

# **INCREMENTAL GENTRIFICATION**

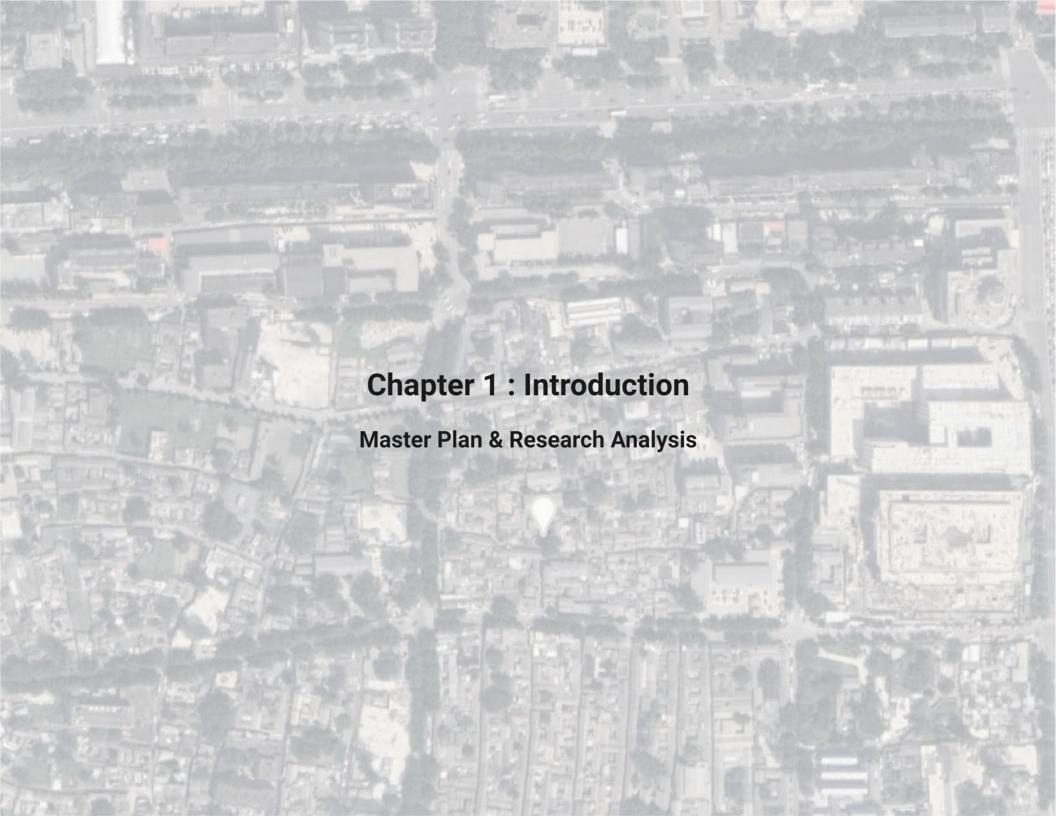
A Critique on "The Next Hutong" by MVRDV

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# **TABLE OF CONTENTS**

Chapter 1: Introduction  Masterplan Proposal What & Why is Hutong? What's around Hutong? Where is Hutong? How was Hutong structured? Evolution of Hutongs How is Hutong structured now? Demographics	03	Chapter 6: Commercial Integration  Current Hutong Amendies The Arcade Projects The Edge Projects The Facility Projects The Identity Projects	34
2 dining april 0		Chapter 7 : Accessibility	41
Chantar 2 : Thoma	12	Current Hutong Mobility	
Chapter 2 : Theme Incremental Gentrification Is Incremental Gentrification go		The Parking Projects	
Objective of Hutong Conservation	on Plan	Chapter 8 : Key Strategies	44
Chapter 3: Urban Intensification  Current Hutong Density The Vertical Projects The Dig Projects	on 20	Incremental Gentrification MVRDV Design Strategies & Gentrification Risk Levels Transect Section Public & Semi - Private Social Space Catalogue	els
The Infill Projects		Chapter 9: Overall Critique	50
Chapter 4: Heritage Conservation  Current Hutong Architecture The Preservation Projects The Interpretation Projects	tion 26	Works Cited	52
,			
Chapter 5 : Sustainability  Current Hutong Infrastructure The Sustainable Projects The Green Projects The Water Projects	30		



# "THE NEXT HUTONG" - MVRDV

A Dutch-based architectural & urban design practice, MVRDV, has taken it upon themselves to reimagine the Chinese Hutong. The practice has set out to define its future and envision "the next hutong", one that is "monumental, dense, green, mixed, and individual".



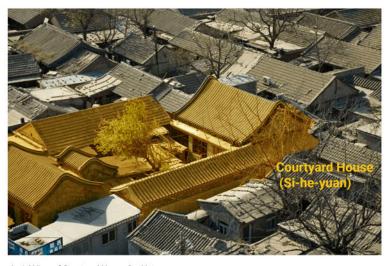


Mixed Hutong Masterplan Overview

Aerial view of "The Next Hutong", showcasing the different intervention: The Arcade Projects, The Facility Projects, The Green Projects, The Vertical Projects

## WHAT IS & WHY HUTONG?

Hutong is a narrow lane, alley, or small street between rows of single-storey Siheyuan (courtyard houses) dwelled by Beijingers in the past. When viewed from the air, the interlaced lanes resemble a maze or a chessboard with delicate gardens, fine rockeries, and ancient ruins which make them a wonder in the world.



Aerial View of Courtyard House & a Hutong



A bird's-eye view of the Hutongs show the criss-crossing grid that is formed collectively. It is a relatively organized structure of the city's town planning.

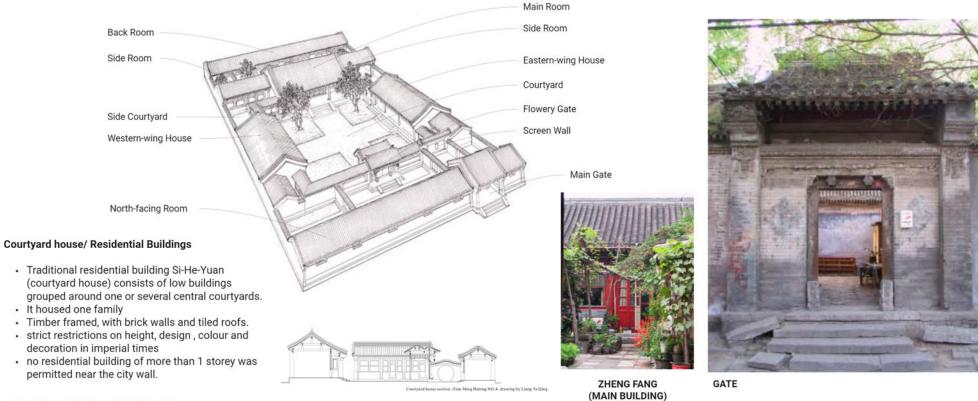




When the Mongols conquered Beijing in the 13th century, they built streets called Hutongs. Along these streets, people built clan courtyards with high walls and gates for protection. Hutong lanes provided shelter from wind and gave a strong sense of privacy.

## WHAT'S AROUND HUTONG?

For centuries Hutongs have been the standard form of settlement for Chinese populations that moved from the countryside to the growing cities. Courtyard housing were found adjacent to the Hutongs.









YING BI (SHADOW WALL)



MEN DUNR (STONE CARVING)

## WHAT'S AROUND HUTONG?



### Extension

As a result of increase in population, extensions were built by the local residents in order to increase the living area.



