



胡同室内

Hutong Interior

merging spaces in the *hutong* system,
the case of *Baitasi hutong*, Beijing

Lidia Preti

“The neighborhood was quiet – the streets were too small for buses [...]. Nothing was taller than a few stories, but many buildings were single-level structures, siheyuan. Unlike the high-rise sections of the city, they weren’t echoes, whose sounds were few and distinct; wind rustling in the streets, rain slipping across tile roofs.”

(Hessler, 2007 p. 199)

Hutong Interior, merging spaces in the hutong system, the case of Baitasi hutong Beijing

A Thesis Submitted in partial fulfillment of
the requirements for the degree of
Tsinghua University and Polytechnic of Turin
In fulfillment of the requirement
for the professional
Double Degree of Master in Architecture
Construction City

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胡同室内空间, 胡同体系中的融合空间, 以北京白塔寺胡同为例

(申请清华大学建筑学硕士专业学位论文)

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二〇一九年 六月

胡同室内空间胡同体系中的融合空间以北京白塔寺胡同为

丽达

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Professor Michele Bonino
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June, 2019

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摘 要

由于其古老的历史和相关的城市实践层次，北京首都是一个蓬勃发展的研究背景，仍然在当代城市的城市形态中发挥作用。研究的目的是研究驱动胡同系统以及四合院，四合院的形成的社会文化背景。此后，研究20世纪的主导力量导致了巨大的变化，改变了北京老城区的城市肌理。此外，本文着重研究了北京首都巴塔西胡同内部剩余胡同的特定区域。同时，在这个鼓舞人心的转型背景下，邻里一直是一些城市试验的沃土：北京设计周。然而，一旦展览结束，这些空间会发生什么？在展览结束后，庭院似乎被关闭了。然而，解构庭院空间的传统概念，这些空旷的庭院可能成为社区的潜在空间，并成为社区的空间支持。庭院住宅的传统类型受到挑战，即建立一个遵循该地区观察到的挪用做法的混合空间。胡同的城市空间在概念上被吸收到庭院中，成为居民容易使用的共同空间。根据设计方案提出的原型原则，悬浮的庭院可能在整个小型干预措施中成为永久的合理化支持，逐步重新开启这些空间，在该区域内形成一个坚固的公共空间系统。

关键词：百塔寺胡同； 转型方案； 暂停庭院； 混合空间

Abstract

The capital city of Beijing is a thriving background for a research due to its ancient history and the related layering of urban practices that still display a role in urban morphology of the contemporary city. The aim of the research is to study the socio-cultural background that drove to the formation of the *hutong* system as well as the *siheyuan*, the courtyard houses. Thereafter, the study of the leading forces that in the 20th century lead to dramatic changes, modifying the urban fabric in the Old City of Beijing. Moreover, the thesis carried out focuses on a specific area of remaining *hutongs* in the inner part of the Capital city of Beijing, *Baitasi hutongs*. Parallely, in this inspiring background of transformation the neighborhood has been the fertile ground for some urban experimentations: the Beijing Design Week. Nevertheless, what happen to these spaces once the exhibition is over? The courtyards appear to be turned off after the conclusion of the exhibition remaining urban suspended spaces inside the neighborhood. However, deconstructing the traditional concept of the courtyard spaces these empty courtyards could become potential spaces for the neighborhood and turned into a spatial support, for the community. The traditional typology of courtyard house is challenged toward the creation of a hybrid space that follows the appropriation practices observed in the area. The urban space of the *hutong* is conceptually absorbed into the courtyard which becomes a common space easily usable by the residents. The suspended courtyards, following the principles of the prototype proposed by the design proposal, might become a permanent rationalized support throughout small interventions, that progressively switched on again these spaces creating a solid system of common spaces inside the area.

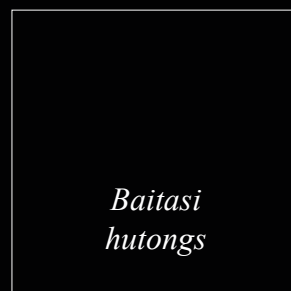
Key words: *Baitasi hutong*; Transformation scenarios; Suspended courtyards; Blended spaces.



Introduction



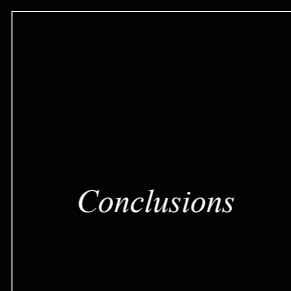
*Beijing's soul,
the hutongs*



*Baitasi
hutongs*



*Design
proposal*



Conclusions

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Introduction

Chapter 1 Introduction

1.1 Motivation and significance

“Better to see things one time than hear about them a hundred times”

Chinese proverb

The thesis work arises from the collaboration in between Polytechnic of Turin and Tsinghua University of Beijing where I had the chance to spend one year as a student. Hence, the research work is rooted in the Chinese environment and aim to analyze and put into practice some specific phenomenon observed during the permanence in Beijing. The research methodology attempt to work on doubts, questions and issues risen from the observation that, throughout the thesis work will be deconstructed and analyzed under different lights and perspectives. Starting from some peculiarities identified in the area, the research work will be developed making use of different registers and sources such as statistics, scientific papers and a critical reading of the personal experience accomplished during the year spent in Beijing. Indeed, the methodology will not only be based on a rigid use of the literature but rather on a mixed and heterogeneous use of the sources. As a matter of fact, the fieldwork was crucial to closely study and read the palimpsest of the neighborhood, the small practices that occur in the area as well as the modification of the spaces after the end of the Beijing Design Week. The collaboration during this event in 2017 for the realization of the Polito pavilion, can be regarded as the starting point of the research work.

Starting from a digression on the origin of the courtyard houses, the second chapter start with a speculation on the city of Beijing and the urban space of the *hutongs*.

Thereafter, the main body of the research will orbit around *Baitasi hutong*, urban tassel of remaining *hutongs* located in the historic center of the city of Beijing. After the analysis of the genesis of the neighborhood and a detailed speculation on the urban space of the area, the research work will be scaled down in a specific tassel of the neighborhood for further analysis and investigations. Parallely the socio-spatial dynamics observed in the area will be the background for a dissertation on the concept of *hutong interior* as well as the meaning given to this notion. Alongside, the chapter will also investigate the transformation scenarios created by the exhibitions of the Beijing Design Week in 2017 and question the nature of those spaces once the exhibition is over. Therefore, the design process aims to merge the different elements analyzed to create a prototype for a flexible and permanent spatial support to meet the necessities of the inhabitants.

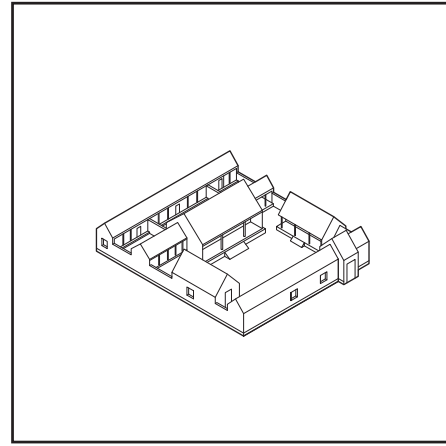
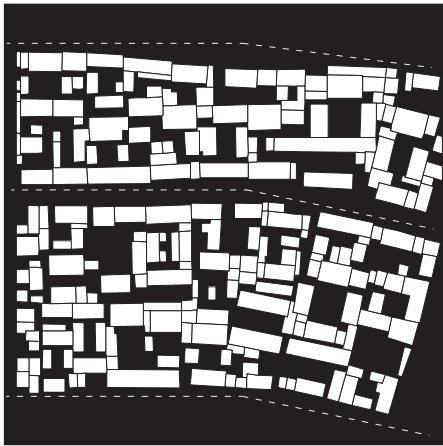
*Beijing's soul,
the hutongs*

Chapter 2 Beijing's soul, the *hutongs*

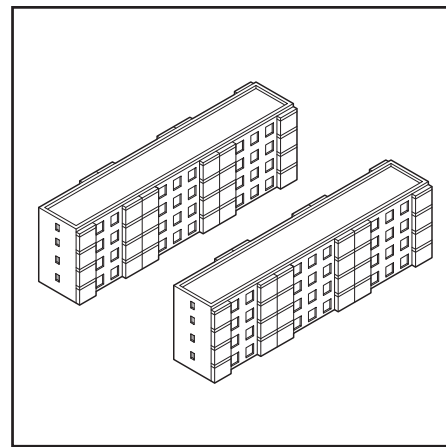
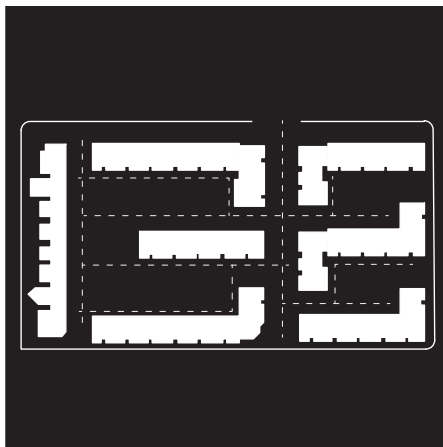
2.1 Urban fragments: *hutongs*, *danwei* and rise buildings

Which factors are creating the modern cities? Which ones are shaping it throughout the time? When it comes to urban expansion, it is worth considering the study of the urban morphology as an effective instrument to try to give an answer to these questions and to study the contemporary cities in China. Based on our notion, the English word morphology comes from the ancient Greek language *μορφή*, *morphé*, that literally means shape. Nowadays the meaning acquired by this term refers to the study of the city spatial structure throughout the investigation of the urban patterns and their growth over different historical periods. Therefore, it goes without saying that, in order to understand the leading forces that brought to the formation of an urban spaces, the study of the urban morphology of a city can be regarded an essential instrument to read an urban space. In a similar fashion, the study of the urban morphology as an investigation tool, consent to efficiently and forthwith relate the building outline with the related area occupied with the open spaces of the urban space, allowing to easily read the density, porosity and permeability of a certain urban area.

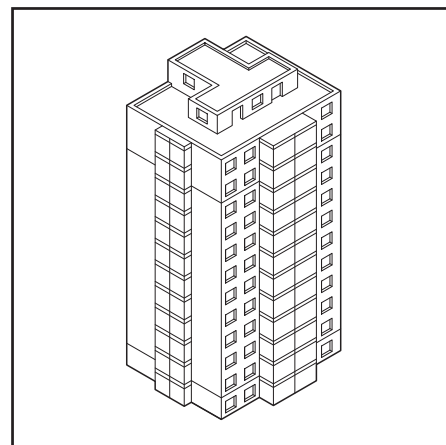
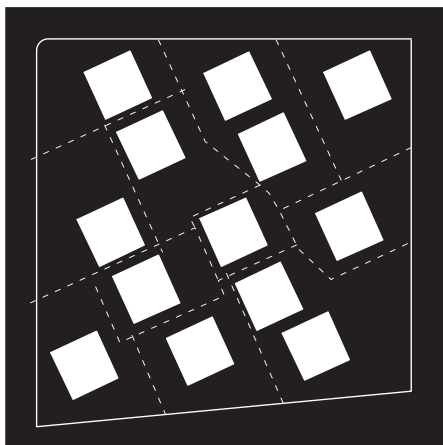
The city of Beijing is depositary of a layering of urban practices related to the different policies carried out during various historical periods. Therefore, the morphology of the city makes viewable the combination of different urban elements that can be described as urban tassels. The main typologies of the residential patterns in Beijing, can be classified in three main: the historical and ancient residential archetype of the *siheyuan*, ascribable to the imperial era, the *danwei*, residential compounds combined with work units related to the socialism and the rise building, compounds that embody the push of the global market and the urban growth.



Siheyuan



Danwei



Superblocks

*Figure 1 Urban fragments morphology: hutongs, danwei and rise building,
source of data: (Wang, 2012), drawing elaborated by Lidia Preti*

Before the '80s, the urban patterns of the city were represented mainly by two elements: the courtyard houses, *siheyuan*, and the *danwei*, work units integrated with residential areas and directly under the central government control. However, the genesis of the two urban pattern is diametrically different (Wang, 2012). The origin of the first typology, dates to the imperial age, when numerous Emperors based their ideologies on the Confucianism doctrine and reflected the principles on architecture. In this background, the courtyard houses represented the spatial configuration of the ideology enunciated by Confucius, of commonality and clear identification of the social hierarchy, indeed the size of the courtyards and the room size of the building was precisely related to the social status of the families.

On the other hand, the *danwei*, which spatial structure was influenced by the Soviet urban planning, depicted the spatial reshape of the political direction of the People's republic of China (Bonino, et al., 2015) and remained a strong identity inside the city of Beijing until the last decade of the 20th century. The units were composed as a combined system between the working space and housing, in one unique spatial unit with a shared "common set of facilities" between people (Lue, et al., 2001 p. 117). Thus, the spatial arrangement was clearly defined for every work unit composed by the communal facilities, placed in the center of the compound, the industry for production and the residential units. The social cohesion and collective lifestyle were enhanced by the architectural space which draw the attention on shared spaces. The communality of the spaces was divided into different levels from the smallest scale of sharing facilities between a relatively limited number of families such as kitchen and toilets, to the wider pooling of facilities with the adjacent buildings, such as gardens and laundries, to the largest scale of sharing which occurred between the all members belonging to the same *danwei* such as the hospital and the sport fields (Wang, 2012). The spatial separation and the enclosure of the work units between inside and outside, was clearly defined and displayed a role in the urban pattern

of the city.

The third typology of residential pattern that can be identified in the city of Beijing is the one of the rise buildings compounds, related to the concept of mega-blocks and massive housing development. In the span of the last decades of the 20th century, the city started to be studded with massive buildings and the concept of gated community, already present in the *danwei* system, was brought to a higher level creating a gated community in a massive scale as the one of the super blocks (Wang, 2012). The human and delicate scale of the traditional courtyard houses is absorbed by a gigantic one that sees the destruction of the relationship between dwelling spaces and open ones typical of the *siheyuan*.

2.2 Speculations on the urban space of the *hutongs*

It is undisputed that the urban space of the city of Beijing chanced. In the last century China is undeniably holding the record of one of the fastest countries in terms of socio-economic development of the 21st century. The dramatic and rapid changes that occurred, lead to remarkable modification of the urban patterns and the related use of the space. With specific regard to the inner part of the Capital City of Beijing, two ancient typology, the *hutongs*, alleyways in between the residential areas, and the *siheyuan*, courtyard houses, were dragged from numerous urban policies to a permanent transformation of the traditional concept of the spaces and their related use.

The courtyard house system is a popular form of architecture typology that can be found in different countries beside China (Wu, 2000). The form of courtyard has embodied the ideal form of vernacular dwelling for centuries; indeed, it is supposed that the first form of courtyard system raised around 2000 years ago. However, the most typical and authentic forms of courtyard houses can be found in the Old City in Beijing, with an history of more than 800 years. Cultural tradition and physical forces as well as the

autochthonous natural environment were the main driving forces of the foundation of this typology.

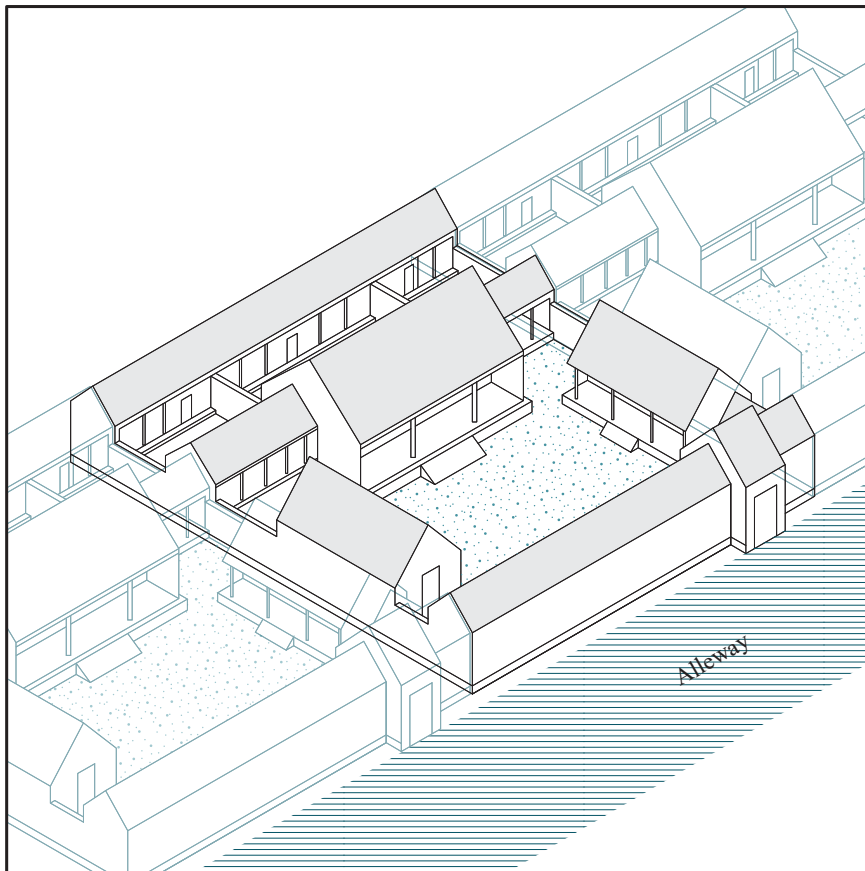
The history of imperial China counts more than twenty dynasties from the Shang dynasty (1600 BC.) to the fall of Qing dynasty in 1911, followed by the institution of the Republic of China (1912-1949). Putting the spotlight on the city of Beijing, among all the dynasties, the Yuan (1271-1368 AD.), the Ming (1368-1644 AD) and the Qing dynasty (1644-1911), left a permanent mark on the city and the traces are still visible in the street setup, palace complexes, and courtyard houses, of the inner city. Indeed, even though Beijing has been the capital of the Empire for several dynasties, the inner parts of the city, which covers an area approximately of 62 km², are bequeathed from the last dynasties of the Chinese Empire (Zhang, 1997). As a matter of fact, the street system of Beijing, still visible nowadays, was firstly planned by the Yuan dynasty and was passed down to the Ming and Qing dynasties. The configuration, in the beginning of the 20th century, was still visible around the Forbidden City in Beijing, surrounded by *hutongs* that were representing the major urban pattern of the city (Yantai, et al., 1997).

