the result, around 0.4 million euro will be earned through mixed use areas and balance other constructions on the whole historic site.

# Design\_social housing

module study



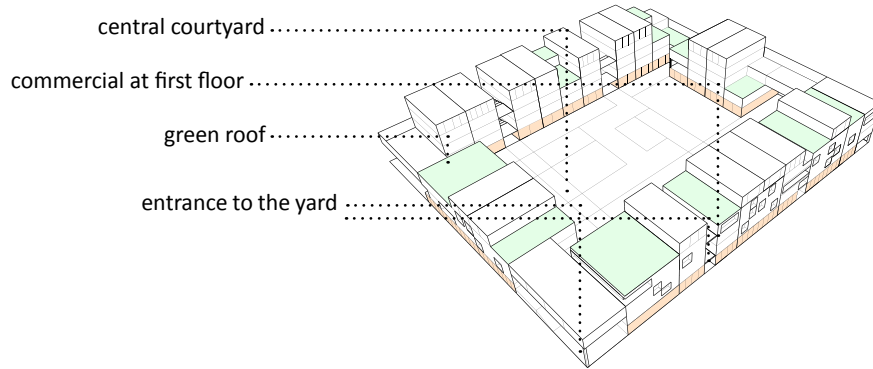
- central yard for public spaces
- suitable scale for single/ couple/triple/four people's family
- flexibility of space arrangement



64.5m<sup>2</sup> is the size basic module used for single/couples family, and the size can be doubled or tripled according to the potential families who will move in.

two basic module make a standard unit, and the scale of unit can be flexible defined

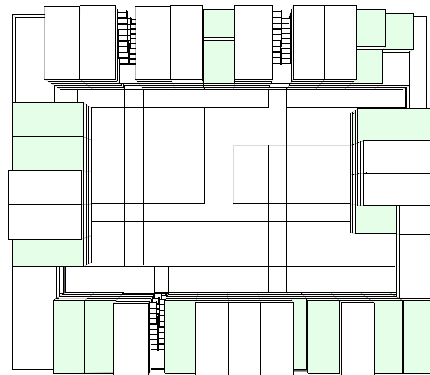
# Design\_social housing design proposal



model of social housing

key word:

- activity at first floor
- openess to the outside
- qualified housing quality
- public space for residents and visitors
- free entrance



plan of social housing



## Design\_social housing

### design proposal\_flexibility of room arrangement

According to the size of the site as well as social housing users, 64.5 square meters apartment has been taken as the basic module. For different families, such as single, couple, three -persons family, the choice of house can be very flexible inside of the building.

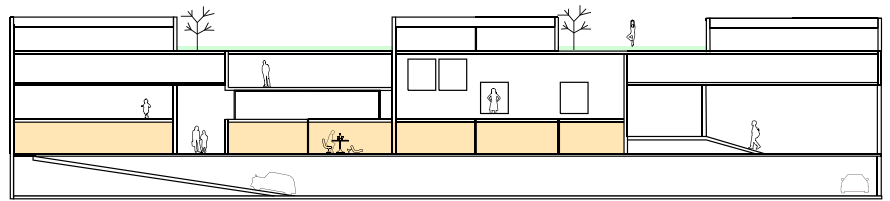
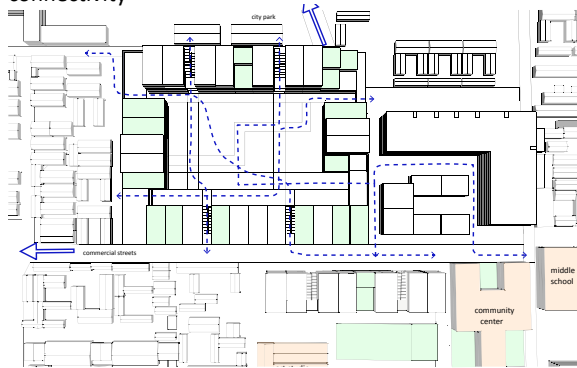


# Design\_social housing

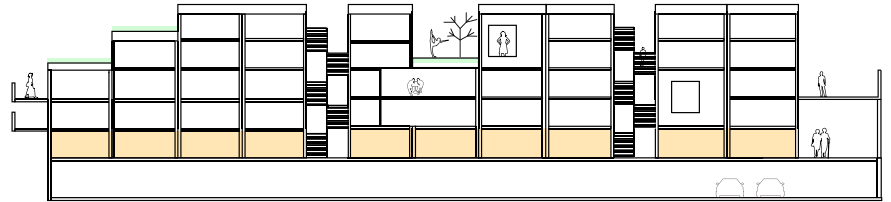
## design proposal\_section

Getting inspiration from courtyard housing in hutongs, social housing use the form of courtyards, it leaves open spaces to the residents who live there, meanwhile open entrance make it possible for other visitors from outside. Many programs can be plug in to the yards to make the social housing areas full of activity. There will be underground parking under the house to solve parking problem in hutongs, meanwhile will benefit the incomes from parking.

