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I, Eli A Dunbar , hereby submit this original work as part of the requirements for the degree of Master of Architecture in Architecture (Master of).

It is entitled:

**Displaced Hutong**

Student's name: **Eli A Dunbar**

This work and its defense approved by:

Committee chair: Aarati Kanekar, Ph.D.

Committee member: Udo Greinacher, M.Arch.



15103

# Displaced Hutong

A thesis submitted to the  
Division of Research and Advanced Studies of the  
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by

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Udo Greinacher, Committee Member

## Abstract

The *hutongs* of Beijing have existed for centuries. A *hutong* is the street, lane, or alleyway located in Beijing's old city center, comprising the circulation space between the grid-based courtyard houses known as *Siheyuan*. A *hutong* street or lane separates two parallel rows of *Siheyuan*. A *hutong* alleyway is the space between two individual *Siheyuan*. The *hutongs* are more than just circulation pathways for the residents and visitors of these old neighborhoods; they also act as the social binding element which allows for the residents to become neighbors.

Existing today within Old Beijing is a dystopian condition which has been triggered by the destruction of *siheyuan* and *hutongs* – the homes and associated social spaces for the residents of Old Beijing – to make room for a modern, affluent city center. Presently, two-thirds of the existing *hutongs* identified in 1949 during the initiation of the Communist Government have been demolished. Because of this destruction, the realities which contribute to this dystopia include forced relocation of the resident

population, the destruction of centuries-old architecture, loss of the *hutong* spaces and the associated social activities and microeconomies, the destruction of a cultural identity, as well as other conditions which contribute to the absolute displacement of the *hutong* itself.

This thesis analyzes the remaining *hutongs* as an urban laboratory to identify the roles social spaces play for the resident population. The relationships developed between the residents, the spaces they inhabit, and the *hutong* spaces will be analyzed such that these relationships can be integrated into the design of a new residential typology. The future of the *hutong* in its current form has been decided, based on demolition trends and gentrification – an unabated dystopia. The resident population will continue to be displaced, and without the concurrent displacement of the social spaces and associated microeconomy which the residents have benefited from for generations, that part of the *hutong* life and culture will also be demolished.

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Top

"Family" - Public Domain

"Guy with cards" - Public Domain

"Kids playing" - Public Domain

"sport" by Amandine Vandesteene from The Noun Project

"Couple" by Shankar Narayan from The Noun Project

"Friends" by Luis Prado from The Noun Project

"Coffee" by Roman Trilo-Denysyuk from The Noun Project

"Bowl" by Ryan Choi from The Noun Project

"Laundry hand wash" - Public Domain

"Hang Dry" by Yazmin Alanis from The Noun Project

"Faucet" by Kenneth Von Alt from The Noun Project

"Cafe" by Hadi Davodpour from The Noun Project

Middle

"Kids playing" - Public Domain

"Adult and child bicycle" - Public Domain

"Senior Couple" by Milton Raposo C. Rêgo Jr. from The Noun Project

"Man walking" - Public Domain

Bottom

"sport" by Amandine Vandesteene from the

"Guy with cards" - Public Domain

"Kids playing" - Public Domain

"Family" - Public Domain

*Figure 2-10 continued*

"Couple" by Shankar Narayan from The Noun Project

"Friends" by Luis Prado from The Noun Project

"Cafe" by Hadi Davodpour from The Noun Project

"Bottle of bier" by chiccabubble from The Noun Project

"Street Food" by Krisada from The Noun Project

"Senior Couple" by Milton Raposo C. Rêgo Jr. from The Noun Project

"Man walking" - Public Domain

"Man walking" - Public Domain

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"Tools" by Scott Lewis from The Noun Project

"Microphone" by Simple Icons from The Noun Project

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"Mushroom" by Monika Ciapala from The Noun Project

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"Street Food" by Krisada from The Noun Project

"Coffee" by Roman Trilo-Denysyuk from The Noun Project

"Bowl" by Ryan Choi from The Noun Project

"Rickshaw" by Stephen James Kennedy from The Noun Project

Project

Figure 2-15

Top row from left to right:

1. <http://www.tour-beijing.com/blog/beijing-travel/beijing-attractions-tips/hutongs-make-for-an-integral-part-of-beijing/>

2. <http://www.urbanphoto.net/blog/2010/08/15/the-gutting-of-gulou/>

3. <http://www.internationalurbanization.org/blog/author-michael-meyer-on-old-beijing>

4. [http://www.thehiltonpartnership.com/?page\\_id=453](http://www.thehiltonpartnership.com/?page_id=453)

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1. <http://www.panoramio.com/photo/23162011>

2. [http://www.boston.com/bigpicture/2010/06/opening\\_weekend\\_-\\_2010\\_world\\_c.html#photo17](http://www.boston.com/bigpicture/2010/06/opening_weekend_-_2010_world_c.html#photo17)

3. <http://worldschool.wordpress.com/>

4. <http://www.filination.com/blog/wp-content/uploads/2014/03/BeijingHutongs54.jpg>

Bottom row from left to right:

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2. <http://philip.greenspun.com/china/beijing>

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Top: Still from *Blade Runner*.

Bottom: <http://halifaxbloggers.ca/flawintheiris/2015/01/in-cinemas-january-30-2015-a-most-violent-year-black-or-white-project-almanac-the-great-digital-film-fest/>

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Top left: [http://www.chinadaily.com.cn/photo/2006-10/23/content\\_714663\\_18.htm](http://www.chinadaily.com.cn/photo/2006-10/23/content_714663_18.htm)

Top right: <http://chinadigitaltimes.net/2009/04/photo-hutong-demolition/>

Bottom left: <http://theculturetrip.com/asia/china/articles/the-last-hutongs-of-beijing-the-high-cost-of-urban-transformation/>

Bottom right: <http://wangpost.s3.amazonaws.com/wp-content/uploads/2014/02/demolished-hutong-beijing.jpg>

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Middle: <http://www.archdaily.com/319825/sliced-porosity-block-steinen-holl-architects-by-hufton-crow/sliced-porosity-block-025/>  
Bottom: <http://aasarchitecture.com/2013/01/sliced-porosity-block-by-steinen-holl.html>

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Bottom Left: <http://sbd2050.org/project/ningbo-history-museum-23/>  
Top Right: <http://sbd2050.org/project/ningbo-history-museum-23/>  
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## Introduction

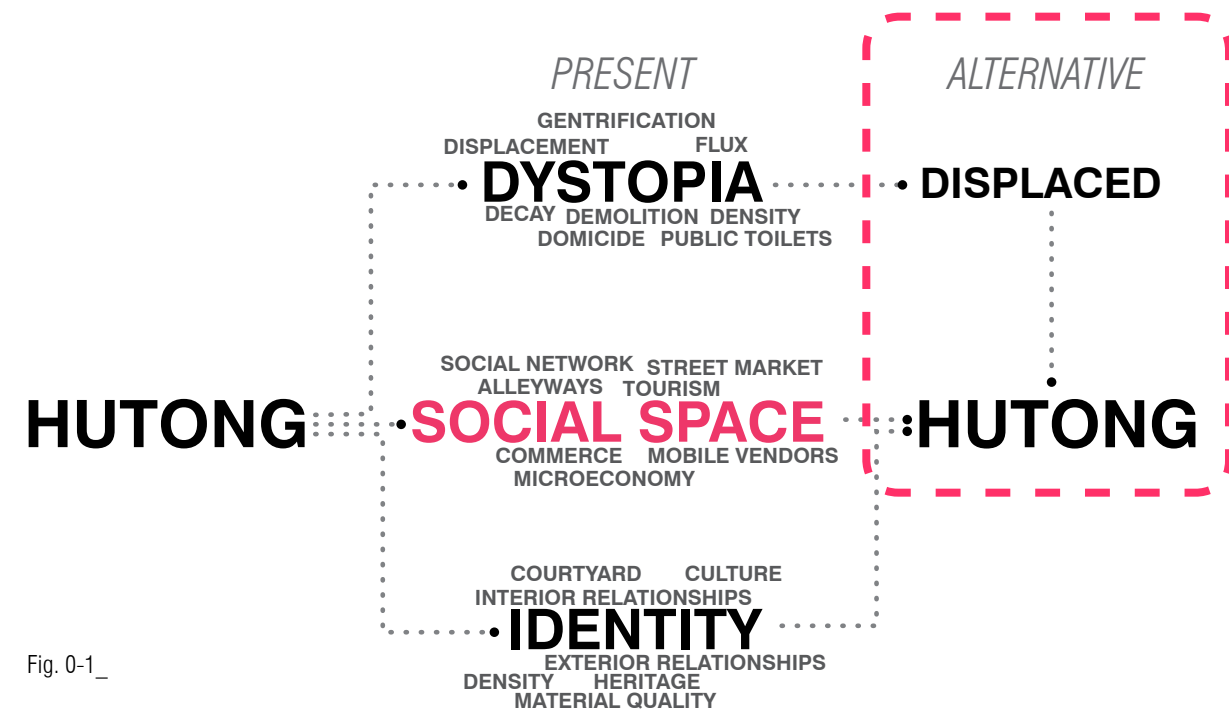


Fig. 0-1\_



Fig. 0-2\_

A *hutong* is the street, lane, or alleyway located in Beijing's old city center, comprising the circulation space between the grid-based courtyard houses which are home to many local residents. Located within these hutongs are spaces, utilized by the residents, which have provided "place" to allow for the city's street culture to evolve for more than seven centuries. The hutongs, along with the associated social spaces and street culture, act as the social binding element which enables these residents to become neighbors. The hutongs also provide spaces for the neighborhood microeconomies to flourish.

Today, these hutongs are being demolished in favor of creating a modern, affluent city center. The demolition has led to a dystopian condition which sees the destruction of the old vernacular architecture and hutongs, and the displacement of the resident population as an everyday occurrence. Although the displaced residents are provided housing alternatives, the social spaces, street culture, and microeconomies are lost. What is required is an architectural intervention that provides not only housing opportunities for the displaced, but a system of spaces which provide areas for the missing street culture that is typically lost when the displaced population is moved.

The remaining hutongs will be analyzed as an urban laboratory to identify the roles these social spaces play for the resident population -- analysis beginning with the provision of the history of Old Beijing, followed by a diagrammatic analysis of present day hutong conditions, and finally a critique of the hutong conditions within the dystopian context relating to dystopian precedents. Careful site analysis as well as design precedent studies included will help guide the final design of the intervention, which ultimately recognizes that finding a home for a displaced culture is just as important as finding homes for a displaced population.

## Part 1 History of Beijing and the Hutong

*In order to understand the context and present day conditions of the hutongs, one must know how this present day dystopia came into being.*

Although the area known today as Old Beijing was developed before the following events, the design of the urban layout of the city center of present day Beijing is based on the city that existed there previously in the thirteenth century – the capital city of the Mongolian Yuan Dynasty, Dadu.<sup>1</sup> [Fig 1-1] When designing Dadu, the Mongolians followed the city planning instructions proposed by an ancient Chinese book called “Rites of the Zhou.”<sup>2</sup> These rules, which followed the tenants of feng shui called for construction and layouts to be oriented to the cardinal directions, in essence creating an urban grid. This city was surrounded by a protective wall.

In 1368, Chinese forces defeated the Mongolians and the Ming Dynasty began. The protective wall was fortified and shifted to the south. Dadu was renamed Beiping, and the “capital city title” was bestowed on a different city. Beiping eventually was renamed “Beijing” in 1403, and was known officially as the Imperial capital city in 1420. During the period of Ming Dynasty rule, the city’s planners enlarged the city grid from an area containing 400 streets to an area containing nearly 1,200 streets.<sup>3</sup> [Fig 1-2]

1 “Beijing Hutong Conservation Plan,” *TibetHeritageFund.org*, 2004. Accessed October 15, 2014. [http://www.tibetheritagefund.org/media/download/hutong\\_study.pdf](http://www.tibetheritagefund.org/media/download/hutong_study.pdf), 10

2 Michael Meyer, *The Last Days of Old Beijing* (New York: Bloomsbury, 2008), 144

3 Meyer 147

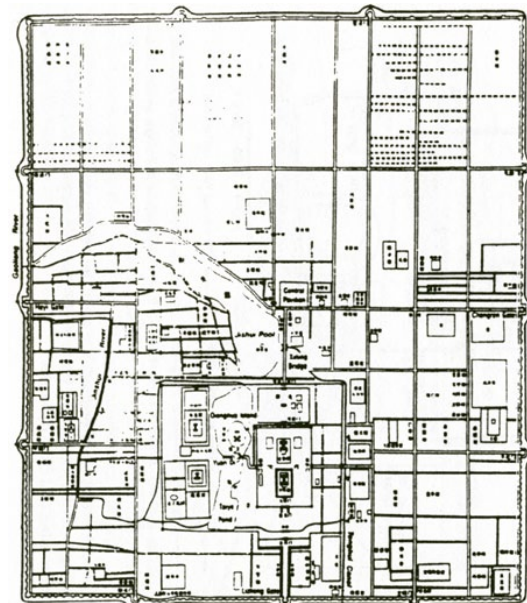


Fig. 1-1\_ Dadu, Capital of Yuan Dynasty

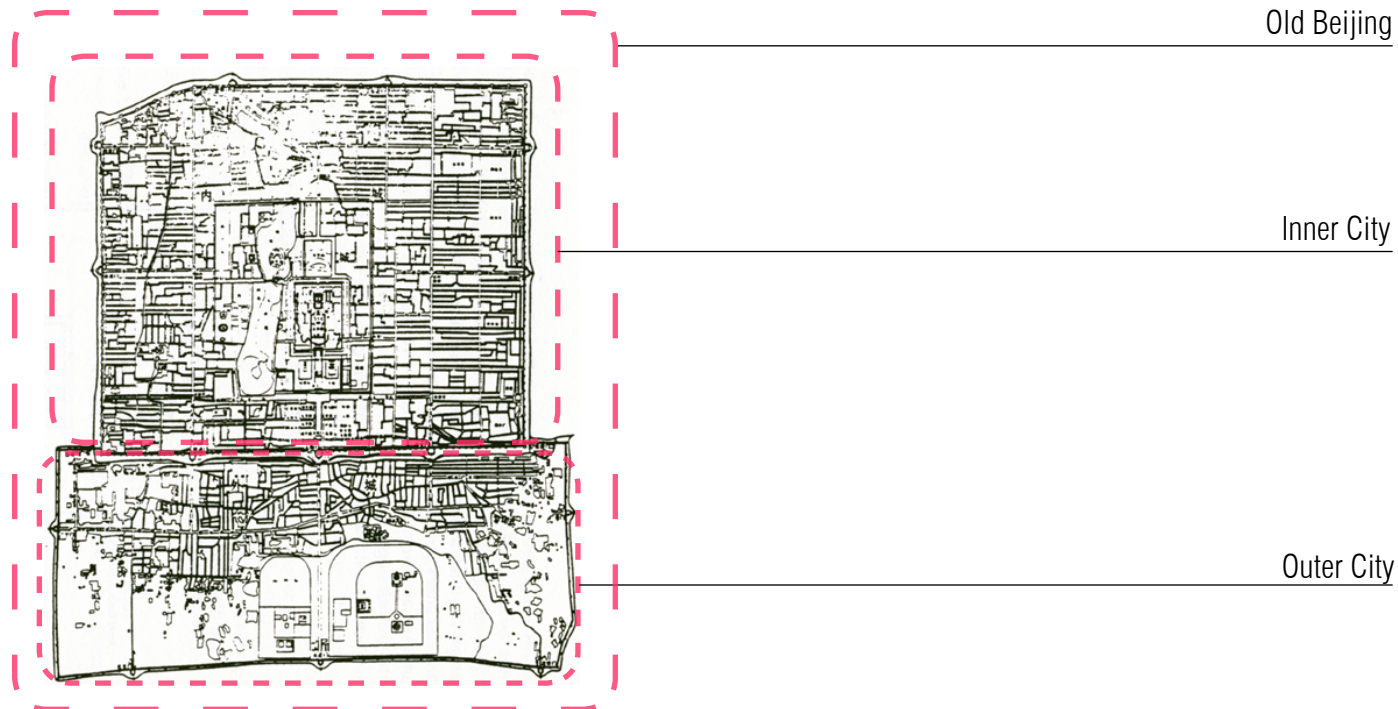


Fig. 1-2\_ Beijing, Capital of Ming Dynasty

## Part 1 History of Beijing and the Hutong

In 1644, the Ming Dynasty came to an end when the Ming forces were defeated by Manchu forces, marking the beginning of the Qing Dynasty. This dynasty enacted urban developments which saw the areas protected by city walls increase, bringing the total number of streets in Beijing to nearly 2,100; 978 of these streets had hutong as part of their name.<sup>4</sup> The word hutong comes from the Mongolian word for “water well.” This same Mongolian word means “pathway between tents.” Hutong also comes from the Chinese word used for describing the spaces in between Yuan Dynasty structures which acted as fire-breaks.<sup>5</sup> The portion of Beijing firmly established during the Ming Dynasty became known as the Inner City during the Qing Dynasty. The portion whose new development, directly south of the Inner City, began during Ming dynasty and was firmly established during the Qing Dynasty was known as the Outer City.