The street configuration lead to the division of the city into many blocks with a main axis from north to south and a horizontal one oriented east west (Wu, 2000). As a matter of fact, the courtyard shape can find its layout reference in the grid system used for the city, finds its origins in the structure of the agricultural fields used in the countryside. The grid system used in the past to define the fields seems to be the prototype for the cities which were planned with a hierarchy at different scales from the biggest unit to the smallest one. It has been observed that it can be found an isomorphic relationship between the city of Beijing, the biggest unit, passing through the courtyard houses, to the smallest one, the room: the city, the street block, the neighborhood, sub-block, the *hutong*, the courtyard compound, the building (Wang, 2016). Indeed, the hierarchical spatial structure in both cases discloses a symmetrical disposition along the main axes, displayed from

North to South. Besides, traditionally in China, the ancient cities were organized with a hierarchical and linear layout, configuration that is easily discernible from most European ancient cities where the spatial layout present a big central static node. The flexibility of the plan was the key feature of the courtyard houses prototype and the different units of the system could have been adapted to different uses.

Another aspect worth mentioning is the criteria of orientation of living spaces and the perception of the space as a sequence of enclosed worlds with an isomorphic relation of scales. Indeed, the transparency and the openings of spaces is facing the inside of the compound rather than having openings towards the outside streets, enhancing the focus on families (Nijveldt, 2013). It is interesting to notice that in Beijing, considered one of the Chinese old cities, the residential compound followed a precise hierarchical structure with a gradual transition from the most public space to the most private one. Indeed, the fish-bone-shaped structure was starting from the main access street, to continue in the smaller lanes in between the neighborhood, *hutong*, to the courtyards in between the house compounds, *siheyuan* in a methodical order (Wu, 2000). The narrow and intricate lanes in the middle of the city, the *hutongs*, are defined by the author Bingkun Liang as the most memorable element of Beijing, (Bingkun, 1997) oasis protected from the chaotic life of the city.

四合院
Courtyard house
prototype



*Figure 2 Courtyard house prototype,
drawing elaborated by Lidia Preti*

However, what happened to the original courtyard system of the city of Beijing? How were the courtyard shaped and transformed during the last hundred years? During the 20th century, China has undergone an astonishing socio-cultural transformation that left its permanent marks in the urban structure of the city. The downfall of the Qing dynasty in 1911 lead the capital to a period of political disorder and internal conflicts. After a period of military occupation by the Japanese (1931-1932), and the governance of the Republic of China in between 1911 and 1949, in 1949 the Popular Republic of China was declared. The priority was to reaffirm and highlight the vocation of Beijing as socio-economic leading country. Therefore, these ideals lead to a new urban expansion and the related social changes with consequence of the transformation of the historical urban pattern of the courtyard houses. As reported by some statistics in 1949 in Beijing could have been counted over 6000 lanes and two third of them were located in the inner city of Beijing. However, with the passage of the years, the lanes in Beijing started to decrease in number (Bingkun, 1997). As a matter of fact, the historical urban fabric, during the period of the Popular Republic of China, undertook two main changes: on one hand the deconstruction and demolition of parts of the areas to leave room for the new multi-storied buildings for the government, on the other hand, the unbelievable densification with new constructions due both to political strategies as well as natural factors.

The first phase of the modification process is the one occurred in between 1956 and 1959 when the dismantlement of courtyard houses reached its peak. Under the guidelines of the government, new multi-storied building began to raise in between the historical urban fabric with administrative function for the party, leading to the partial or total destruction of some courtyard houses areas. The outcome was a discontinuous island in the urban fabric, 540.000 m² of houses were demolished (Wang, 2016). The second leading factor of the modification of the layout of the courtyard houses can be found in the densification process. As mentioned above, the change of the urban fabric was, to a

certain extent, related to the densification of the courtyard blocks to maximize the economical profits of every area. This change can root its origin both in a natural disaster as well as in the impact of Chinese policy. Indeed, on one hand the violent earthquake that took place in Beijing in August 1976, drag deconstruction behind itself, on the other hand, under the period of People Republic of China, due to the steep increase of the population, the government spurred the common living in the courtyard houses as well as the self-adaption of the houses by the residents. This system, carried out during the second period of the Great Cultural Revolution (1966-1976), permitted to the residence to extend the built space of the houses in the empty space of the courtyards. The traditional one-family courtyard house was than transformed into dwellings for more than five families, the self-adaptation of the previous structure by the inhabitants was unavoidable. As a consequence, the units became overcrowded and the families were obliged to share facilities as the kitchen and the toilets (The Traditional Courtyard House in China: Its Formation and Transition, 1996). What can be observe it the phenomenon of “courtyard houses without courtyard”, expression used by the professor Wu Liangyong¹ to describe the stratification and overcrowding of building and practices that can be recognized in the *hutongs* in Beijing. These processes involve not only the urban-architectural elements but also the communities living in these areas and the individual inhabitants, undermining the so called “lane culture”, belonging to Beijing and its *hutongs* (Wu, 2000).

¹ Professor Wu Liangyong graduated in the early 1940 at the National University in Nanjing and can be regarded as one of the most important scholars in China and an academic luminary.

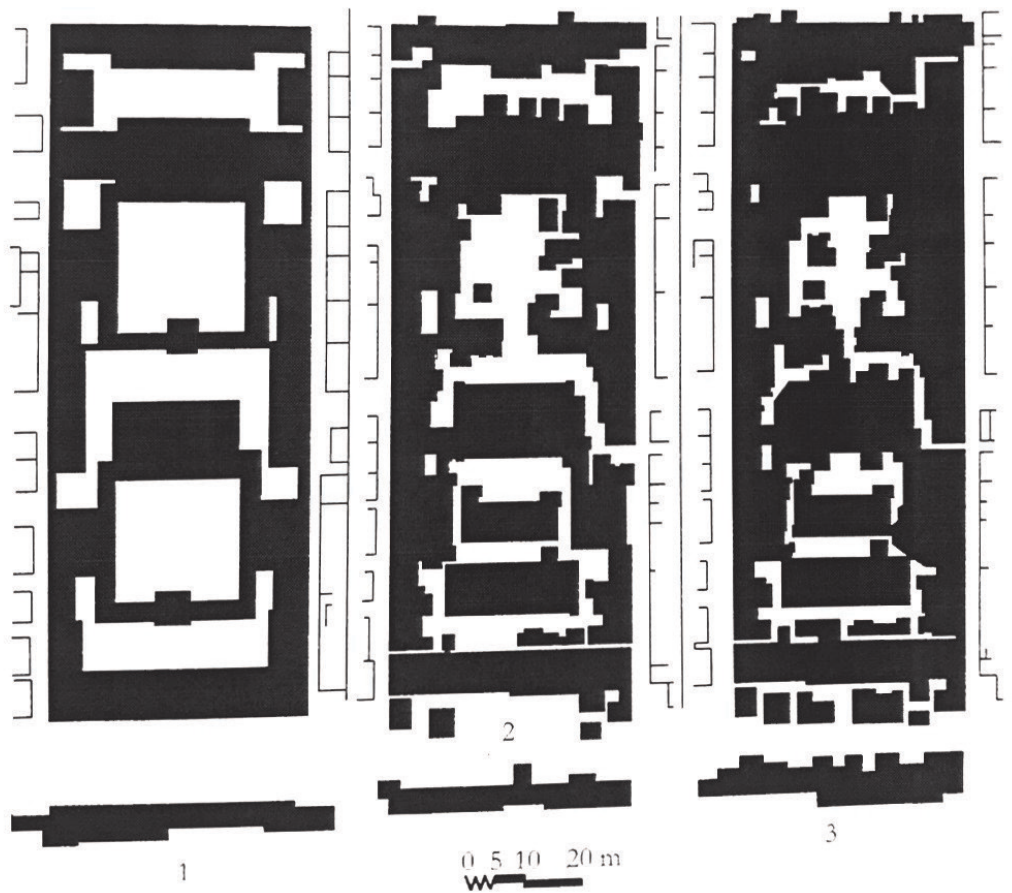


Figure 3 Decline of the courtyard houses, (Wang, 2016)

Subsequently, inside the historic neighborhoods started to rise “informal buildings” normally with a size in between 6 and 12 m². Data shows that among 5 million m² of courtyard houses, more than 2 million m² were fulfilled by informal addition added by the residents so much that the built density boomed from 15% to 70% by 1986 (Wang, 2016). The over-layering of practices throughout the decades are represented by the informal addition created by the resident themselves inside the courtyard houses to counterbalance the lack of space. A research carried out during the last decade of the 20th century, pointed out that 60% of this informal addition had a function of kitchen, 30% as outdoor storage and 10% as additional rooms to accommodate beds. The outcome of the densification and saturation process is a network of the so called “internal *hutongs*” (Bernabei, 2012).

According to the study carried out by the Tibet Heritage Fund, allegedly more than 70% of the resident families had extension buildings (Tibet Heritage Fund, 2004). A statistic report carried out by the West City Property Management Bureau in 1991, depicts that in the Inner-City areas, approximately 10% of families lived in a space that measured less than 2 m² for each family member (Zhang, 1997). The informal additions are nowadays become a defining feature of the remaining residential *hutongs*.

As an unavoidable consequence of the stratification process of the building inside the courtyard houses lead to a remarkable deterioration of the living conditions, reason why in 1990, Beijing's municipal government decided to redevelop the Old City with a project called "Old and dilapidated Housing Redevelopment Project". However, against the expectations, the policy lead to an additional dismantlement of courtyard houses. As a matter of fact, it is observed that 75% of the area occupied by the courtyard houses was dismantled in the span of five decades, from 1949 to 1999. Another remarkable aspect that played a key role in the deterioration of the courtyard system is the tendency, shown by numerous studies, of building high-rise compounds, and, as reported, in 1976 31 high-rise buildings were realized close to the old city proper of Beijing. Due to this trend, the courtyard houses felled apart and the character of the historical area of the Beijing's Old City, permanently lost their identity and the historical urban structure (Wang, 2016). Numerous *hutongs* areas suffered from this phenomenon and the urban structure was modified and the new high-rise building created elements of discontinuity inside the area (Bernabei, 2012).

To limit all these tendencies, in 2001 the Chinese government listed the historic area to protect on the Beijing Old City. In addition, in 2005 the government proposed the "polycentric" Master-plan in Beijing (2004-2020) that aims to create a polycentric structure of the city in order to protect the Old and historic areas of Beijing (Wang, 2016).



Figure 4 Remaining hutongs in the inner city of Beijing,
source of data: (Tang, et al., 2018), drawing elaborated by Lidia Preti

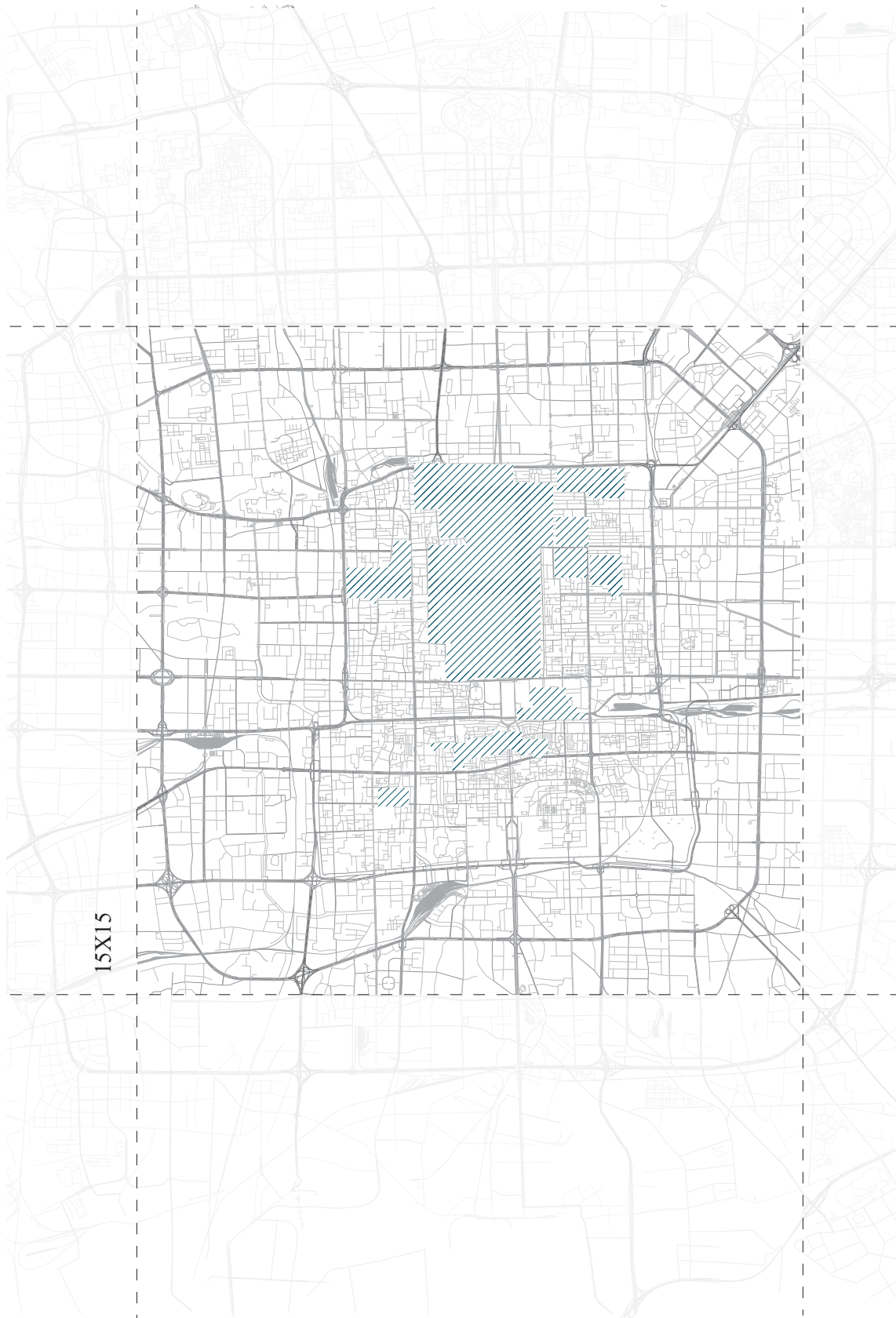


Figure 5 Conservation Plan for the historical city 2002,
source of data (Carter, 2017), drawing elaborated by Lidia Preti

Baitasi hutongs

Chapter 3 *Baitasi hutongs*

In 2017 I had the chance to collaborate for the realization of the Polito pavilion for the Beijing Design Week in *Baitasi* area. This experience enhanced the chance to spend many hours immersed in the historical *hutongs* thereupon closely observe the socio-spatial dynamics displayed in the area with a process bottom-up.

Closely analyzing the urban space of *Baitasi*, it appears visible how the modification of the courtyards and *hutongs* system related to the historical changes mentioned above, still display socio-spatial effects inside the neighborhood. Studying the changes of the urban morphology occurred in the 20th century and the consequent densification of some of the pattern of the city, lead to the interpretation of the spaces under a new and different light. The original system of courtyard houses now make room for the stratification of additions realized during the last fifty years which blurred the original structure and the related use of the spaces. Spending time in the neighborhood and walking from the main alleys to the smaller and labyrinthine secondary roads of the area, was fundamental to understand the forces and relations in between the inhabitants of the neighborhood. The Chinese American academic Qiu Xiaolong in a passage of a book he wrote describes the social interaction in the *hutongs* with the following words:

“Life is incredibly enriched with all the activity and interaction.

You become part of the lane, and the lane, part of you. [...]

*People get together [...] in the lane too. Their room being so crowded,
people need to find space elsewhere”*

(Xiaolong, 2010 pp. 4-5)



Figure 6 Beijing inner city aerial view, image source: Google Earth Pro,
drawing elaborated by Lidia Preti

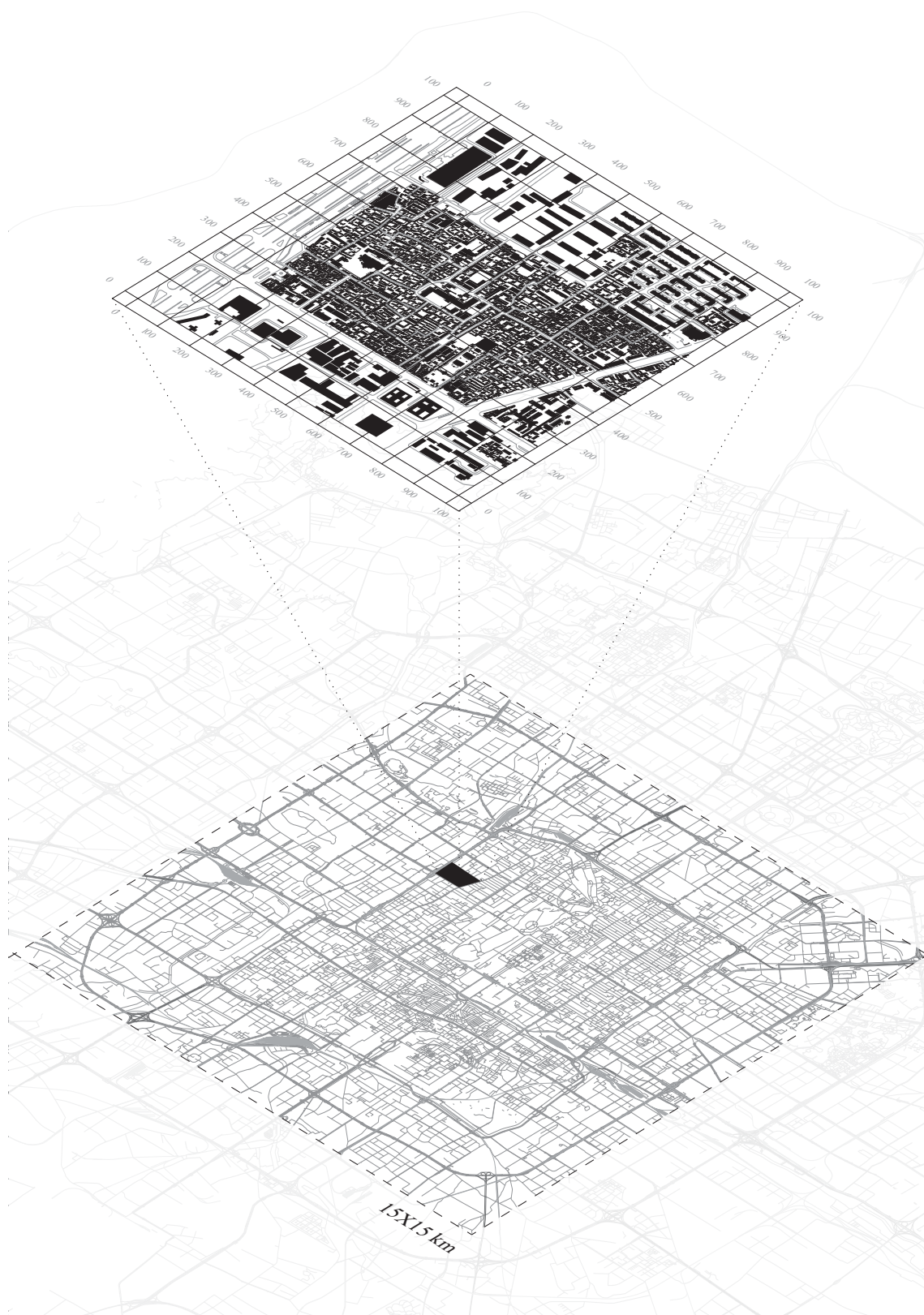


Figure 7 Axonometry Baitasi location, map base: (Cadmapper),
drawing elaborated by Lidia Preti

Despite the demolition of a large number of *hutongs* during the 20th century, some residential areas in Beijing, endured to the total change and hold out against the disappearance. It is the example of *Baitasi hutongs*, an oasis of remaining *hutongs* in Beijing's Old City. There is a saying in between the old Beijing residents that the city has more than 360 *hutongs* and every one of them has a name related to something specific (Weng, 1993). As a matter of fact, an *hutong* area, could be named by different elements, some of them were called by the name of a person, some called with the name of markets and merchandise, some called with names of building present in the areas and some others called by the appearance of the terrain on which they were built. In the case of *Baitasi hutongs*, the prominent building inside the area, was not only a wondrous architectural element inside in the city but it also gave the name to the *hutongs* of the surrounding area (Weng, 1993). To give an example, the Chinese name *Baitasi* (白塔寺) means White pagoda Temple and refers to the Chinese Buddhist temple that arise in the district from which the *hutong* area takes its name.