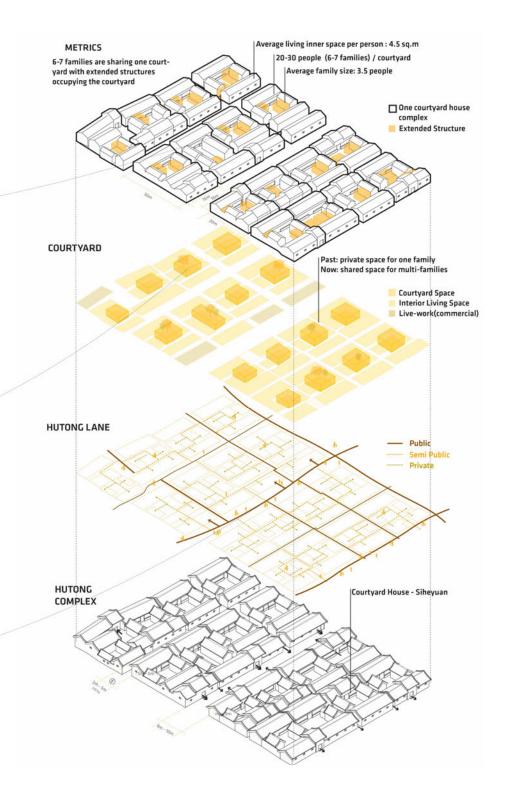
### Courtyard

Various usage within the courtyard house



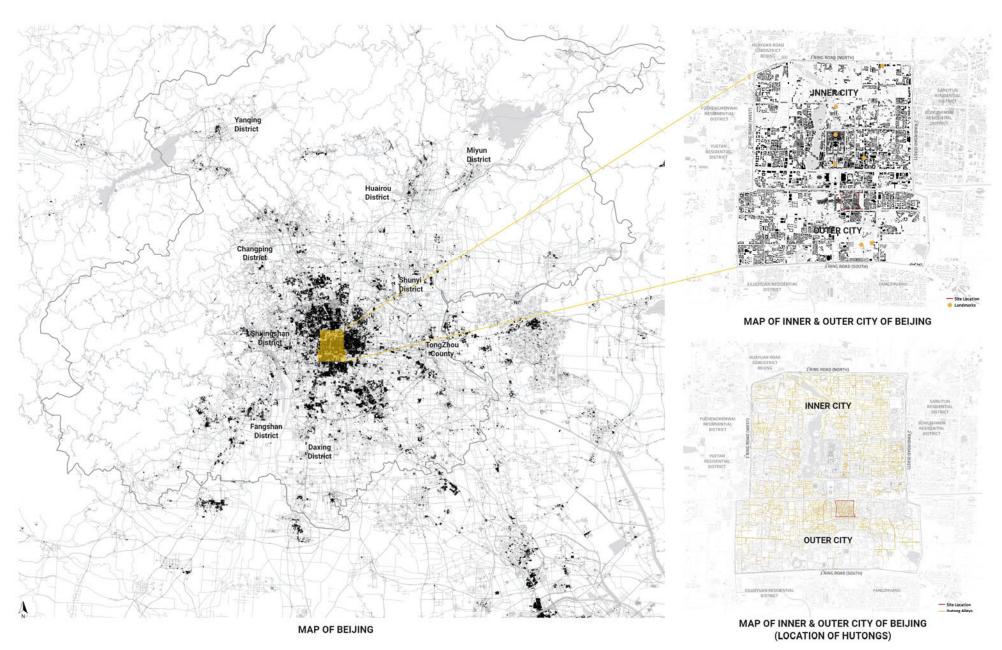
### Hutong

Narrow Hutong road, the old Hutong courtyard houses and the new buildings (with more stories)



# WHERE IS HUTONG?

Beijing is located on a flat plain on 39.56 north latitude and 116.2 east longitude, with hills to the northwest. Several natural and artificial lakes and waterways within the central area are part of an ancient water-system bringing fresh water from Yu Quan Shan and providing recreational areas for the residential districts.

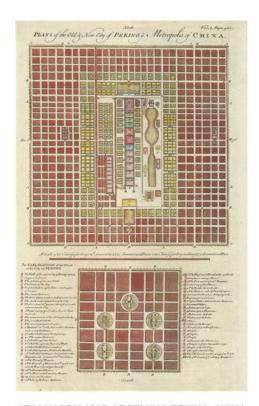


# **HOW WAS HUTONG STRUCTURED?**

For centuries Hutongs have been the standard form of settlement for Chinese populations that moved from the countryside to the growing cities.

### INNER CITY

- · Streets were laid out mainly on a grid pattern
- Mostly residential, with concentrations of largescale courtyard homes of the upper classes



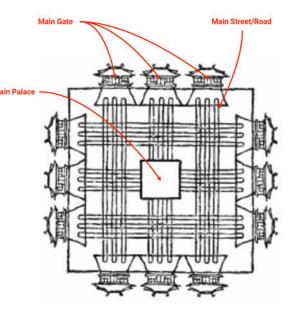
1744 HARRIS MAP OF BEIJING/PEKING, CHINA

### **OUTER CITY**

- not laid out along a grid pattern, so there are many crooked streets and narrow alleys
- · smaller scale buildings
- · traditionally a commercial area



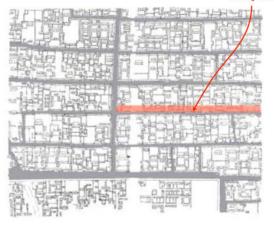
**INNER & OUTER CITY** 



#### **URBAN STRUCTURE PRINCIPLE**

Principles for ancient Chinese urban planning included a rectangular street grid with a palace in the centre, surrounded by temples and markets, and an auspicious number of 12 gates in different directions

#### **Hutong Lan**



#### STREET TYPOLOGIES

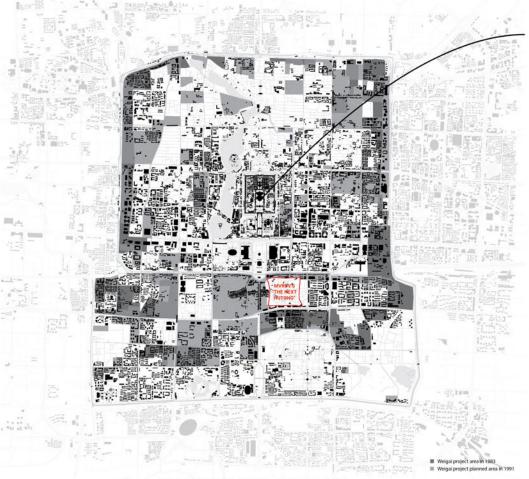
- 1. Big streets
- 2. Small streets (mostly ran North-South)
- 3. Hutong lanes (mostly ran West-East)

## **EVOLUTION OF HUTONGS**

The speed of the demise of the Beijing Hutong has been measured at 600 lanes per year

#### Reasons:

- 1. Cultural revolution & natural disaster damage on the historic buildings
- 2. Housing Reform and Weigai System densely populated housing districts were centuries old and lacking in maintenance. They need to be demolished and redeveloped
- 3. The Weigai project aims to demolish and rebuild old and dangerous residential structures.

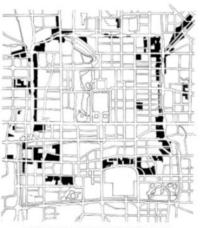




The 'Conservation Planning of 25 Historic Areas in Beijing Old City' supplies official data analyzing the land use:

Total size of the 25 protected areas: 1038 hectares (10.38 square kilometers) The population: 285,000 people (95,000 families)

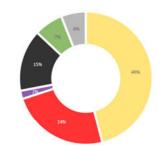
Population density: 275 people / hectare



**WEIGAI PROJECT AREA IN 1983** 



WEIGAI PROJECT AREA IN 1991



PROJECTED INCREMENTAL GENTRIFICATION AT XIAN YU KOU JIE



Phase 1: Commercial Development on edge



Phase 2: Partial Residential Development



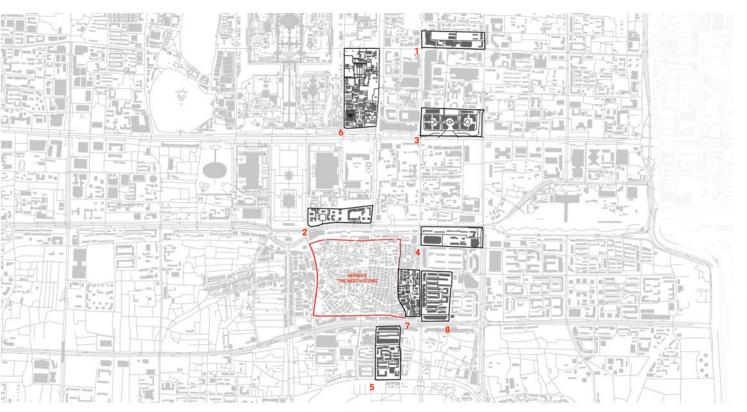
Phase 3: Full Residential Development

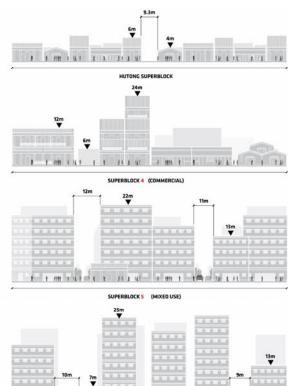
<b>Current Land use</b>	Area (Hectares)
Residential	490 ha (46%)
Commercial	247 ha (24%)
Industrial	17 ha (1.5%)
■ Road	154 ha (15%)
Green Space	69 ha (6.5%)
Other	61 ha (6%)

LANDUSE BREAKDOWN OF **INNER & OUTER BEIJING** 

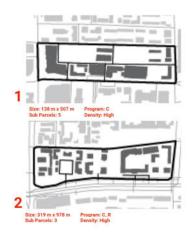
# **HOW IS HUTONG STRUCTURED NOW?**

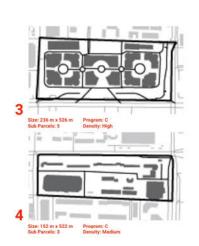
Map of inner and outer city of Beijing showcasing the different sizes of the old and new superblocks.



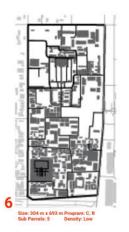


**INNER & OUTER CITY OF BEIJING** 













## RESIDENTS IN HUTONG VS THE REST OF BEIJING?

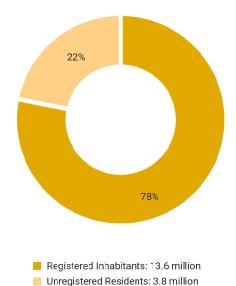
For centuries Hutongs have been the standard form of settlement for Chinese populations that moved from the countryside to the growing cities.

### POPULATION DENSITY OF BEIJING

### In Beijing, the population totals to 17.4 million people.

A majority of the population consists of Registered Inhabitants at 13.6 million people (73%). The rest of the population is made up of Unregistered Residents at 3.8 million people (22%).

### Total Population of Beijing: 17.4 million

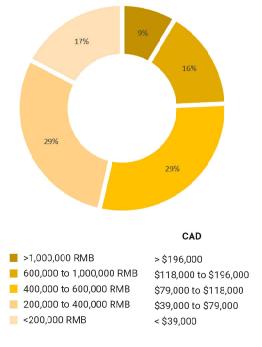


### **ANNUAL FAMILY INCOME**

This is a graphical representation of the percentages of Beijing residents with varying thresholds of income.

The two largest groups have income ranging from 200,000 to 400,000 RMB and 400,000 to 500,000 RMB, which makes up approximately two-thirds of the population.