The Inner City was (and still is) spread out over a rectangular area comprising 38 sq km, with the Forbidden City located almost centrally, along the central N-S axis. Most of the area was residentially zoned for the wealthy and upper class Manchu families. The Han people, who had previously inhabited the Inner City were forcefully moved to the Outer city, and compensated for doing so.<sup>6</sup> The Outer City com-

4 Meyer 148

5 Meyer 4

6 Meyer 150



prises 24 sq km. It does not follow the grid pattern as the Inner City does so there exist many diagonal streets, lanes, and alleyways which sometimes end abruptly.<sup>7</sup>

The height of the Qing (Manchu) Dynasty was seen during Emperor Qianlong's reign (1736 – 1795). During his rule, a citywide renovation was enacted. Over the next 100 years, the Qing Dynasty was weakened by battles during the Second Opium War. By 1860, the Dynasty had lost most of its funds due to the luxurious lifestyles of the wealthy and the city had fallen into disrepair.<sup>8</sup> All the while, the lower classes inhabited the hutongs of the Outer City as well as parts of the Inner City. Beijing was described by one Westerner journalist as a “...squalid collection of houses...”<sup>9</sup>

The Boxer Rebellion saw many of the buildings in Outer Beijing destroyed by fire. This also marked the immediate decline of dynastic rule. Western Forces silenced the rebellion and occupied Beijing for one year, and allowed for the Imperial Princess and her court to return and reestablish the Qing Dynasty's rule until 1912 when a provisional republic came to power. Infighting between different groups hedging for full control of China saw power ex-

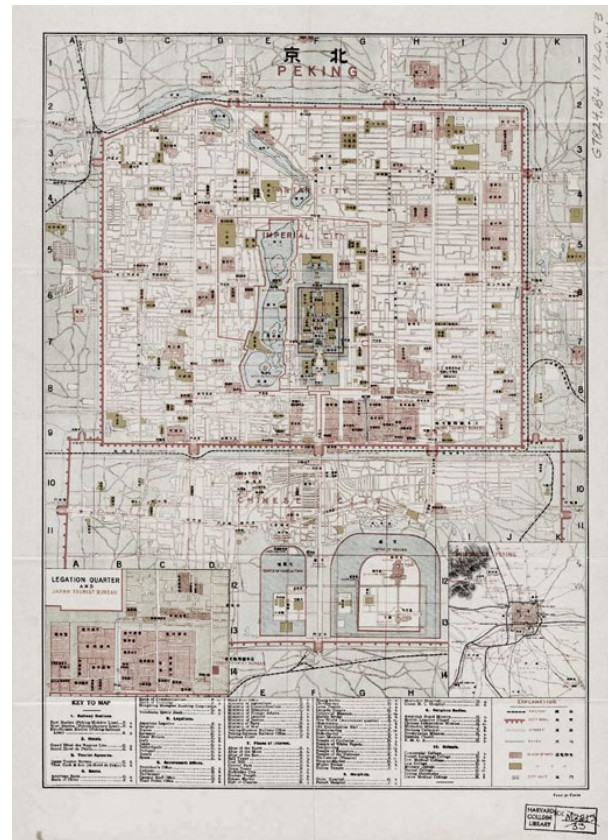


Fig. 1-3\_ Peking [Beijing], 1920

change hands several times. These groups united to war against the invading Japanese armies with the eventual defeat of the Japanese in 1945. In 1949, the Communist Party of China established the People's Republic of China, with Beijing as its capital. The Beijing Urban Planning Committee was also established in 1949. It was agreed that the Beijing would develop as an industrial epicenter. Famous Chinese architect Liang Sicheng proposed that the industry be developed outside the city center, so that the historic cultural areas would be preserved. Chairman Mao, however, disregarded this proposal and began demolishing important cultural areas to make room for inner city industry buildings.<sup>10</sup>

Over the next thirty years, Beijing experienced many drastic changes including damage to many culturally significant areas. Also during this time, the Urban Planning Committee was shutdown which resulted in unguided land development and population control. Large numbers of people, not limited to the migrant population, moved into the city center which caused much of the overcrowding of the traditional courtyard homes.<sup>11</sup> Beginning in the 1950s, socialist policies forced private land and housing to be seized. Public services and utilities were now state-owned and these agencies focused on hous-

7 Beijing Hutong Conservation Plan 15

8 Meyer 151

9 Meyer 152

10 Xuefei Ren. *Urban China* (Malden, MA: Polity Press, 2013), 95

11 Beijing Hutong Conservation Plan 18

ing contemporary, Soviet-style housing blocks which were in essence small individual gated communities comprising several medium-rise residential buildings and their associated gated grounds.<sup>12</sup> All of this focus on the newly created residential blocks allowed for the existing, centuries old hutong neighborhoods to fall into disrepair. The economy wilted during the next 25 years.

In 1978, China began taking steps to introduce a market economy to their socialist systems. While doing so, to help boost the economy alongside the introduction of the market economy, the government seized all private lands so that local governments could sell land-use rights to private developers. This allowed for steady income generation and literally paved the way for redevelopment and large scale demolition of older areas located within Old Beijing.<sup>13</sup> This redevelopment has been taking place ever since.

During the 1980s and early 1990s, typical relocation involved moving residents from one part of the hutong neighborhood to another close by, thereby increasing the density of the part of the neighborhood not being demolished. Since the 1990s, relocation has taken the form of moving residents to the outskirts

of the city. Monetary payments to the relocated (displaced) residents are typical.<sup>14</sup>

It has been estimated that 600 Hutong lanes have been demolished per year.<sup>15</sup> In 1949, there existed an estimated 6,074 hutongs. In 2005, the number diminished to 1,571.<sup>16</sup> Efforts to declare some of the neighborhoods culturally relevant and worth saving are difficult. Because ownership rights have shifted hands so many times, seemingly the easiest way to deal with the condition is to enact tabula rasa and demolish the old and introduce the contemporary. During the beautification period elicited by 2008 Olympics, 25 zones [Fig 1-4] in Old Beijing were designated as “national historical and cultural preservation districts by the Beijing Municipal Administration of Cultural Heritage.”<sup>17</sup> Presently, it isn’t clear what remains of the 25 heritage sites; what is clear is that demolition and displacement is still ongoing. Let us always remember that every demolition involves the deletion of part of the past.

12 Jun Wang, “The People’s City”, *Architectural Design* 78, no 5 (2008): 46  
13 Jun Wang 47

14 Beijing Hutong Conservation Plan 21  
15 Beijing Hutong Conservation Plan 20  
16 Xuefei Ren 96  
17 Yu-Ngok Lo, “Siheyuan and Hutongs: The Mass Destruction and Preservation of Beijing’s Courtyard Houses,” *The American Institute of Architects*, accessed November 20, 2014, <http://www.aia.org/practicing/AIAB086563>.

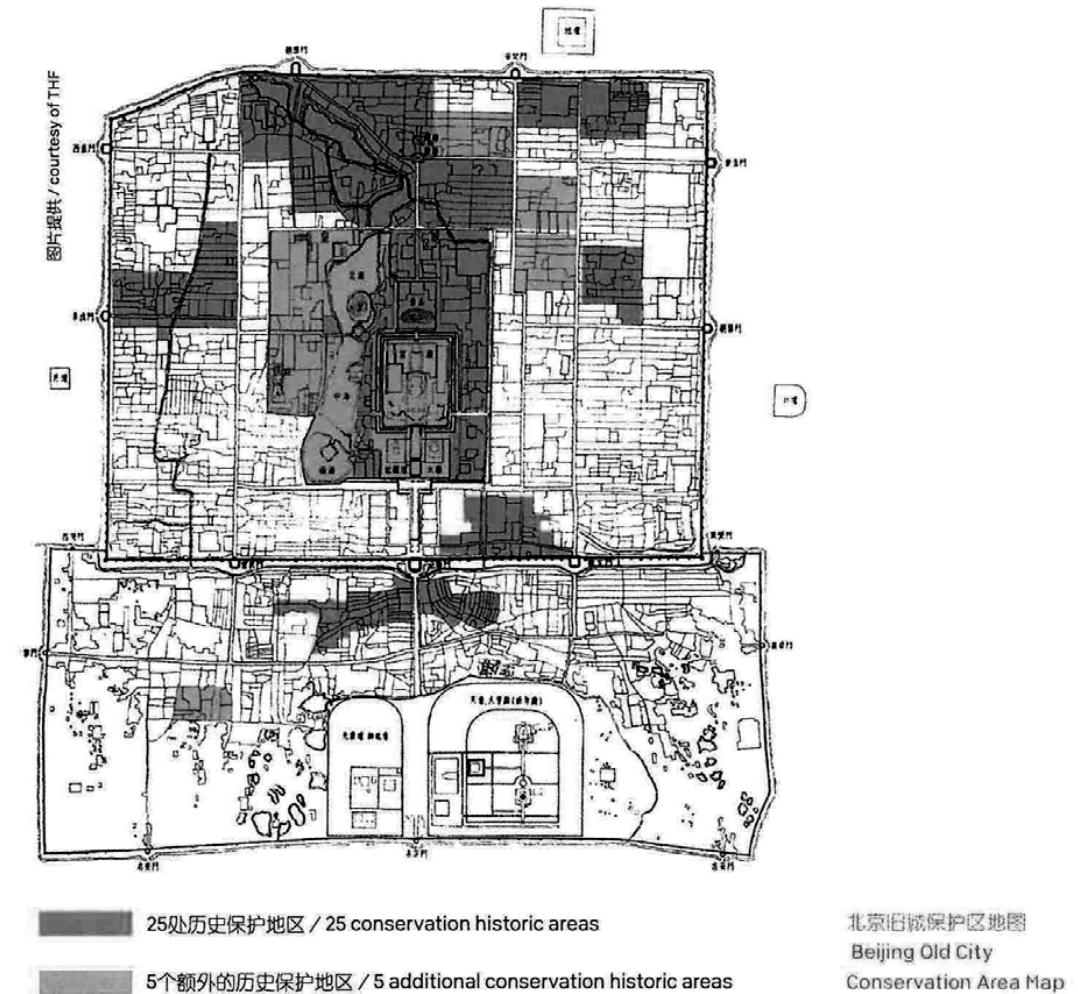


Fig. 1-4\_ 25 Designated Conservation Areas



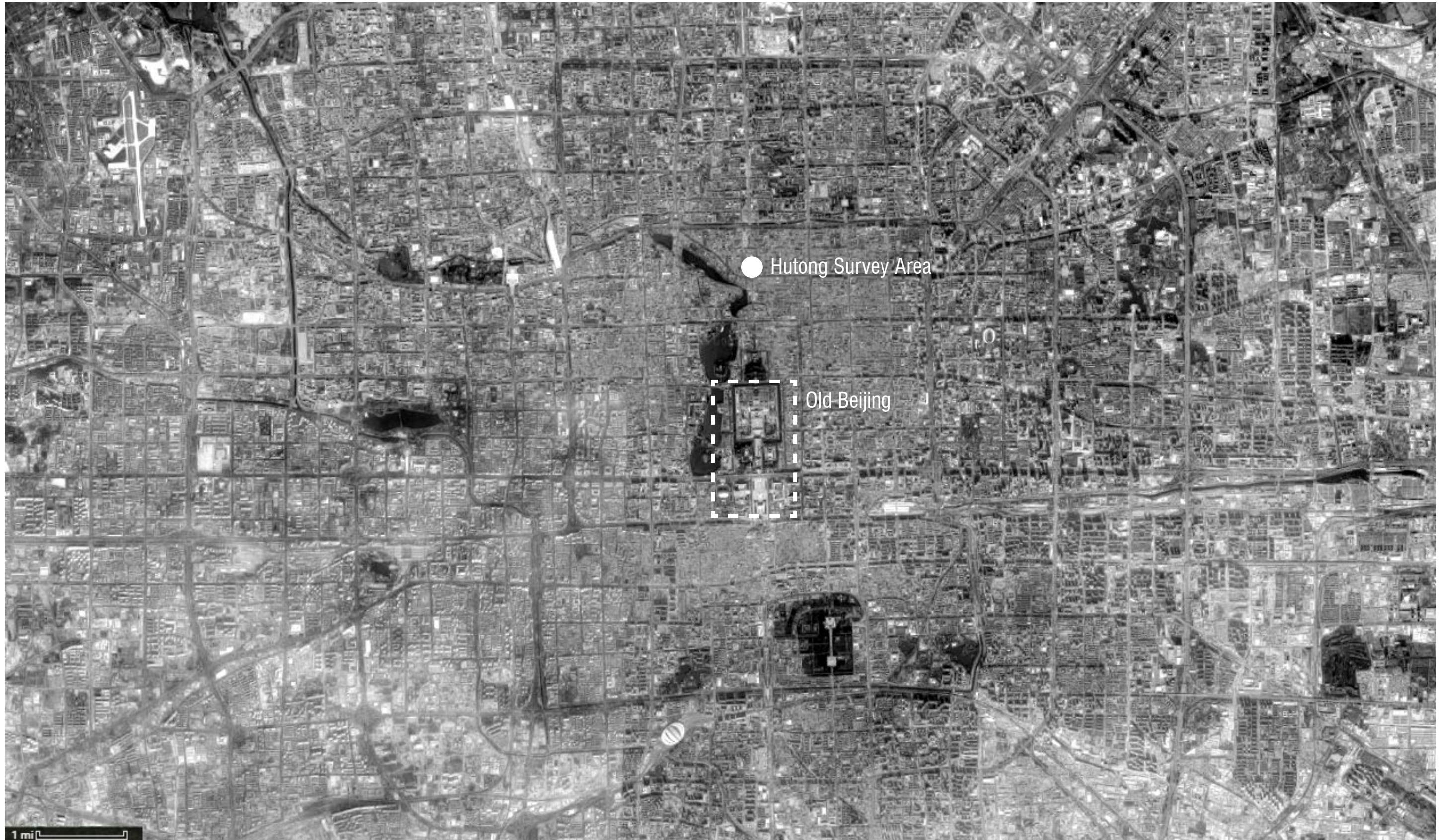


Fig. 1-5\_ Aerial of Present Day Beijing



## Part 2 Hutong: Present Day Conditions

*A study of the present day conditions allows for insights into the lives of the residents who call hutongs home.*