The White Pagoda temple, magnificent temple built more than 700 years ago, was realized during the Yuan dynasty (1279-1368) when the Nepalese architect Araniko was invited from the emperor to the Capital of the Yuan Dynasty (modern Beijing) to build the temple. The pagoda, the tallest among the three realized by the architect in China, measure a height of 51 meters with a basement of 9 meters height and surface an area of 1422 square meters. In 1368, the temple built around the white pagoda caught fire, thereupon the Emperor order the reconstruction of the temple that was renamed "Miaoying temple". During the reign of Emperor Kangxi, the temple hosted one of the four main fairs in Beijing and the White pagoda became an attraction across Beijing and lasted six days every month (Xia, 2018). After 700 years of history, the White Pagoda temple still stand out as a landmark in the traditional neighborhood, enduring against the pressures of the rise building compounds that surrounds the area.



Figure 8 Baitasi, White pagoda temple, drawing elaborated by Lidia Preti

With the exception of the temple, the information about the origin of the area are difficult to source. The few reachable data concerns, as mentioned above, the realization of the *Baitasi* temple, realized during the Yuan dynasty (1279-1368), and completed in 1279. During the Yuan dynasty, presumably related to the construction of the temple, two main alleyways were opened in the area both parallelly to Fuchengmen road. Thereafter, during the Ming dynasty, new alleyways were realized, crosswise to the previous ones, creating a widespread net around the temple. Fewer additional smaller roads were added during the Qing dynasty (1644-1911) to reach approximately the street texture that we can read nowadays in the neighborhood (BaiTaSi ReMade, 2015).

Despite the minimum amount of infrastructural intervention in the area during the Qing dynasty, it is from this time that come the most accurate drawings of *Baitasi* area before the modern age. Indeed, the first detailed maps that came down to the present times in optimum conditions of the whole city of Beijing is the Qianlong map which dates back to 1750. The map was realized during the fifteenth years of reign of the Quianlong emperor, Qing dynasty, and represent the oldest and most detailed graphic representation of the city of Beijing during the imperial times. The work consists in 51 volumes in which each tassel of the city is accurately represented with dwellings, monuments, temples and administrative buildings. Taking different fragments of the volume V and VI of the books was possible to recreate the configuration of the area around the White Pagoda temple. The urban configuration is clearly recognizable and readable on the map. As shown in the Qianlong map, on the west side of the area, it can be observed the presence of the city walls that were running all along the side of the neighborhood, as well as the city gate at the west end of Fuchengmen street, torn down in 1960. Now, the city walls leave space to a massive mobility infrastructure, the second ring roads cutting Fuchengmen inner street from the Fuchengmen outer street. Another aspect worth noticing is how the street, that nowadays tangentially lines along the east side of the area, Zhaodengyu road, once

was occupied by a small river crossed by numerous bridges at every intersection.

After the decline of the last dynasty and the establishment of the Republic of China in 1912, fewer smaller roads were inserted in the neighborhood and can be observed the street layout that is still preset nowadays. However, what most suffered of the modifications led by both political and natural phenomena during the 20th century were the residential compounds and the related *siheyuan*. Even though they maintained the formal typology, and, with few exceptions, the same height above ground, as mentioned above, the courtyard compounds were fulfilled with informal additions. These practices lead to the stratification of the dwelling space that still displays an important role inside the area.

Baitasi area is, nowadays a tassel inserted in a completely different urban pattern. Looking at the morphology of the built spaces, it could be noticed how the typology of courtyard houses, *siheyuan*, assembled around the *hutongs*, despite the modification of the 20th century and minor changes in the configuration, are still preserved. Comparing the dense and low-rise morphology of *Baitasi* to the surrounding compound appears to be in front of an unmatched piece of a puzzle. Differently, the surrounding compounds, particularly on the opposite side of Fuchengmen road, dramatically changed their morphology throughout the centuries, indelibly erasing the traditional courtyard compounds.

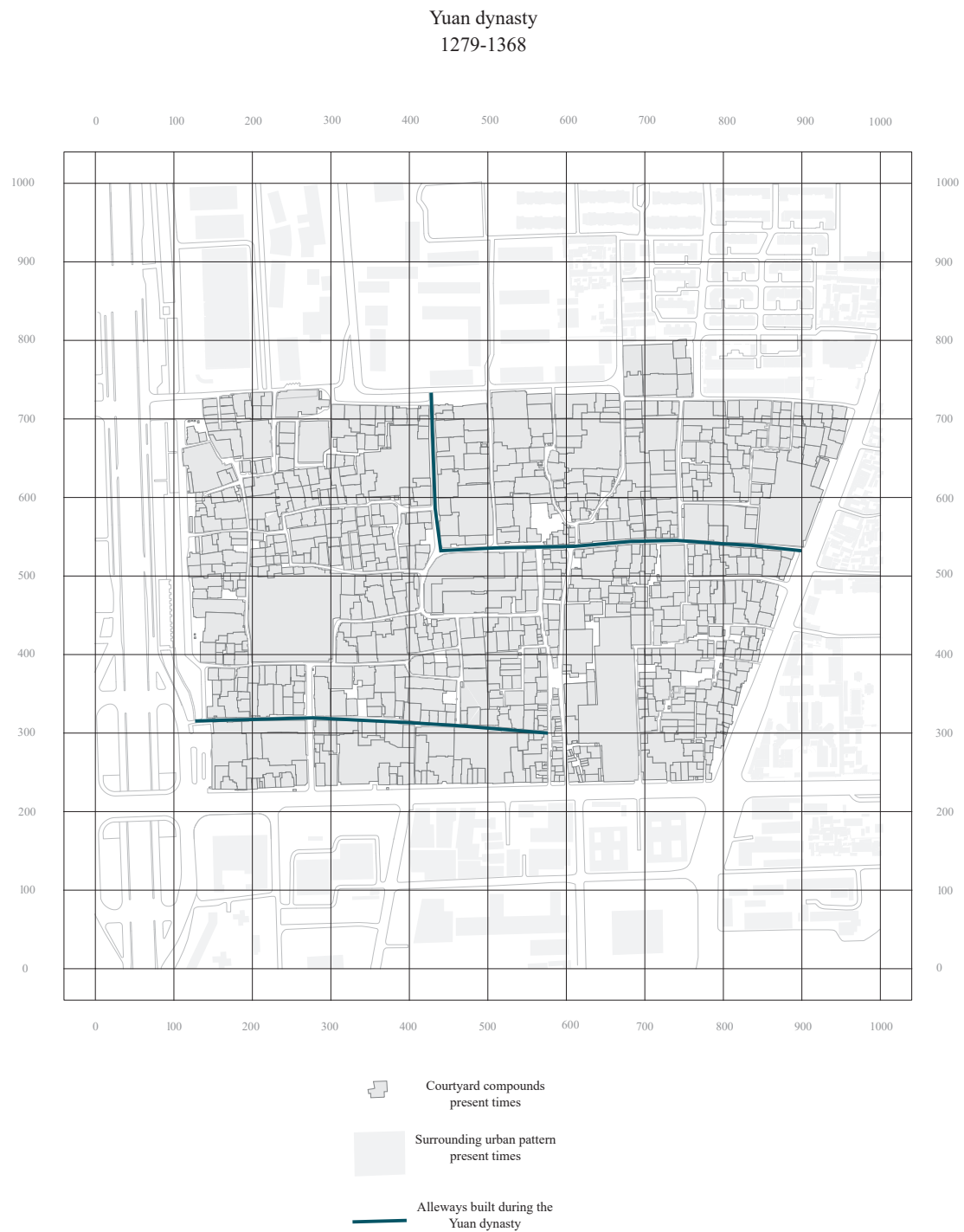
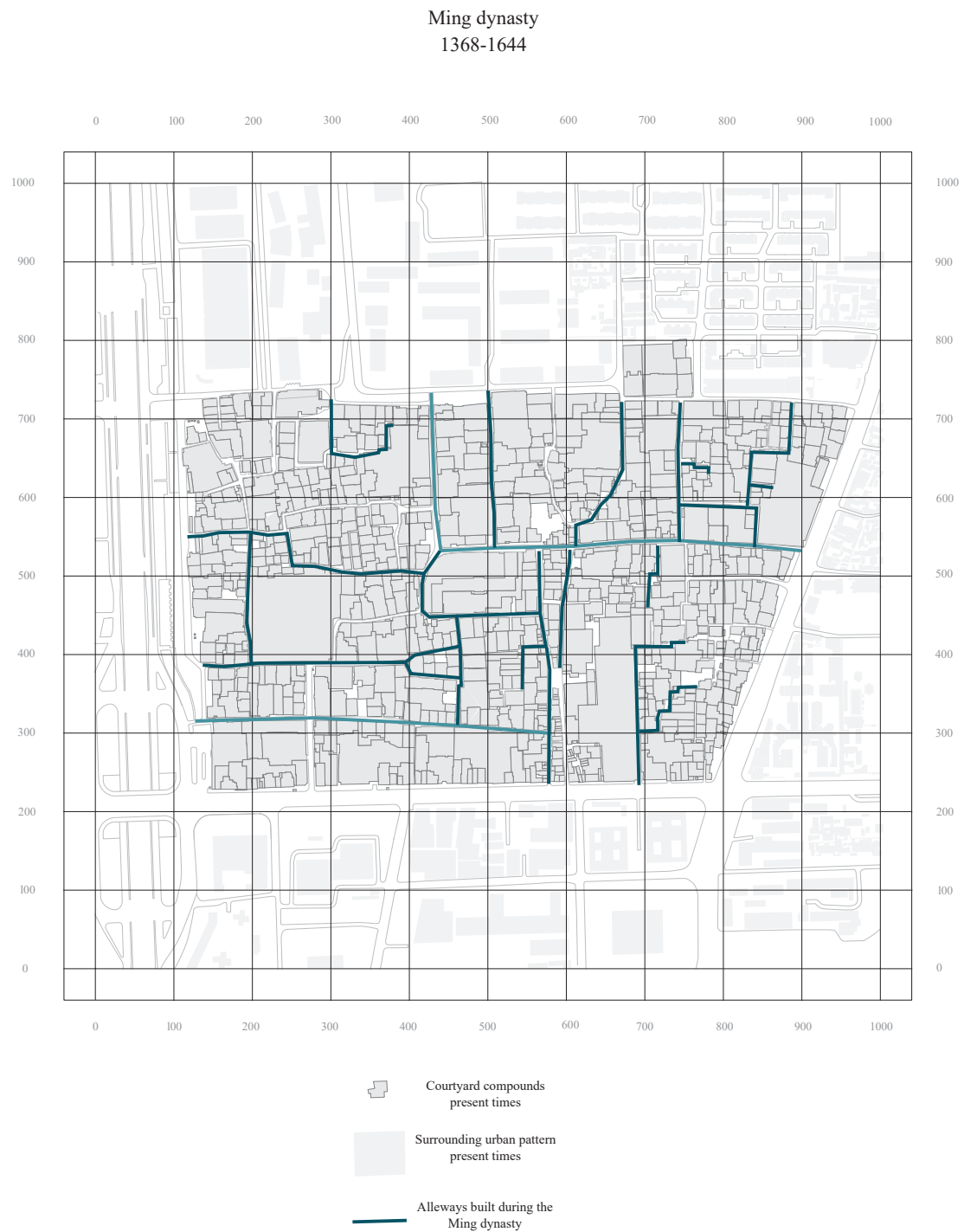


Figure 9 Baitasi, alleyways during Yuan dynasty,
source of data: (BaiTaSi ReMade, 2015), drawing elaborated by Lidia Preti



*Figure 10 Baitasi, alleyways during Ming dynasty,
source of data: (BaiTaSi ReMade, 2015), drawing elaborated by Lidia Preti*



*Figure 11 Baitasi, alleyways during Qing dynasty,
source of data: (BaiTaSi ReMade, 2015), drawing elaborated by Lidia Preti*

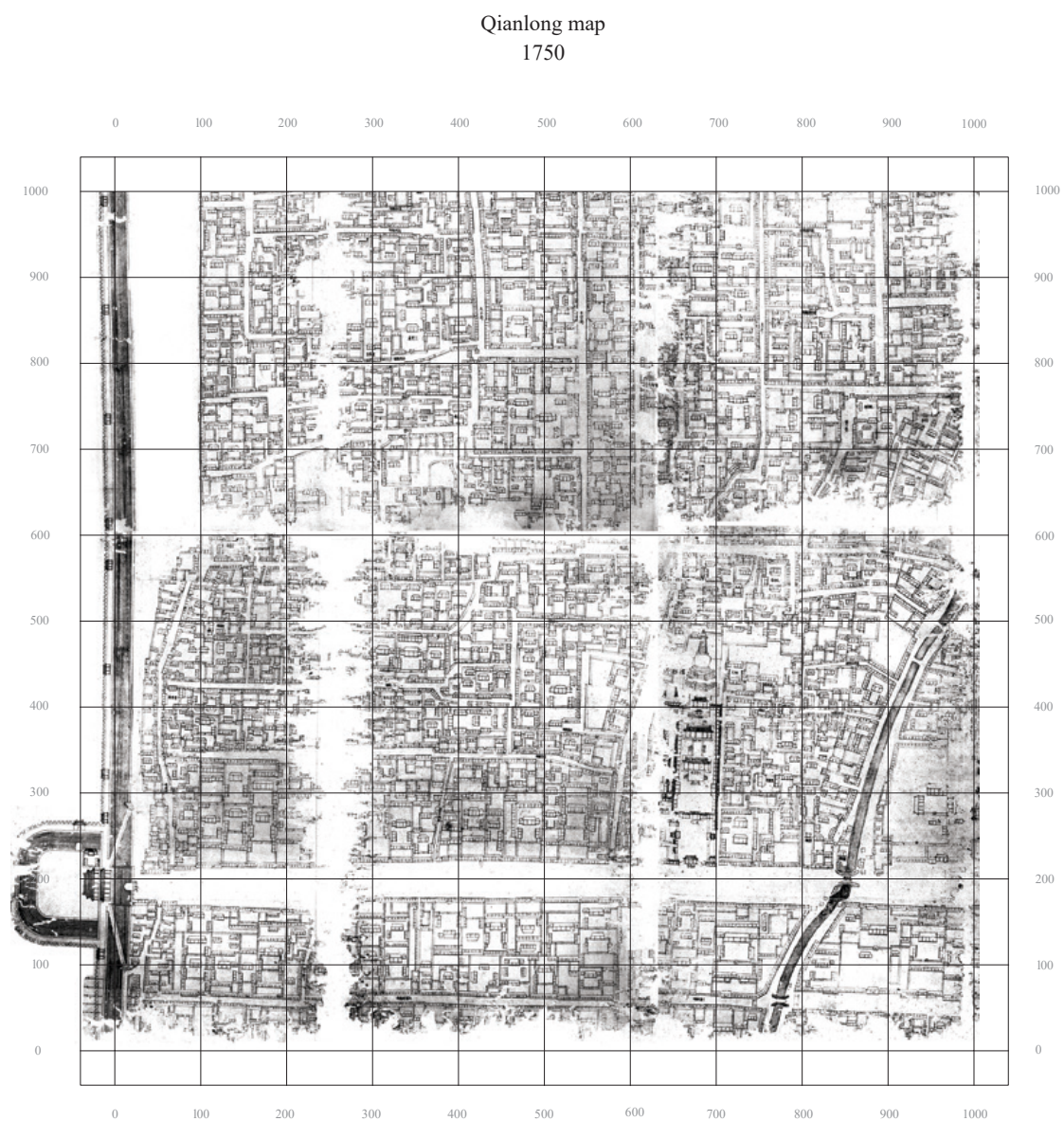
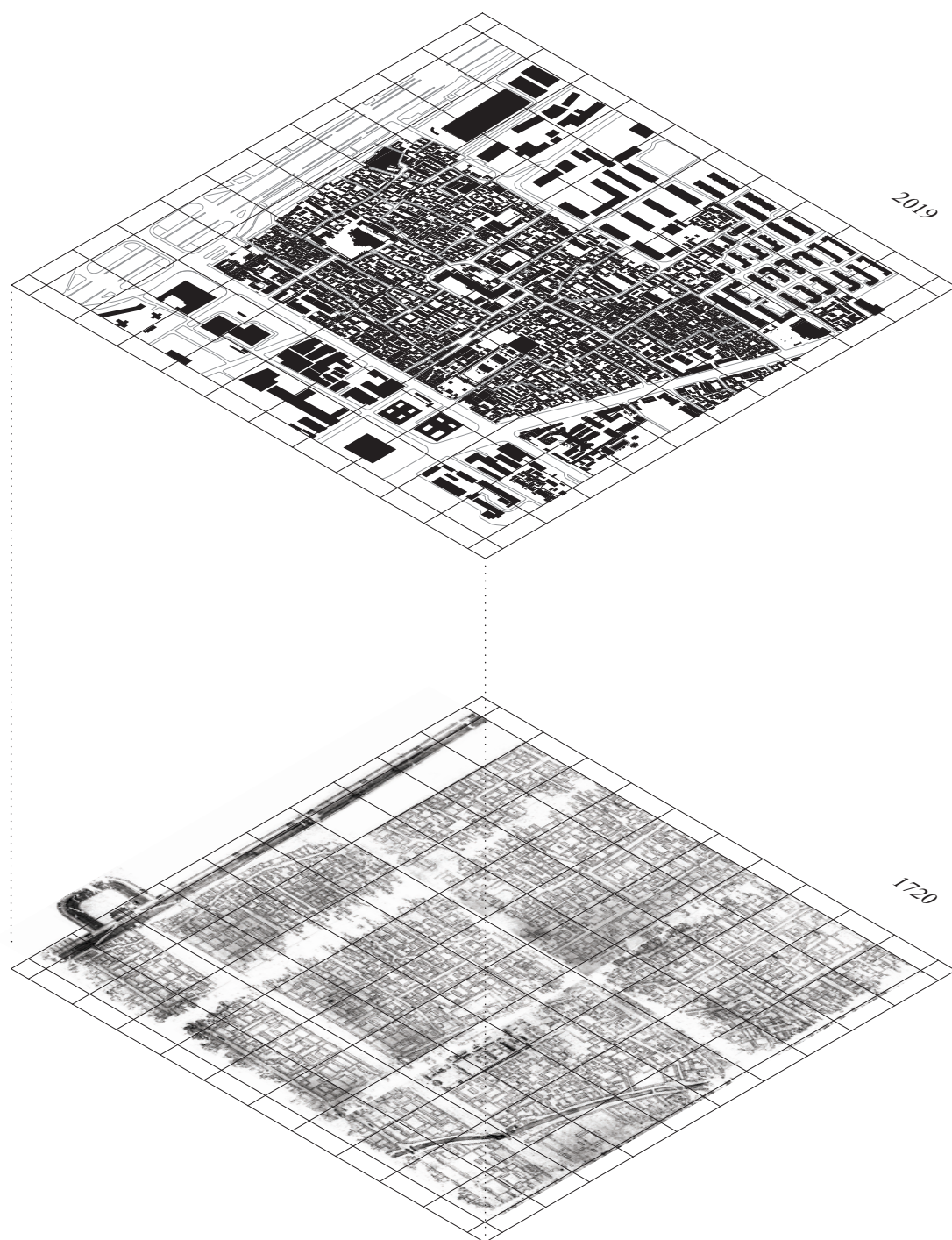