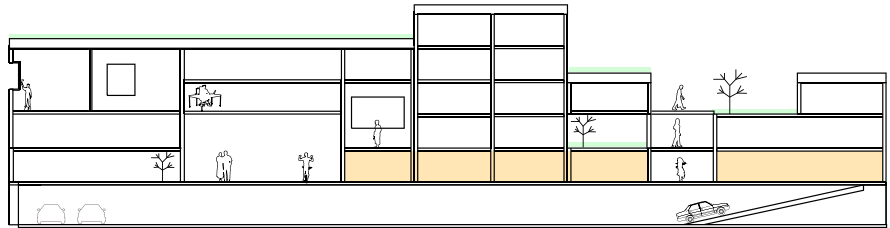
## connectivity



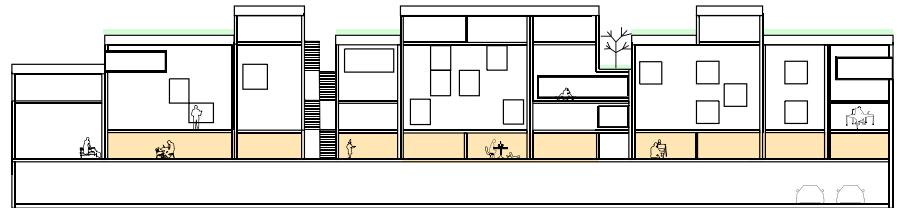
section-west 1:300



section-north 1:350



section-east 1:300



section-south 1:350

# Design\_social housing

## Courtyard-open space

possible activities can happen in the open space

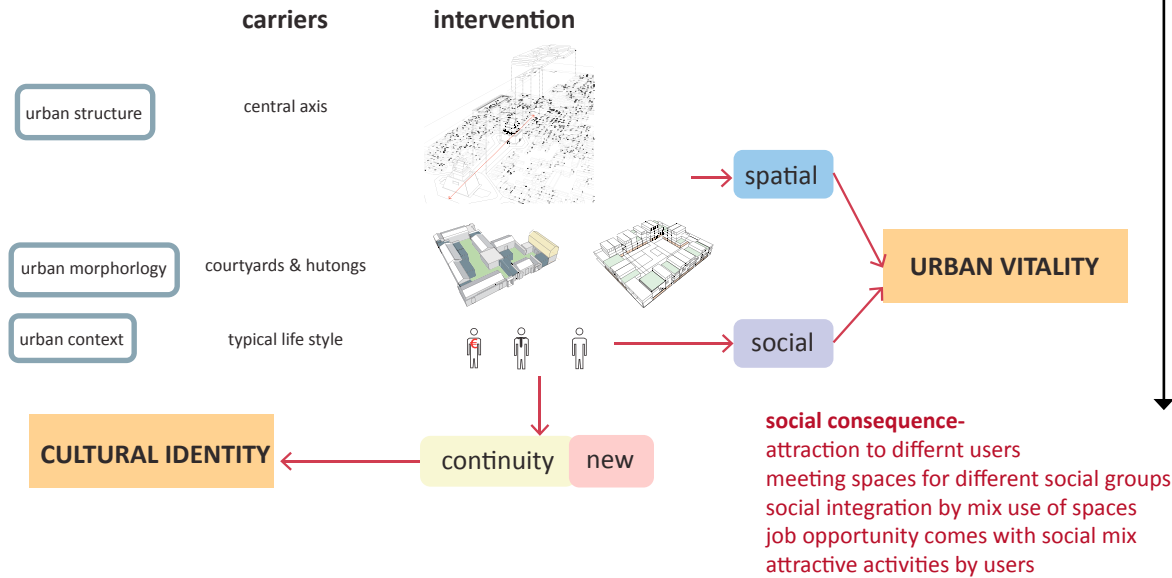




# Conclusion

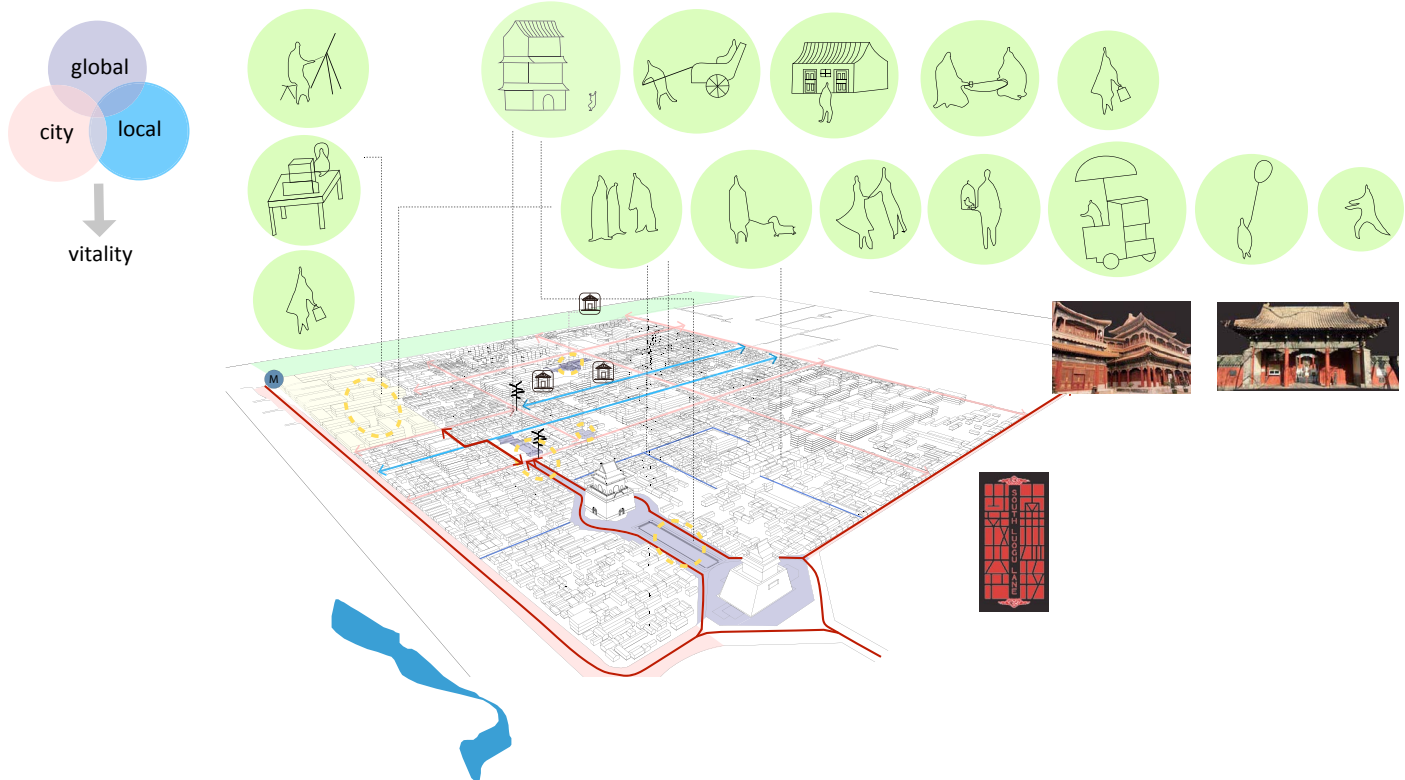
**spatial consequence-**  
 upgraded centrality  
 improved living quality  
 added public spaces  
 diverse housing typology  
 historical continuity of urban forms

The three design reflect intervention on the carriers of cultural identity:  
**historic squares regeneration**-central axis  
**social housing**-transforming of urban morphology  
**mixed use area**-urban vitality, central axis extension



## Conclusion

There are mix of different users and diverse activities on public site and surround important nodes. Hutong space, as linkage brings added vitality in between nodes. Meanwhile, preserve the original neighborhoods in a quite situation.