#### Annual Family Income of Beijing residents (Units: RMB)



### **FAMILY SIZE & LIVING SPACE**

In Hutongs, the average family is 3.5 members and the average living inner space is 2 rooms per residential unit, which makes up to an area of 15 square meters.

Compared to China's national average of 20.23 square meters per person.

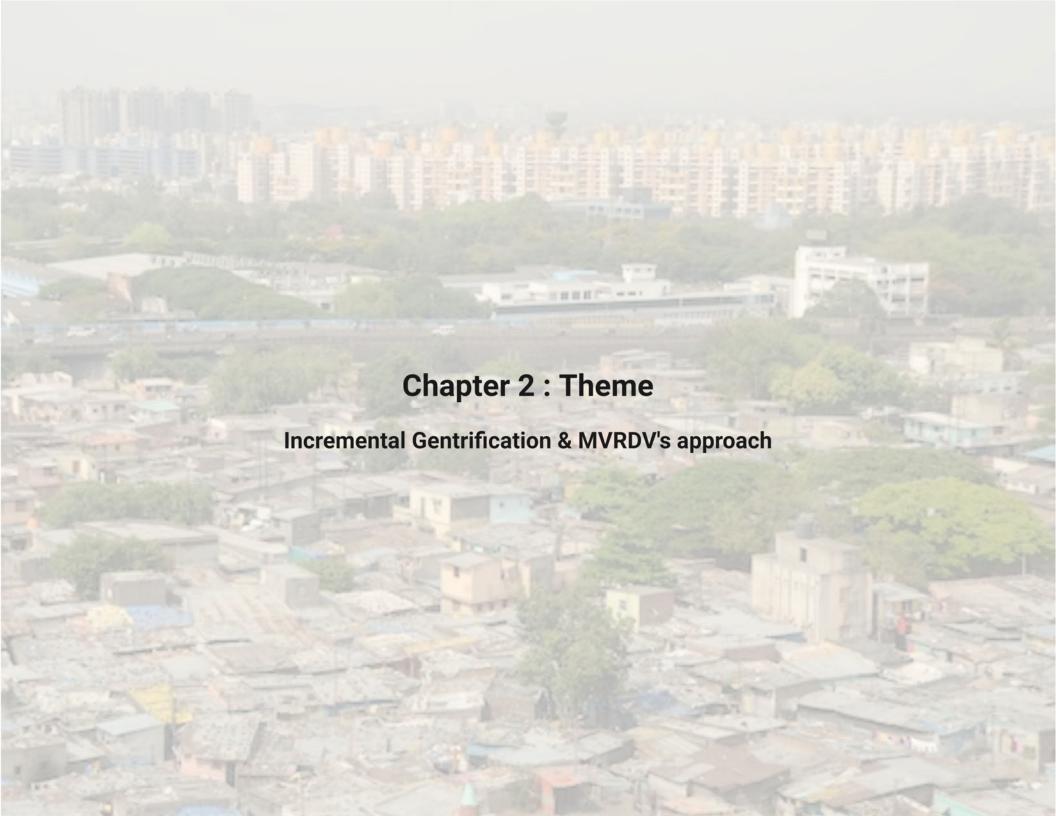


**AVERAGE FAMILY SIZE:** 3.5 Members



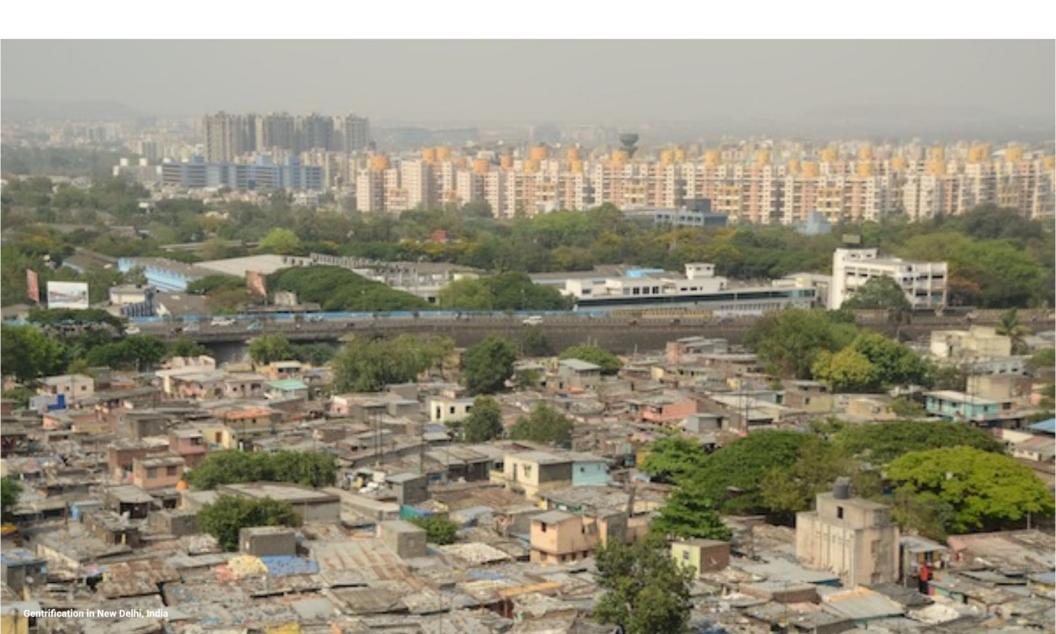


Images of the living space of the residents in the hutongs.



# WHAT IS INCREMENTAL GENTRIFICATION?

Incremental gentrification refers to the buying and renovation of houses and stores in deteriorated urban neighborhoods by upper- or middle-income families or individuals, raising property values but often displacing low-income families and small businesses.



## IS INCREMENTAL GENTRIFICATION GOOD OR BAD?

### **Advantages**

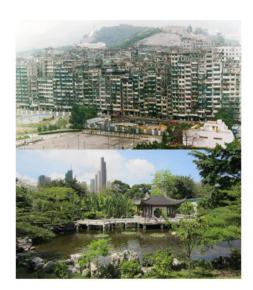
- Urban renewal contributes to better living environment
- Provision of food, retail outlets, and jobs
- Create new housing opportunities
- Promotes new urban activities, and events

- **⊘**
- Enhances public safety
- Gentrification creates growth opportunities
- Reduce suburban sprawl within a community

### **Disadvantages**

- Local Residents Displacement
- Changes cultural standards of neighborhood
- Increased property value, cost of rent & purchase
- Increased property value

- Privatization, gentrification is a process run by the private sector
- Changing Income Mix
- Potential of leading higher levels of community conflict



Urban Colonialism on Kowloon Walled City, now Walled City Park. Displacement of slums to create a Park to boost tourism



Regent Park social housing demolition for "revitalization" and new development



Demolition of courtyard houses in XianYuKou as part of the "Weigai" system for commercial development



Commercial revitalization of Mars Bar on Second Avenue at First Street, East Village (2005, 2014).

## INCREMENTAL GENTRIFICATION IN BEIJING

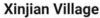
Most of the Hutongs and courtyard houses are located in the inner and outer city of Beijing where the property value have significantly increased in the past 50 years. Therefore, they are vulnerable to the private developer's interest in gentrifying them.

In response, the government have created a heritage conservation policy plan to protect the Hutongs and the courtyard house from demolition, as these structures are recognized as the core culture/feature of Beijing.



### **Northwestern Beijing**

Scenes of destruction in northwestern Beijing Photograph: Tom Phillips



Xinjian village, a once-teeming neighborhood of garment factories and migrant dwellings in Beijing that has been partially demolished as part of the housing crackdown Photograph: Tom Phillips



Sanyingmen

Scenes of destruction in Sanyingmen, a condemned migrant village in southern Beijing. Photograph: Tom Phillips



A restaurant shut down as part of the "Great Brickening" – in which businesses were forced to shut storefronts were bricked up. Photograph: South China Morning Post via Getty Images



# Revitalized Nanluogu Xiang commercial district

Shoppers on Nanluogu Xiang. Photograph: kpzfoto/Alamy Stock Photo

# **INCREMENTAL GENTRIFICATION IN XIAN YU KOU JIE**



**Current Condition of Xian Yu Kou Jie** 



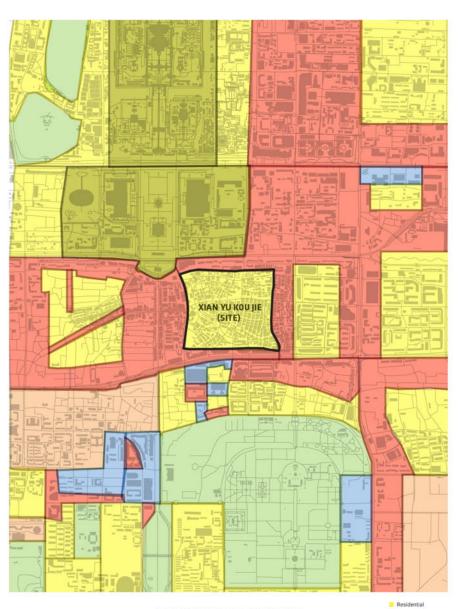
**Phase 2: Partial Residential Development** 



Phase 1: Commercial Development on edge



Phase 3: Full Residential Development



### **ADJACENT LANDUSE**

Mixed Use
 Institutional
 Parks & Open Space

Heritage & Culture

Analyzing the adjacent landuse will have a better understanding of the projected demand of the current Xian Yu Kou Jie.

## **OBJECTIVE OF HUTONG CONSERVATION PLAN**

The main objective of the Beijing Hutong Conservation Plan by THF and the Tsinghua University researchers is to provide a concrete proposal for the conservation and subsequent rehabilitation of three of Beijing's historical Hutong Quarters.