Figure 12 Qianlong map, 1750, source of map: (*Koainkahokurenrakubuseimukyo-kuchousashitsu*), drawing elaborated by Lidia Preti

Modern age
1911- today



Figure 13 Baitasi, alleyways during modern age,
source of data: (BaiTaSi ReMade, 2015), drawing elaborated by Lidia Preti

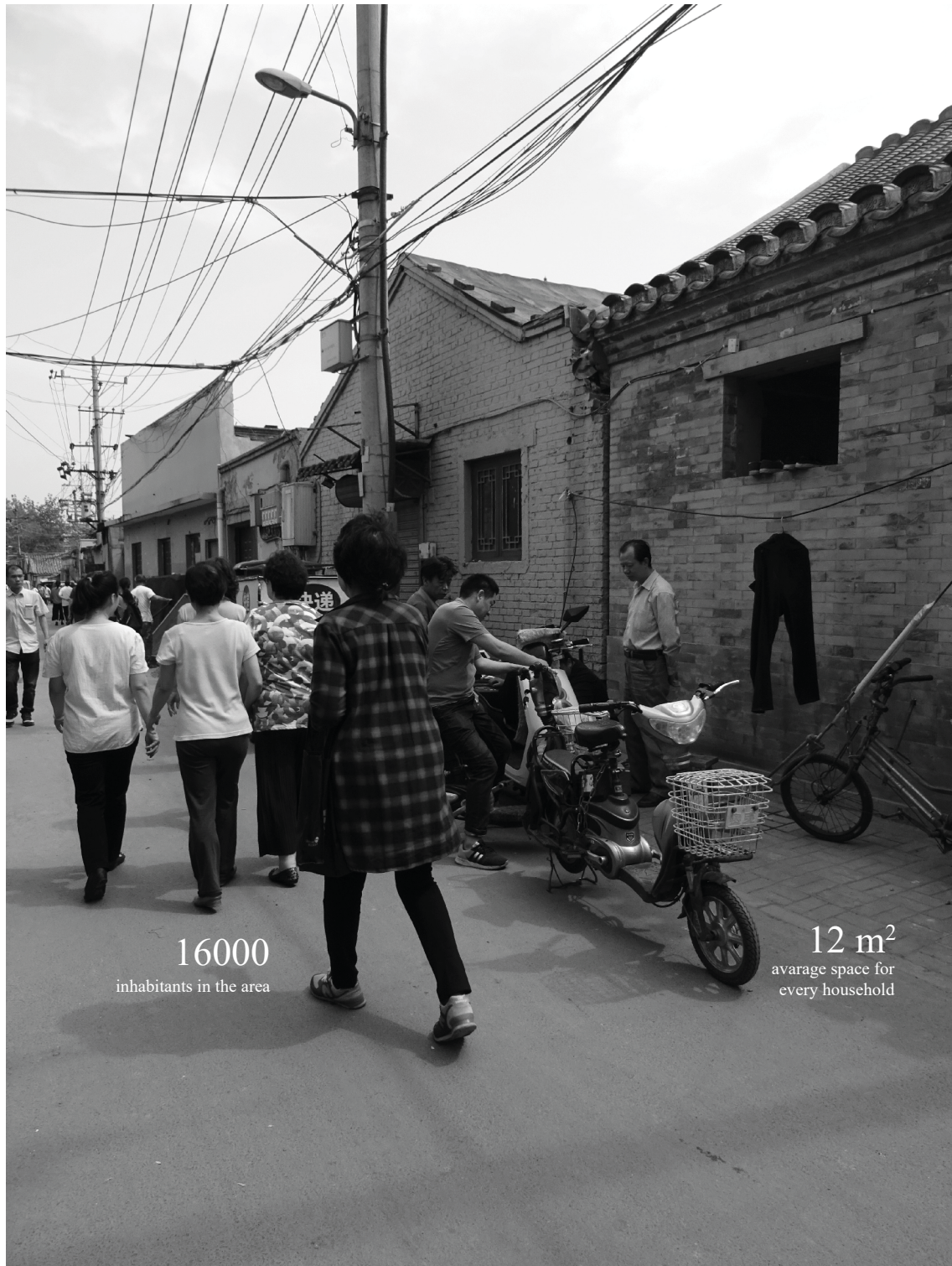


*Figure 14 Baitasi, comparison between 1720 and 2019,
drawing elaborated by Lidia Preti*

3.1 Spatial exploration, speculation on *Baitasi* space

Baitasi area, nowadays belongs to Xicheng district, west city district, one of the 16 administrative district of the city of Beijing. Facing Fuchengmen inner road it covers a zone of 370.000 m² (Wong, 2017). Observing the street system, the neighborhood appears framed by three main arterial roads that runs along the south, the east and the west side of the tassel, respectively Fuchengmen inner road, Zhaodengyu road and the second ring road. Left behind the wide and chaotic Fuchengmen inner road, it is noticeable an unexpected change of scale entering the widespread net of roads infiltrated in the dense area.

Walking through Fuchengmen road, the neighborhood is easily visible for the unique White pagoda temple that stands out in the south east corner of the area. In the same way the neighborhood is clearly distinguishable for its dense and low-rise morphology compared to the one of the surrounding compounds where the traditional courtyard compounds left room to high rise building. As a matter of fact, with the exception of few building the area is predominantly composed by low rise buildings, of one or two stories height. Statistic shows that a the majority of the area is residential, and in 2016 the number of registered inhabitants amounted to 16.000 (Baitasi Remade Project, 2017). Of this number approximately three quarters of the inhabitants are between 18 and 60 years old, and the remaining one quarter is represented by 12,7% of residents under 18 years old and 13% above 60 years old (LAVA 熔岩, 2015). Of the remaining land space is use approximately the 8% is devoted to the cultural sites, 5% to education and 8% to commercial activities (BaiTaSi ReMade, 2015). The commercial activities of the area are predominantly located in the southern part, the one facing Fuchengmen inner road as well as in one of the main arterial road orthogonal to Fuchengmen road, Gongmenkou road and they activities primarily consist of small retail shops.



*Figure 15 Inhabitants and density, source of data: (Baitasi Remade Project, 2017),
photograph and elaboration by Lidia Preti*



*Figure 16 Informal additions,
photograph and elaboration by Lidia Preti*



Figure 17 Inhabitants percentages, source of data: (LAVA 熔岩, 2015),
photograph and elaboration by Lidia Preti



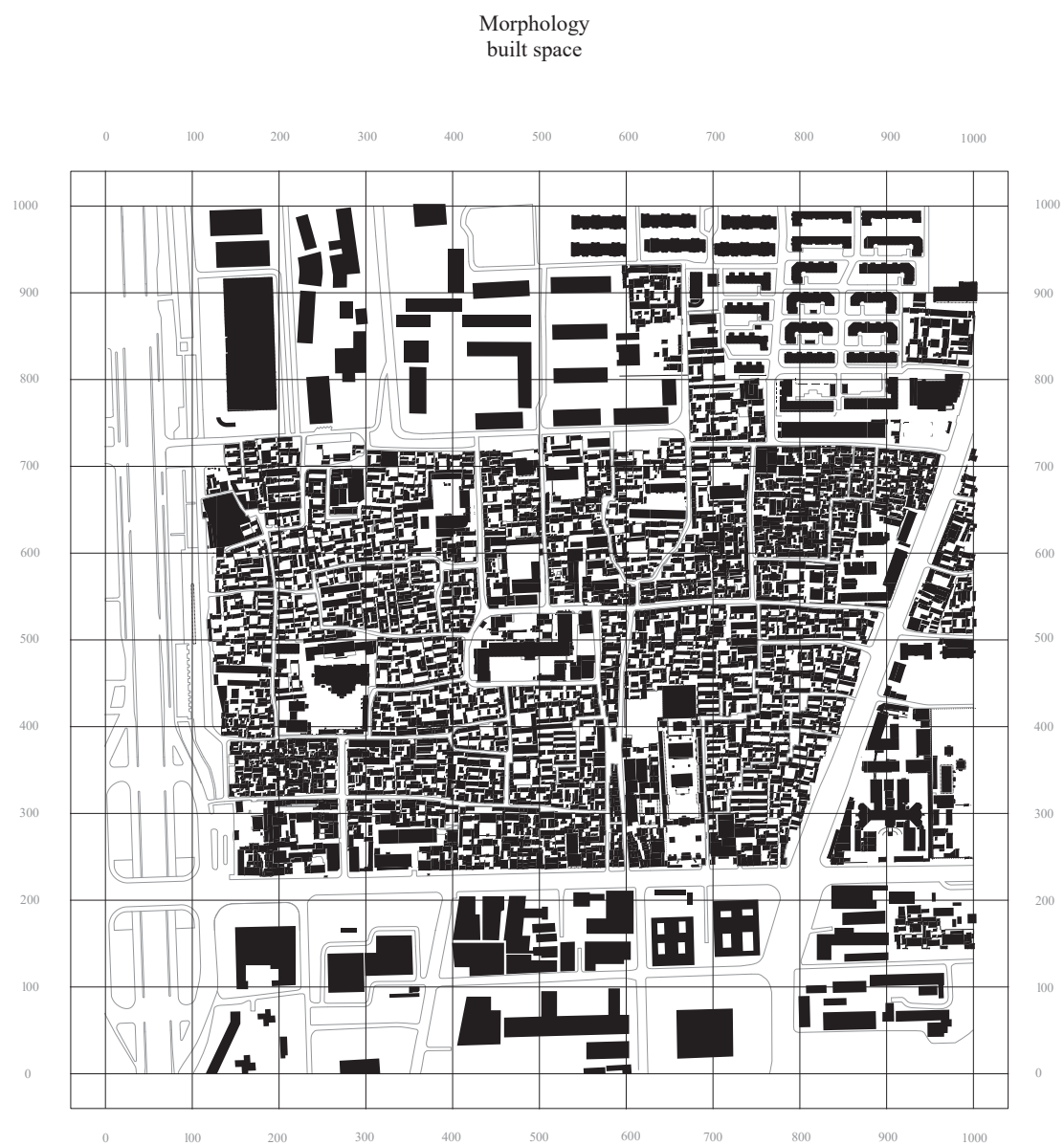
*Figure 18 Peculiarity of the area,
photograph and elaboration by Lidia Preti*



*Figure 19 Peculiarity of the area,
photograph and elaboration by Lidia Preti*



*Figure 20 Suspended spaces in the area,
photograph and elaboration by Lidia Preti*



*Figure 21 Baitasi map, morphology of the built space,
drawing elaborated by Lidia Preti*

Street system



Figure 22 Baitasi map, street system, drawing elaborated by Lidia Preti

Courtyard compounds



Figure 23 Baitasi map, courtyard compounds, drawing elaborated by Lidia Preti

Green system of the area

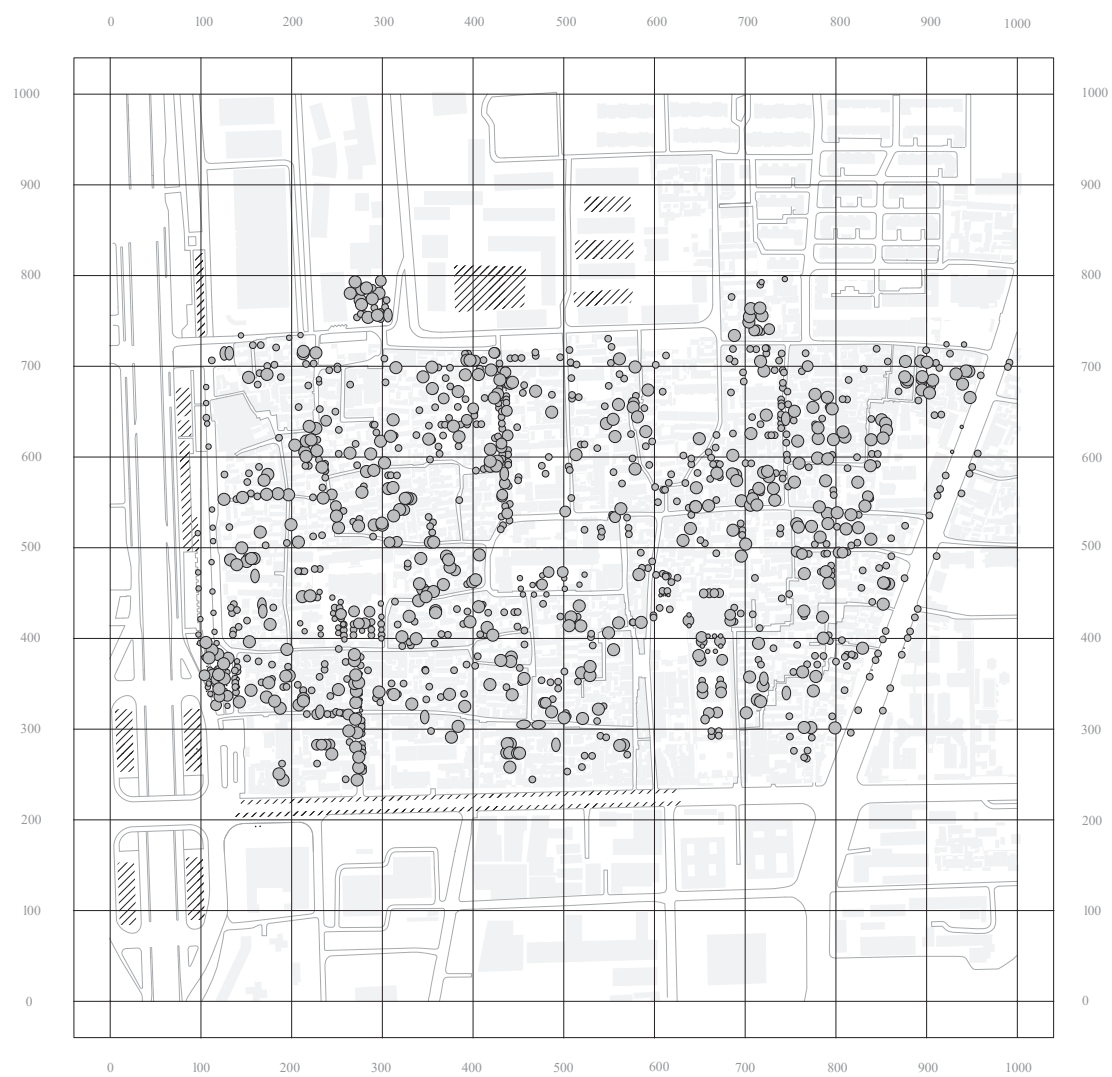


Figure 24 Baitasi map, green system, drawing elaborated by Lidia Preti

Commercial activities



*Figure 25 Baitasi map, distribution of commercial activities,
drawing elaborated by Lidia Preti*



Figure 26 Baitasi map, land use,
source of data: (清华大学建筑学院, 清华大学建筑与城市研究所, 北京市建筑设计研究院, 2010),
drawing elaborated by Lidia Preti



Figure 27 Scheme of the land use, source of data:
(清华大学建筑学院, 清华大学建筑与城市研究所, 北京市建筑设计研究院, 2010),
drawing elaborated by Lidia Preti

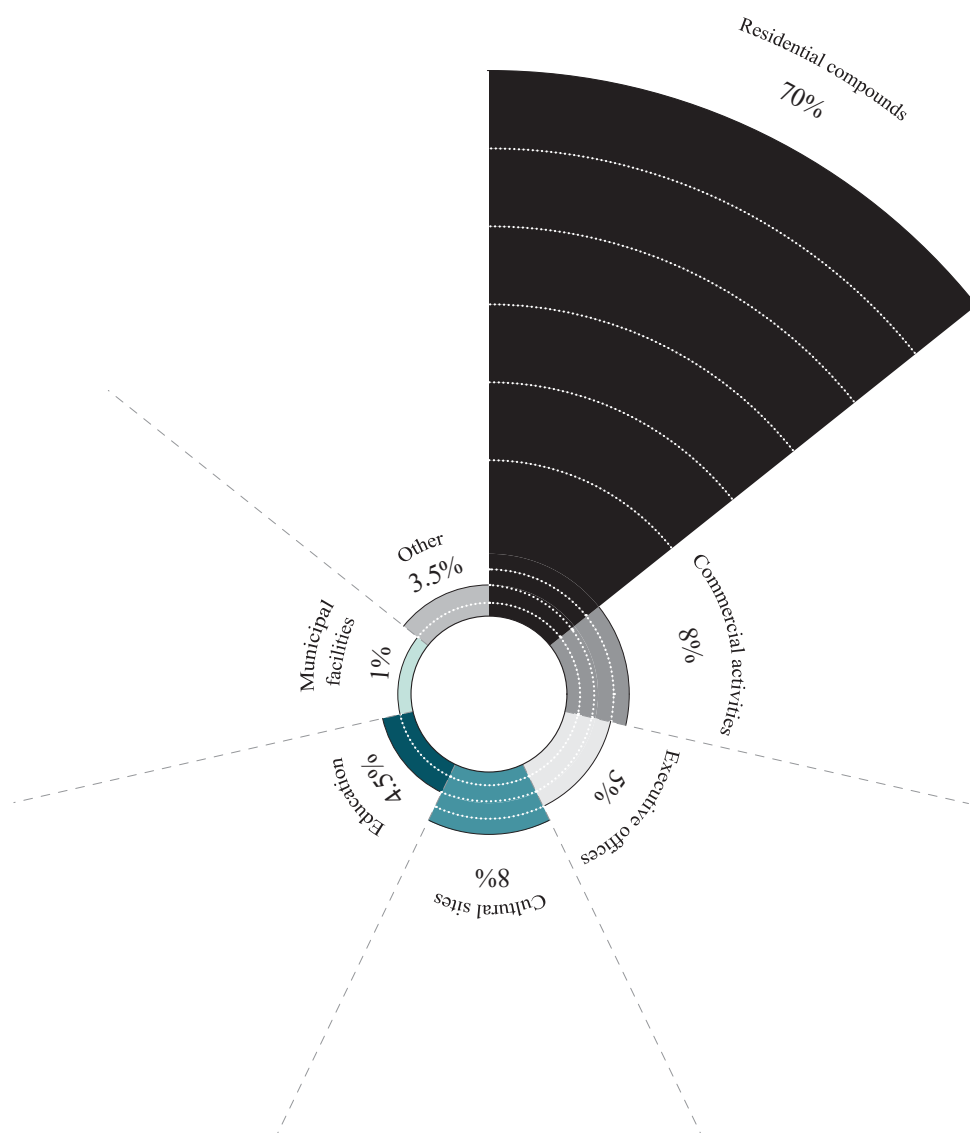


Figure 28 Percentage of land use, source of data:
(清华大学建筑学院, 清华大学建筑与城市研究所, 北京市建筑设计研究院, 2010),
drawing elaborated by Lidia Preti



Figure 29 Baitasi temple, photograph by Lidia Preti



Figure 30 Baitasi alleyway, photograph by Lidia Preti



Figure 31 Commercial street, photograph by Lidia Preti



Figure 32 Baitasi alleyway, photograph by Lidia Preti

3.2 *Baitasi stratification*

“But the city does not tell its past, it contains it like the lines of a hand, written in the corners of the streets, in the grids of the windows, in the handrails of the stairs, in the antennas of the lightning rods, in the auctions of flags, each segment lined with its vault of scratches, serrations, carvings, gills.”