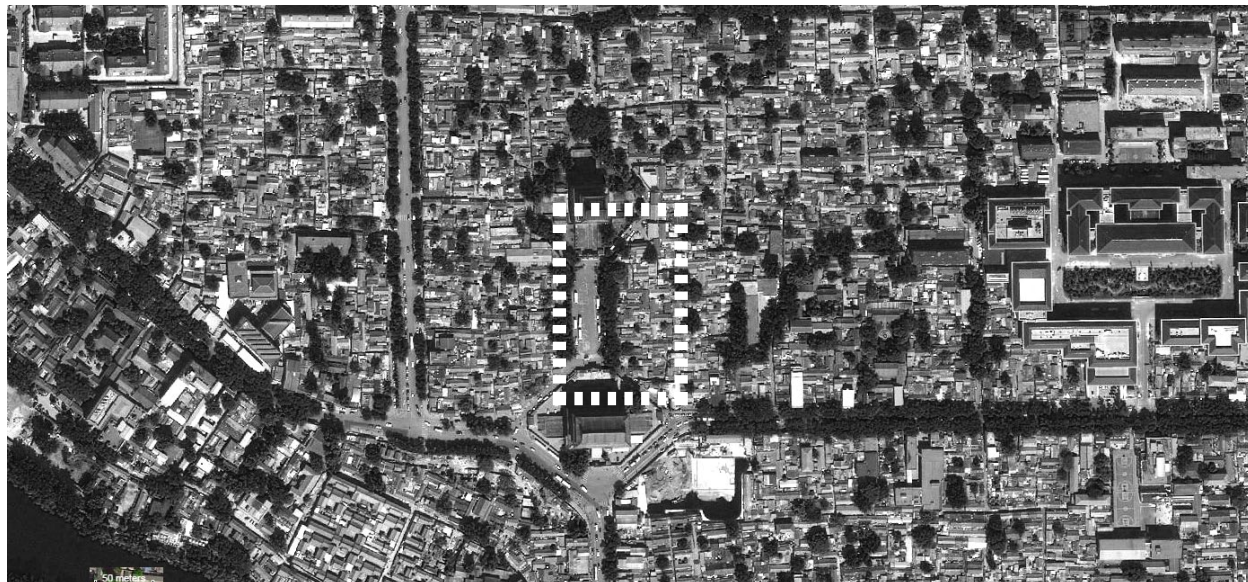


Fig. 2-1\_ Zhong-Gulou, Survey Area

Hutong life can be difficult. The typical siheyuan (courtyard house) is in a constant state of disrepair due to the lack of interest given them by the local housing authority. This condition is compounded because the owners of the land use rights also refuse much needed repairs and modifications based on the simple fact that the future of any particular siheyuan is uncertain. In hutongs where demolition is currently the norm, the demolition can at any time extend into areas previously deemed “off-limits” by representatives of the housing authority. Residents are immediately notified that a siheyuan is slated for demolition when the character *Chai* [Fig 3-3] is painted on one of the exterior courtyard walls.<sup>18</sup> *Chai* translates to

<sup>18</sup> Jun Wang 46

## Part 2 Hutong: Present Day Conditions

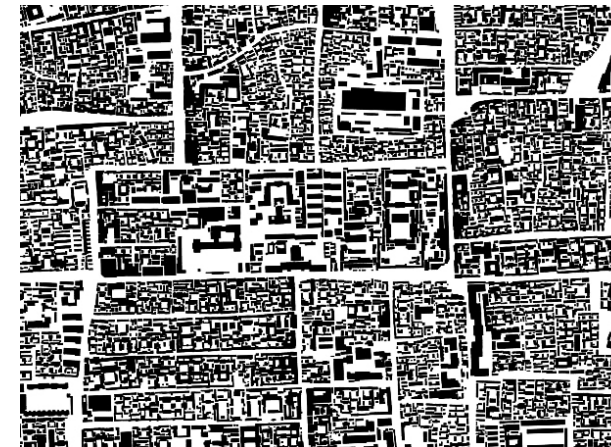


Fig. 2-2\_ INSTANT HUTONG, “Beijing Vision”

### Survey Area Statistics

- Survey area comprises 6186.3 sq m (66590 sq ft).
- 65% of the surveyed buildings are public housing.<sup>19</sup>
- 70% residents are from Beijing,<sup>20</sup> 30% comprise migrant families, ex-pats, students.
- Survey area includes approximately 130 families.<sup>21</sup>
- Average family consists of 3.5 people.<sup>22</sup>
- Survey area includes approximately 450 people.
- Officially, Chinese average living space area per person: 20.23 sq m (217.75 sq ft).<sup>23</sup>
- Average enclosed living space per family: 15 sq m (161.46 sq ft).<sup>24</sup>
- Chinese “Modest Wealth” standard living space per person: 12 sq m (129.17 sq ft).<sup>25</sup>
- Average enclosed living space per person: 4.3 sq m (46.29 sq ft).

<sup>19</sup> Beijing Hutong Conservation Plan 34

<sup>20</sup> Beijing Hutong Conservation Plan 33

<sup>21</sup> Beijing Hutong Conservation Plan 37

<sup>22</sup> Beijing Hutong Conservation Plan 33

<sup>23</sup> Beijing Hutong Conservation Plan 33

<sup>24</sup> Beijing Hutong Conservation Plan 33

<sup>25</sup> Beijing Hutong Conservation Plan 21

*demolition.* As was stated previously, many residents have been compensated for their relocation and have already been moved outside of the city center. Some of the residents whose siheyuan have been marked for demolition are already planning their relocation and are bargaining for a higher compensation. Others are living their lives day to day in neighborhoods where demolition is inevitable. And yet others are living in areas which are relatively safe from demolition. The hutong is an ever-changing condition, perfectly fluid while based on an ancient grid system.

The case study neighborhood of Zhong-Gulou [Fig 2-1] is located near the Bell and Drum tower just north of the Forbidden City, along the central N-S axis emanating from the city center. This case study was created by the *Tibet Heritage Fund* over the course of several years in order to document current conditions of selected hutong neighborhoods. The study was released in 2004. Although the study is already 10 years old, it still contains much information relating to the physical and social make up of the hutongs. The study area consists of 16 siheyuan. The courtyards houses were labeled as *historic*, *non-historic*, or *extension* [Figures 2-4 - 2-6]. Historic buildings are presumably buildings which were built or rebuilt prior to contemporary times. Non-historic buildings presumably were built recently. Extension buildings are considered any illegally built structure.



When the diagram listing the structure type was overlaid with a present day aerial image of the neighborhood, approximated areas were determined. According this technique, roughly 63% of the structures are non-historic or extension, leaving 37% of the structures as being historic.

According to the study, there are 3 main types of properties found in hutong neighborhoods: public housing, work unit housing, and private property.<sup>26</sup> Public housing sees residents living in government owned siheyuan; rent is subsidized. Work unit housing comprises siheyuan owned by companies and institutions. The workers of these companies live in these houses for free or at subsidized rates. Private housing consists of siheyuan owned by individuals. These individuals may own the land-use rights which have been passed down generationally, they can be owned by the wealthy, or they can be owned by the average “middle-class” citizen.<sup>27</sup>

Living conditions in the Zhong-Gulou study area can be considered typical of many other hutong neighborhoods, and when viewed in some contexts can be considered undeveloped, as many of the neighborhoods lack contemporary infrastructure. Typically, water taps can be located in each courtyard. Some homes have individual water taps. Ninety per-

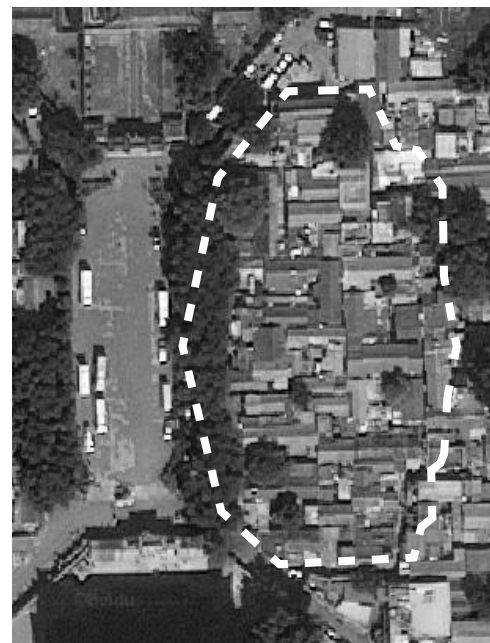


Fig. 2-3\_ Zhong-Gulou, Survey Area

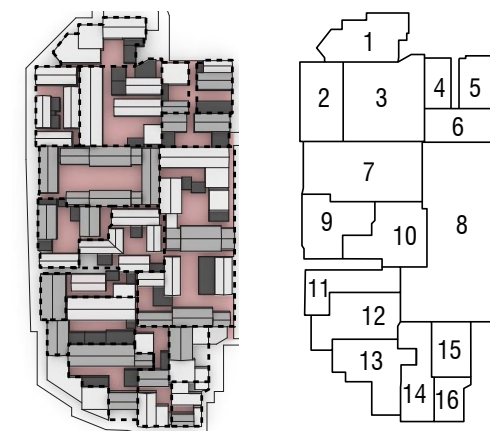


Fig. 2-4\_ Building Type, Courtyard Designation

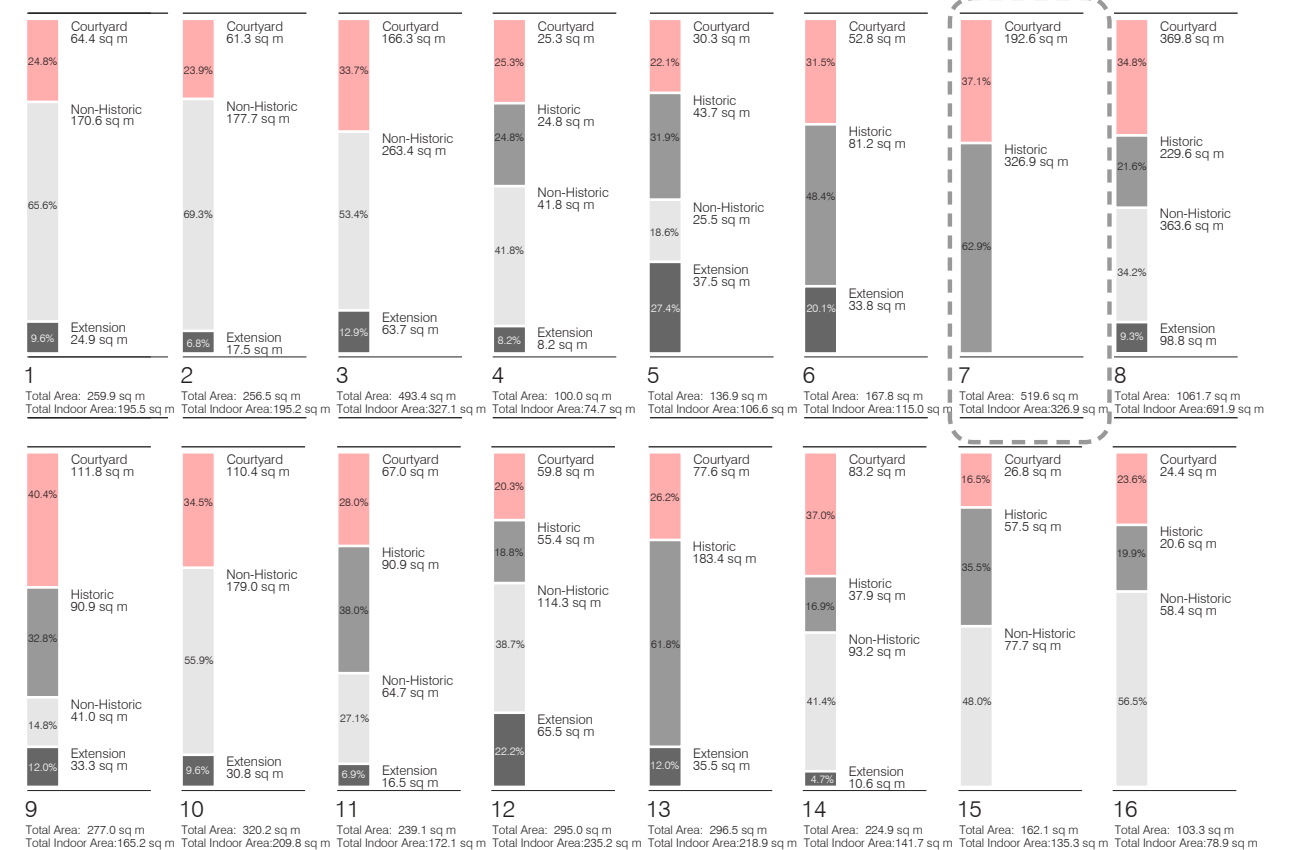


Fig. 2-5\_ Building and Courtyard Areas



Fig. 2-6\_ Building Type

<sup>26</sup> Beijing Hutong Conservation Plan 34  
<sup>27</sup> Beijing Hutong Conservation Plan 34

cent of the residents must use public toilets, which are maintained by the government, and some residents have installed water flush toilets in their homes or courtyards.<sup>28</sup> Ninety-five percent of the residents rely on unsafe, inefficient coal heating systems during the winter, which contribute to the pollution of Beijing daily.<sup>29</sup> Most of the siheyuan are in disrepair, and residents must resort to making temporary repairs themselves. Overcrowding is always a major issue.

Even when taking all of these problems into account, residents were happy with their current living conditions. According to the surveyed residents, “Sixty-four percent of residents were mostly satisfied and like their home, 26% were dissatisfied and disliked their home, 10% said simply that they have gotten used to it.”<sup>30</sup>

Socially, hutong life is very interactive. The courtyard houses previously considered private family sanctuaries, have been subdivided into residential units. This condition has created many, small microcommunities where helping each other is typical. “Tenants are very close to each other and helpful neighbors are common. It is a life where people live in peace and intimacy with nature and each other.” This was stated by Wei Wu, a retired professional pho-

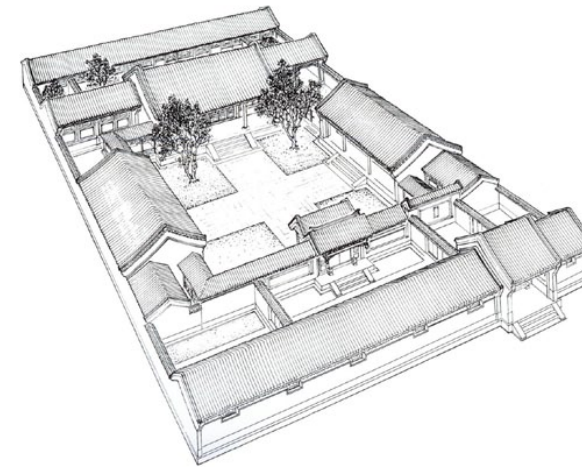


Fig. 2-7\_ Vernacular Siheyuen, Courtyard House



Fig. 2-8\_ The Liu Family, owners and residents of a traditional Siheyuen

tographer, who has been photographing the hutongs for the past 12 years.<sup>31</sup> In siheyuan that haven't yet been subdivided, single extended families can sometimes be found. These extended families are representative of an ancient cultural norm, a norm that is no longer common as families are separated when children leave the courtyard house to start their own lives. In many cases, the aging parents usually stay in the hutongs to rent out space in the vacant portions of the courtyard house.