**BUILDING MATERIALS** 

Preserving a maximum amount of the authentic historical building materials



**TOWNSCAPE** 

Preserving the townscape and original historic setting of Si-He-Yuan type housing in the Hutong lanes



TRAFFIC REGULATION

Better traffic regulation to ensure the safety of the pedestrians and bikers while providing vehicles for the tourists



**COLLABORATION** 

Working with the existing residents of the community



LIVING CONDITION

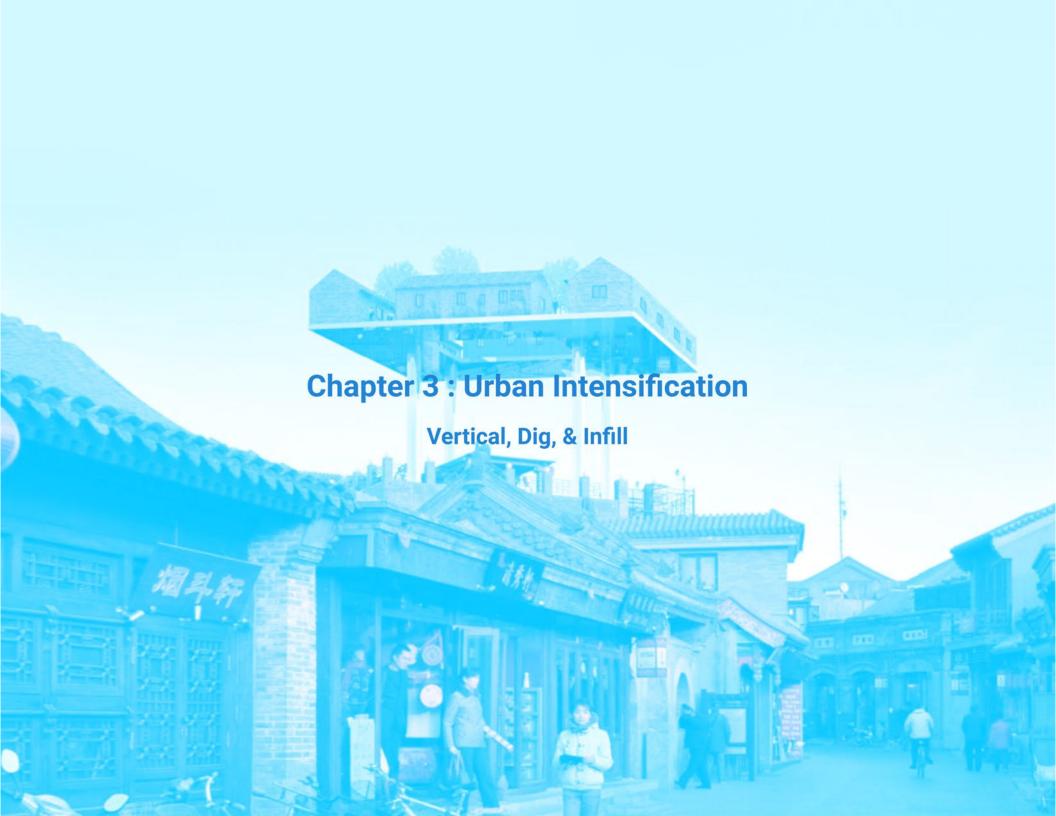
Bringing living conditions up to acceptable standards, to ensure the healthiness of the inhabitants



**HOME OWNERSHIP EQUALITY** 

Retaining the current mixture of subsidized housing, private house ownership, commercial buildings and services





## **CURRENT HUTONG DENSITY AT AN URBAN SCALE**

According to the research by THF and the Tsinghua University researchers, only 46% of the historic areas in Beijing Old City remain as residential land. Only the courtyard houses located in the inner part of the Xianyukou Site remained for residential use.

### **Demographics Changes**

- 1960s: thousands of people lived in the remaining Hutong area
  - the population rapidly grew because of the growth of export industry.
- 1980s: residents were relocated on the same site. (Weigai System enacted)
  - similar living space but minus any extensions or courtyard space that had previously been theirs.
- Late 1990s: relocation to the outskirt of the city (Weigai System enacted)
  - 200, 000 families have been relocated huge impact on the historic character of Beijing.
  - People moved into apartments or moved out to the suburbs or to other areas of China
  - Workers from other provinces rent the courtyard houses in Beijing

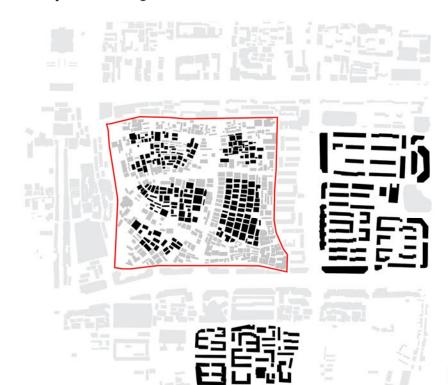


Hutongs and Courtyard Houses being Demolished because of the Weigar system



Original Hutong Area redeveloped into residential apartment community

### Xianyukou Hutong Residential Land Use

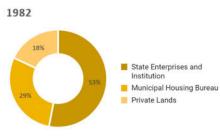


While commercial buildings are developed at the edge of the site, only the courtyard houses located in the inner part of the Xianyukou Site remained for

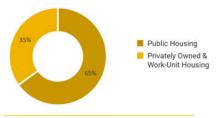
lands which used to be Hutongs.

residential use. Residential Apartments Complex are built in the surrounding

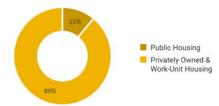
### **Ownership**







### 2000: COMMERCIALIZED HUTONGS



## **CURRENT HUTONG DENSITY AT COURTYARD HOUSE SCALE**

One of the main issues of the current Hutong and courtyard houses is the lack of living space. As more tenants move into the courtyard houses, the extended structures built by the residents, being unstable and not organized, causing congestion in the narrow lanes and safety issues to the neighborhood. Yet, people do not build upward because of the the height limits of the Hutong from ancient time .

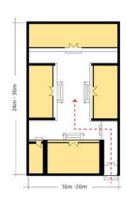
#### RENTAL IN HUTONG

- · Public Housing
  - Each family unit(20sq.m) pay 44.30 rmb (CAD\$8) per month
- · Private owners rent out rooms
  - 400 to 800 rmb (CAD\$50 -CAD\$100) per month
- · Work-unit Housing
  - 64 rmb (CAD\$12) per month

#### RENTAL IN MARKET

 Average: 2000 rmb per unit (15-20s.m) per month

#### COURTYARD HOUSE TYPICAL SIZE



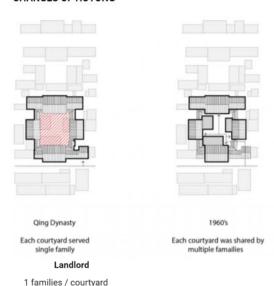
Area of a Courtyard house: 284 - 600 Sq.m

#### CHANGES OF HUTONG

5-10 people / courtyard

15sqm / person

**HEIGHT LIMITATION** 



Tenants
6-7 families / courtyard
20-30 people / courtyard
4.2sqm / person

1960's to Present

The edge between private space and

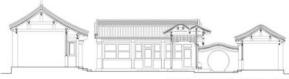
public space was blurred

#### INSUFFICIENT SPACE





Courtyard open space is occupied by extension buildings, blocking sunlight. Lack of space: average living space per family (3.5 members): 15m2. China's official average: 20.23m2/person



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

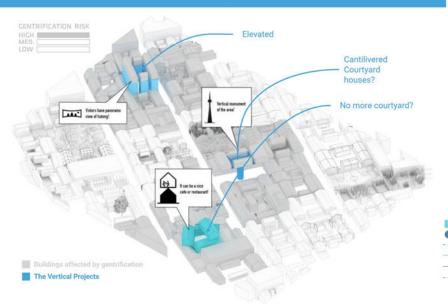
Courtyard house section

All courtyard houses are one storey because before 1911, the courtyard houses only served one family and no residential building of more than one storey was permitted. (not taller than the walls of the Forbidden City).



## THE VERTICAL PROJECTS

The Vertical Projects attempt to utilize vertical spatiality to allow residents and visitors have scenic views of the city and the hutongs itself.



### BEFORE









**Courtyard Relaxing Space** 

### **CURRENT**

Courtyard houses in the inner city of Beijing was restricted to be no more than 1 storey. Most of the houses are maintained with the height, being a feature of the Hutong.

One storey houses

### **Masterplan (The Vertical Projects)**



- Gentrification, increase the property value
- Unrealistic proposal of uplifted structure of the courtyard house, an attempt to expand the courtyard house and Hutong
- Elevated structures break aesthetic of low rises housing complex in the Hutong neighborhood
- Courtyard features and the sunlight to the courtyard are blocked by the additional structures.
- Potential to be the tourist attractions which can provide views of the whole Hutong.
- Bring in activities to the Hutong while maintaining the same footprint.

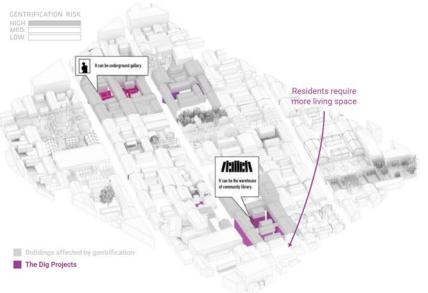


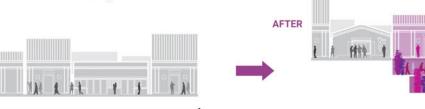


## THE DIG PROJECTS

BEFORE

The Dig Projects attempt to utilize vertical spatiality by occupying the underground rather than the sky with underground galleries and libraries







### **CURRENT**

Hutong courtyard house cladded with grey bricks and red painted timber structure. Courtyard spaces are for private households.