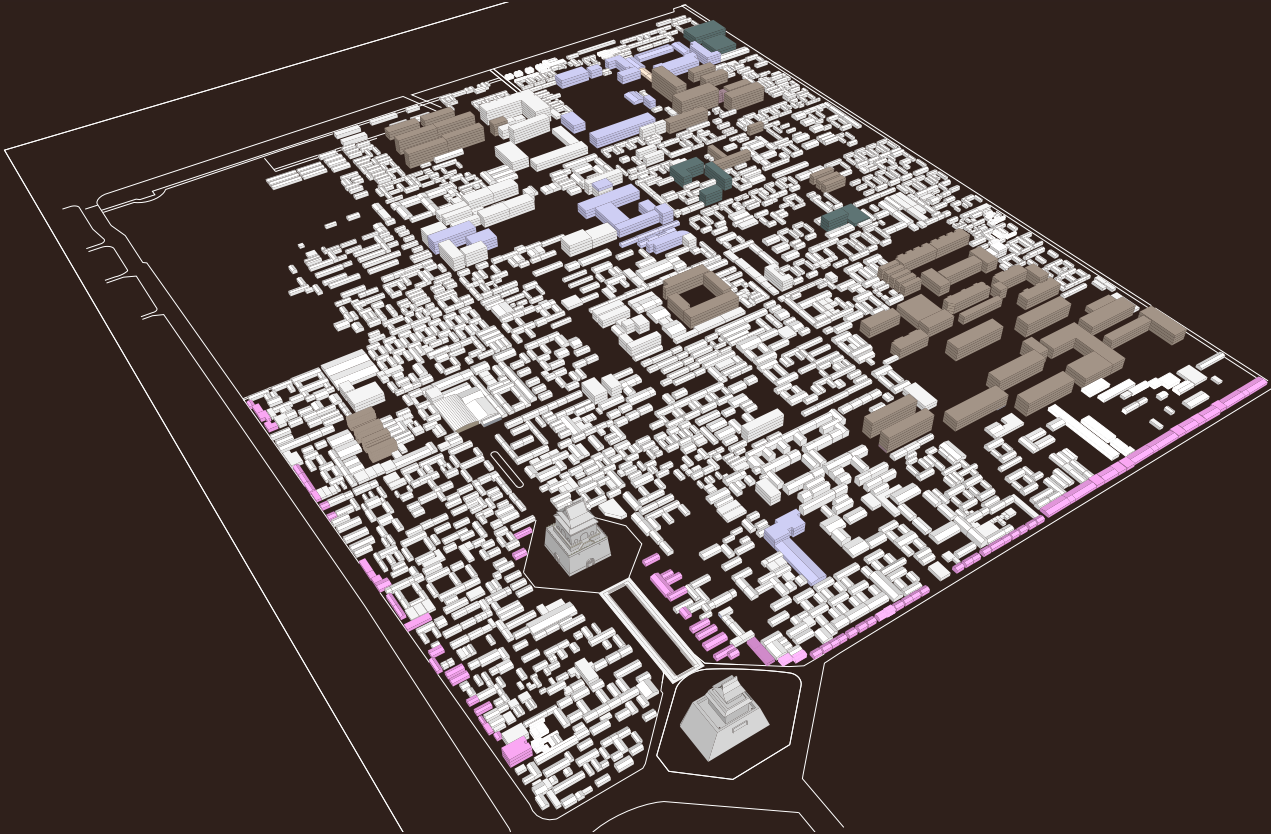
phasing

explanation of phasing

## **Phasing and Management**

This chapter shows the phasing of regeneration in the site by steps and explain the management has been done by the housing institution during the process. The one slice of site sampled how the phasing proceeded during the process, showing how the cooperation operated in between housing institution, private development, local residents.

current situation



commercial



good quality courtyards



hospital



modern buildings



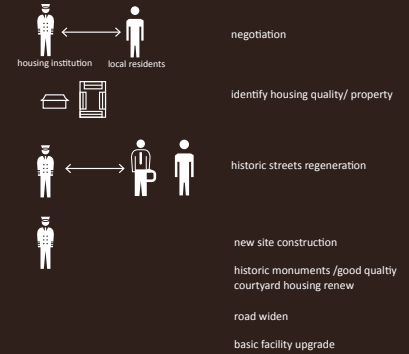
schools

# PHASE ONE

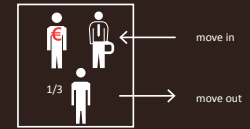
**investigation:**  
 housing quality  
 housing property  
 local residents willing

**cooperation:**  
 housing institution-private developers

**operation:**  
 upgrade basic facilities  
 widen roads  
 new site construction

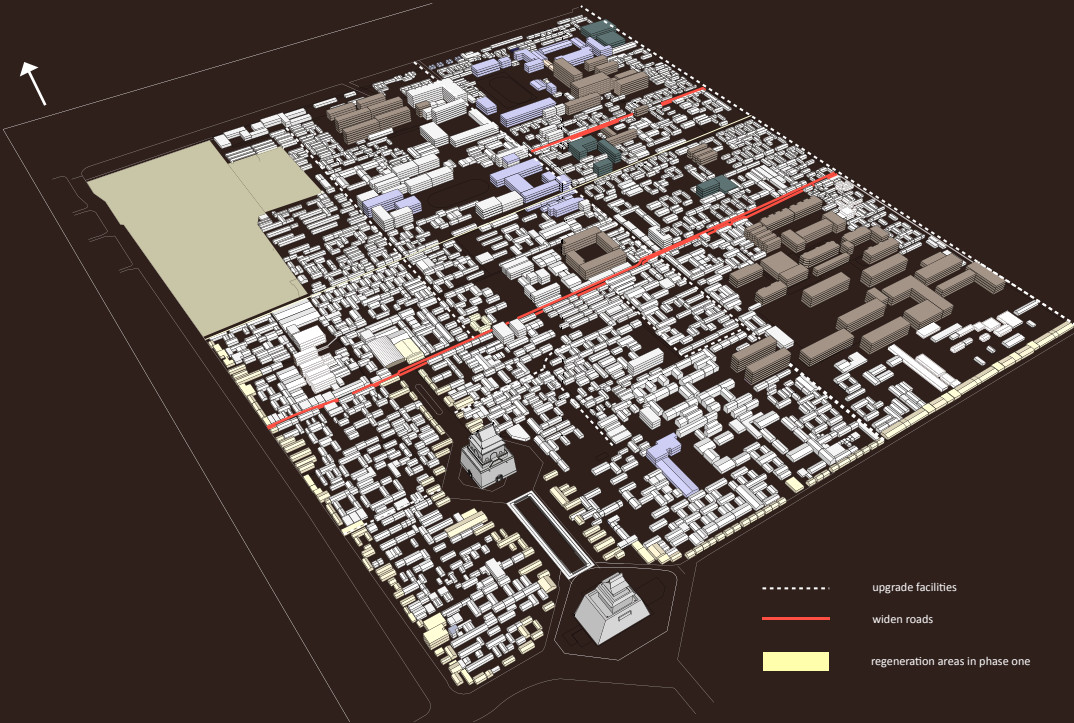


Results: opportunity for courtyard housing renew  
 attract private developers  
 introduce more functions into the areas  
 opportunity for obtain regeneration finance