The hutongs are home to many social groups, of all ages. Older men can be found along street sides playing games of Chinese chess. Older women can also be found under shade trees playing Mahjong. Groups of children are found in courtyards playing tiao pi jin, soccer, and hide and seek. A conclusion reached by the Tibet Heritage Fund surveys stated that “The residents overwhelmingly praised the life-quality within a Hutong environment in terms of...convenience of location for working and shopping..., and having excellent social relations with neighbors. For most, this outweighed the lack of space...within their homes.”<sup>32</sup>

28 Beijing Hutong Conservation Plan 37

29 Beijing Hutong Conservation Plan 38

30 Beijing Hutong Conservation Plan 40

31 Ruili Hou, “Last Look at Hutong Life,” China Daily, 8 (2011): 61.

32 Beijing Hutong Conservation Plan 48



One example of hutong social interaction comes in the form of an adaptation to a newly restored public space. During the beautification process Beijing experienced during the buildup towards the 2008 Olympics, a public rest room located in the Ju'er Hutong was rebuilt. The public space at the front of the rest room was also landscaped and remodeled. The residents took advantage of this new space and developed a new local socializing area, replete with folding chairs, wooden cabinets, a donated chessboard, and a barbecue grill. Eventually, this area was attended by so many people every night that the attendees named themselves the "W.C. Julebu," or Wash Closet Club.<sup>33</sup>

*It is this opportunistic use of space which is most important when viewing the hutong lanes, alleyways, and cleared areas as Social Spaces. Street culture thrives on the exploitation of available space, most especially in dense, urban settings.*



Fig. 2-9\_ Hutong Social Spaces

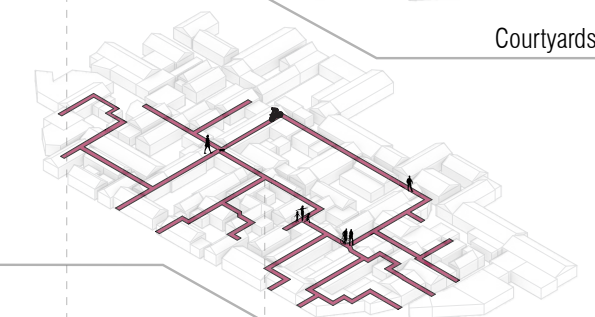


Activities

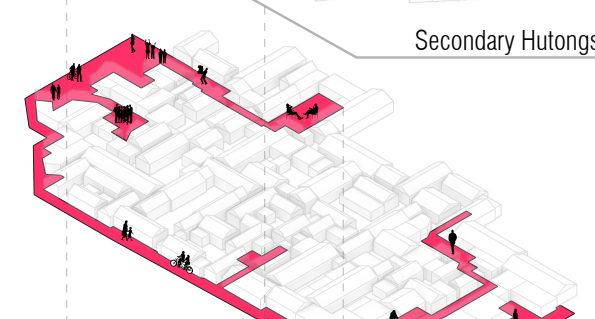
- Courtyard Space
- Secondary Social Space
- Primary Social Space



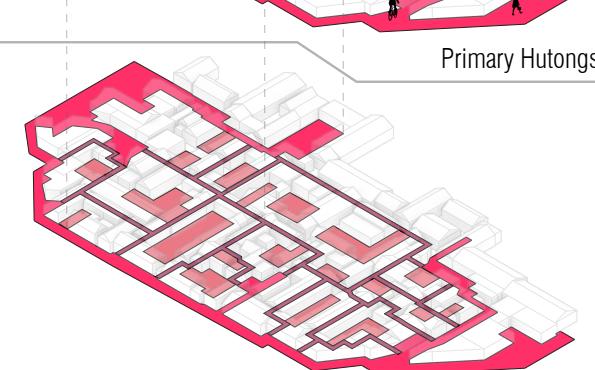
Courtyards



Secondary Hutongs



Primary Hutongs



Social Spaces

Fig. 2-10\_ Hutong Social Spaces

<sup>33</sup> Peter Hessler, "Hutong Karma," The New Yorker, February 2006, accessed November 18, 2014, <http://www.newyorker.com/magazine/2006/02/13/hutong-karma>.

Hutongs are home to many important cultural crafts and folk art, as many of the craftsmen and pursuers of folk art still live in the hutongs. A very famous boy named Batar who performs for the Peking Opera internationally is a hutong resident.<sup>34</sup> Shuangkun Tian, a Guqin virtuoso lives in a hutong and teaches apprentices there as well.<sup>35</sup> Fuxi Yang and his family make traditional longbows. They also live in a hutong, and are currently the only makers of traditional longbows in Beijing. Yang's grandfather used to make ancient weaponry for the Qing Imperial Court.<sup>36</sup>

A vital aspect inherent in all hutongs is the microeconomy [Fig 2-12 - Fig 2-15] generated by retail, food services, and services provided for the residents by the residents who are the proprietors of these services. Mobile carts are found near social hotspots within the hutongs offering services such as haircuts and bicycle repair.<sup>37</sup>

Also found are markets and stands selling produce and meats brought from the farms located outside of Beijing. Street food vendors are plentiful as well, whether they exist in a Siheyuan storefront or as a mobile vendor. Chinese Architect Shuo Wang jokingly stated that access to street food was the reason why he chose a hutong location for his architecture firm's office.<sup>38</sup> Recycling collectors are ever-present in fetching recyclables which can earn compensation.

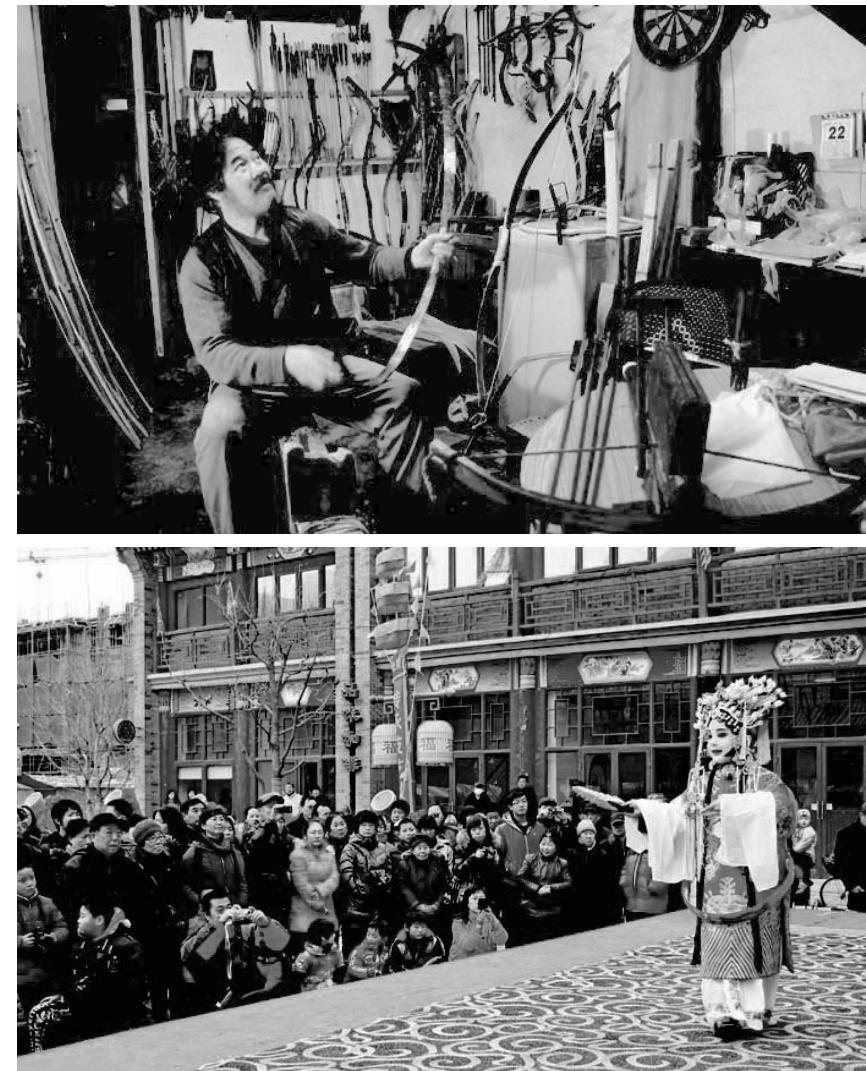


Fig. 2-11\_ (Top) Fuxi Yang making traditional longbows. (Bottom) Batar performing traditional Chinese Opera.

34 Ruili Hou 62

35 Ruili Hou 63

36 Ruili Hou 63

37 Yan Chao, "Dialogues With Business Owners," *Abitare China*, 34 (2013): 66.

38 "Urban Experiment by [Meta:hutong], An Interview with Wang Shuo and Andre Bryant," *Abitare China*, 34 (2013): 72.





Fig. 2-12\_ Resident and Microeconomy Activity

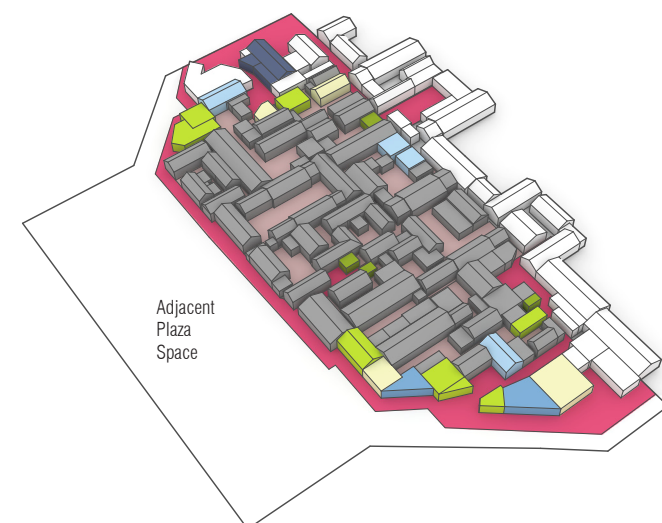


Fig. 2-13\_ Survey Area Zoning



Fig. 2-14\_



Fig. 2-15\_ Hutong Program





### Part 3 Dystopia: Destruction and Domicide

*Conditions warrant acceptance of Dystopia and actions must be taken to receive the displaced.*

The current condition of the hutongs of Beijing is indeed dystopic. Decay, demolition, gentrification, a permanent state of flux, third world infrastructure, displacement -- all of these concepts apply. To delve further into the analysis of dystopian conditions requires precedent study. Dystopias depicted in media can act as precedent studies because oftentimes they offer metaphorical critiques of societal conditions. These dystopic depictions can be analyzed such that their relevant assessments can eventually be applied to the hutongs and future design methodologies.

One such dystopian precedent which can be analyzed is the film, *Blade Runner*<sup>39</sup>. One of the integral, yet often unrecognized themes of *Blade Runner* is that of *domicide*: the destruction of the home.<sup>40</sup> Authors J. Douglas Porteous and Sandra Smith, the people who coined this term, suggest that the cause of domicide is a common good, has been defined by a wealthy elite, and to bring about this common good means to build a society and infrastructure which will allow for this concept to flourish.<sup>41</sup> In the case of *Blade Runner*, to build the giant Mayan Pyramid complex of the Tyrell Corporation, hundreds of thousands of existing buildings would have to be destroyed or built over to make room for this complex of factories,

<sup>39</sup> *Blade Runner*. Directed by Ridley Scott. 1982. Burbank, CA: Warner Home Video, 2007. DVD.

<sup>40</sup> David Forten, *Architecture and Science-Fiction Film* (Burlington, VA: Ashgate Publishing Co, 2011), 102

<sup>41</sup> David Forten 103



Fig. 3-1\_ (Left) Still from *Blade Runner*, Tyrell, Elite Founder of the Tyrell Corporation. (Top Right) Still from *Blade Runner*, Los Angeles, 2019 A.D. Tyrell Pyramids. (Bottom Right) Still from *Blade Runner*, Interior shot of Tyrell's home.

offices, laboratories, housing, etc. Homes and memories must be destroyed to make way for the ideals that would save humanity. These homes would belong to the people who still dwell in the relics of the old city built upon. The people would be the working class, *The Oppressed*, those who inhabit the lower strata of this society, which is associated with an older time, age, and a decayed way of life. Much like the residents of hutongs, whose homes are being destroyed so that a modern way of life can be built upon the ruins.

A second set of Oppressed (for the common good) found in *Blade Runner* are *Replicants*. Forced to endure lives of servitude, these genetically engineered people are given four year life spans, and forced to perform tasks related to their genetically engineered aptitudes. These tasks include combat, prostitution, and labor. Their tasks only exist “offworld,” away from Earth, and if a Replicant were to ever return to Earth without permission, the punishment for this action is death.

Replicants have been banished from Earth; possibly an unparalleled displacement as relating to distance and severity. That they were genetically created, the replicants were born displaced. However, they are affected greatly by the domicile condition in that they were given false memories at the moment of their creation. These memories help the Replicants maintain a sense of sanity. They remember “home,” but are not allowed to return to it, and will be terminated if they do so - permanent displacement.



Fig. 3-2\_ (Top) Roy Batty, Leader of the Replicants. (Bottom) Rachel, a Replicant who is unaware that she is a Replicant.



The destruction of the physical components and resultant loss of identity, associated social spaces, and microeconomy is seen presently in the hutongs of Beijing. The destruction causes displacement, which is a condition the forced relocation can never solve. The residents themselves are relocated, but their identities and culture did not make the trip with them. Displacement and relocation are variables in an unequal equation, it is not a 1:1 relationship; there is so much that remains missing after relocation. Typically, former hutong residents are relocated to the outer rings of Beijing and into high-rise apartment blocks, far away from their former lives. An architectural solution which incorporates as much of the displaced, including social spaces, must be part of the solution.

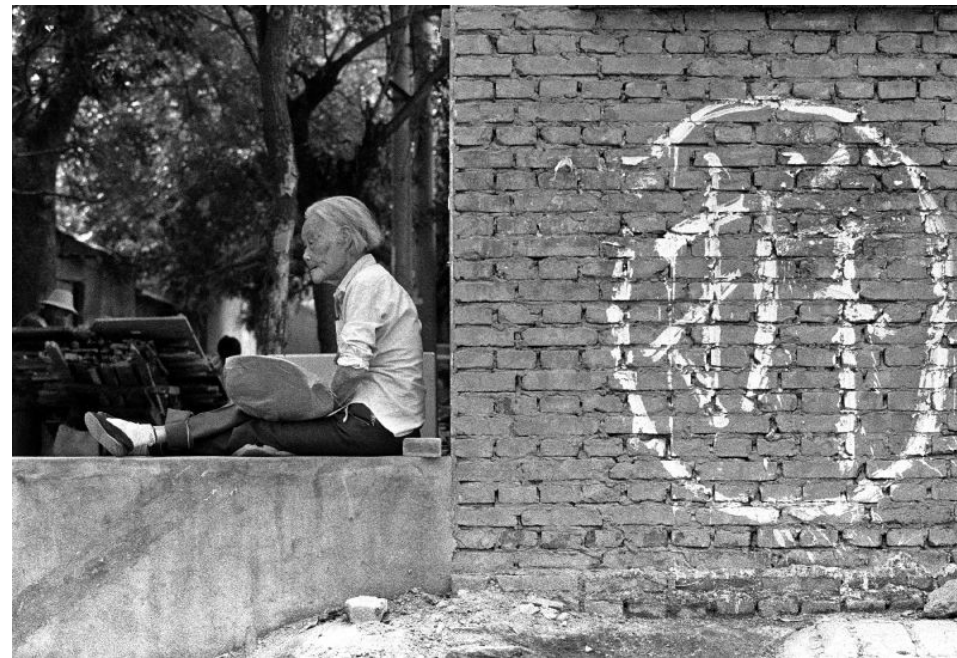


Fig. 3-3\_ (Top Left) The Chinese character "chai" meaning tear down is ever-present in hutong neighborhoods. This character is painted onto Siheyuan which are slated for demolition. (Top Right) Siheyuan contrasted by modern high rise construction in the background. (Bottom Left) Gentrification isn't solely limited to the urban areas in the U.S. (Bottom Right) A man and his son in a Hutong neighborhood undergoing demolition.