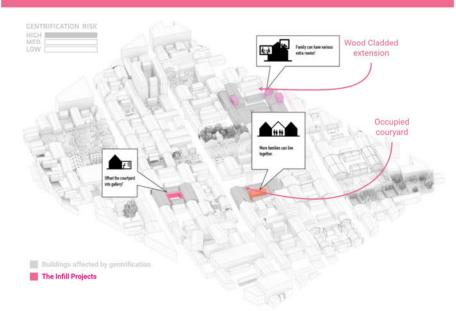
- Removing the current courtyard and digging an underground courtyard poses many issues, such as construction management, safety and accessibility issues.
- The site lacks space and large glass and courtyard structures would waste even more space.
- It is expensive and structually unfeasible to dig vertical space underground.
- Courtyards which used to be semi-private are turned into public space.
- Bring in activities to the Hutong while maintaining the same footprint.

HUTONG



## THE INFILL PROJECTS

The Infill Projects create housing extensions on existing structures in the Hutong so families can have more space and also rooms that can be at different elevations.



### BEFORE









**CURRENT** 

Lack of courtyard space due to the necessity of the extension for the courtyard house, such as kitchen and bedroom.

**Courtyard House** 

**Extension for Storage** 



Masterplan (The Infill Projects)



THE INFILL

- Neglects the traditional requirement or aesthetic of Hutong and courtyard houses, such as red timber structure, clay shingles, and grey brick facade
- Some courtyards are populated by the infills, which reduces the preexisting semi-public space.
- Increased density posing extra pressure to the existing infrastructure
- Proposed multiple stories extension in oppose to the current single storey house, which provides more living space for the local residents.
- Low gentrification, enhance the property value but provide better living space
  - Organized and designed infill is better than the dangerous extended structures by the residents.

The state of the s



# **CURRENT HUTONG ARCHITECTURE**

The courtyard house has a history of over 2,000 years. It showcases unique characteristics of Chinese architecture. Preserving the traditional architectural form is significant for both keeping the identity of the old Beijing city and cultural inheritance.



#### TRADITIONAL ARCHITECTURAL LANGUAGE

The courtyard houses demonstrate the aesthetic value by using traditional building techniques and materials such as stone base, red timber and clay shingles.



#### VEGETATED COURTYARD

Vegetation in courtyard is an important feature that worths preserving



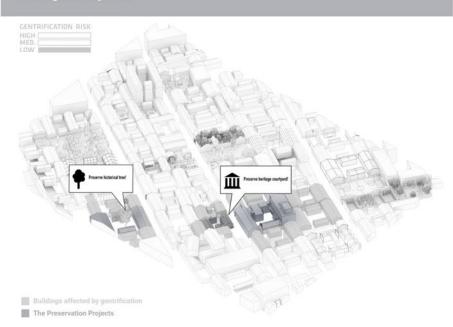
### DETERIORATED COURTYARD HOUSE

Due to lack of proper management and maintenance, facades of courtyard houses have started deteriorating.



## THE PRESERVATION PROJECTS

elements of the Hutongs by preserving historical trees and heritage courtyards.



BEFORE



Existing landscape

Use of traditional architectural language

Existing tree

### **CURRENT**

The courtyard houses demonstrate the aesthetic value by using traditional building techniques and materials such as stone base, red timber and clay shingles.





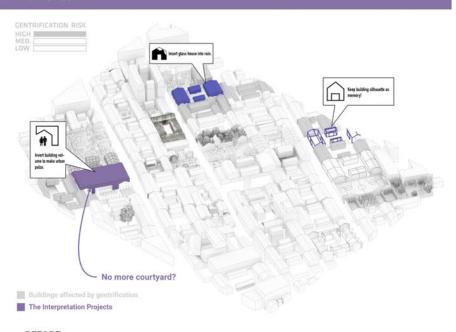


- No density increase in the preserved courtyard houses
- The program does not contribute to the economic demands
- The sites are highly selective. It is difficult to define which houses have more aesthetic value
- Preserve the historical architectural form
- Preserving existing vegetation and landscape contributes to maintaining ecological diversity
- Reduce social impact or gentrification



### THE INTERPRETATION PROJECTS

The Interpretation Projects intend to both regenerate and preserve the historical features of the existing structures within the hutong such as inserting glass houses into the ruins and keeping building silhouettes as memories.





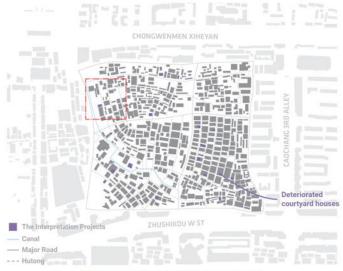


Damaged house

Deteriorating façade with minor repair

### **CURRENT**

Due to lack of proper management and maintenance, facades of courtyard houses have started deteriorating. The condition is not suitable for residents to live in any more.



Masterplan (The Interpretation Projects)



- Unique architectural design attracts tourism, triggering gentrification
- European-approach deculturates the Hutong
- Economically inefficient to build the structures
- Reduce the social impact that can be caused by demolition
- Preserve the traditional architectural elements

Opportunities to convert the program to commercial use, bringing in more tourists



# **CURRENT HUTONG INFRASTRUCTURE**

Although there are very few green spaces in the Hutong area, a variety of trees can be found in the alleys and courtyards. There are currently no sustainable implementations found on the hutong sites. The present facilities of the hutongs consists of a common courtyard drain with a sewer connection. For the inhabitants, the kitchen areas have running water but inadequate drainage.



SUSTAINABILITY
Few areas of green spaces are seen in the bird's-eye view shot of a hutong.



INFRASTRUCTURE
Current state of the waste
management system in the Hutongs
that need to be fixed.



Coal heating system



Shortage in Sanitation Facilities, each toilet is shared by 77 families on average



FACILITIES Simple solar shower system



Insufficient water supply, shared water tap



WATER DRAINAGE Inadequate sewage system



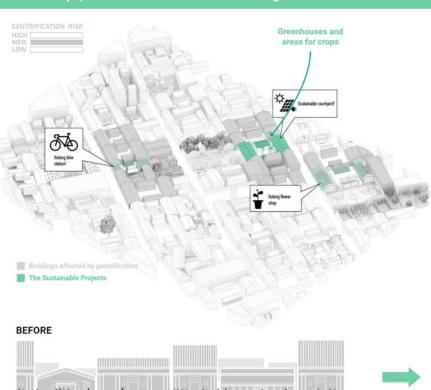
Residents are required to use the public toilets in the streets nearby where they would be reguarly cleaned by pump trucks.





### THE SUSTAINABLE PROJECTS

The Sustainable Projects create eco-friendly environments through sustainable courtyards, flower shops, and bike stations within the hutongs.



HUTONG





People socializing in courtyard

### **CURRENT HUTONG COURTYARDS**

Residents within the same courtyard house are interdependent to each other. In light of their interdependency, MVRDV's proposal of the sustainable projects utilize the idea by introducing green house and open farm land where local crops can be grown and harvested.



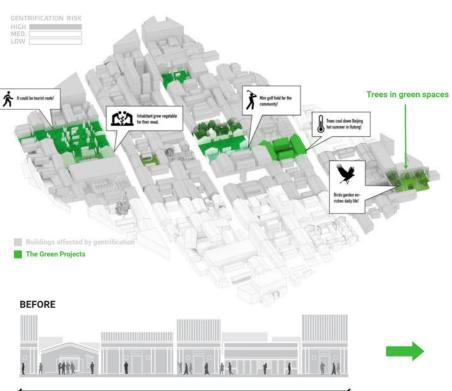


- High-maintenance costs of greenhouses and gardens
- Demolition of the courtyard houses
- Promotes eco-friendly and sustainable methods of living by creating sustainable courtyards and greenhouses
- Trees and green spaces improves air quality
- Enhances social interaction and involvement.
- Bike lanes promote environmentally friendly alternatives to buses, subways, and cars
- Operates all year round



# THE GREEN PROJECTS

The Green Projects intend to create green areas for vegetable gardens, tourist routes, mini-golf courses, and bird gardens.







### **CURRENT HUTONG COURTYARDS**

There are very few green spaces found in hutongs but a variety of trees exist in the courtyards and lanes.





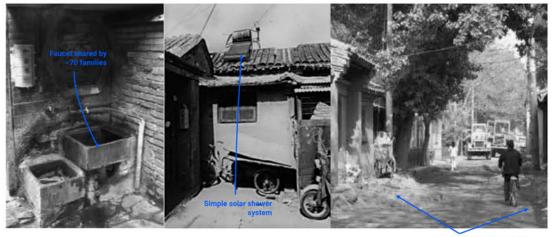
- Provision of open public green space to attract people into the site, a gentrification system
- Gardens are not functional in the winter
- Demolition of the courtyard houses to make space for public green spaces
- Residences are able to produce vegetables for themselves, rather relying on adjacent commercial suppliers
- Trees provide shade for hot and sunny weather
- Additional amenities for public use (ie. mini-golf courses)
- Trees and green spaces help to mitigate the effects of global warming and promote ecofriendly living
- Storm-water management in permeable surfaces may be adapted in green areas to resolve the drainage system issue
- Provides better accessibility for tourists



### THE WATER PROJECTS

The Water Projects create moments utilizing water that include fountain areas and housing that float on top of the river.