(Calvino, 1972 p. 4)

Urban spaces are, at the beginning of the process, designed by urban planners and architects with a top-down process represented by a master plan and a methodology ascribable to the concept of “obsession with order” (Shaftoe, 2008 p. 82). However, once people start living an urban space, it becomes shaped and softened by the use that the inhabitants make of the space itself and it is transformed by the dynamics established in between the community. Anthropological studies assert that the manifestation of the layout of the urban space is the result of the outward display of the adaptation in the urban structure by social groups, (Wang, 2016) once people start living a space, they do not just dwell the built space itself but also the part of the city reinterpreting the connection between community and city (Bianchetti, 2016).

Along these lines, in 2013, a group of architects and designer, members of the architecture office Moto Elastico, based in South Korea, conducted a research in the city of Seoul, called *Borrowed City*. Seoul appears as the perfect example of an Asian metropolis where the public space is, in different occasions, “borrowed” by private citizens. The research, based on a detailed photographic report and related axonometric drawings, tries to put the spotlight on the use of the public space undertaken by people. The terminology Borrowed city refers to the way in which people use the public spaces as private one,

explain the architects. There are spaces, designed as public ones that are used as a platform for different functions furthermore, according to the amount of time that people spend in these places using them as private ones, new interactions and new centers of gravity are created in a community that share the same area. Once we start using the public space, new interactions are defined. The authors define this phenomenon as a “Metropolitan Interior” meaning that the public streets are used in a similar way to the rooms of a dwelling, customized to accomplish a personal comfort (Bruno, et al., 2013).

Moving the attention to *Baitasi hutongs* in Beijing, the concept of “borrowing the space” could be applied to the hybrid use of the spaces displayed by the inhabitants, where the dividing line between indoor and outdoor spaces is blurred. The spatial transformation of the residence compounds was both dictated by the policies as well as the resident activities and physical use of the space related to people’s movement or action inside the space (Wang, et al., 2016).

According to Michel De Certeau, author of the book “The practice of everyday life [...]” the space is a practiced space and “it only exists when it has interactions with the people who live the space itself, who shape it and interact with it” (De Certeau, 1988 p. 117). Urban spaces where people live are fulfilled with mark and traces that they leave on the place itself. In his studies on the urban space, De Certeau questions the use of the spaces, investigate how inhabitants can identify themselves in a place and he analyses the tactics people use to appropriate a space. He asserts that is noticeable at how every inhabitant is led to “colonize” the public spaces putting some element in the collective corridor to progressively appropriate the common place. The spaces reflect moment of each of us. In this way starting from a micro-scale, we gradually appropriate the collective space.

Once these studies accomplished by Michel De Certeau in a western environment are lowered down in the Chinese context, many similarities can be found in the description of the use of the space as demonstrated by the research realized by a group of Chinese

scholars (Fang Wang, Xiaoyu Liu, Yueyi Zhang) in the area of Dongsisantiao *hutongs*, Beijing. The researchers outline the phenomenon of the autonomous modification of the residential blocks and landscape by the inhabitants of these spaces, showing the impact these practices have on a spatial transformation. As observed, as times goes by, the *hutongs* in Beijing have experiences a significant change in the residential compounds leading to the modification of urban modalities inside these spaces. As a consequence of this tendency can be identified in different form of appropriation of the space by the residents as the use and stratification of the inner courtyard to accomplish the daily life demands (Wang, et al., 2016).

Undeniable consequence of the increase of the building density is the decline of the living condition as much as the slump of the original courtyard system. The community in the neighborhood are still present and the modification of the traditional urban fabric tightened these dynamics. Recent studies carried out in the recent years, have demonstrate how the closest relationship in between neighbor and different generations are localized more in these areas than anywhere else in the city (Blofeld, 1989) creating the so called “lane culture”, belonging to Beijing and its *hutongs* (Wu, 2000). In some part of the city the policies that set up the special configuration are not responding anymore to the new living necessities and the inhabitants are shaping and adapting the architectural space in a spontaneous form. On the contrary the distribution of the architectural spaces leads the people to gather into groups and enhance the social relationships. Despite the high-density living conditions, the people living in the *hutong* shows a strong cohesion and vitality between the community (Wu, 2000). It can be regarded as a strategy to survive to the urban transformation.

The space, incapable to fulfill the needs, explodes pouring into the common spaces outside the domestic walls creating a private and intimate use of the common spaces.

Informal additions



Figure 33 Baitasi map, informal additions, drawing elaborated by Lidia Preti

3.3 The concept of intimate space

“Distance, proximity, density redefine the balance between different public spaces, they reverse the conventions between inside and outside [...]. It is a space that is always crossed by something else. This is its value. The other is the body.”²

(Bianchetti, 2015)

The city and its spaces are constantly changing and the rigid and constrained category that used to defined spaces as private, semipublic and public should be reinterpreted in the changing of the dynamics in the city. The investigation of the relation between individual and public space can be analyzed under three different forms: *Intimité*³, hiding from the public, *Extimité*⁴, being in the public, and *Public*⁵, read as the traditional concept of public spaces. The first term, *Intimité*, describes the intention of people to be alone in an open environment, outside the walls of the house, in between the others. On the other hand, the second term mentioned, *Extimité*, is used to describe the desire to create connection and interactions with other elements of the society, it can be identified as a drive to social interactions (Bianchetti, 2016). This division of the concept of uses related to the space allow to read and describe the blurred and smooth division that we can find in the *hutong* environment.

² Translation by the Author.

³ From the French *intimité*, privacy.

⁴ From the French *extimité*, term used to describe the aim to endorse a part of the private life in public.

⁵ From the French *public*, public, referred to the traditional public spaces.

“Public spaces used as internal, private ones [...].

Heterogeneous spaces, pulled out, abrasive, fragmentary: fall down

the claim to a public space smooth and homogeneous”

(Bianchetti, 2016)

The indoor and outdoor spaces in the urban environment, have mainly been designed as two different entities nevertheless, the widely used dichotomic distinction in between spaces is not sufficient anymore to describe all the urban areas (Transitional Spaces: Between Indoor and outdoor spaces, 2013). Regarding the traditional division of spaces, can be observed a reverse of the trend towards a more mixed use of the space itself. The traditional clear division in between indoor and outdoor spaces in the *hutong* system is blurred and not clearly visible anymore. In this framework, the social interactions that have always been a key feature of the so called “lane culture”, are nowadays still fundamental to better understand the phenomenon and to observe how the social practices unquestionably display a role in the spatial changes of the area.

The concept of transitional space refers to a third element in the dichotomy of indoor and outdoor space and concern a space whose use is limited, traditionally are spaces not planned for a continuous use in time. The transitional spaces possess some of the characteristics of both indoor and outdoor spaces (Transitional Spaces: Between Indoor and outdoor spaces, 2013). However, due to the change of the needs of the society, the distinction in between the two entities it is not a clear cut anymore instead it is blurred. Nonetheless, in this particular typology of space, new social dynamics take place.

The concept of the transitional space leads to one of the studies on Urban Interiors, that can be regarded as an investigation on the relationship between the urban space and the use of it in certain parts of the city. The aim of the study of the Urban Interiors it

is to acquire a knowledge around the dynamics of the contemporary space and focus the attention of the thin dynamics in between people and open space (territoridellacondizione, 2015). The space itself appears shaped and molded by the innate necessity of the human body to have a relationship with others. As a matter of fact, places designed as spaces of the city, are transformed by the users into spaces that act as an extension of the private and indoor space, incapable of sustain the change of the living necessities of the community. The acquired knowledge would place the architect and the urban planner in a different position compared to the past. Indeed, the change of dynamics leads the architect to situate his work not anymore in a process up-down therefore, a bottom-up perspective which would embrace and facilitate the existing current dynamics of the spaces.

In the Chinese environment, the dynamics that used to regulate the urban space of the *hutongs* in the past changed and are not responding anymore to the new necessities expressed by the community. In origin the courtyard was designed as a shielded space, a common space for the families, as a bubble embraced by buildings and walls used as membrane for the relationship between the indoor and outdoor spaces. Therefore, as mentioned above, the socio-cultural dynamics changed and lead to the dysfunction of the spaces, reason why also the way in which people use the outdoor space changed. Small plazas are created in the road crossing, in between walls, across small corridors or on the stairs in front of the houses.

3.4 *Hutong Interior*

Based on our knowledge, private and public spaces have been predominantly described as two different entities. The etymology of the first term comes from the Latin word *privatus* and is defined as the contrary of the term *public* and meaning reserved to one person, not shared in between people. On the other hand, the etymology of the second element comes from the Latin word *pùblicus* which refers to the word *populus*, meaning community, people, the origin of the term itself highlights the nature of the word of gathering and bringing single individuals to turn them in a community. Shifting these two concepts into the city environment, the notion of private space mainly refers to the dwelling dimension where the spaces are enclosed by walls and allotted in between people sharing a close relationship. On the contrary, the notion of public mostly refers to an open place accessible to everyone, a place where people come together and interact with the city itself. However, with this in mind, it is indisputable that the traditional notion and division of spaces is changing, and we should read these spaces under a different light. This change of direction requires a new approach to the design of those spaces where people can be part of the urban life (Gegl, et al., 2009). Referring to the research carried out in Seoul by the architecture office Moto Elastico mentioned above, the authors describe the phenomenon observes as “Metropolitan Interior” meaning that the public streets are used in a similar way to the rooms of a dwelling, customized to accomplish a personal comfort.

However, what happens to another Asian metropolis like Beijing? Can we observe and recognize the same practices? According to the research carried out for the thesis work, the *hutongs* still existing in the core of Beijing can be the breeding ground for a similar study. Reading the spaces inside the neighborhood it is clear how the traditional distinction in between spaces is blurred and dissipated. The *hutong* system has a small-scale of spaces, the spaces present an intimate dimension where people can interact and

reverse the daily activities on the street, seen as an extension of the inner private spaces (Hagenbjörk, 2011).

In this trend, the concept of *Hutong Interior* unhinge the traditional distinction between public and private spaces, indoor and outdoor ones, blurring the boundaries and opening a perspective of the “space in between”, the observation of the space and how it is used, the actors of the process and how they are irreversibly changing the space from inside. The juxtaposition of the two words *hutong*, normally referred to a street therefore to an outdoor space of the city, and the term *interior*, referring to the inner part of a space, creates an oxymoron that enhance the tendency of people of living outdoor spaces as inner ones.

*“Public spaces do not exist as static physical entities
but are constellations of ideas, actions, and environments.”
(Miller, 2009 p. XI)*

Therefore, the question is what is happening to the traditional division of spaces? Undeniably each country has a distinct and peculiar history and economic development that affect the urban policies and the related projects of the space. Considering the notion of indoor and outdoor space in the Chinese environment numerous factors influenced the distinction of these two entities. The permeability of the urban spaces is certainly not a characteristic belonging to the city of Beijing. Walls, enclosures and gates used to delineate the city planning and those elements still display a role in the city layout where are still easily recognizable the monumental center represented by the Forbidden City, and the monumental axes designed during the Imperial time. When it comes to the definition of spaces traditionally the open spaces were allocated to the high rank families (Shi, 1988) and the street, typically used for connections becomes places of interaction at the

social level, especially considering the small lanes of the traditional residential compounds: the *hutongs*. As a matter of fact, in Chinese's cities, the street can be regarded fully fledged as a public space and as a peculiar element that embrace the sense of community and provide a deeper knowledge of its inhabitants and the related daily practices (Wang, 2003).

“This outdoor space functioned in different ways according to the seasons: in winter, when residents had to move from one building to the next, they crossed the courtyard quickly; in warm weather, they shifted some of the daily routines outside, enjoying the square patch of sky”
(Hessler, 2007 p. 201)

Outdoor spaces designed for “something else” are molded by new practices. A plastic space with a strong potential is transformed according to the necessities of the users. The way in which the external space is lived as an extension of the private one is noticeable in every corner of the area. Some of the uses of the space are not permanent, they show little and volatiles signs of communities living together, some others are more structured and permanent to denounce the new necessities of the inhabitants in a place that lost his original archetype.

The system, as it was prefigured centuries ago, does not work anymore, is not supporting the necessities displayed by the people, therefore, we have to rethink it and give suggestions to adapt it to the necessities. Perhaps the paradigm shift changed, and we should reflect and investigate new way of living the spaces and the related connection public-sharing practices displayed in some tassels of the city (Sampieri, 2011).



Figure 34 Example of hutong interior Baitasi, photograph by Lidia Preti



Figure 35 Example of hutong interior Baitasi, photograph by Lidia Preti



Figure 36 Example of hutong interior Baitasi, photograph by Lidia Preti



Figure 37 Example of hutong interior Baitasi, photograph by Lidia Preti

3.5 Transformation scenarios: Beijing Design Week



Figure 38 Logo Beijing Design Week 2017 Baitasi, (Wong, 2017)

Parallely, in this inspiring background of transformation, *Baitasi hutongs*, has been the fertile ground for some urban experimentations: the Beijing Design Week. The Beijing Design Week, carried out for more than eight years, is the ideal framework for the design and architecture landscape to create installations in iconic urban areas of the city of Beijing accessible to the public and citizens. It is a process that involves professionals coming from different background to reflect and discuss about the contemporary city and an attempt to solve some of the issues identified in the different areas providing design solutions. The experimentation in the renewal perspective for the *Baitasi* neighborhood started for the first time in 2015. However, in 2015, was not the first time that a group of traditional *hutongs* was the framework of the Beijing Design Week as a matter of fact, in 2011 the *Dashilar hutongs* were the scene of the design fair. Nevertheless, the two areas are widely different, if on one hand *Dashilar hutongs* display many gentrification processes, on the other hand *Baitasi* seems to endure to the big renovation policies.

In the occasion of the launch of the Beijing Design Week 2015, the curator of the exhibition Beatrice Lanza raised the question on how to revitalize *Baitasi* enclave in order to attract people without destroying the melancholic attachment of the community to the area (Lawrence, 2015). Therefore, the process aims to proceed through a bottom-up approach that involves the residents in order to avoid the superimposition typical of the gentrification process. During the first phases of analysis of the neighborhood, the design studio LAVA, based both in Netherlands as well as in China, started a magazine called LAWAII entirely dedicated to *Baitasi* to investigate and witness numerous aspects of the area (Cordoby, 2016).

In 2017, following the trend started two years before, the Beijing Design Week was held in the *Baitasi* neighborhood with the aim of renew some of the courtyards of the area and a focus on the public spaces of *Baitasi* solving throughout a design solution the living conditions of the residents of the neighborhood. The density of the neighborhood, the lack of essential facilities, the overcrowding of the courtyards, the related living spaces and the lack of community places are factors immediately recognizable at the first sight. Forasmuch as this reason appears crucial an intervention to improve the quality of life of the inhabitants and an occasion to attract people and tourists to revitalize the area. In this perspective, the 2017 exhibition in the *Baitasi* areas was called “Towards new neighborhoods Baitasi remade 2017”. The fair aimed to collect design proposals for the courtyards and the public *hutong* space in order to revitalize the neighborhood and improve the life quality of the inhabitants. In this transformation scenario, 35 different projects were selected to be integrated in the existing urban fabric with a process that can be called “archi-puncture”, small scale interventions “injected” in the historical urban fabric without destroying the character of the area. The area was studded with pavilions realized by numerous teams of architects and designers what collaborated to enrich with attractions the place and living conditions.