The difficulty arises when one tries to rebuild a complex urban fabric which has taken years, if not centuries to create. Theoretical architect Lebbeus Woods has addressed this issue by stating the following:

“The attempt at replacement serves, in the end only the interests of the decrepit hierarchies, struggling to legitimize themselves finally through sentimentality and nostalgia, a demagoguery that is all too comforting and appealing to people struggling to recover from the tragedy of profound personal and cultural losses.”<sup>41</sup>

He continues by stating that new directions are needed when implementing new designs based on the destruction of the old.<sup>43</sup> The proposed intervention that will receive the displaced, whose design is guided by the analysis of the displaced (residents, spaces, microeconomy, etc) must act in a manner which may be unfamiliar at first to the user. However, over time, the user will discover some of the relationships which existed in his previous environment.

Woods is able to graphically depict how some of these reconstructions may look. An image of a burning high-rise that had just been shelled during the war in Sarajevo is juxtaposed with a section perspective describing Woods’ intervention shows the hollowed areas of that skyscraper destroyed by fire and explosion have enveloped so that they may become inhabitable once again [Fig 3-4].<sup>44</sup> Instead of a copy/pasted vertical arrangement of floor plates comprising a tower, we now see a tower with void spaces and subtractive qualities – vast atriums which create vertical relationships within the plan based architecture.

Woods is able to take the dystopian, post-war Sarajevo and a high rise building stock severely damaged by siege, and create *Opportunistic Spaces* which may be adapted by the user of that space. Offering the user of the proposed intervention spaces that they may utilize and adapt for their own activities allows for that user to feel develop a personal relationship with the architecture, the spaces, and his fellow users, neighbors.

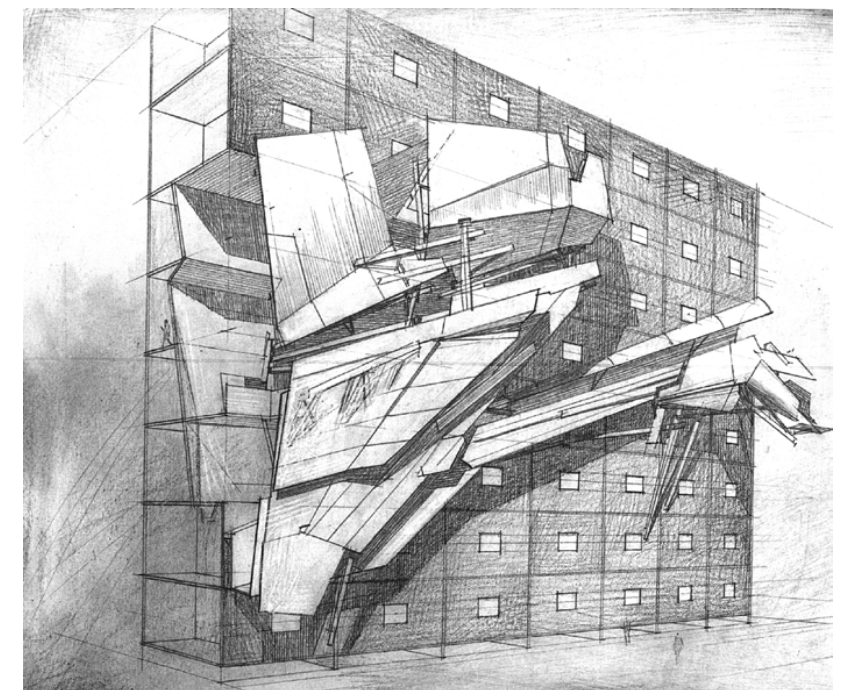
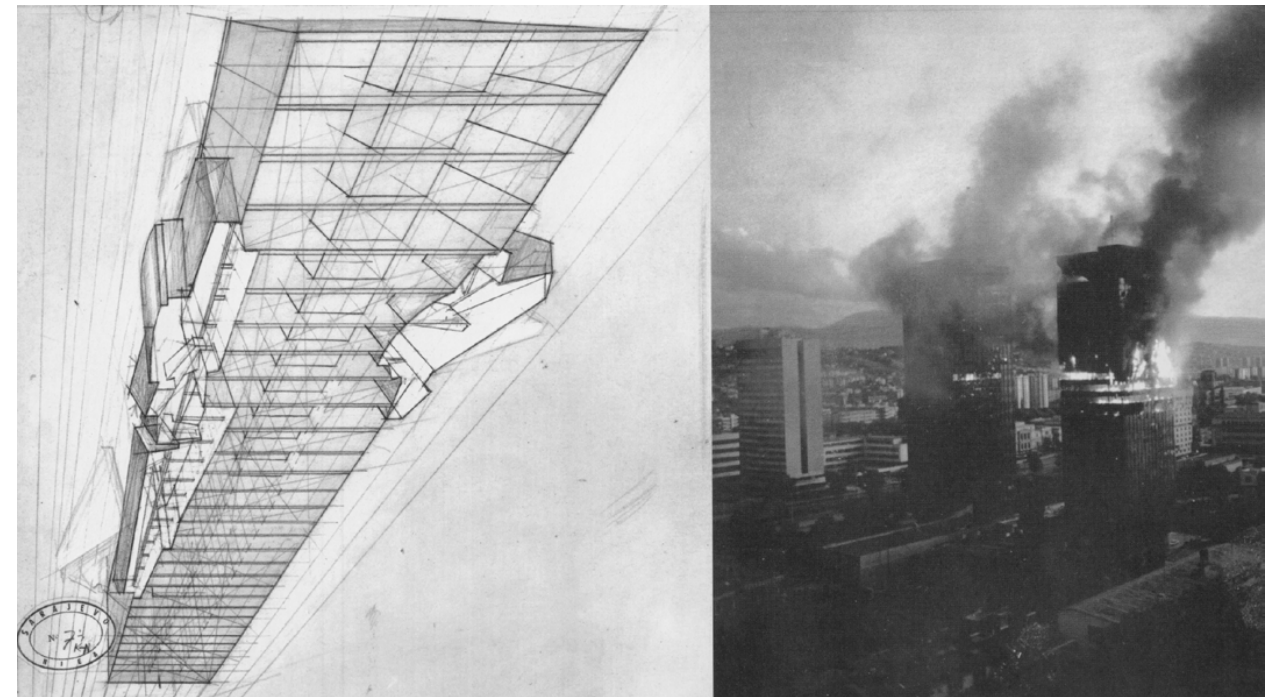


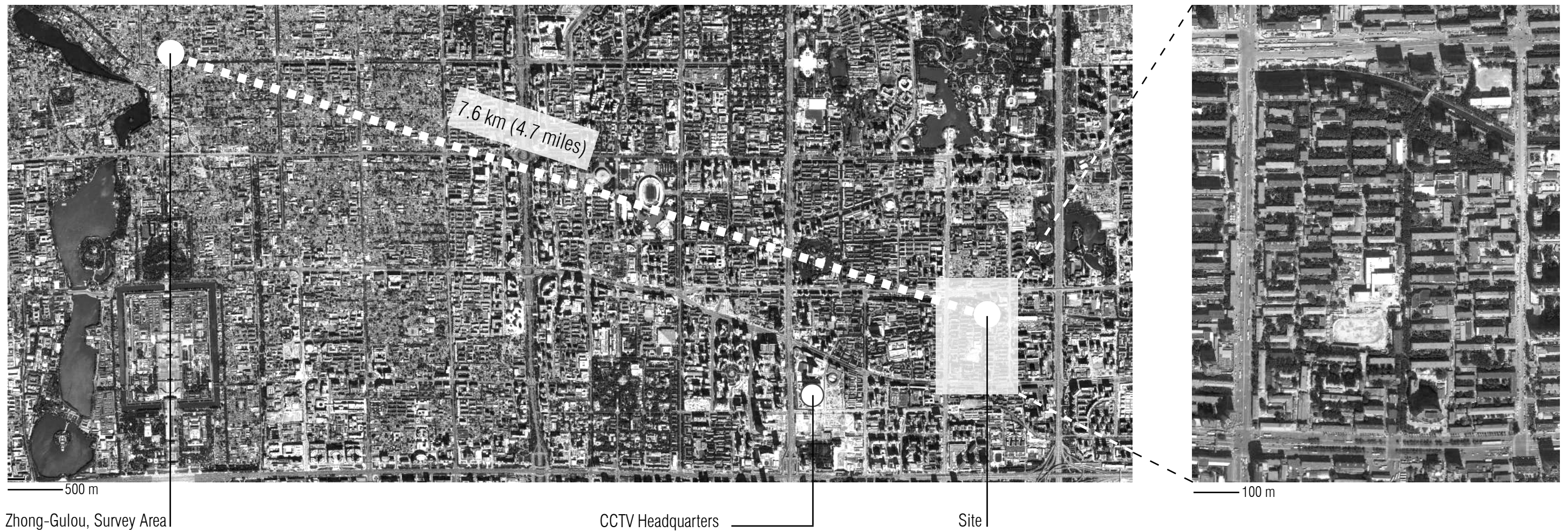
Fig. 3-4\_ (Top and Bottom) Experimental architectural interventions in Serejevo, a study of the buildings ruined after the seige in 1992. *Radical Reconstruction*, Lebbeus Woods.

42 Lebbeus Woods, *Radical Reconstruction* (New York: Princeton Press, 1997), 15.

43 Lebbeus Woods 15

44 Lebbeus Woods 48





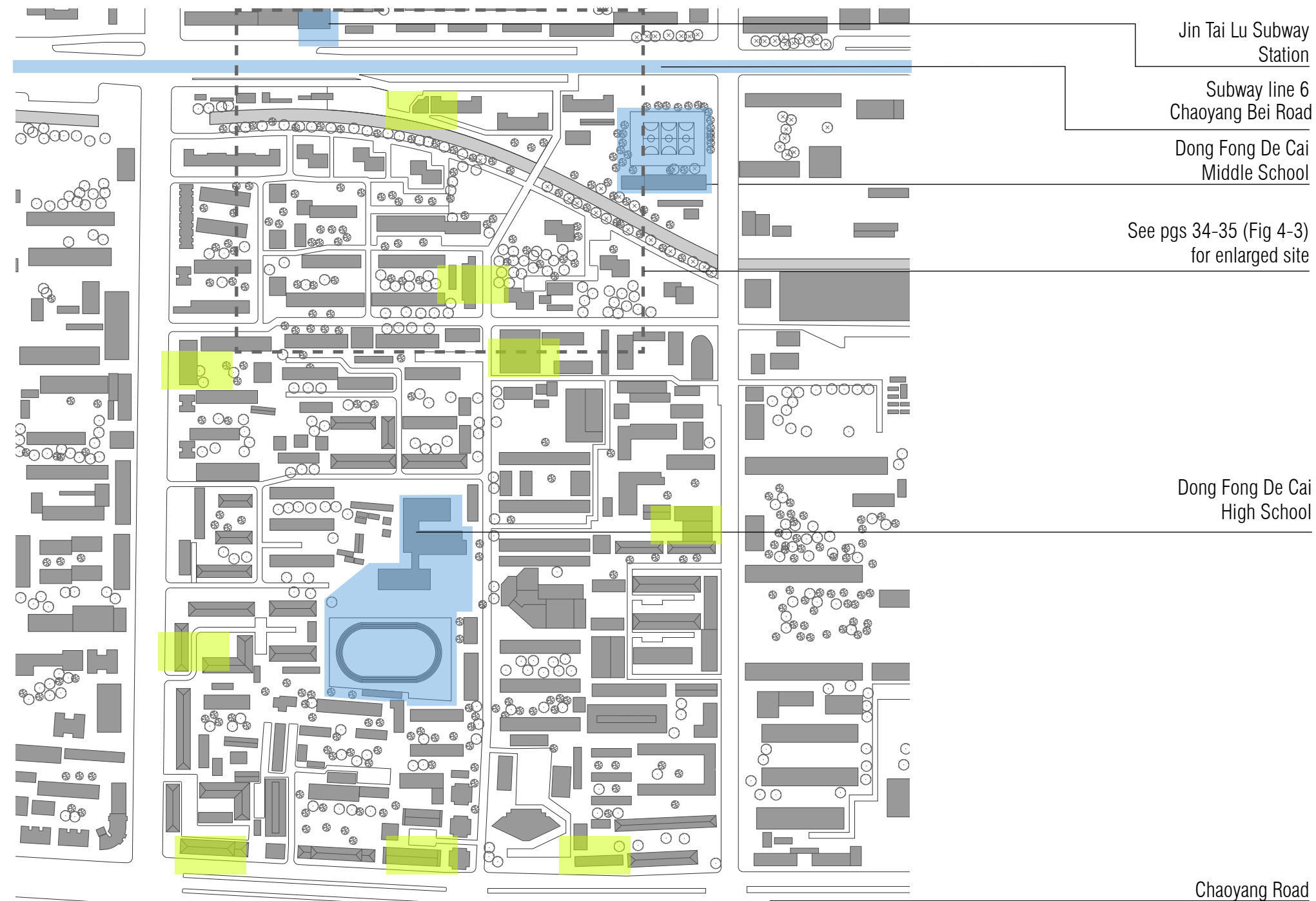
Zhong-Gulou, Survey Area

CCTV Headquarters

Site

Fig. 4-1\_

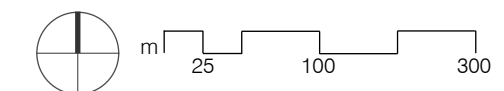
Fig. 4-2 Site Analysis



The site of the Displaced Hutong was chosen for the following reasons:

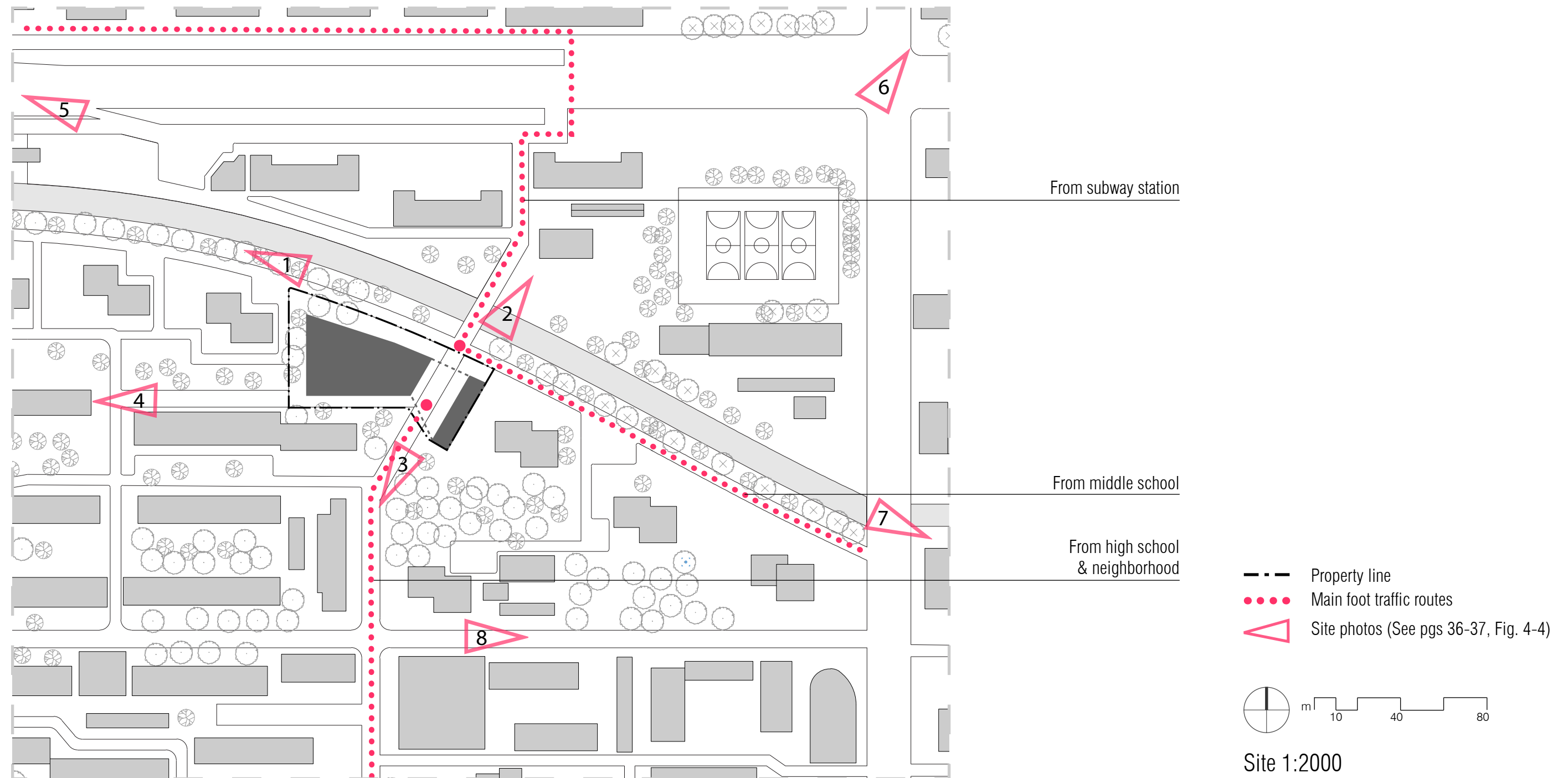
- The site comprises a large residential neighborhood which is composed of both high rise (50 m, 15 story) and medium rise apartment buildings.
- The site is located near the Jin Tai Lu subway station to allow for easy access to the rest of the city.
- The site has both a middle school and high school located within 400 m.
- There exists several retail locations near the immediate site, which proves that commercial efforts located in this area are successful.
- The site is not located on the outskirts of Beijing, but in the Chaoyang District, the designated Central Business District of Beijing.
- By subway and walking, it would take 30 minutes to travel back to the survey neighborhood, Zhong-Gulou.

Public adjacencies  
Commercial adjacencies



Site 1:5000

Fig. 4-3\_Site Analysis







1

2



5

6



3

4



7

8

Fig. 4-4\_ Site Images (See pgs 36-37 for map locations)

The following precedents have contributed to an understanding of the spatial relationships between the form and the site, the spatial relationships within the intervention, and the material qualities of the intervention.

*Sliced Porosity Block, Steven Holl Architects  
Chengdu, China, 2012*

Sliced Porosity Block, by Steven Holl Architects was chosen as precedent to develop an understanding of the relationship between the form of the intervention and the site. The collection of towers comprises a mixed-use development including residential, retail, hospitality programs. Retail functions are located near the base of the towers, with residential programming located above. The forms of the towers were determined by the subtraction of volume to allow for sunlight to enter the interior of the complex and adjacent complex towers, as well as subtraction of volume to avoid blocking sunlight for neighboring buildings.<sup>45</sup>

Large volumes seem to be subtracted from the base of several towers to emphasize grand entrances. Outdoor public plaza space is located centrally within the complex. Outdoor public space is also located in several locations where volumes were subtracted from the towers, above ground. Public spaces located in different towers is connected via bridge volumes containing public space as well.

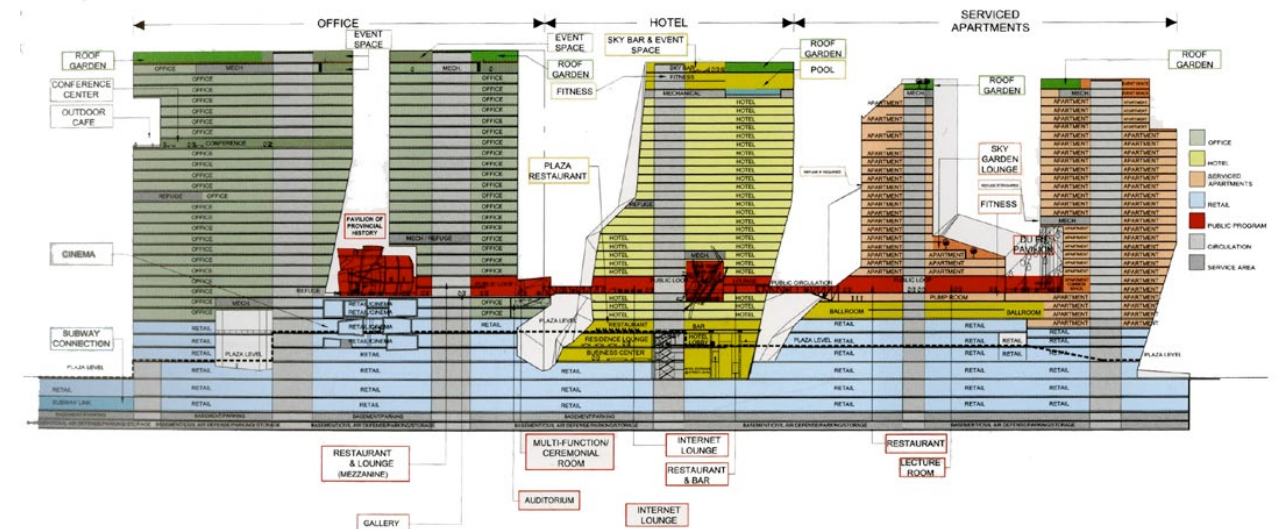


Fig. 5-1\_ Sliced Porosity, unfolded program section

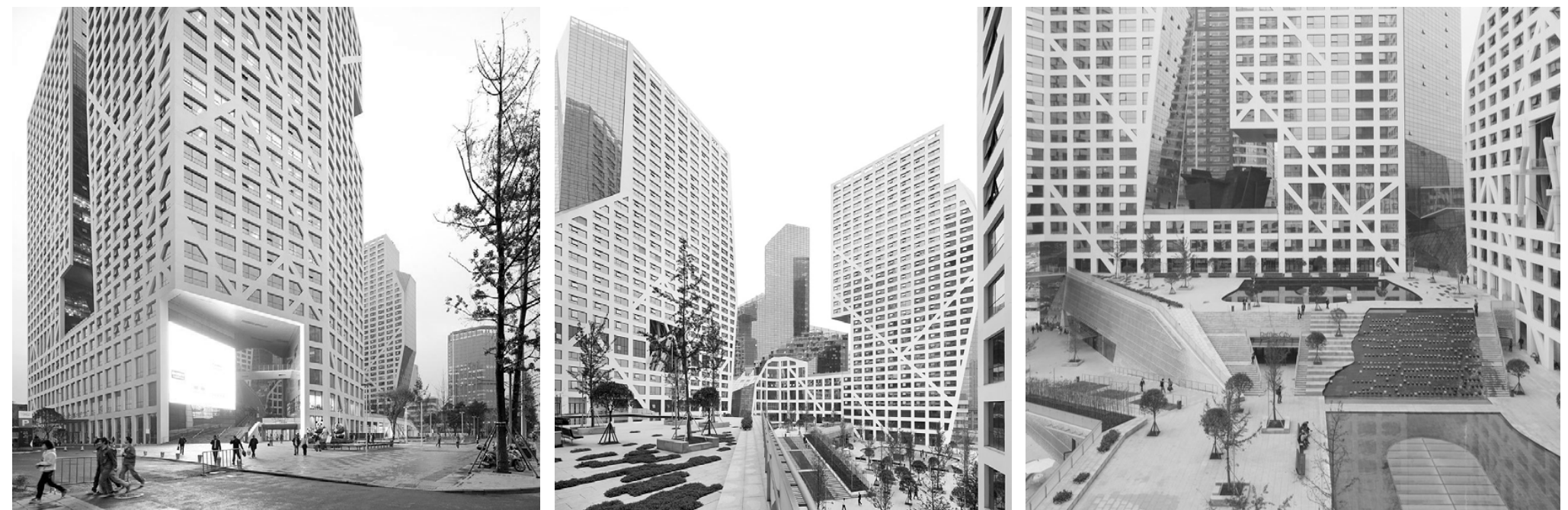


Fig. 5-2\_ Sliced Porosity

<sup>45</sup> Futagawa, Yuko, ed. *Steven Holl 1999-2012 Volume 2* (A.D.A. Edta: Tokyo, 2012), 147.



*Ningbo History Museum, Amateur Architecture Studio (Wang Shu & Lu Wenyu)  
Ningbo, China, 2007*

The Ningbo History Museum was selected as precedent for the proposed intervention for reasons concerning spatial organization and materiality. Program is arranged around the perimeter of the building, with large volumes subtracted from the perimeter to allow for light to enter the interior of the building. A large open-air courtyard is located within the interior of the building. Circulation space within is of variable ceiling heights which allows for multiple experiential relationships with different spaces.

Exterior vertical surfaces are afforded a vernacular texture by the use of *wa pan*, which is a technique used by the masonry specialists of the region which incorporates the laying of bricks in a manner which allows for bricks of different sizes and conditions to be used. Interior vertical surfaces are given texture through the use of bamboo cane molded concrete.<sup>46</sup>

In using the *wa pan* and bamboo cane molding techniques, a craft once used widely throughout the region was reintroduced in a contemporary context. A cultural memory was given physical form because of the implementation of these techniques.

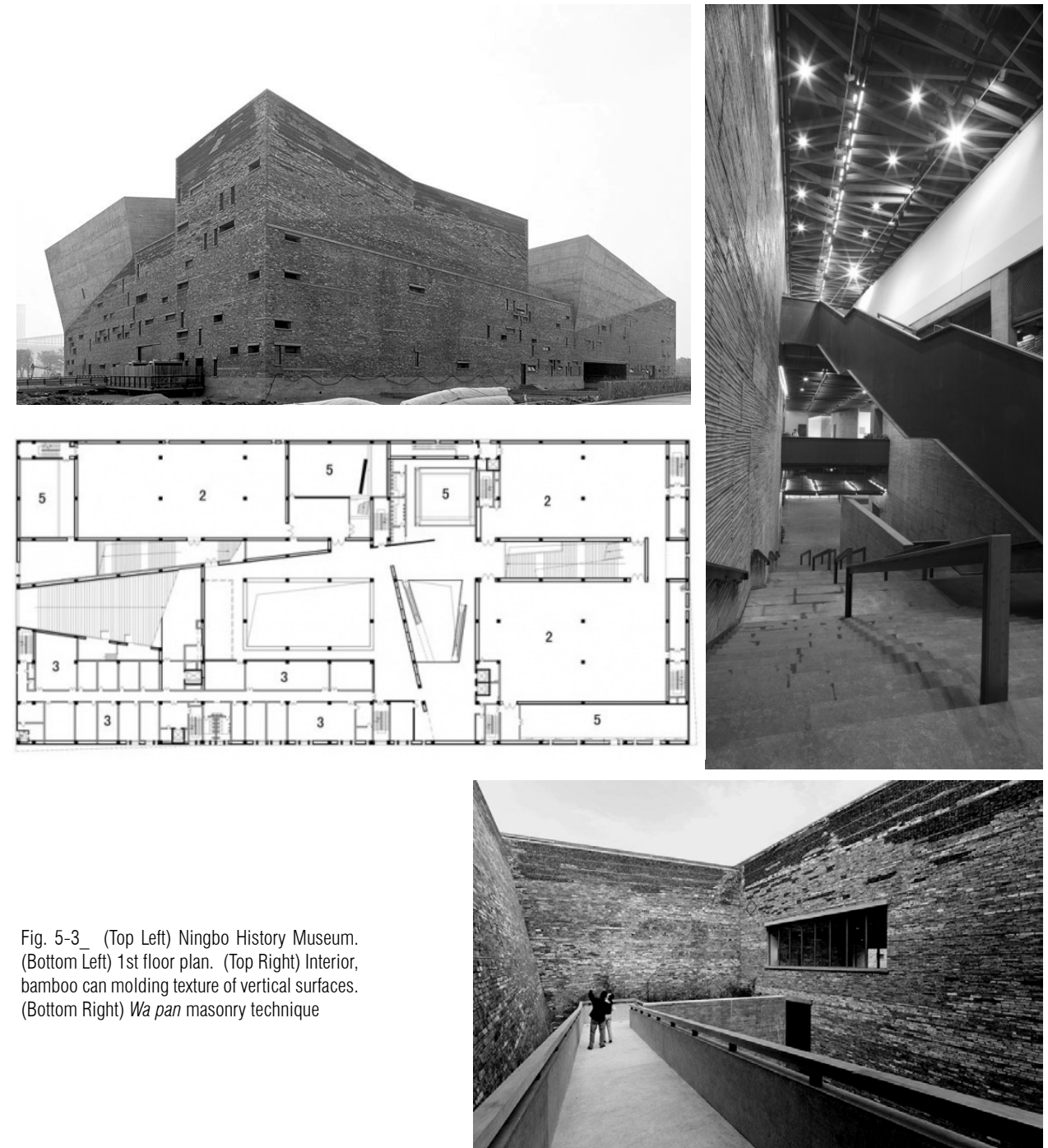


Fig. 5-3\_ (Top Left) Ningbo History Museum. (Bottom Left) 1st floor plan. (Top Right) Interior, bamboo cane molding texture of vertical surfaces. (Bottom Right) *Wa pan* masonry technique

<sup>46</sup> McGetrick, Brendan, "Ningbo History Museum," *Domus*, accessed November 20, 2014, <http://www.domusweb.it/en/from-the-archive/2012/03/03/ningbo-history-museum.html>.