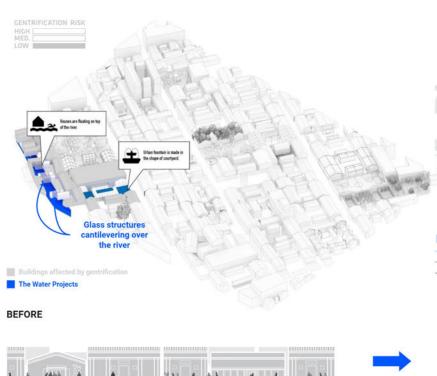
HUTONG



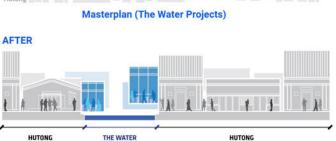
Inadequate sewage system

### **CURRENT HUTONG INFRASTRUCTURE**

Unhygienic and insufficient water supply and system for the courtyard house community.







- Glass structure cantilevering over canal is expensive, unnecessary and visually making space even more congested
- Glass structures is unresponsive to the vernacular Hutong courtyard house design guideline
- Improves infrastructural systems by mitigating the current insufficient water management and unhygienic environment, such as the sewage system, washrooms, and drinkable water supply.
- Provides more space for inhabitants and tourists by utilizing space over the river
- Tourist attraction



# **CURRENT HUTONG AMENITIES**

Cultural heritage is one of the main features of Beijing city, making Beijing one of China's top tourist destinations. The conservation of the remaining historic areas is vital to Beijing's identity and for the city's long-term commercial interests.





### REPLICAS

While the Beijing government tries to being back the Hutong courtyard house culture back, meaningless replicas are created

#### **TRANSFORMATION**

Now, no more than 1,000 Hutongs remain and a majority of the existing ones have been transformed into tourist attractions associated with street food, shopping, and bars.



#### **ENTERTAINMENT DISTRICT**

Some hutongs evolved into popular evening entertainment districts with many recently-opened bars, restaurants, and souvenir shops.





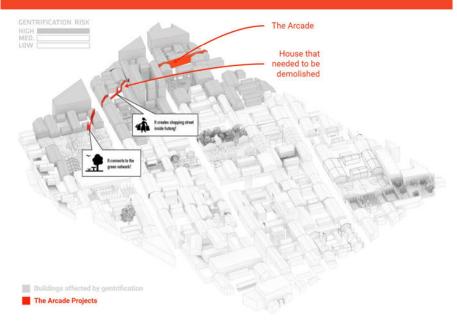
### **RICHSHAW TOURS**

A man is seen driving a rickshaw carrying tourists through the Hutong alleys

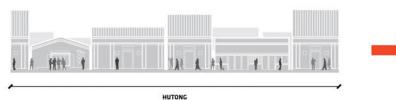


### THE ARCADE PROJECTS

The Arcade Projects create areas for leisure and entertainment by designing shopping streets inside the Hutong.



#### **BEFORE**



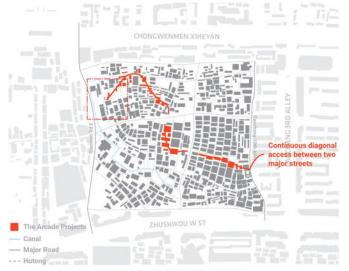


### **CURRENT**

Social interaction between neighbors

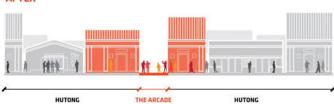
**Narrow inactivated Hutong** 

Quiet & peaceful night in Hutong, evening social interaction with neighbor from different courtyard house.



Masterplan (The Arcade Projects)

#### **AFTER**



- Sound & light pollution to the local residents living in the courtyard house
- Demolition of the courtyard
- Commercial revitalization is crucial to the success of the gentrification
- Souvenir store, local food & beverage serve as tourist attraction
- Unique continuous boulevard circulation experience opposing the static Hutong street experience
- Increase these retailers' revenue so they can afford to maintain/renovate their courtyard house



# THE EDGE PROJECTS

The Edge Projects address the narrow edge conditions of the hutongs by demolishing old buildings and widening the roads while maintaining the community elements of the hutongs.

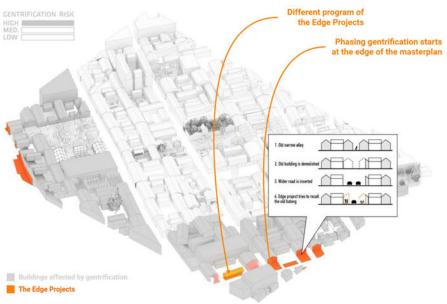


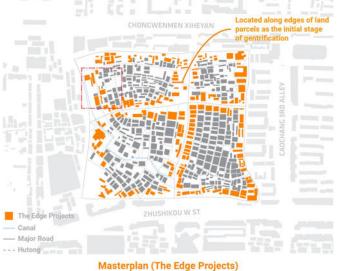


- Back façade facing Hutong

### **CURRENT**

Current back façade of the courtyard house facing the Hutong, making the Hutong nothing more than a street for circulation





AFTER

- Pro "Weigai" system, phasing gentrification starts at the edge of the masterplan, and to the inner core
- Sound & light pollution to the local residents living in the courtyard house
- Commercial revitalization is crucial to the success of the gentrification
- Demolition of the courtyard houses
- Increase these retailers'
  revenue so they can afford to maintain/renovate their courtyard house
- Widening of the Hutongs mitigates the safety concern of the old congested Hutongs
  - Brings liveliness and activities to Hutongs that are unappealing

HUTONG

BEFORE

THE EDGE



### THE FACILITY PROJECTS

The Facility Projects intend to create spaces for its inhabitants and visitors by providing various amenities such as a sports court, public library, open markets, and kindergartens.





HUTONG



**Deteriorate Building** 

### **CURRENT**

Façade-less Hutong courtyard house buildings as a result of the lack of maintenance from the local residents.



Masterplan (The Facility Projects)



- Provision of public amenities is the early phase of gentrification
- European approach that deculturalize the vernacular Hutong courtyard house typology
  - Proposed program of The Facility Projects not addressing the social needs of the Hutong Residents, ie public library and sports court
- Removal of large parcel of buildings for the sports court which heightens the issue of shortage in space

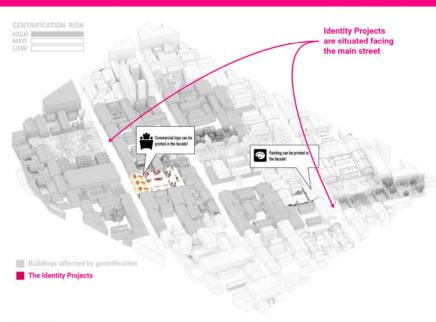
Affordable heritage architecture renewal maintaining the certain elements of the vernacular design, without having to demolish the entire structure





### THE IDENTITY PROJECTS

The Identity Projects intend to create attractive architecture facing the major street to attract tourism. Architectural technique such as rasterized image printed on glass is used.



#### BEFORE



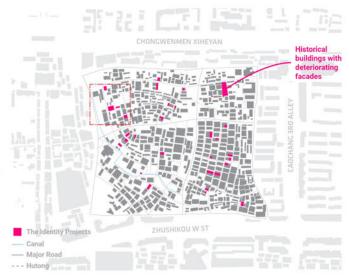
HUTONG

Facade facing main street



## CURRENT HUTONG STOREFRONT

Current façade of the Hutong courtyard houses that are facing the main street is unattractive. This is due to the lack of financial support/public subsidies for the local residents to maintain them.



Masterplan (The Identity Projects)



Removal of vernacular Hutong Courtyard House design with an European cladding approach

storefront

- Pro "Weigai" system, providing commercial program within the core to initiate urban development
- Unique architectural design attracts tourism, triggering gentrification
- Unique architecture as an approach to boost tourism, and the economy of the local Hutong retails
- Location of The Identity
  Projects are placed along the
  Hutongs to attract tourists or
  visitors to the community



# **CURRENT HUTONG MOBILITY**

Cultural heritage is one of the main features of Beijing city, making Beijing one of China's top tourist destinations. The conservation of the remaining historic areas is vital to Beijing's identity and for the city's long-term commercial interests.





An inhabitant is seen walking through the Hutong



People relaxing outdoors alongside their birds

#### MOBILITY

Traffic congestion in Hutong, 1 lane for parking and 1 lane for car circulating, which leaves no room for pedestrian or bikers access



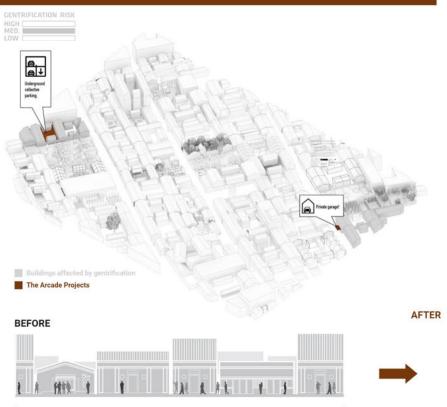
#### **RICHSHAW TOURS**

A man is seen driving a rickshaw carrying tourists through the Hutong alleys



### THE PARKING PROJECTS

The Parking Projects intend to create collective parking underground with private garage parking aboveground.







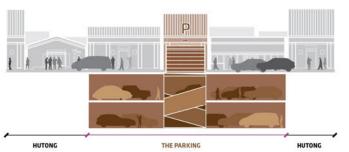
### **CURRENT**

Traffic congestion in Hutong, 1 lane for parking and 1 lane for car circulating, which leaves no room for pedestrian or bikers access.