## Consequence:

income from rent houses to private developers;  
 attraction for new users;  
 improved living quality;  
 upgraded and added nodes;  
 public spaces



- upgrade facilities
- widen roads
- regeneration areas in phase one

## PHASE TWO

### cooperation:

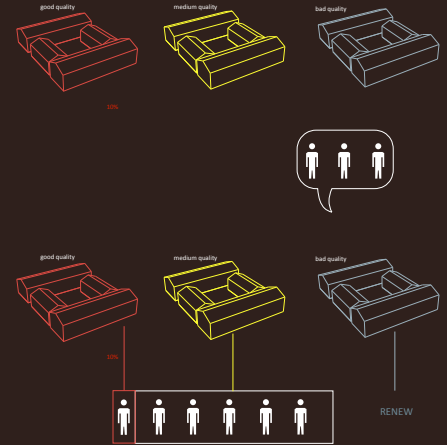
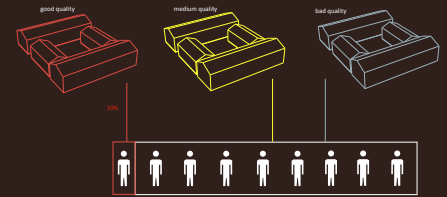
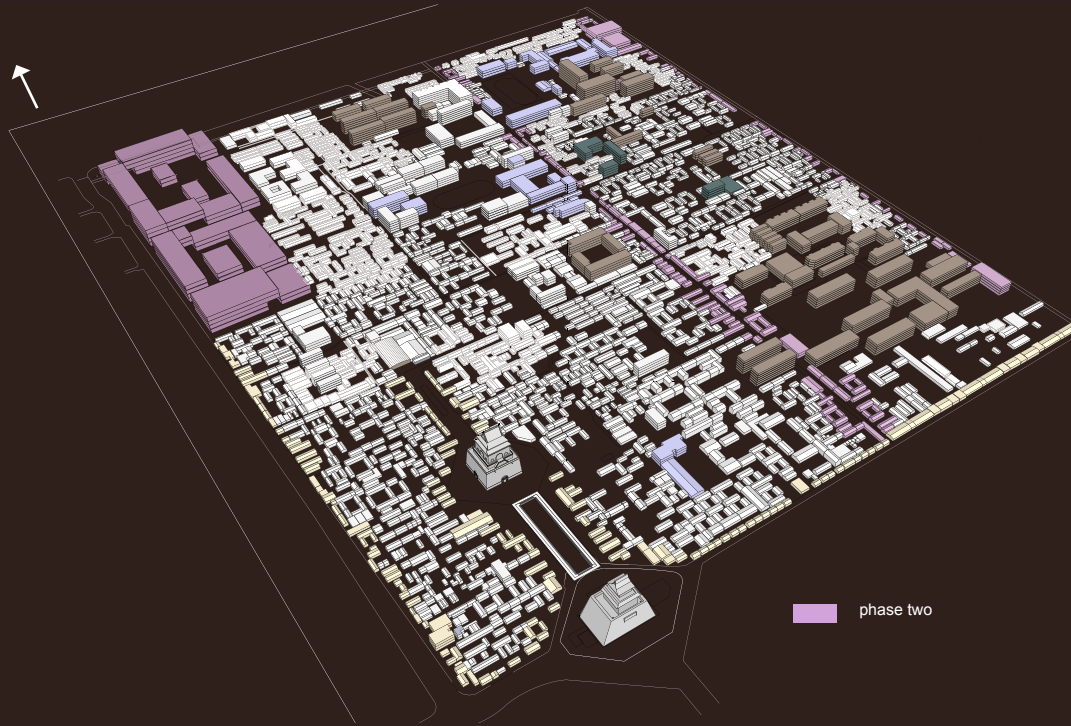
local residents-move out of bad quality house and relocate collectively

### operation:

main hutongs regeneration; renew bad quality houses

### management:

**mixed use area;**  
**collect and relocate residents in the site**



### Consequence:

**middle class and higher class start to move in to the renewed houses;**  
**income from rent shared courtyard houses;**  
**attract private investors start their business in the main hutong areas;**  
**public spaces**



# PHASE THREE → LONG TERM REGENERATION

## cooperation:

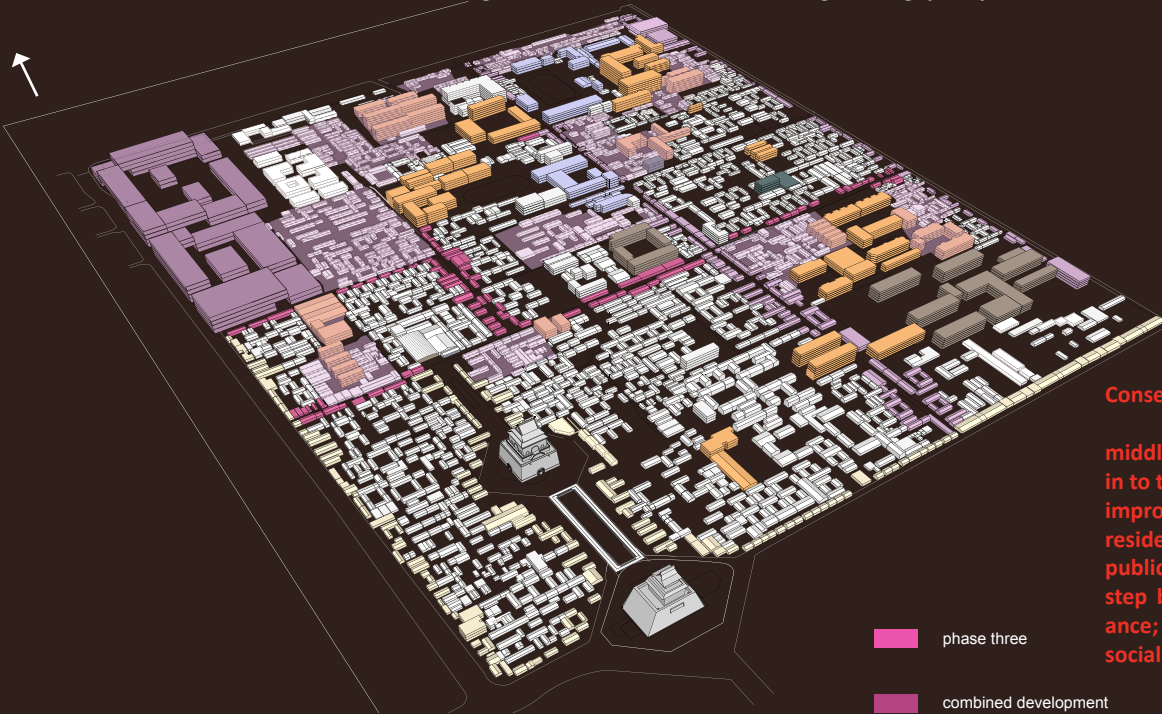
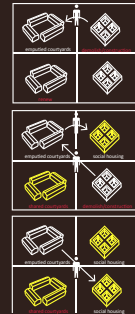
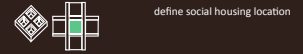
local residents-regeneration of middle quality houses