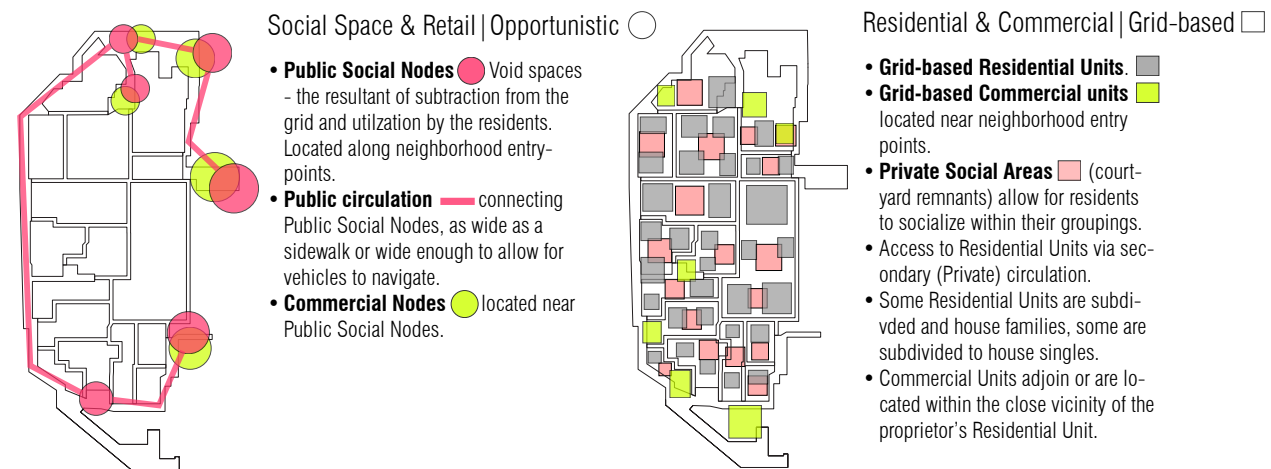
The hutong in its simplest programmatic form consists of residential spaces, commercial spaces, private social spaces (courtyards), commercial concentrations (mobile vendors and services), and public social spaces.



Fig. 6-1\_

**Social Spaces** can be classified as *Opportunistic*. Open areas are utilized by residents for social and retail functions. Residents take advantage of these open areas and congregate and socialize within these areas, as well as use them for commercial functions including buying and selling goods, food service, and offering services.

Hutongs created *The Grid*. Hutongs are *The Grid*. Aligned to the grid are the residential spaces, the commercial spaces which are located inside part of a Courtyard house, and the Courtyard void spaces themselves.



Program Relationships

Fig. 6-2\_

Hutongs have always been affected by *subtractive processes*. These subtractive processes (**1\_** demolition, **2\_** the widening of the lane, **3\_** the construction of a new building, etc) allow for the creation of Opportunistic Void Spaces. These opportunistic void spaces can be thought of as nodes [Fig 6-2 Left].

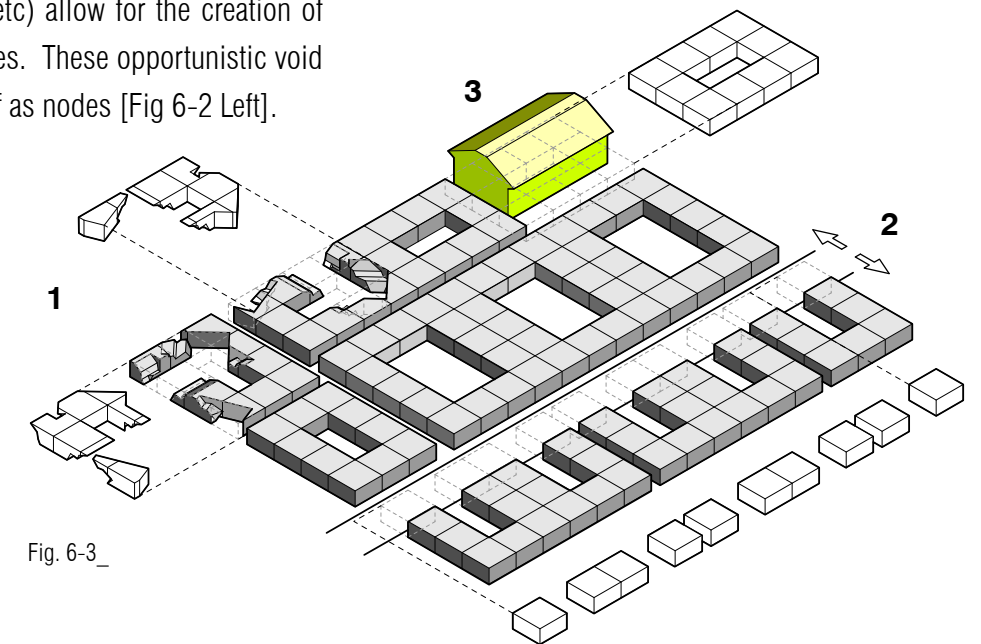


Fig. 6-3\_

The initial massing of the intervention is derived from site factors such as setbacks from the property line, allowing for light to reach neighboring buildings, allowing for site circulation to remain unimpeded, and to maintain a proper scale with regards to the surrounding buildings. Subtraction begins immediately.

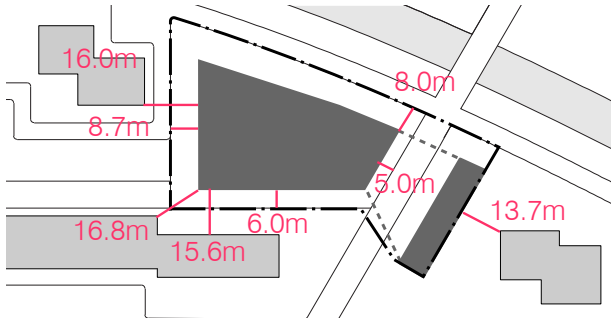


Fig. 6-4\_ Property line and Setbacks

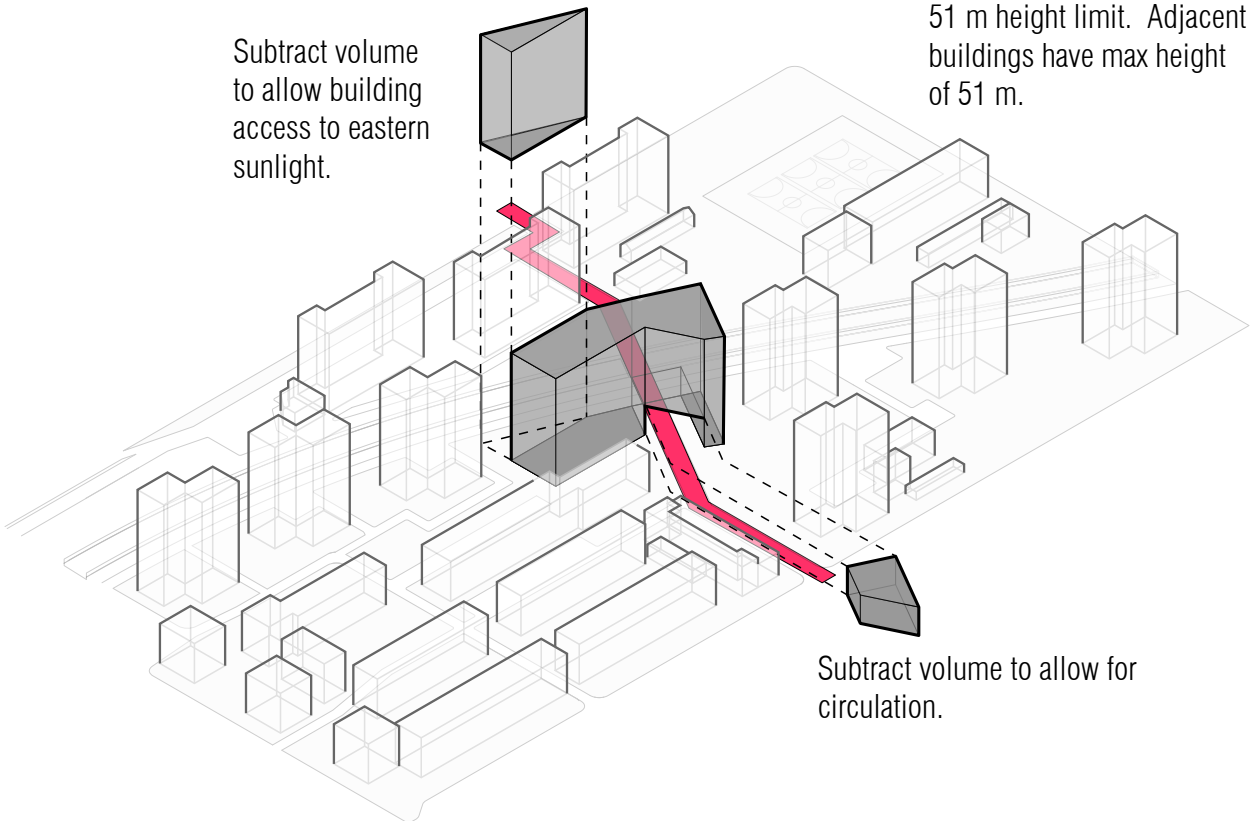


Fig. 6-5\_ Initial Massing

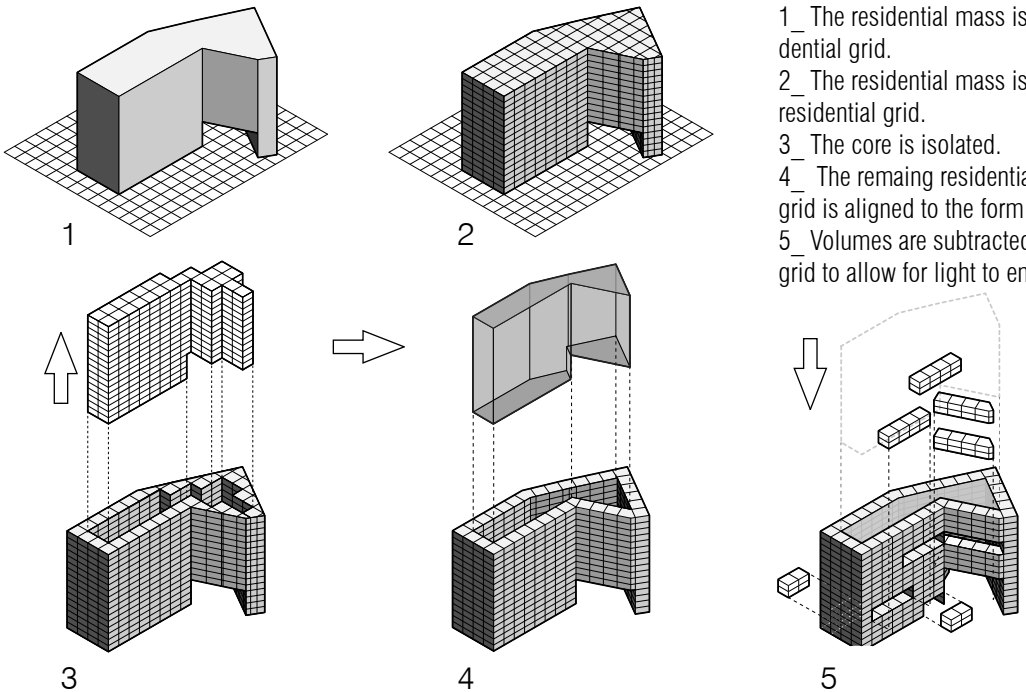


Fig. 6-6\_ Form Sequence

- 1\_ The residential mass is placed on the residential grid.
- 2\_ The residential mass is controlled by the residential grid.
- 3\_ The core is isolated.
- 4\_ The remaining residential massing / residential grid is aligned to the form for efficiency.
- 5\_ Volumes are subtracted from the residential grid to allow for light to enter the interior.

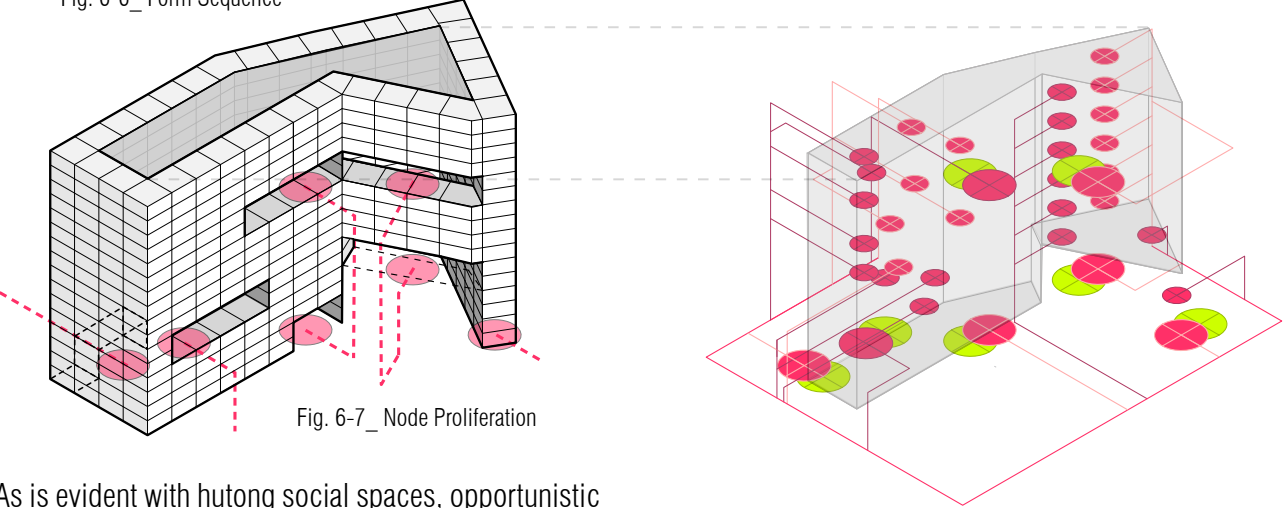


Fig. 6-7\_ Node Proliferation

As is evident with hutong social spaces, opportunistic Public Social Nodes are placed within the subtracted areas (void spaces), and at entrances. Smaller Public social nodes are placed within the core vertically and in positions which allow for light shafts to be subtracted from the interior. Commercial Nodes are located near the main Public Social nodes.

Nodes determine the location of the social spaces throughout the form. Connecting the nodes via circulation routes, and then thinking of the social spaces as subtractive volumes creates a porosity throughout the interior of the form.