Figure 39 *Lawaai* magazine, *Future of Baitasi*, (Cordoby, 2016)

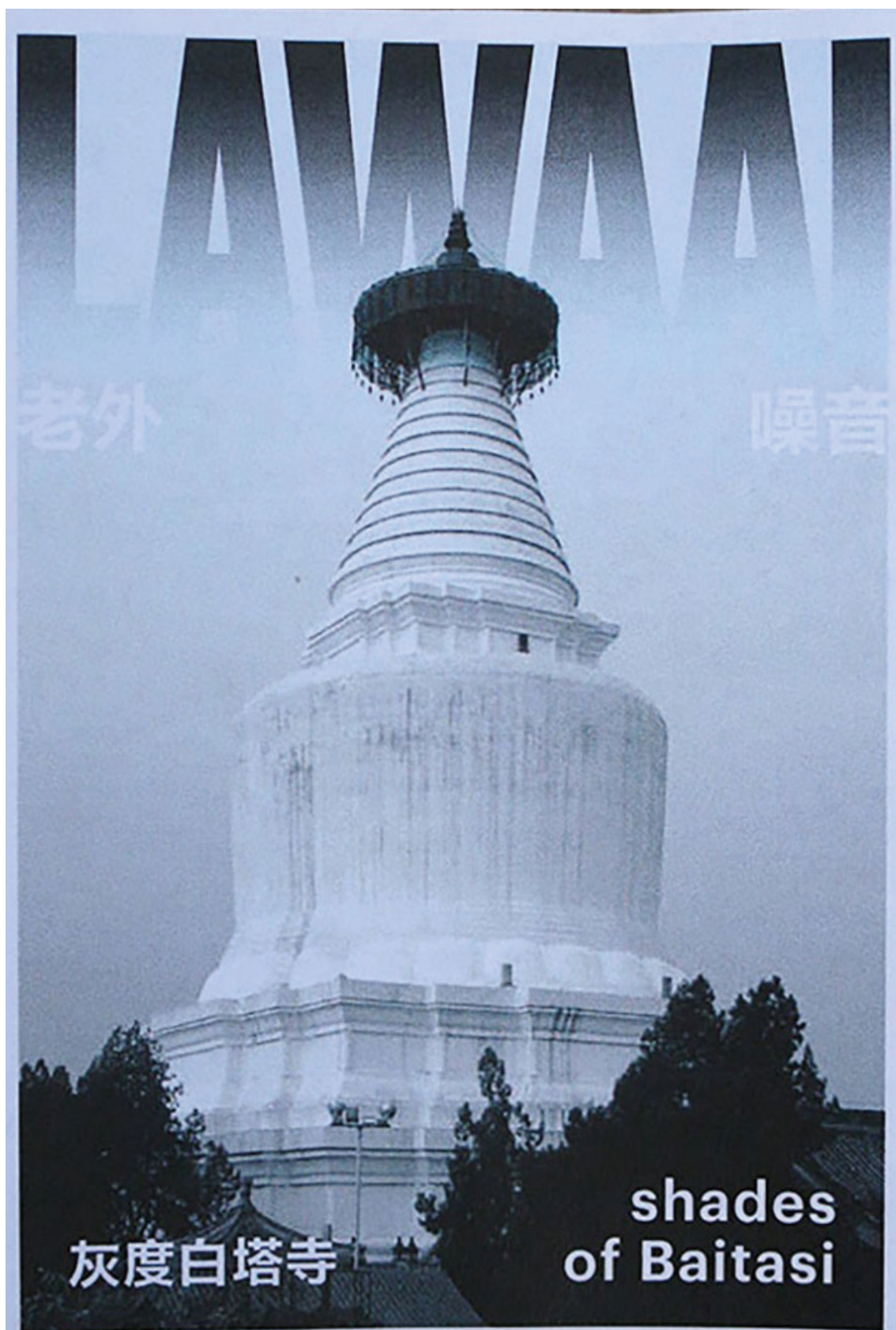


Figure 40 *Lawaai magazine, shades of Baitasi*, (Cordoby, 2016)

3.5.1 Hutong Playground, Polito pavilion

The Beijing Design Week, held in the *Baitasi hutong* area from the 23rd of September to the 7th of October 2017, as mentioned above, focused on the realization of micro-scale urban intervention in an historical urban area. Among the different courtyards, the Polytechnic University of Turin, in collaboration with the EPFL of Lausanne, took part in the exhibition and realize an installation in one of the historical courtyards of the area. Entering in the courtyard number C18 during the Beijing Design Week brings back childhood memories. “Hutong playground” is the name given to the temporary installation realized by the team and represent an interpretation on the concept “Making neighborhoods” proposed by the event. Taking an existing courtyard in the area, after restoring it to the original image, taking off the informal additions, the built structure and the courtyard was turned into potential spaces for the temporary installation that lead to the activation of a tassel inside the neighborhood. The courtyard focuses of the theme of the game play and reads and reinterpret under a new light the traditional division of public and private spaces in the *hutong* system. Indeed, the aim is to integrate a public function as a playground into a traditionally rigid private space as the one of the courtyards, the provocation is the integration of a distinctly private space as the one of the courtyards, with a clearly public space as the one of the playgrounds, traditionally designed outside the dwelling space (Bideau, 2017). The challenge is overcome throughout the creation of a pavilion that lowers down a space with a public dimension into an intimate one that embrace in between the buildings the new surfaces. The aspiration is to create a new aggregation space that enable the courtyard to gather the neighborhood residents as well as an element to connect with the surroundings parts of the city. The domestic and intimate sphere is, as a result, is infilled with a public space which claim its own identity inside the neighborhood.



Figure 41 Poster Hutong playground, photograph by Lidia Preti



Figure 42 Hutong playground installation, table tennis, photograph by Lidia Preti



Figure 43 Hutong playground installation, Chinese chess, photograph by Lidia Preti

3.6 What happens to the suspended spaces?

The provocation risen from the project “*hutong* playground” realized for the Beijing Design Week 2017 by the Polytechnic of Turin can be regarded as a consistent starting point for a reflection on the theme. The reflection unavoidably leads to question if it is possible to blend indoor and outdoor spaces into a homogeneous system. The transformations realized for some of the courtyards in the area during the Beijing Design Week seemed to unhinge the traditional rigid division of the indoor and outdoor spaces into a merged system of dwellings and public spaces.

Nevertheless, what happen to these spaces once the exhibitions are over? What is the foreordained destiny for these spaces? They appear to be turned off and closed after the conclusion of the exhibition remaining quiescent, they are turned into urban suspended spaces, incapable to be used by the local community and acting as urban voids inside the neighborhood. Deconstructing the traditional concept of the courtyard spaces related to the dwelling dimension these empty courtyards could become potential spaces for the neighborhood and turned into a spatial support, as a surplus space that can be adapted to the needs of the community. The space should leave room for opportunities, for things to happen in a natural way avoiding the rigidity. As shown by the projects, the traditional notion and division of spaces can be unhinged and reinterpreted, seeing the merging of public and private spaces as a plausible solution for a new urban typology. The traditional interpretation of the space can be reversed, considering the *hutong* space as potential space for transformations. The *hutong* can be regarded as made of a malleable and tender space, that can be shaped and transformed supporting the needs of the inhabitants. Closing the doors to the nostalgic and romantic feeling of the past, these dynamics of change and these new practices of use of the public space, can be regarded as a tremendous potential for the city and a design tool utilized for the interest and benefit of the community.

Courtyards Beijing
Design Week 2017



*Figure 44 Baitasi map, courtyards Beijing Design Week 2017,
drawing elaborated by Lidia Preti*



*Figure 45 Baitasi map, vacant courtyards after Beijing Design Week 2017,
drawing elaborated by Lidia Preti*

3.7 Analysis of a tassel in the area

“The neighborhood was quiet – the streets were too small for buses [...]. Nothing was taller than a few stories, but many buildings were single-level structures, siheyuan. Unlike the high-rise sections of the city, they weren’t echoes, whose sounds were few and distinct; wind rustling in the streets, rain slipping across tile roofs.”
(Hessler, 2007 p. 199)

After a detailed analysis on the whole area, in order to structure the study, the research conducted, has been addressed to a specific tassel inside the neighborhood. The tassel chosen is located in the south-east part of the area, juxtaposed to the alleyway on the side of *Baitasi* temple. The main access is through the narrow alleyway that runs along the walls of the White Pagoda Temple creating a remarkable cut inside the area. The land use of the tassel is mainly residential and appears protected from the high-trafficked roads on the east and south side. Leaving them behind and overstepping the first hundred meters of the alleyway, the loud noises of the main roads leave room to a quieter space with a totally different scale. The sounds are muffled as in a countryside village, the hum of the cars and big trucks fade away leaving room to the lighter noise of the scooters and chattering of people. Moving further in the alleyway, smaller lanes come into view in between the buildings and show small daily life scenes that arouse the curiosity to explore them. The dense morphology of the tassel leaves a narrow space in between the courtyard compounds to walk through the neighborhood, surrounded by the walls, the perception is to walk through a maze of buildings.

Moving in the smaller alleyways the talks become more distinguishable and the community cohesion more visible. Every corner, every turn, every alleyway, is a thriving

space full of surprises. Delving into the neighborhood, the layering of informal additions created by the inhabitants are distinguishable in between the historical texture of the buildings, overcrowding the passages in the already narrow alleyways. Makeshift spaces pour into the surplus space left in between the historical pattern of the neighborhood. Are recognizable both permanent structures as outdoor kitchens, as well as more ephemerals constructions realized with makeshift materials. The last layer of addition is realized with objects and personal belongings placed outside the dwelling space as an attempt to exhibit the lack of space. Bikes, motorbikes, drying racks, chairs, stools, tables, toys and so forth, flood into the outdoor space and become part of it.

However, what is catching more the attention are the groups of inhabitants and their behavior between each other as well as with the architectural space. The overcrowding of spaces and courtyards seems to lead the inhabitants to find space elsewhere to let the social relations occur. People are poured out into the common spaces as the alleyway and corners in between the buildings. The built space, due its fragmentation into smaller units, appears incapable to meet the needs of the families living in the area, furthermore, the courtyards, once designed as a common space for the families, are now overcrowded and unable to act as gathering spaces. Consequently, the daily activities are poured outside looking for space outside the domestic walls to be used. Each scene captures the attention of who is walking inside the area, people sitting on the front door step, children playing in each corner which is not occupied and running throughout the alleyways as in a labyrinth, people chattering and plying Chinese chess with an improvised chessboard, everything enlighten the curiosity.

*“Life in buildings and between buildings seems
in nearly all situations to rank as more essential and
more relevant than the spaces and buildings themselves”*

(Gehl, 2011 p. 31)

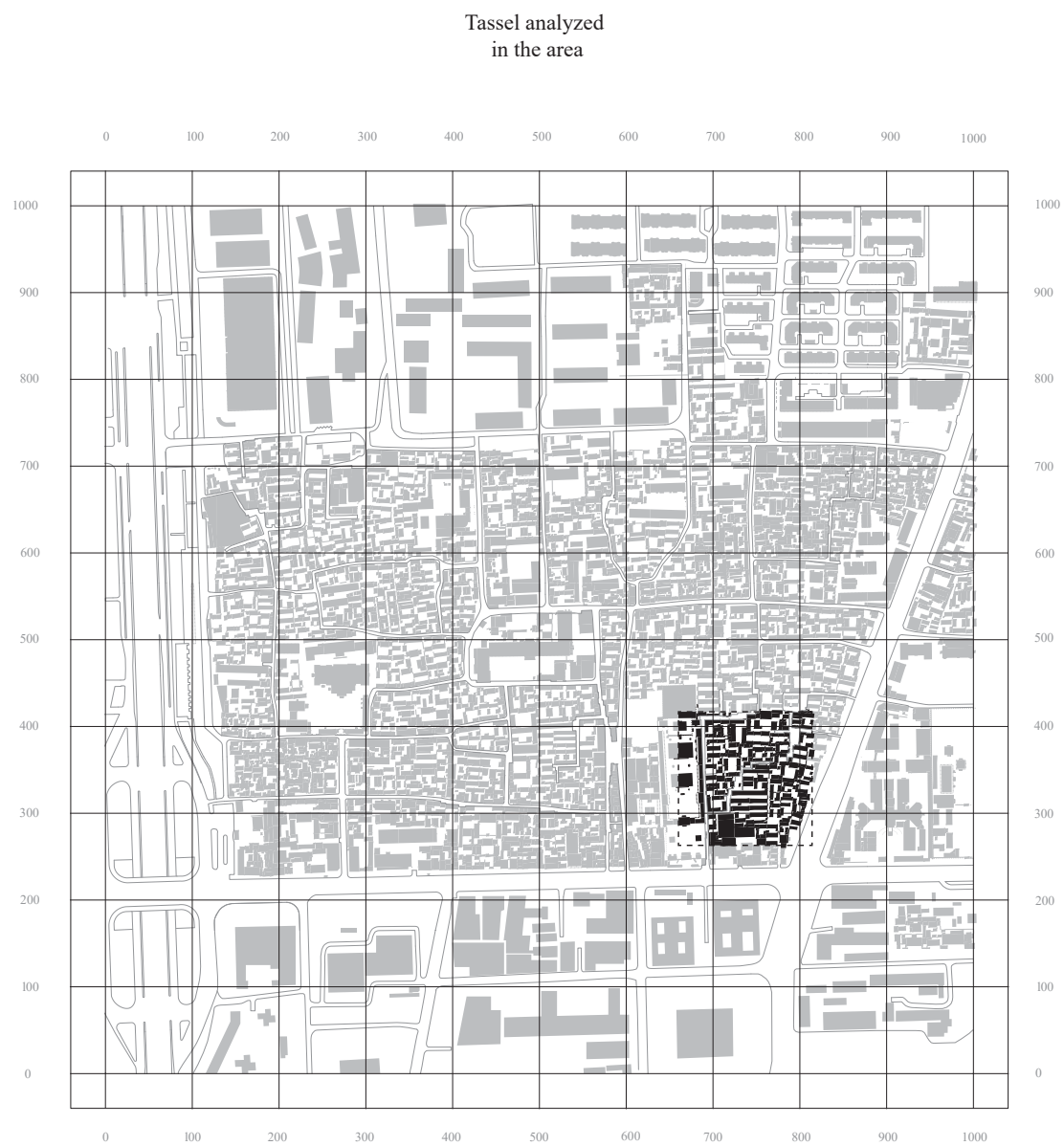


Figure 46 Baitasi map, tassel analyzed, drawing elaborated by Lidia Preti

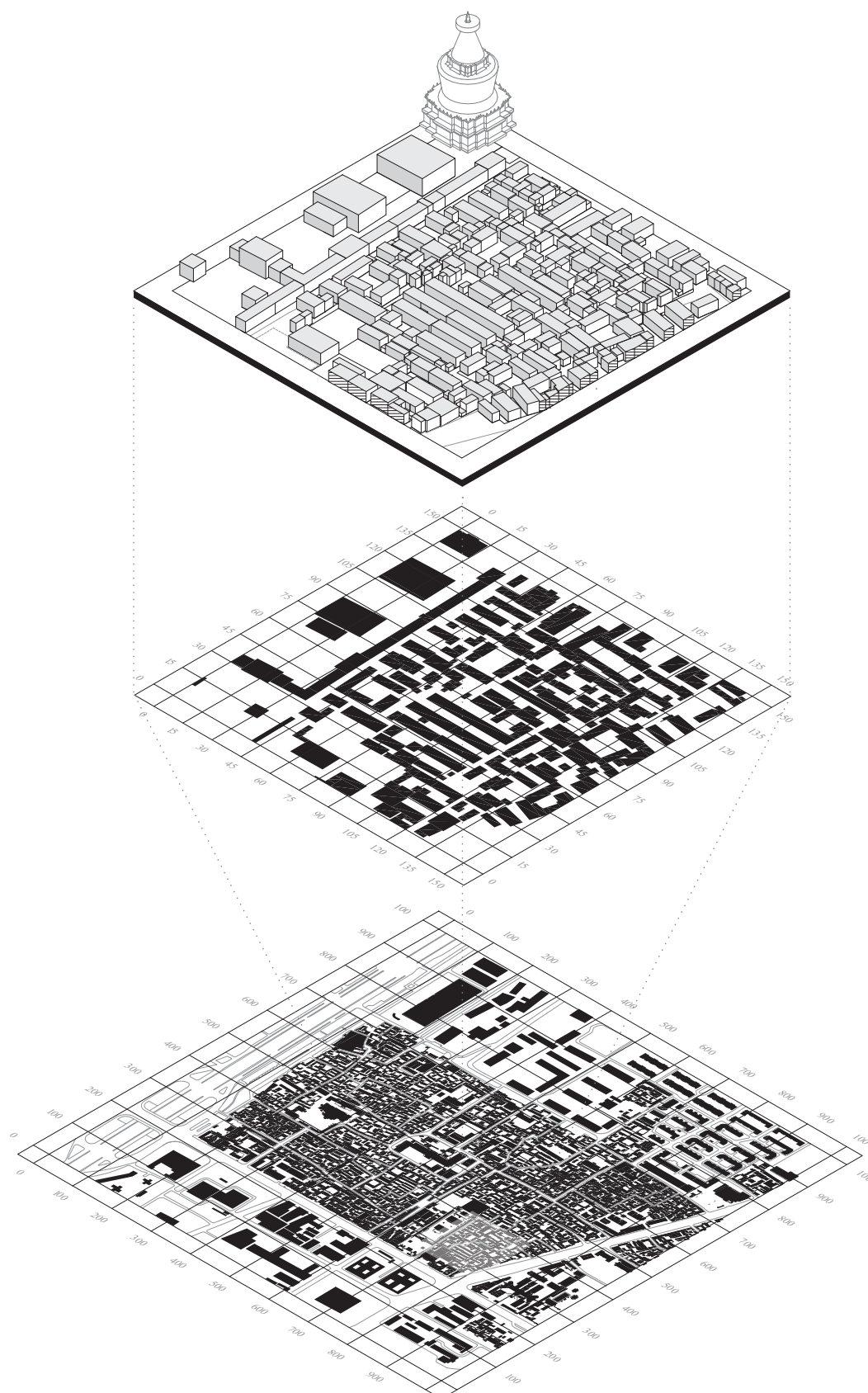


Figure 47 Tassel axonometric explosion, drawing elaborated by Lidia Preti

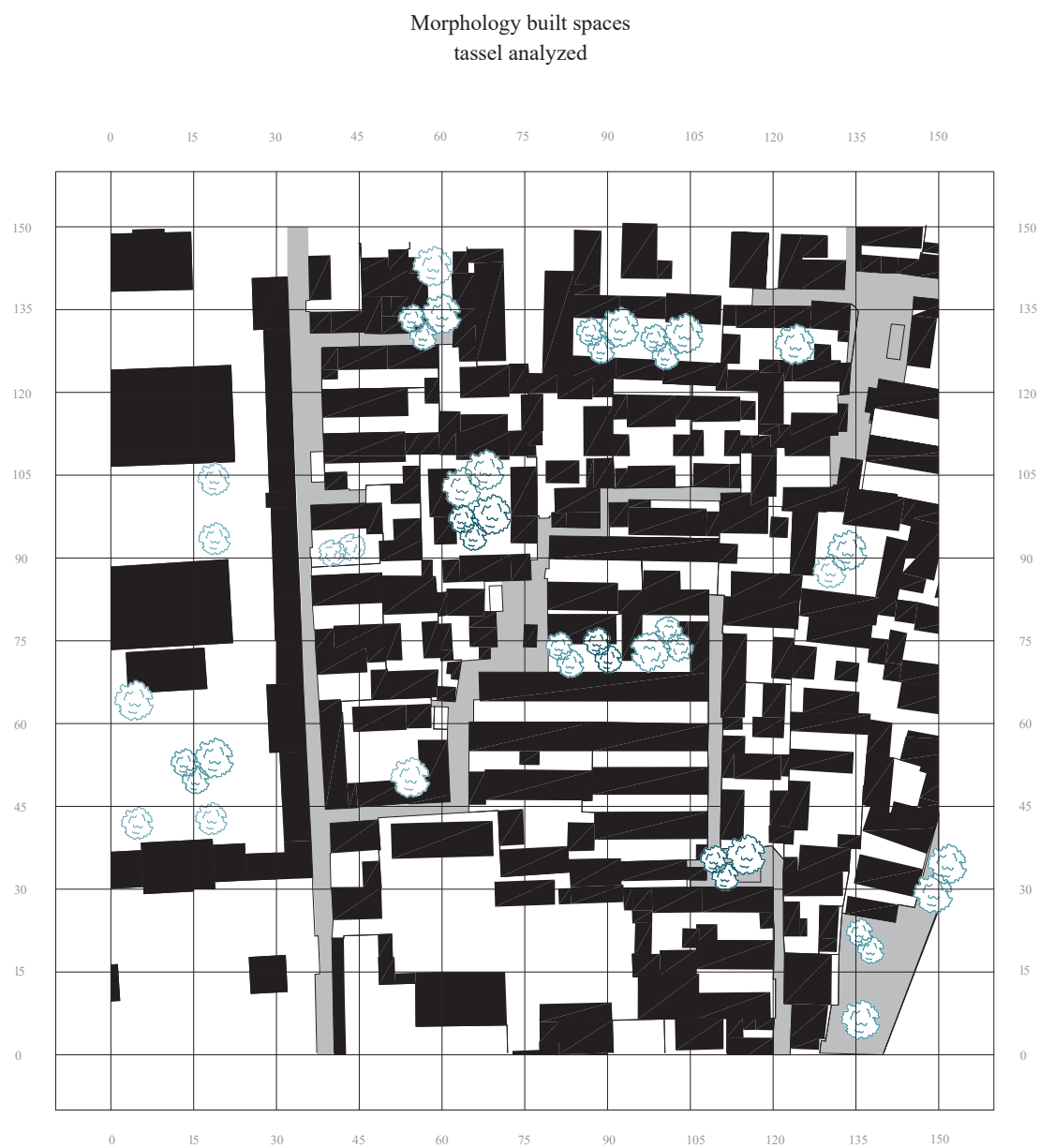


Figure 48 Tassel map, morphology of the built spaces,
drawing elaborated by Lidia Preti