## operation:

social housing construction; middle quality courtyard houses renew regeneration of secondary hutongs

## management:

mixed use area; main hutong; combination of social housing and courtyard renew maintaining housing quality



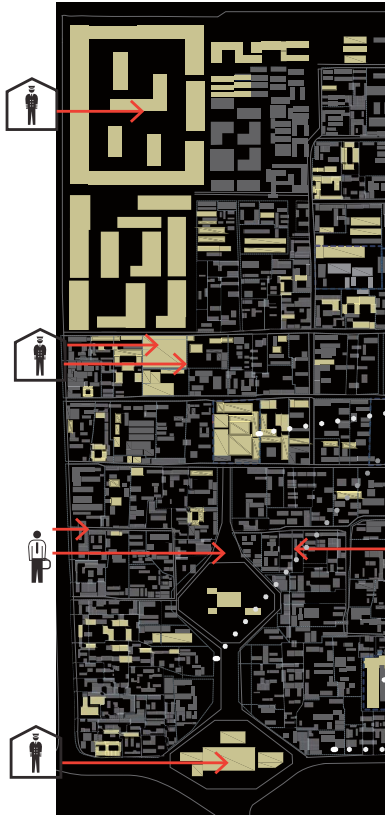
phase three

combined development

## Consequence:

middle class and higher class start to move in to the renewed houses;  
 improved housing quality for low income residence;  
 public spaces;  
 step by step regeneration with finance balance;  
 social integration

# EXPLANATION OF PHASING



## PHASE ONE heritage

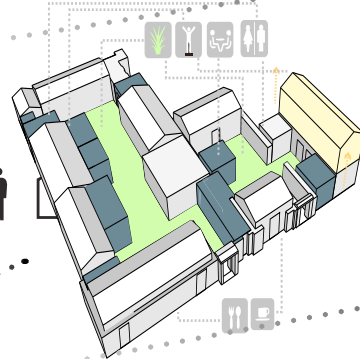


good quality courtyard housing

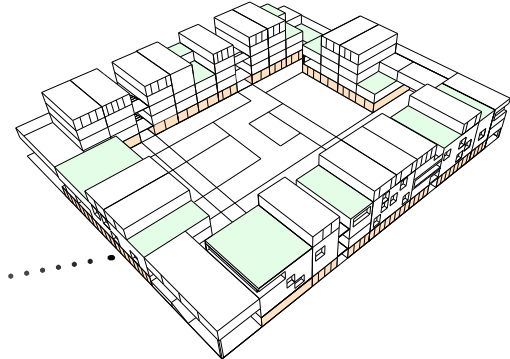


## PHASE TWO

shared courtyard housing



social housing



## PHASE THREE

local residents self-organized regeneration

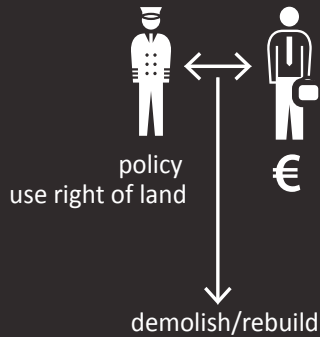


## Evaluation

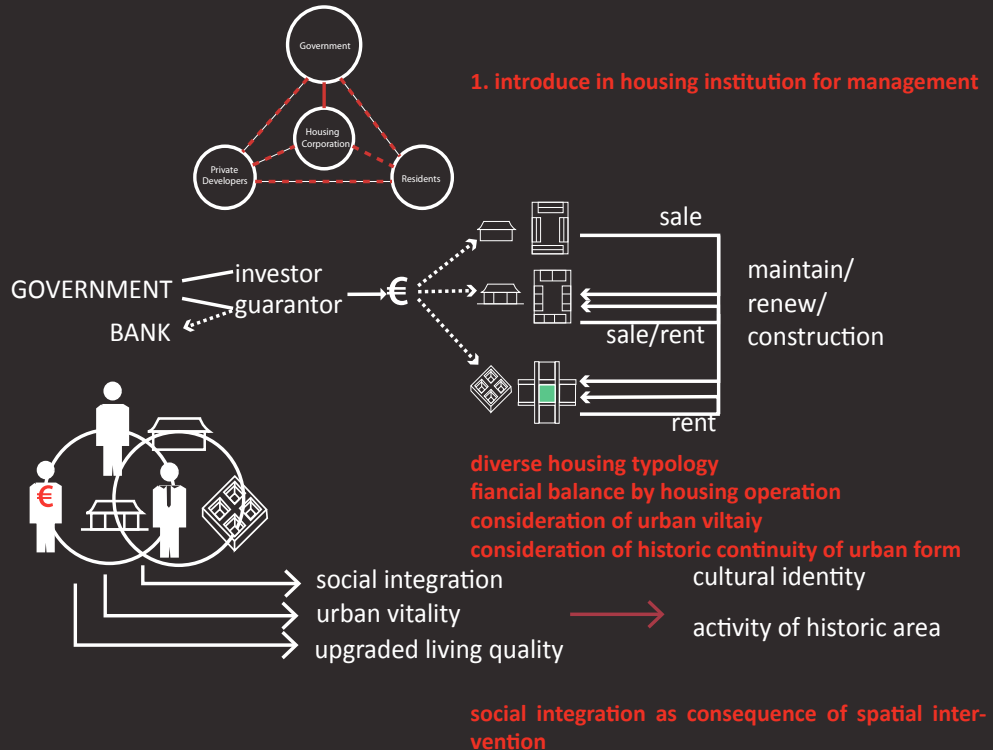
This chapter shows the phasing of regeneration in the site by steps and explain the management has been done by the housing institution during the process. The one slice of site sampled how the phasing proceeded during the process, showing how the cooperation operated in between housing institution, private development, local residents.