Car Access



Masterplan (The Parking Projects)



- Unrealistic location and approach of underground parking entrance in the middle of a Hutong.
- Encourages vehicle to circulate in the narrow Hutong lane, posing safety issues and traffic congestion.
- Provision of car park allows more arrival for tourist, triggering gentrification
- Vehicles will bring noise and air pollution to the Hutong area
- Hutongs would no longer be congested with traffic and parking. Space would be dedicated for bikers and pedestrians.
- New parking lot would allow tourists to access the Hutong more conveniently



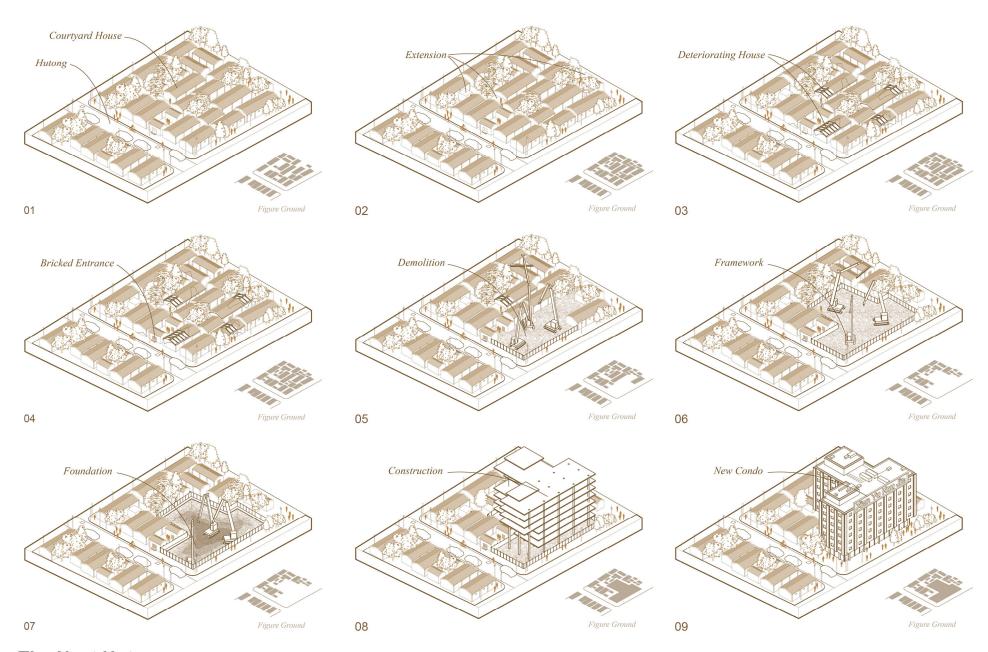
## **KEY URBAN SOCIAL STRATEGIES**

#### THF & TSINGHUA UNIVERSITY RESEARCH CONSERVATION PLAN

The key strategies suggested by the THF and Tsinghua University researchers aim to minimize the social impact and maintaining the preexisting urban fabric of the Hutongs in Beijing. In doing so, their social space recommendations focus on the utilization of space rather than building new.

#### MVRDV'S "THE NEXT HUTONG"

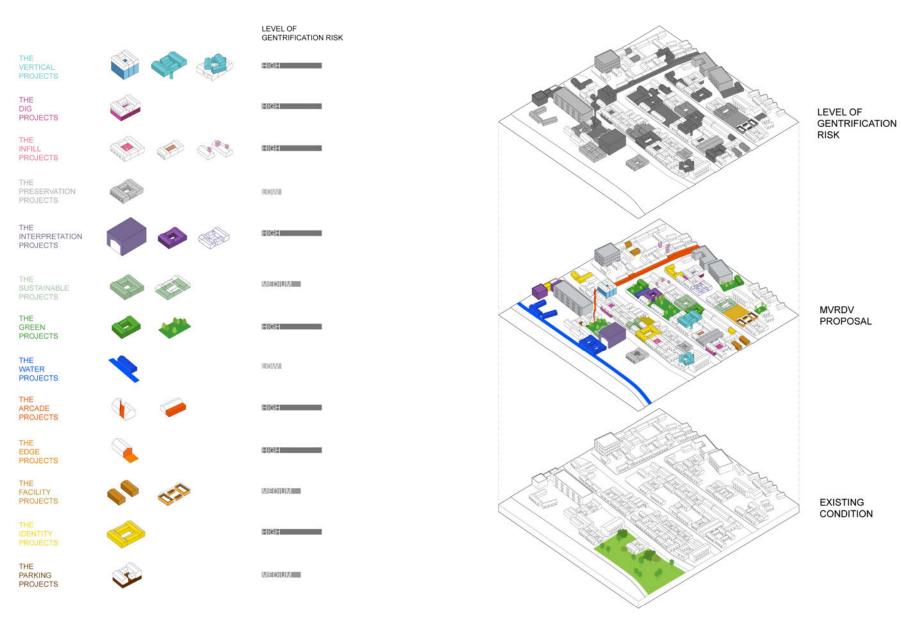
While most of the proposed urban renewal encourage The selected key strategies proposed by MVRDV "The Next Hutong" focus on the enhancement of the public realm of these inactivated Hutongs by introducing various exciting programs. These programs have the opportunity to gather the Hutong community.



The Next Hutong MVRDV | Beijing | 2014

Andrew Lee - Bonnie Ho - Mavis Huang - Jue Wang

Series of axonometric drawing describing the sequence of incremental gentrification. 1) existing North West quadrant of the Xian Yu Kou Jie Hutong and courtyard house 2) Extensions of courtyard house were added by the local residents as a result of increase in population and family sizes 3) Deteriorating facade and structure as a result of lack of maintenance and lack of government subsidies 4) Vacant courtyard house as a result of the original local residents moving out and into the suburbs 5) Demolition of courtyard house as a result of vacant and unsafe land 6,7) Deep excavation and foundation for the new mixed use midrise 8) Construction 9) New mixed use consists of residential units on top and retails at grade

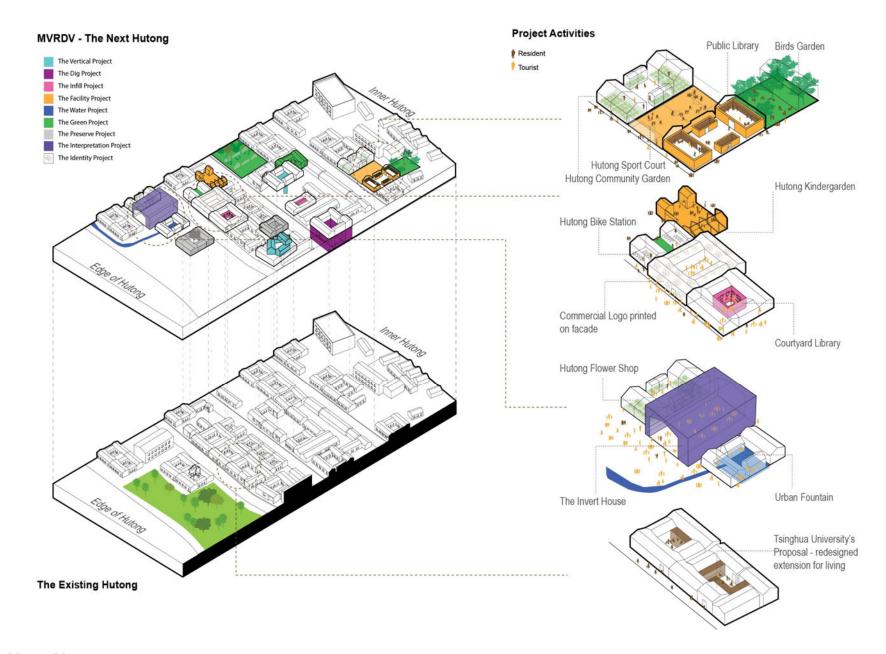


# The Next Hutong MVRDV | Beijing | 2014

Andrew Lee Dennie He Mevie Huene Ive We

Andrew Lee - Bonnie Ho - Mavis Huang - Jue Wang

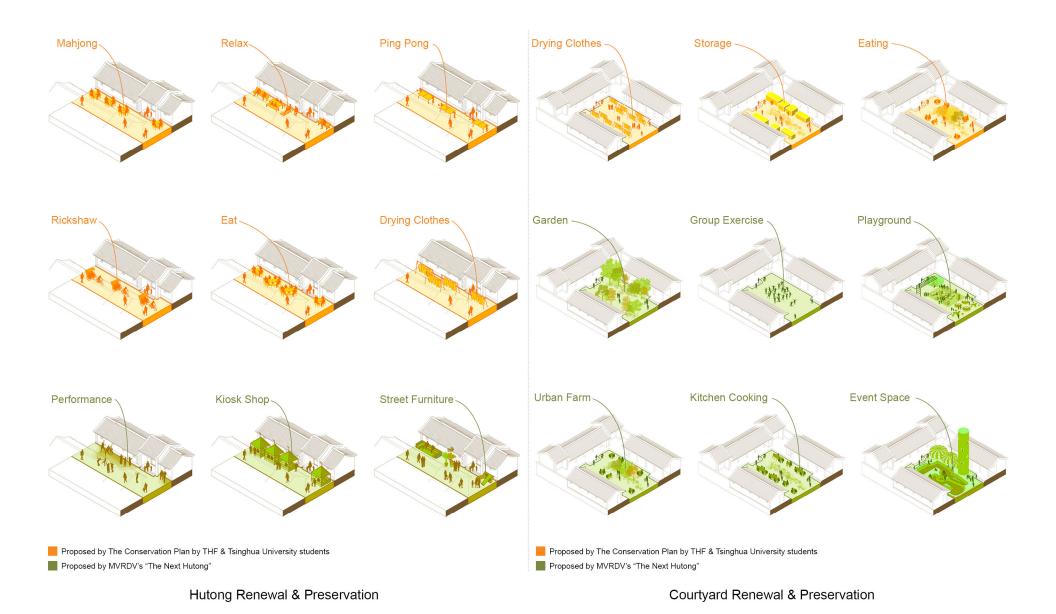
A series of axonometric drawings on the left illustrates the thirteen projects proposed by MVRDV. By analysing MVRDV's design intentions and the context of the site, Xianyukou area, we assigned each project a level of gentrification risk, ranging from low to high, based on its impact to the neighbourhood. By comparing MVRDV's proposal with the existing condition of the site one can see how the area can be developed and changed by introducing the thirteen projects that are listed. By analysing the gentrification risk level of the projects and their distribution within the area, it is clear that MVRDV's proposal will convert Xianyukou into a neighbourhood with high gentrification risk.