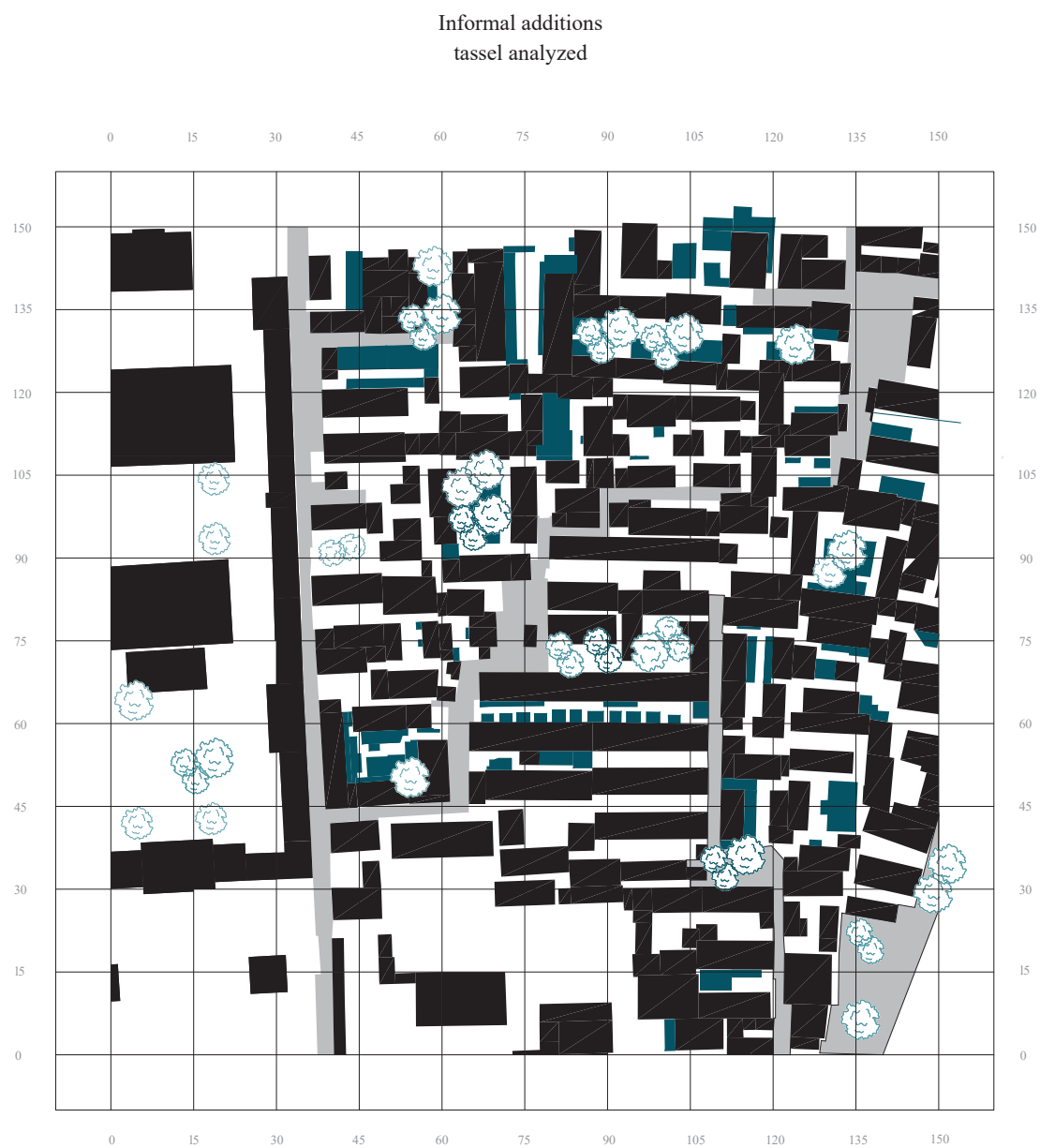


Figure 49 Tassel map, informal additions,
drawing elaborated by Lidia Preti

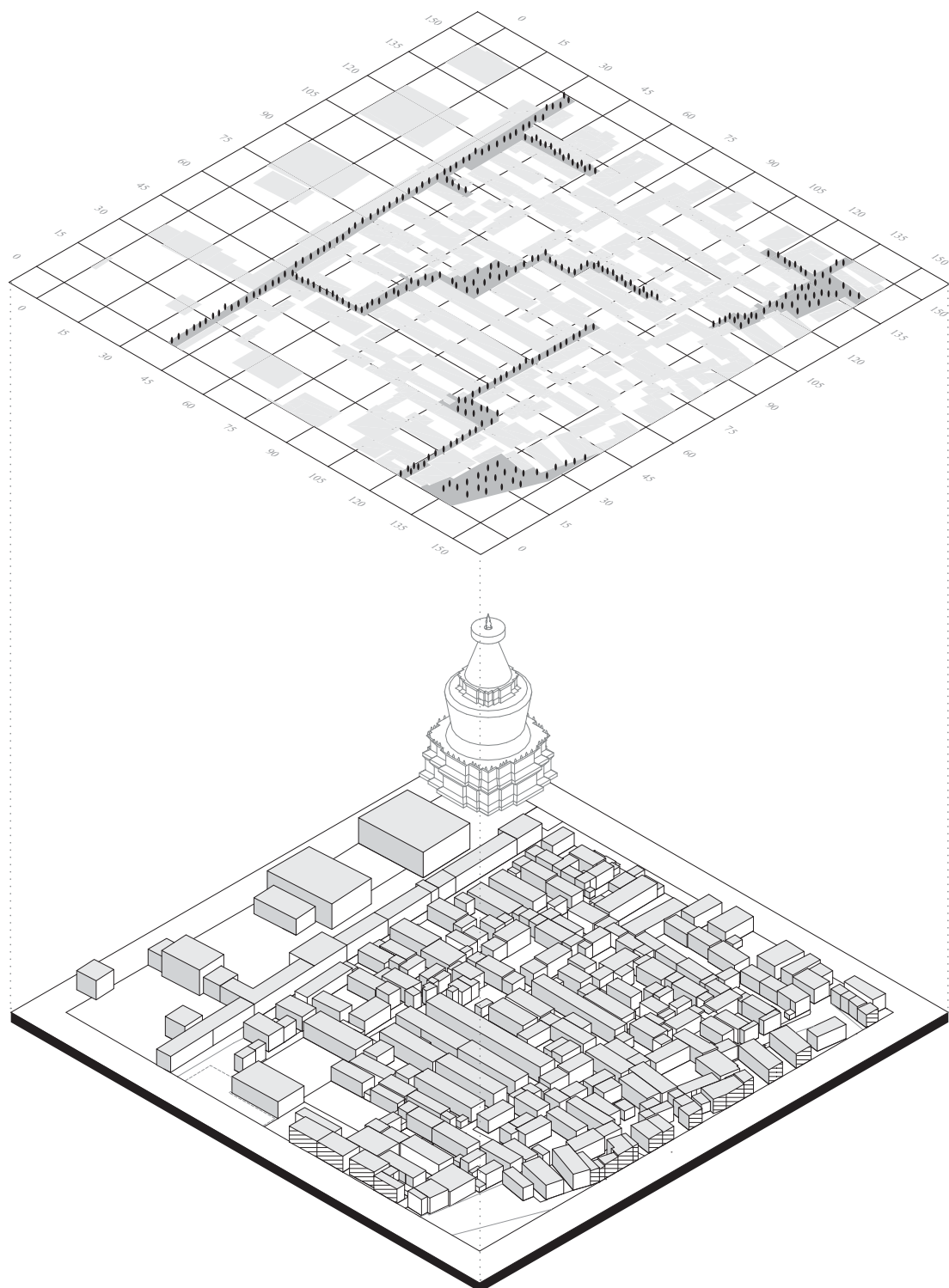
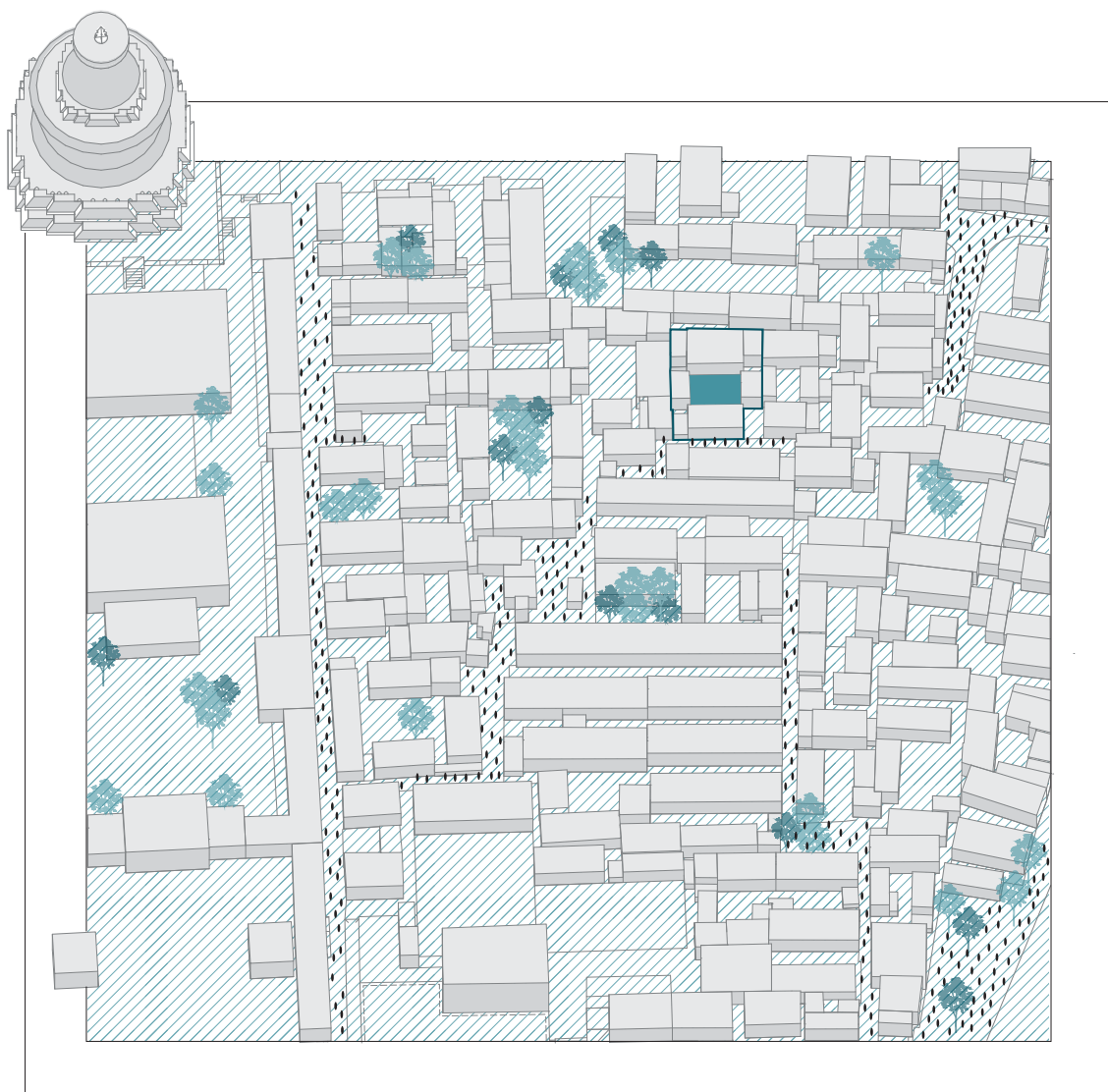


Figure 50 Tassel axonometry, flow of people, drawing elaborated by Lidia Preti

Perspective view
tassel analyzed



Chosen courtyard



Fluxes of people

Figure 51 Tassel two points perspective, drawing elaborated by Lidia Preti

Design proposal

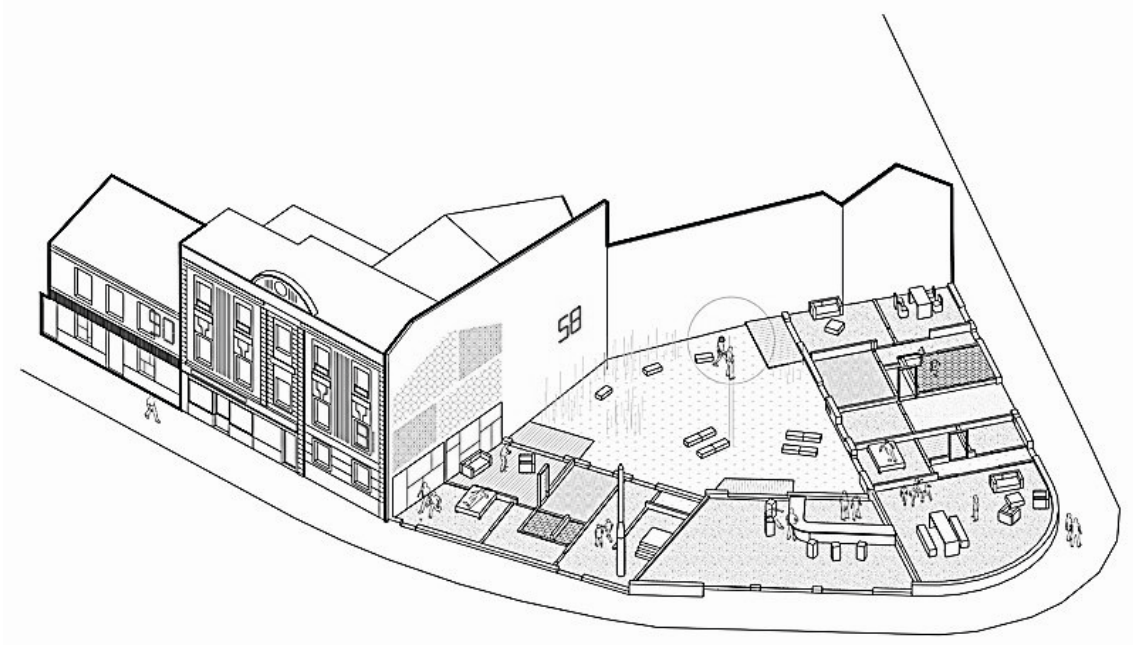
Chapter 4 Design proposal

4.1 Case studies

The two case studies chosen, try to address the line of reasoning behind the thesis work. The first one, an urban project, refers to the reuse and adaptation of a suspended space, an empty urban tassel in St Etienne, a small city in the central eastern part of France. On the other hand, the second case study selected, bring into focus on the smaller architectural scale, unhinging the traditional division between indoor and outdoor spaces, creating a more fluid system without distinction.

4.1.1 Place au Changement Public Plaza, Collectif Etc

The first case study, as mentioned above, concerns the reuse of a wasteland at the intersection of two roads in Saint Etienne, France. The proposal is inserted in the district of Chateaucieux, a specific tassel of the city, object of urban transformation and where the wastelands play a predominant role in the existing urban fabric. The project simulates a house floor-plan drawing on the ground the outlines of the external walls as well as the internal partition that are represented using different textures and materials on the ground as well as small wood elements to trace the boundaries (Collectif Etc , 2011). The installation creates an oxymoron, an outdoor domestic space. Indeed, it gives the impression of a hybrid space that plays with the contrast of the dwelling concept, traditionally referred to an indoor space, and the urban space notion that refers to a space without walls. The absence of physical walls creates a welcoming and gathering environment maintaining, however, the perception of an intimate space. The participation of the inhabitants of the neighborhood for the realization of the public space was essential to involve the community in a long-term use of the area to overturn an empty space into a thriving one.



*Figure 52 Place au Changement Public Plaza, axonometry
(Collectif Etc , 2011)*



*Figure 53 Place au Changement Public Plaza, gathering spaces,
(Collectif Etc , 2011)*

4.1.2 House in Mathi, renovation project

The second case study concerns the renovation of a barn built in the beginning of the past century turned into a house in Mathi, Turin. The renovation project, realized in 2011 by the architecture office MARC, predominantly works on the section, maintaining almost untouched the original structure of the barn. The peculiarity of the project is the focus on the connection between the indoor and outdoor spaces together with the openness of the built space towards the exterior ones. The intervention investigates the relation between users and architectural space and the possibility to make the dwelling space a permeable one. The overlapping of the dwelling and urban dimension is strengthened by the visual continuity realized throughout a bright yellow floor that permeate the indoor and outdoor spaces indiscriminately. The indoor space contaminates the exterior one, creating an inviting environment, that embrace the commonality (Vecchione, 2013).