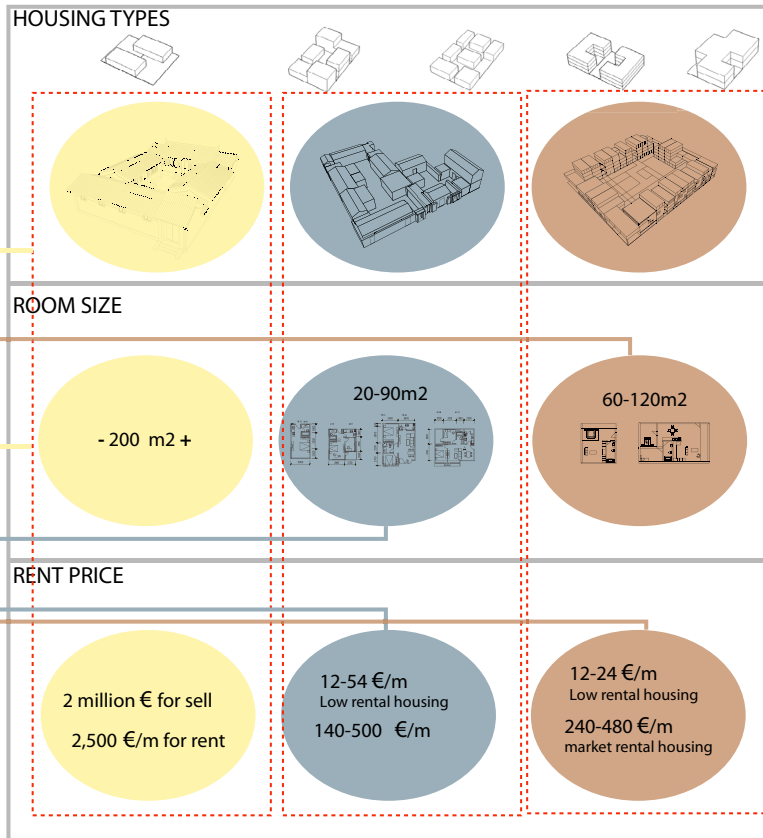
# Inner city regeneration

## General way



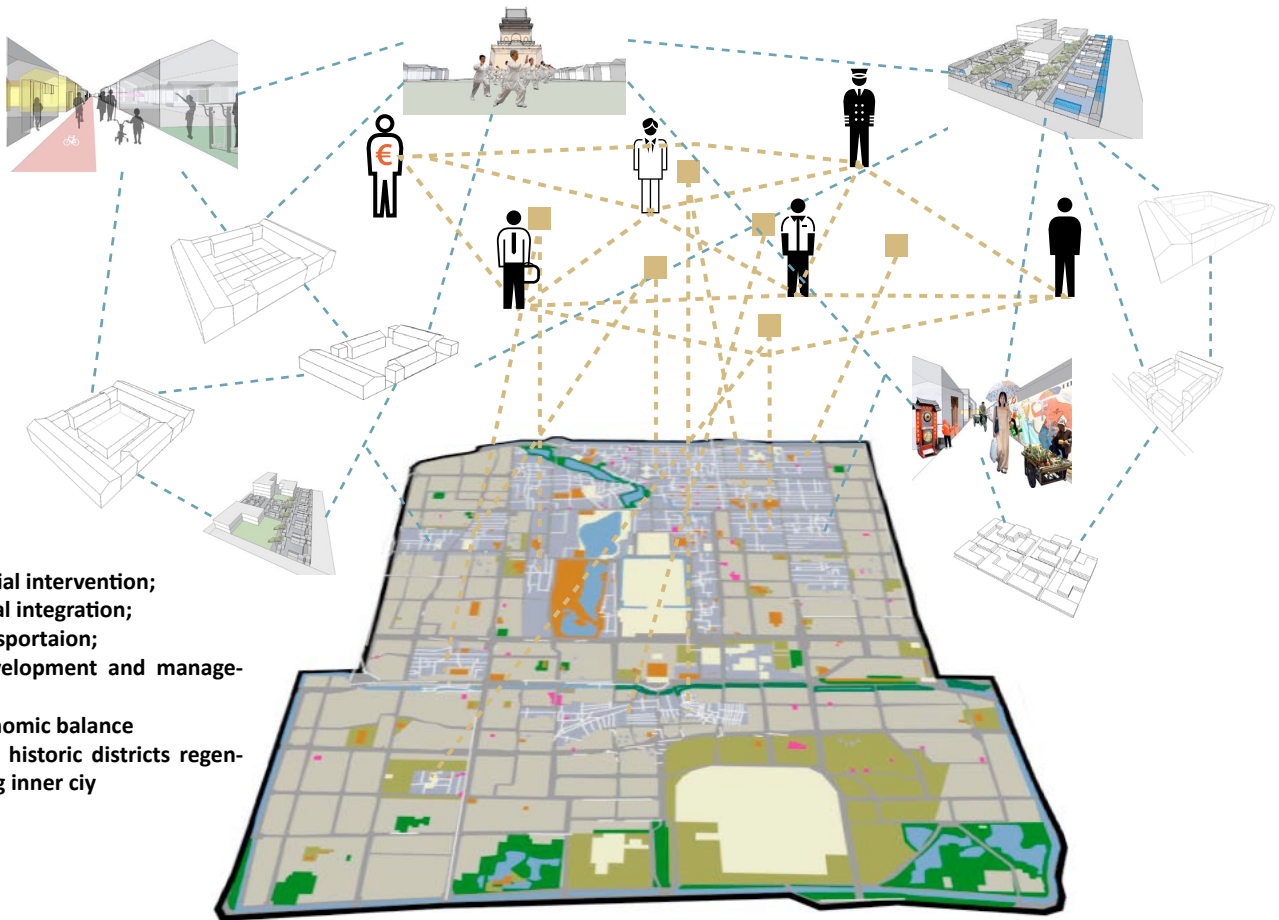
## My way





diverse housing types supplied by housing institution;  
improved quality;  
multi-choices for different square meters of rooms;  
flexible options for different social groups;  
social integration by mix use of spaces