### The Next Hutong MVRDV | Beijing | 2014

Andrew Lee - Bonnie Ho - Mavis Huang - Jue Wang

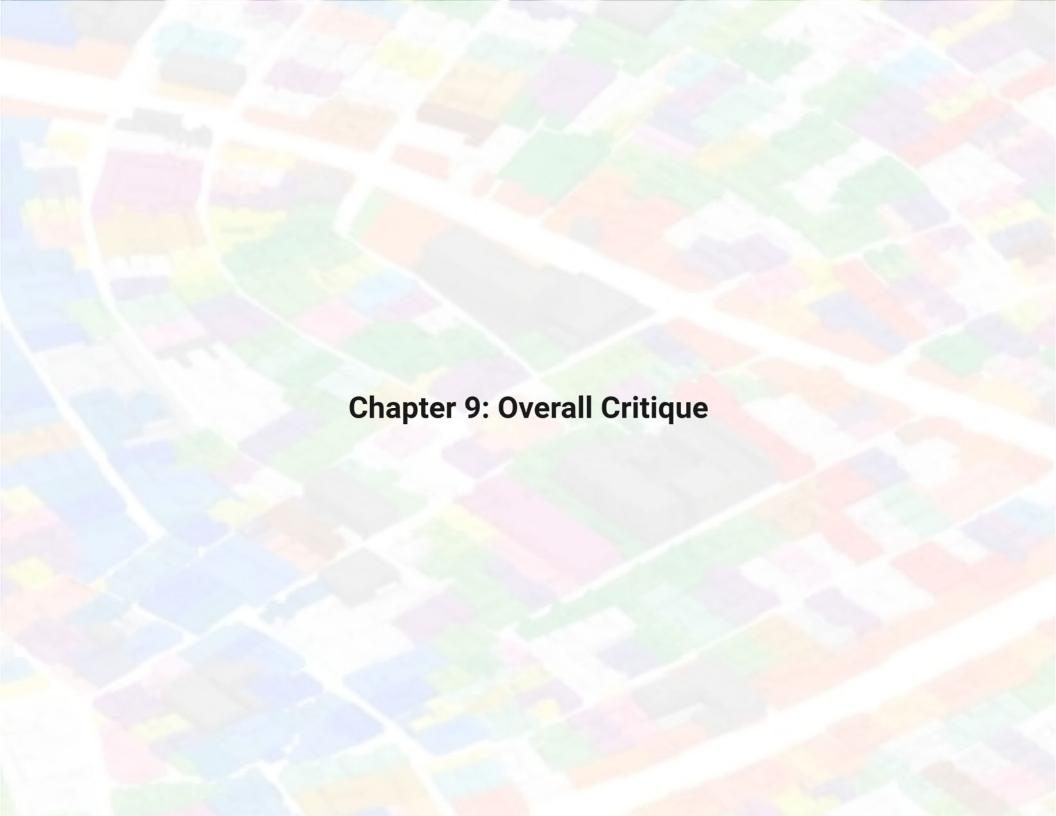
The Transect Axonometric drawings on the left demonstrate the Xianyukou Hutong's existing site condition and the MVRDV's proposed project of the Next Hutong. By calling up points of interest from the MVRDV proposal, activities are analyzed through the relationship between different proposed projects and difference in the user groups. Resident-focused orojects are mostly located in the inner Hutong while the edge projects are more destinated for commercial use, attracting more tourists. Comparing the MVRDV, Tsinghua University and Beijing Coseervation Plan proposed rehabilitation of courtyard houses with redesigned extension, mitigating the risk of gentrification and providing better living space for the residents.



The Next Hutong MVRDV | Beijing | 2014

Andrew Lee - Bonnie Ho - Mavis Huang - Jue Wang

Series of axonometric drawings describing the key strategies of conserving and urban renewing the existing Hutongs and courtyard house. These selected strategies aim to preseve and respect most of the existing urban fabric of the Xian Yu Kou Jie. Orange represents the proposed conservation plan written and suggested by the THF and Tsinghua University researchers. The Green represents some of the key strategies from MVRDV's "The Next Hutong" proposal.



## UNSUCCESSFUL

Though MVRDV's "The Next Hutong" proposal have the opportunity to significantly enhance the public streetscape and boosting local retail economy, it does not address the root of the Hutong courtyard house urban and political issues, such as lack of living space, the traffic congestion, and the physical/cultural heritage preservation of the Hutong courtyard house.



- Provision of public amenities is the early phase of gentrification
- Proposed program of The Facility Projects not addressing the social needs of the Hutong Residents, ie public library and sports court
- Removal of large parcel of buildings for the sports court which heightens the issue of shortage in space
- Pro "Weigai" system, phasing gentrification starts at the edge of the masterplan, and to the inner core

- Unique architectural design attracts tourism, triggering gentrification
- Neglects the traditional requirement or aesthetic of Hutong and courtyard houses, such as red timber structure, clay shingles, and grey brick facade
- Removing the current courtyard and digging an underground courtyard poses many issues, such as construction management, safety and accessibility issues.
- The site lacks space and large glass and courtyard structures would waste even more space.

- It is expensive and structually unfeasible to dig vertical space underground.
- Courtyards which used to be semiprivate are turned into public space.
- Gentrification, increase the property value
- Unrealistic proposal of uplifted structure of the courtyard house, an attempt to expand the courtyard house and Hutong

- Courtyard features and the sunlight to the courtyard are blocked by the additional structures above the original houses
- Demolition of the courtyard houses
- Sound & light pollution to the local residents living in the courtyard house
- Commercial revitalization is crucial to the success of the gentrification







Improves infrastructural systems by mitigating the current insufficient water management and unhygienic environment, such as the sewage system, washrooms, and drinkable water supply.

- Proposed multiple stories extension in oppose to the current single storey house, which provides more living space for the local residents.
- Trees provide shade for hot and sunny weather
- Additional amenities for public use (ie. mini-golf courses)
- Storm-water management in permeable surfaces may be adapted in green areas to resolve the drainage system issue
- Provides better accessibility for tourists
- Preserving existing vegetation and landscape contributes to maintaining ecological diversity
- Promotes eco-friendly and sustainable methods of living by creating sustainable courtyards and greenhouses
- Trees and green spaces improves air quality
- Enhances social interaction and involvement.
- Bike lanes promote environmentally friendly alternatives to buses, subways, and cars
- Unique continuous boulevard circulation experience opposing the static Hutong street experience
- Increase these retailers' revenue so they can afford to maintain/renovate their courtyard house



### **WORKS CITED**

### **CHAPTER 1: INTRODUCTION & CHAPTER 2: THEME**

Beijing Hutong Conservation Plan

Source: www.tibetheritagefund.org/media/download/hutong\_study.pdf

MVRDV - The Next Hutong

Source: https://www.mvrdv.nl/projects/210/the-next-hutong

1744 Harris Map of Beijing or Peking, China

Source: https://www.geographicus.com/P/AntiqueMap/PekingBeijing-harris-1744

Inner City & Outer City

Source: https://www.pinterest.ca/pin/371406300510326787/

Measuring visual quality of street space and its temporal variation: Methodology and its application in the Hutong area in Beijing

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#### **CHAPTER 3: URBAN INTENSIFICATION**

Beijing Hutong Conservation Plan

Source: www.tibetheritagefund.org/media/download/hutong\_study.pdf

Beijing's Hutong

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Two Dimensional City

Source: https://etd.ohiolink.edu/!etd.send\_file?accession=ucin1491317866390447&disposition=inline

### **CHAPTER 4: HERITAGE CONSERVATION**

Traditional Architectural Language

Source: https://www.chinacenter.net/2016/china\_currents/15-1/chinese-courtyard-housing-under-socialist-market-economy/

Deteriorated Hutong Facades

Source: https://www.nytimes.com/2008/07/27/arts/design/27ouro.html

Siheyuan with Tree

Source: https://www.dreamstime.com/pear-tree-blossoming-chinese-traditional-courtyard-early-spring-sunbeam-forbidden-city-beijing-china-image142124055

Damaged House

Source: https://www.semanticscholar.org/paper/CHINESE-SIHEYUAN-ARCHITECTURE-%3A-Transformation-of-Tratsiakovich/d81df5cfc3972380be87d0b83214b2b17419622a

#### **CHAPTER 5: SUSTAINABILITY**

MVRDV - The Next Hutong

Source: https://www.mvrdv.nl/projects/210/the-next-hutong
Historical images of Xianyukou Hutong in Beijing, China
Source: https://dv.163.com/article/EKHF20FR05128EQR.html

### **CHAPTER 6: COMMERCIAL INTEGRATION & CHAPTER 7: ACCESSIBILITY**

MVRDV - The Next Hutong

Source: https://www.mvrdv.nl/projects/210/the-next-hutong