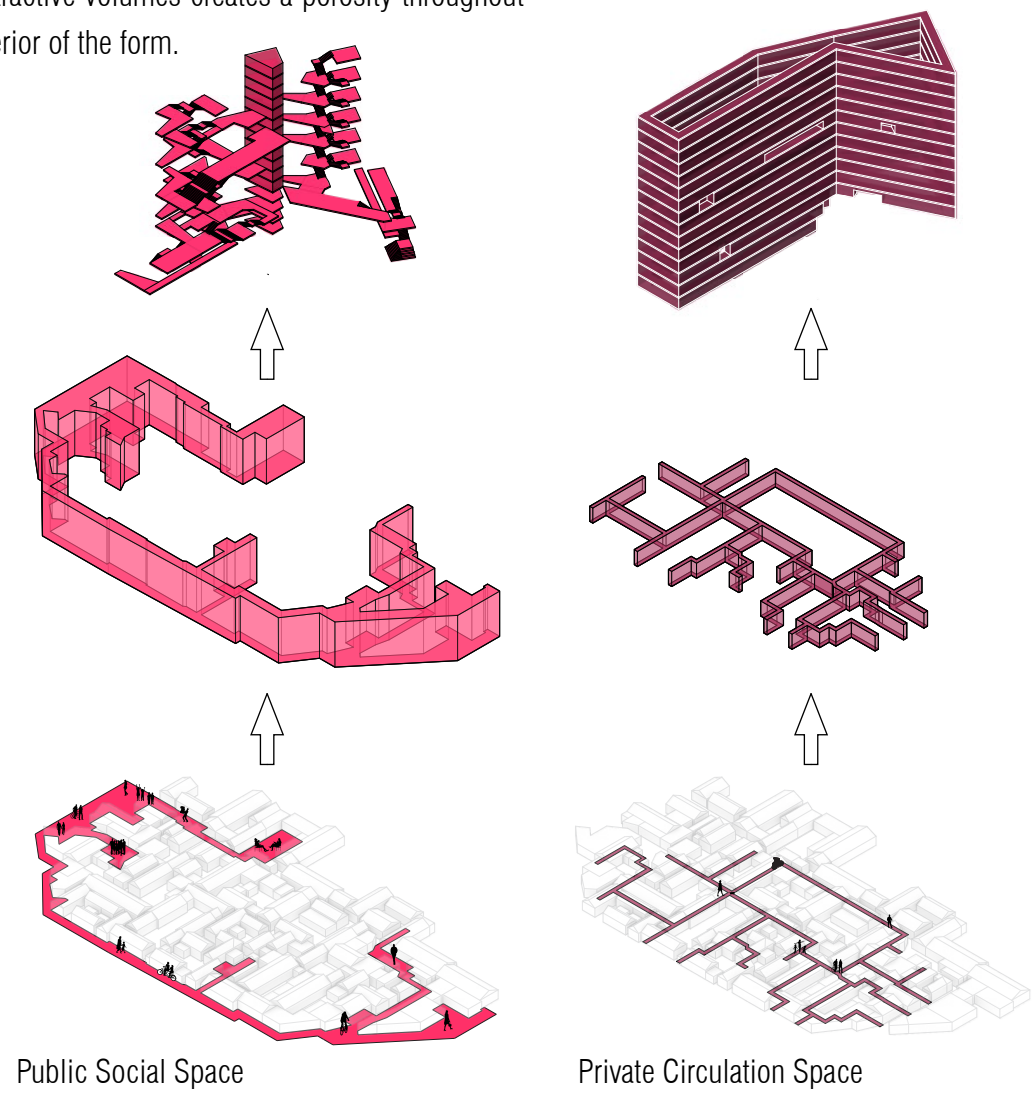


Fig. 6-8\_

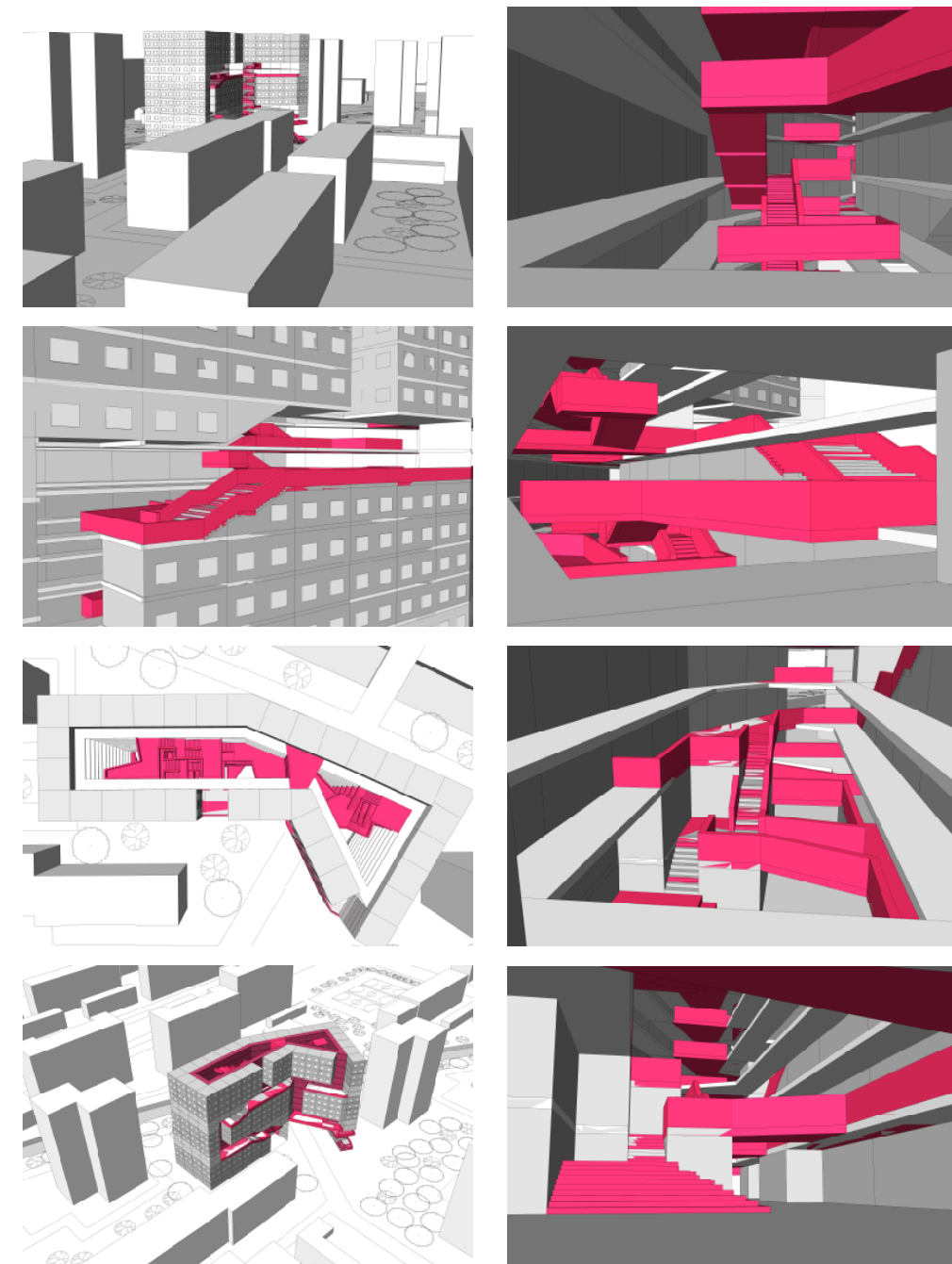


Fig. 6-9\_

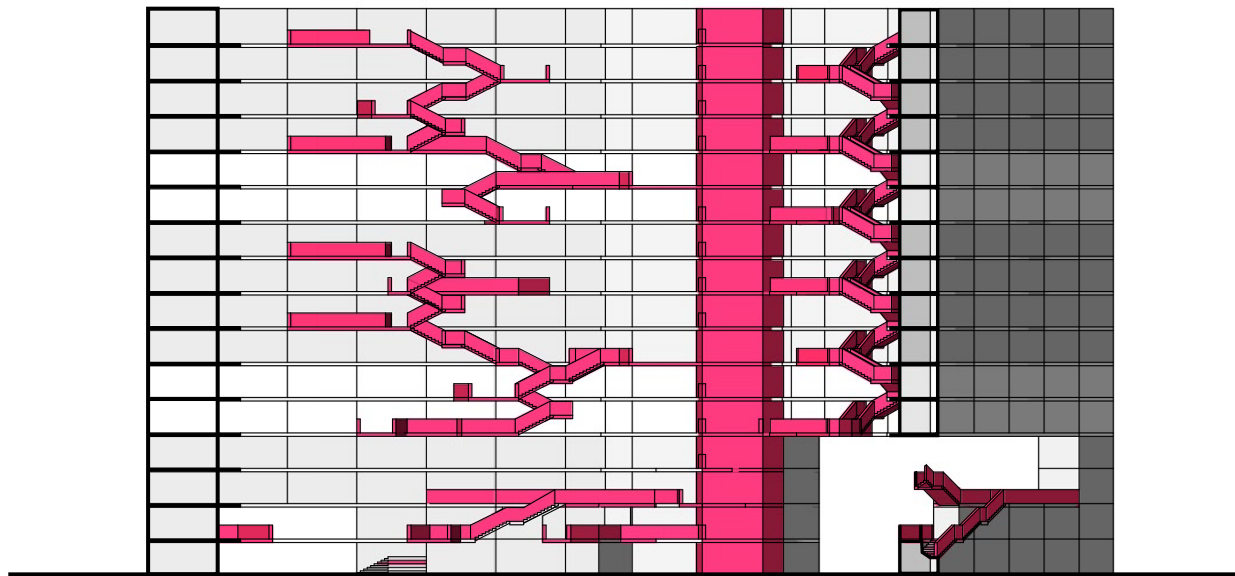


Fig. 6-10\_ Section

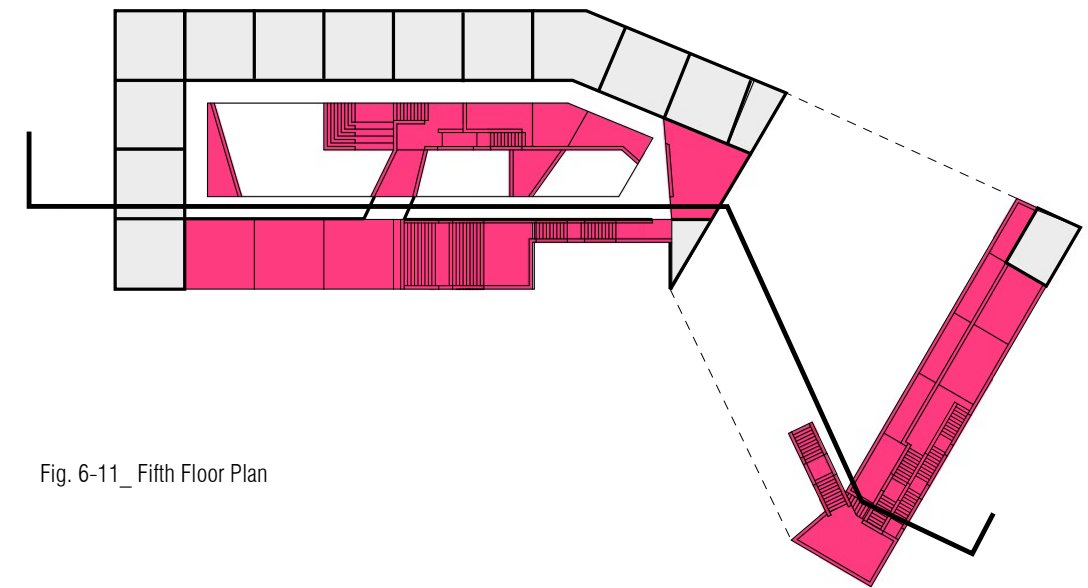


Fig. 6-11\_ Fifth Floor Plan

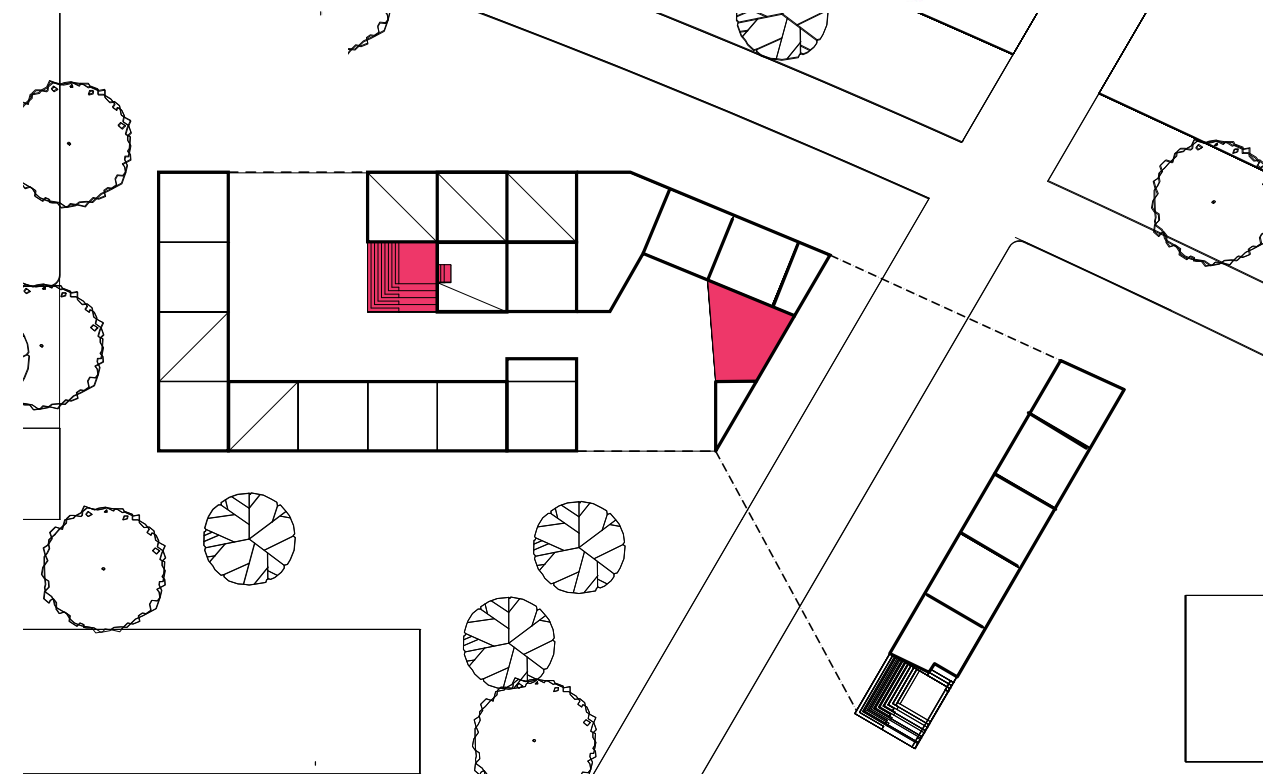


Fig. 6-12\_ Ground Floor Plan

## Conclusion

History has shown that the hutong street culture has always been a part of the resident population's lives. The separation of the social spaces from the residents who utilize these spaces leads to a loss of culture, identity; the destruction of the physical typically results in the eventual destruction of the intangible. To help counteract the hutong dystopia, relationships, which are the product of a physical place and the interaction of those who inhabit that place, must survive. These social spaces and the associated relationships, upon demolition, are merely displaced and requiring a new "place." Integrating social spaces into the receiving multiresidential architecture is the first step towards maintaining these relationships.

Though social and retail spaces have been designed for, there still exist several issues relating to the losses incurred by the displaced residents. Part of the loss due to the demolition of the hutongs is microeconomic, and needs further study. Retail spaces can be provided, which will help to maintain the commercial endeavors of the displaced residents. However, because the historical/cultural component of the hutong based commerce has been destroyed, the associated tourism has no reason to visit the new home of the displaced residents and social spaces.

However, because the intervention is located in an established residential neighborhood, perhaps the commerce provided by the displaced residents will be utilized by the residents of the neighborhood at large.

The hutong survey area of Zhong-Gulou comprised approximately 1500 sq m of hutong social space. The intervention also comprised approximately 1500 sq m of hutong social space. Further studies of social behavior and space could allow for a determination to be made which sees a future design that consolidates social spaces or increases the proliferation of social spaces throughout the intervention. This would require comprehensive neighborhood activity analysis, which was not available during the design period.

Recognizing that cultures as established as those seen in hutongs are not immune to contemporary urban design initiatives is the first step in maintaining those cultures. Thankfully, this first step has been taken, by many. Designing to maintain the continuity of that culture is vital. Creating spaces which allow for residents to become neighbors shouldn't be limited to Beijing, as these social relationships can positively affect neighbors of all Urban locations.

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