## Evaluation



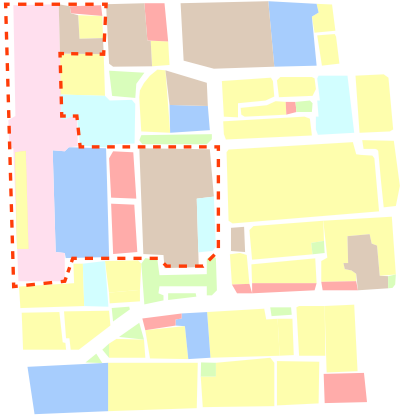
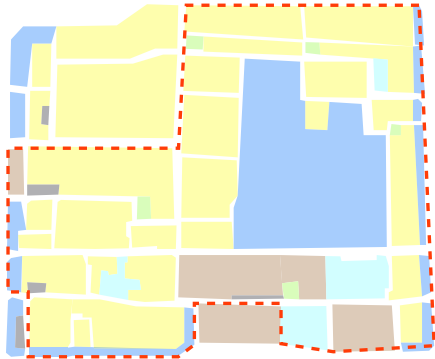
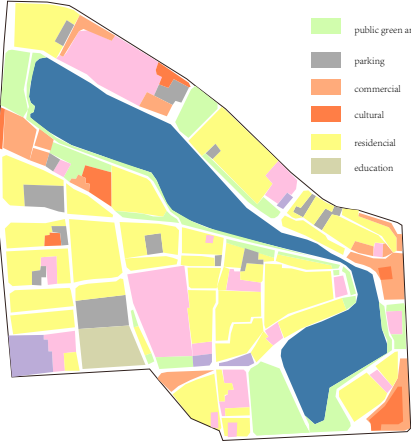
strategy for spatial intervention;  
strategy for social integration;  
strategy for transportation;  
strategy for development and management;  
strategy for economic balance  
----> promote in historic districts regeneration of Beijing inner city



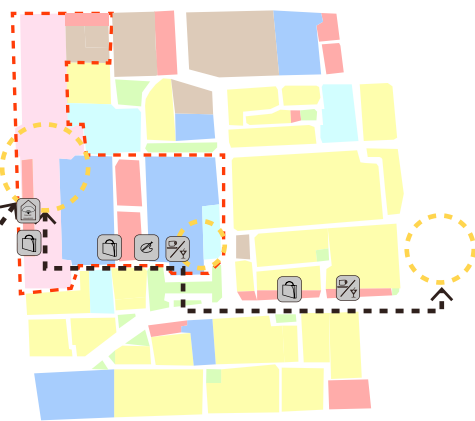
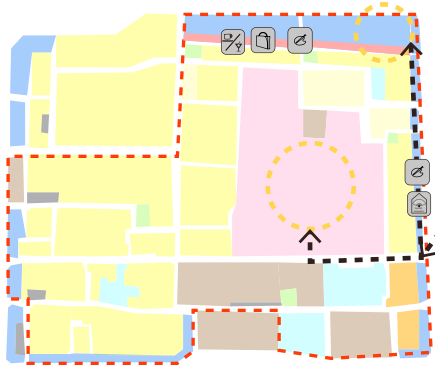
# Evaluation-Strategy under use in other historic districts

**CURRENT**

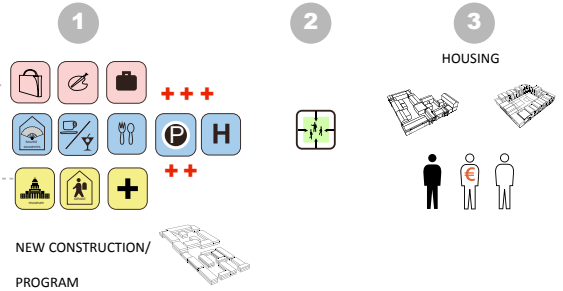
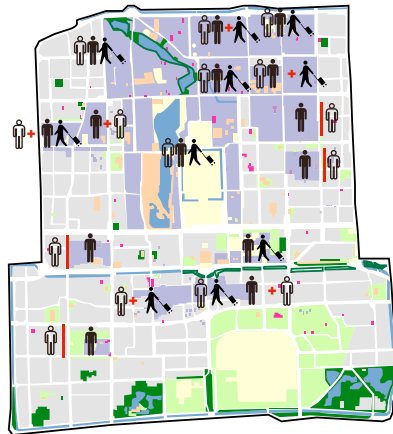
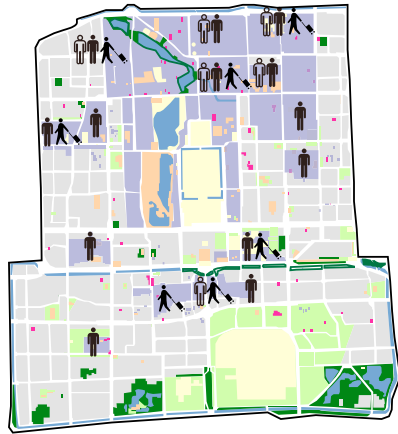
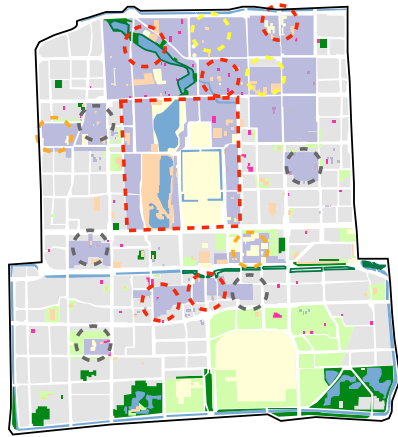
- cultural heritage
- public green area
- parking
- commercial
- cultural
- residential
- education



**AFTER**



# character changes of historic districts in Beijing inner city



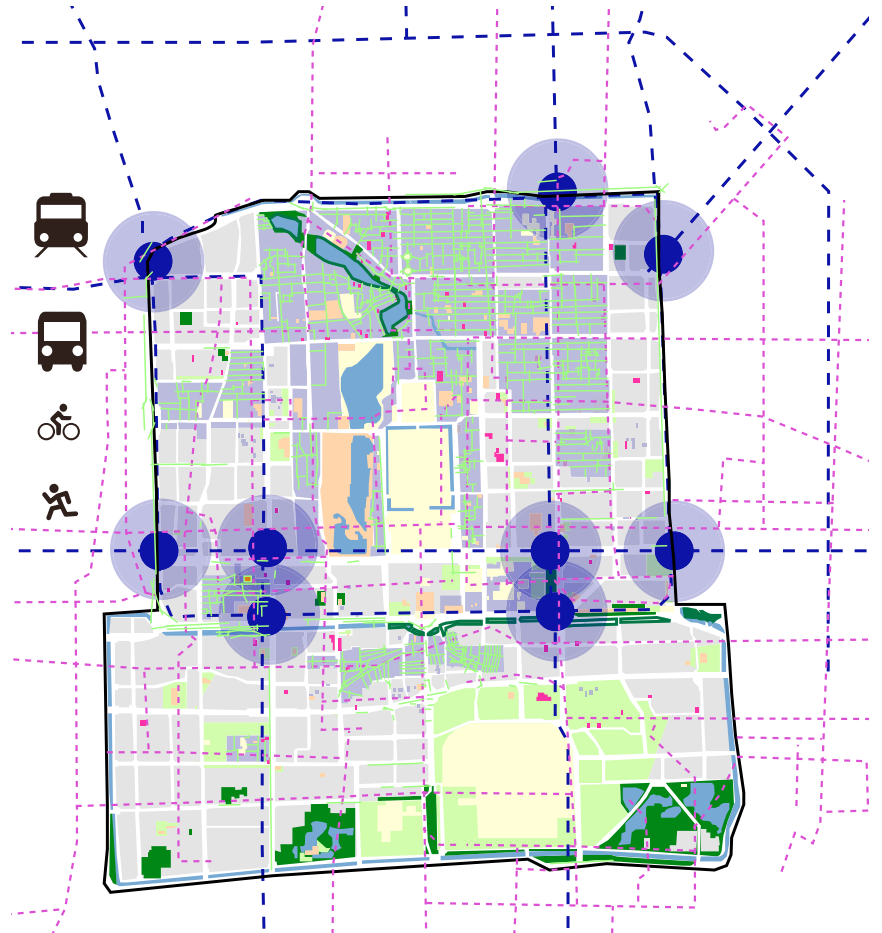
**upgraded nodes:**  
**strength and adding functions: local-->city-->globe scale nodes;**  
**attraction to more users;**  
**improved quality of neighborhood;**  
**integrated social groups;**  
**diverse housing types;**  
**continuity of historic urban forms;**

**urban vitality activated by more users:**  
**as the changes of nodes from local-->city-->globe level, more users will come to use the regenerated historic districts-**

# Promotion of BMW system in whole Beijing inner city

city scale- metro, bus  
district scale-metro, bus, bike  
local scale-bus, bike, walk

metro line  
bus line  
bike lane-streets of historic districts, roads of neighborhood  
pedestrian lane-streets of historic districts, roads of neighborhood

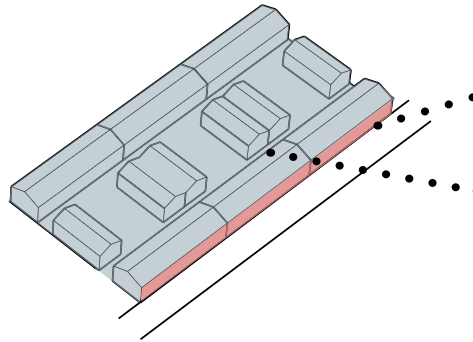


# APPENDIX

**rules 1**  
historical heritage



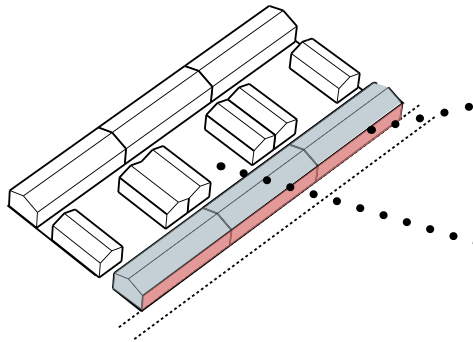
**rules 2**  
alongside the main streets



• continuity of the facade

• integrity of one depth of courtyard(min)

**rules 3**  
alongside the secondary streets

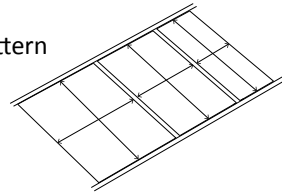


• recovery of the historic image

• tidiness of one courtyard housing(min)

**rules 4**

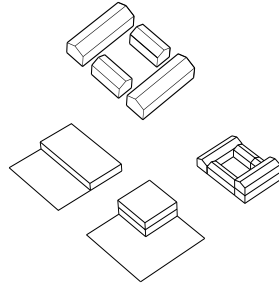
block width- respect historic pattern



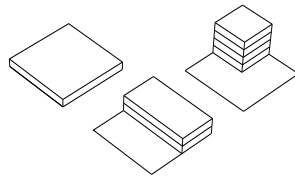
**rules 5**

FAR Request

FAR=0.2, Volumn>10%



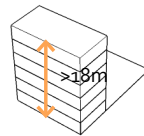
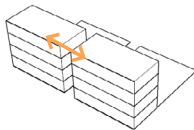
FAR=0.5



FAR=1(min)

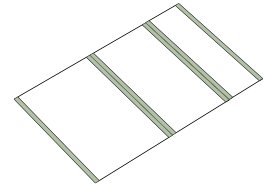
**rules 6**

height, sunshine, distance of building



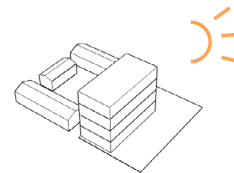
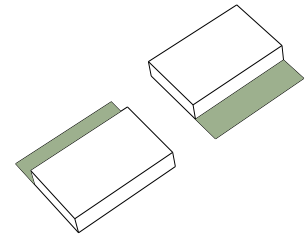
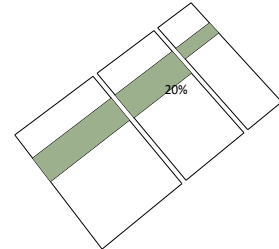
**rules 7**

side yard width



**rules 8**

open space ratio



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