*Figure 54 Relation between indoor and outdoor space, photo
Beppe Giardino, (Vecchione, 2013)*



Figure 55 Project floor plans, MARC, (Prinsi, 2012)

4.2 The courtyard

The concept of courtyard in the Chinese culture, is closely related the concept of a human scale as well as to a strong relation between indoor and outdoor spaces can be noticed. Originally the courtyard space was designed to be an outdoor space belonging to the family living in the building surrounding the space, as a space for social interactions to occur outside the dwelling space but still in a protected environment. In the specific case of a low-rise city or part of it, the outdoor spaces seem to be more closely related to the dwelling spaces end with a stronger relation between the residences, outdoor spaces creating an inviting and more accessible use. The indoor and outdoor spaces when the scale of the building is human, are merged and one is enriching the other in one whole system. In the same way, a pedestrian oriented street or square, typical of the historical centers of the Italian cities, the outdoor life is enhanced compared to the car-oriented city (Gehl, 2011). However, the stratification of practices and built space led to the erosion of the traditional image of spaces and to the foregone and accentuated the dislocation of social activities in the alleyways in between the courtyard compounds.

*“The more residents are outdoors, the more often they meet
and the more greetings are exchanged, and conversations develop. [...]
More than architecture is needed for these interactions to develop.
Design that is conducive to such interaction will, however, encourage it.”*
(Gehl, 2011 p. 53)

The urban pattern of the tassel analyzed is composed of residential courtyard compounds. After the identification of a specific courtyard in the tassel, the following maps aim to analyze the space of the courtyard as well as the different phases of it.

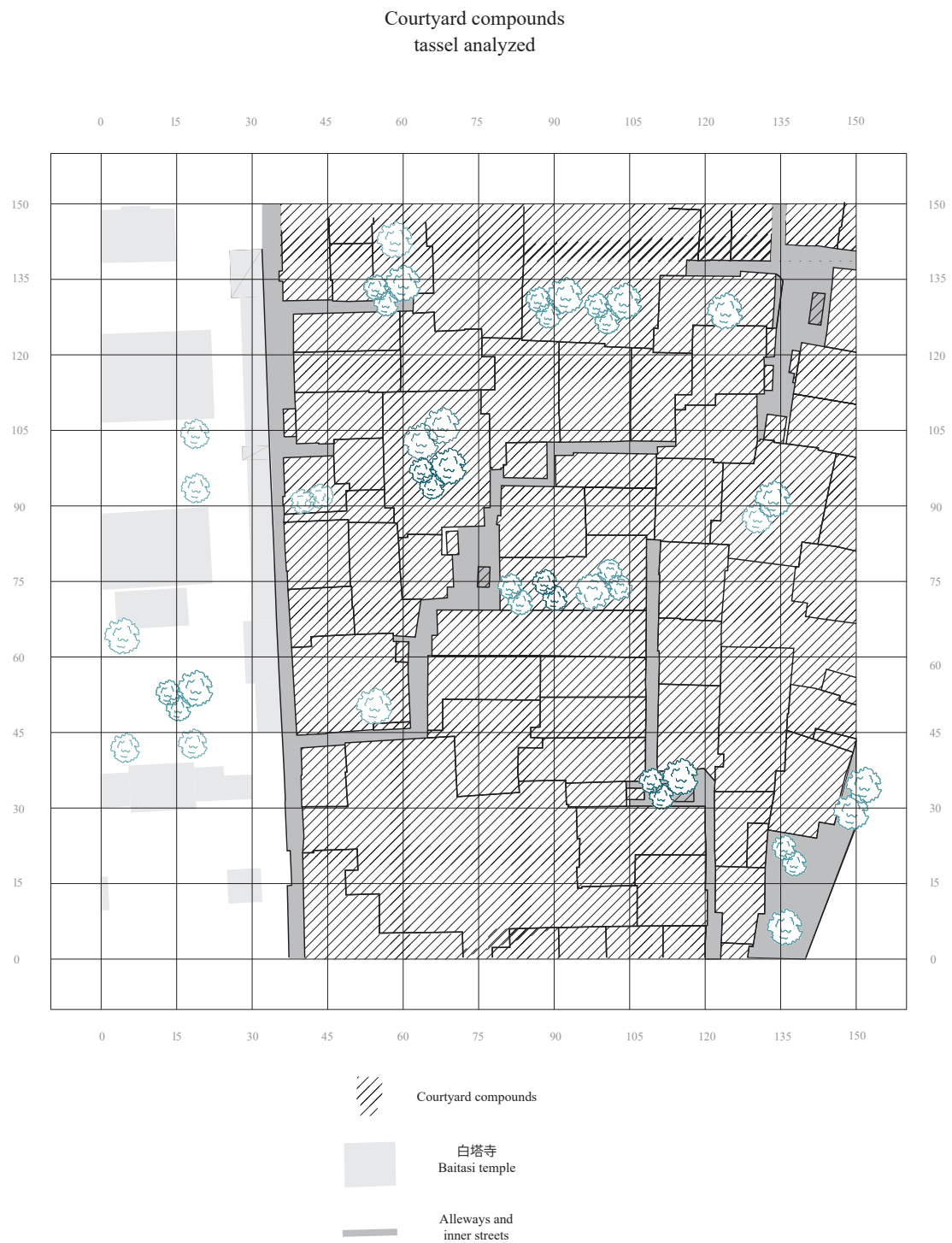


Figure 56 Tassel map, courtyard compounds,
drawing elaborated by Lidia Preti

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Figure 57 Tassel map, Beijing Design Week courtyards,
drawing elaborated by Lidia Preti



Figure 58 Tassel map, suspended courtyards after Beijing Design Week,
drawing elaborated by Lidia Preti

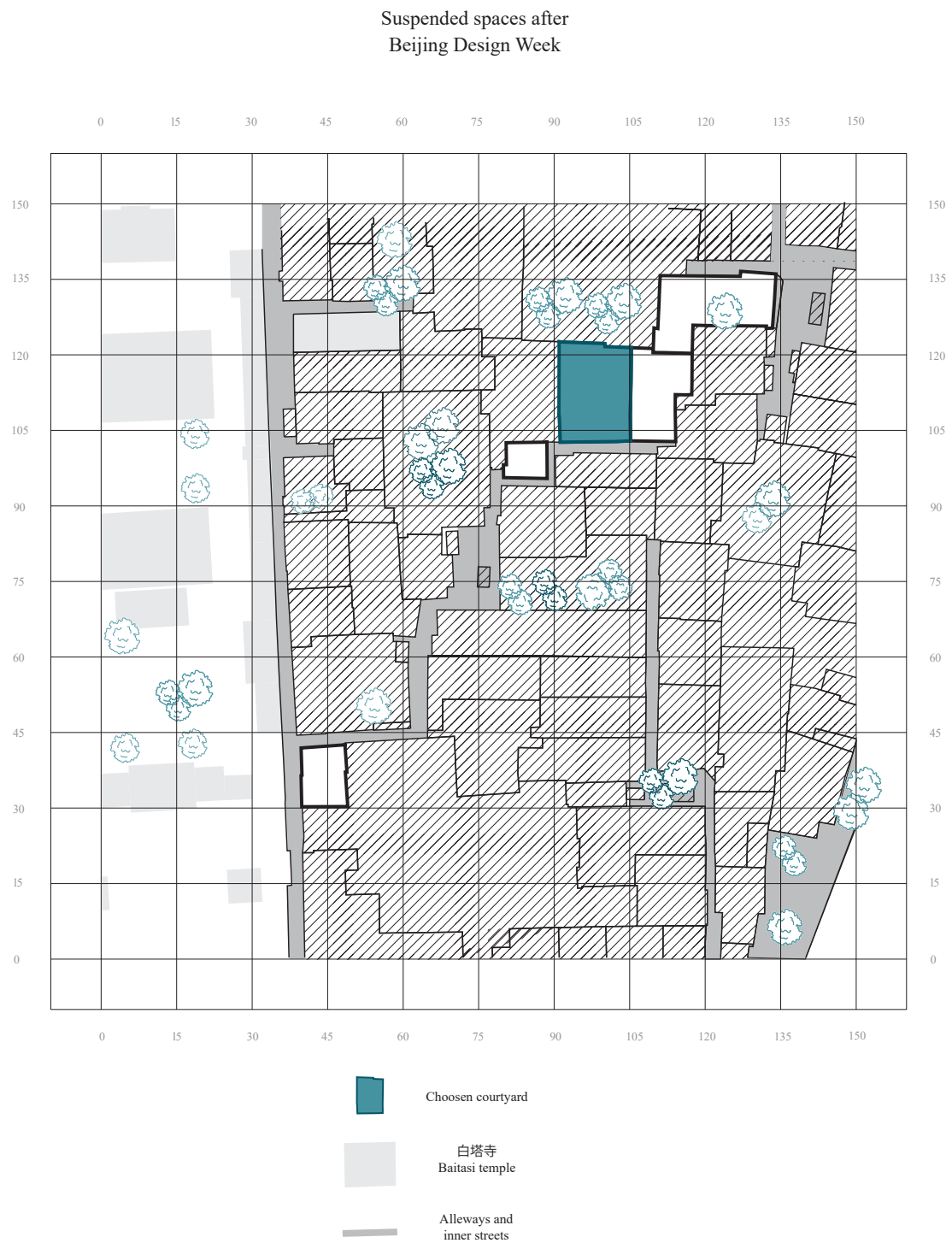


Figure 59 Tassel map, chosen courtyard,
drawing elaborated by Lidia Preti

Courtyard planimetry

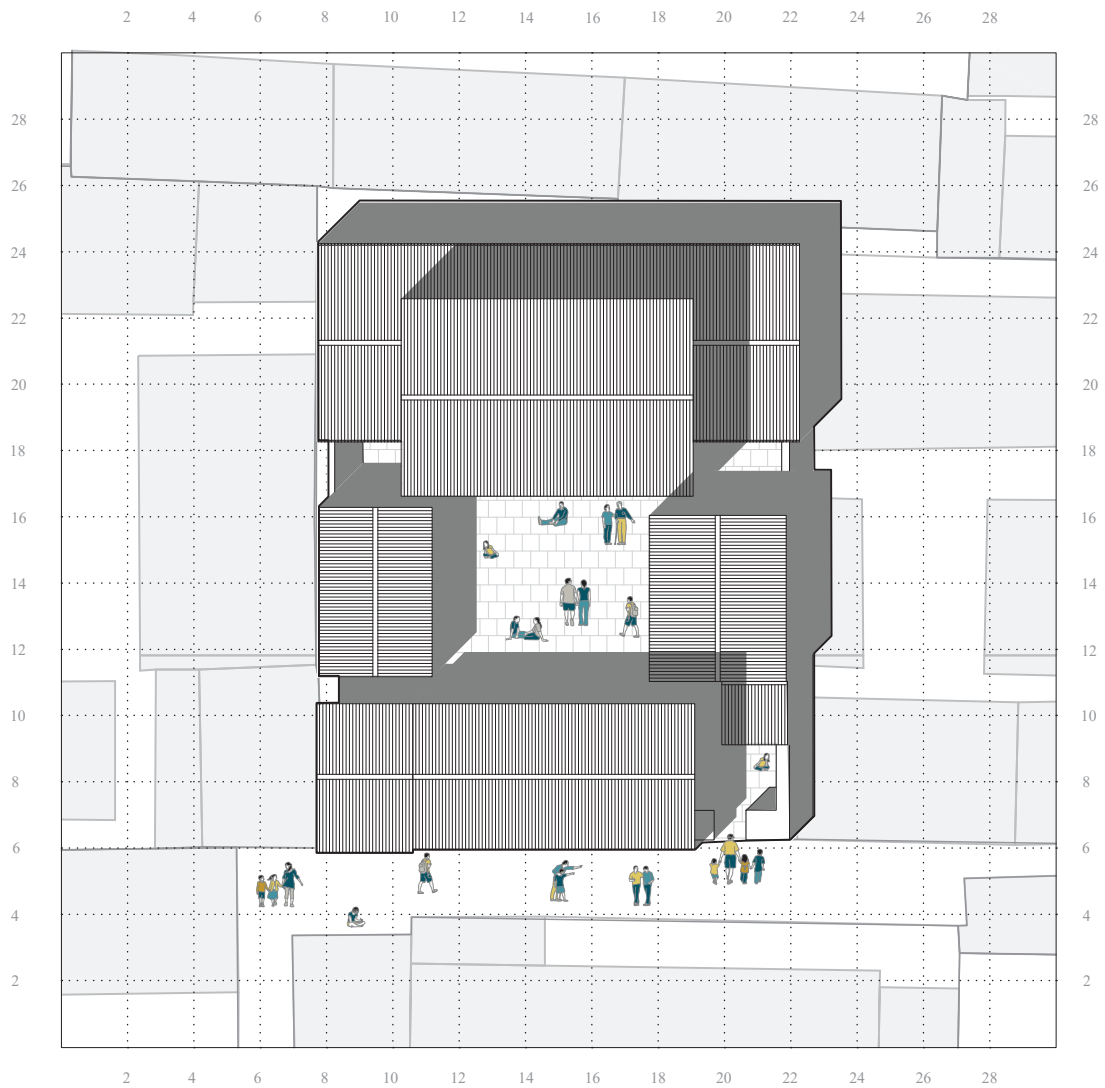
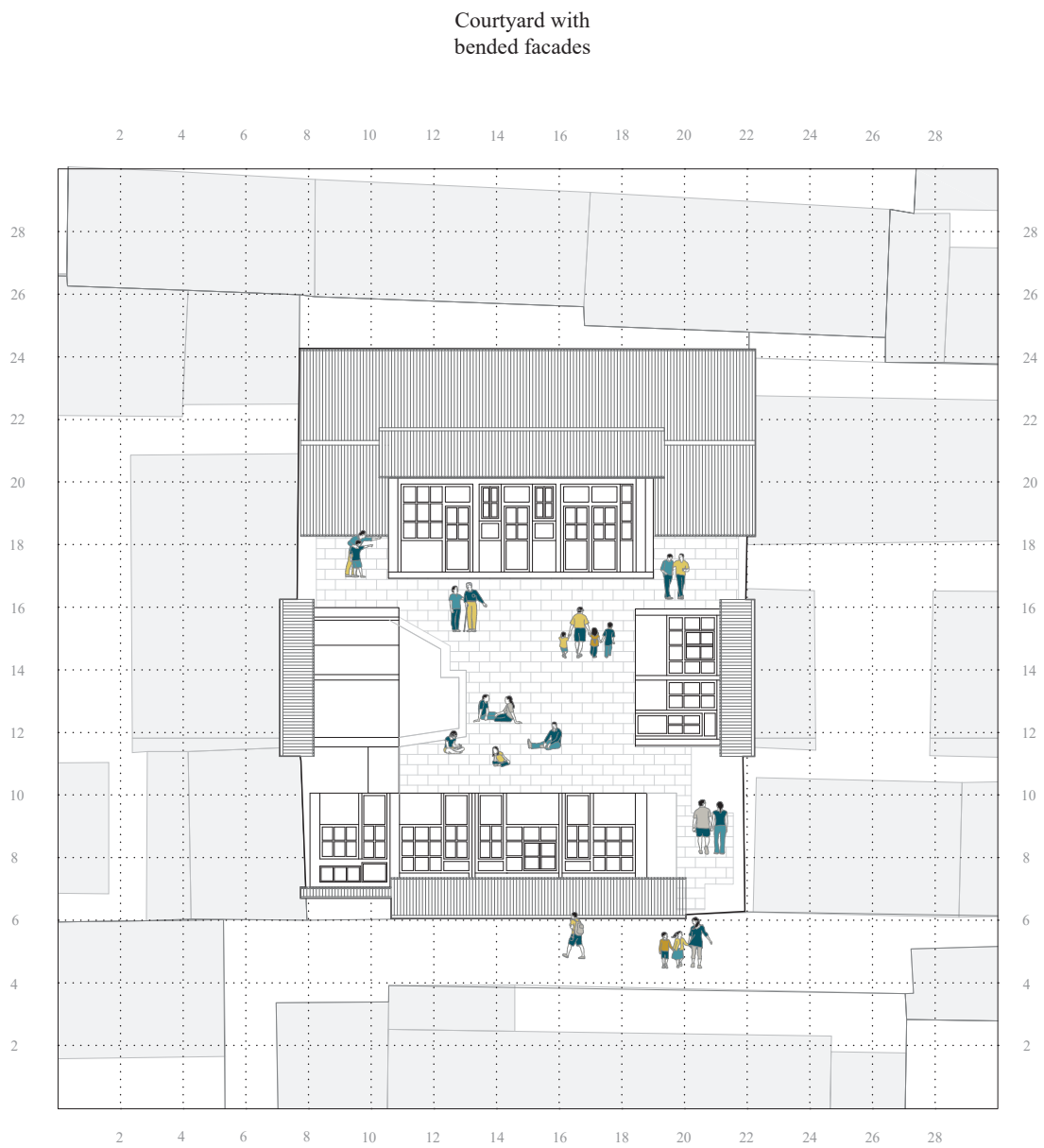


Figure 60 Courtyard planimetry,
drawing elaborated by Lidia Preti



*Figure 61 Courtyard with bended facades,
drawing elaborated by Lidia Preti*

4.2.1 Courtyard phases

4.2.1.1 Before the Beijing Design Week

The selected courtyard, before the Beijing Design Week was, as the surrounding ones, a residential compound accessible from a small opening on the south side. Four buildings of slightly different height were surrounding the central courtyard space and a thriving tree was growing in the middle of it.

4.2.1.2 During the Beijing Design Week

During the Beijing Design Week, the courtyard has been deprived of its residential nature, emptied from the stratifications and arranged to host the exhibition. For this occasion, the studio reMIX, developed an installation for the courtyard to celebrate Aranya, a coastal area which hosts luxurious architectures are inserted in the peaceful landscape of the shoreline. Therefore, the installation creates an environment that evoke the sea: the courtyard is fulfilled with sand and the background music recalls the crashing of the waves. The exhibition spaces occupy the south, the east and the north edifice and the last two are connected throughout the use of a new black volume that creates an unusual path and a suggestive dark passage where the humid mist typical of the seaside is recreated. The central space of the courtyard is used as a gathering space and together with the west building create a space for the screening of movies (reMIXstudio, 2017).

4.2.1.3 After the Beijing Design Week

The exhibition courtyards in *Baitasi* area, that during the Beijing Design Week studded the neighborhood, after the end of the exhibition, are dismantled one after the other and closed. This happens to the examined courtyard as well where the installations are disassembled, the sand is removed, and the space taken back to the original configuration leaving numerous tassels of the area vacant.

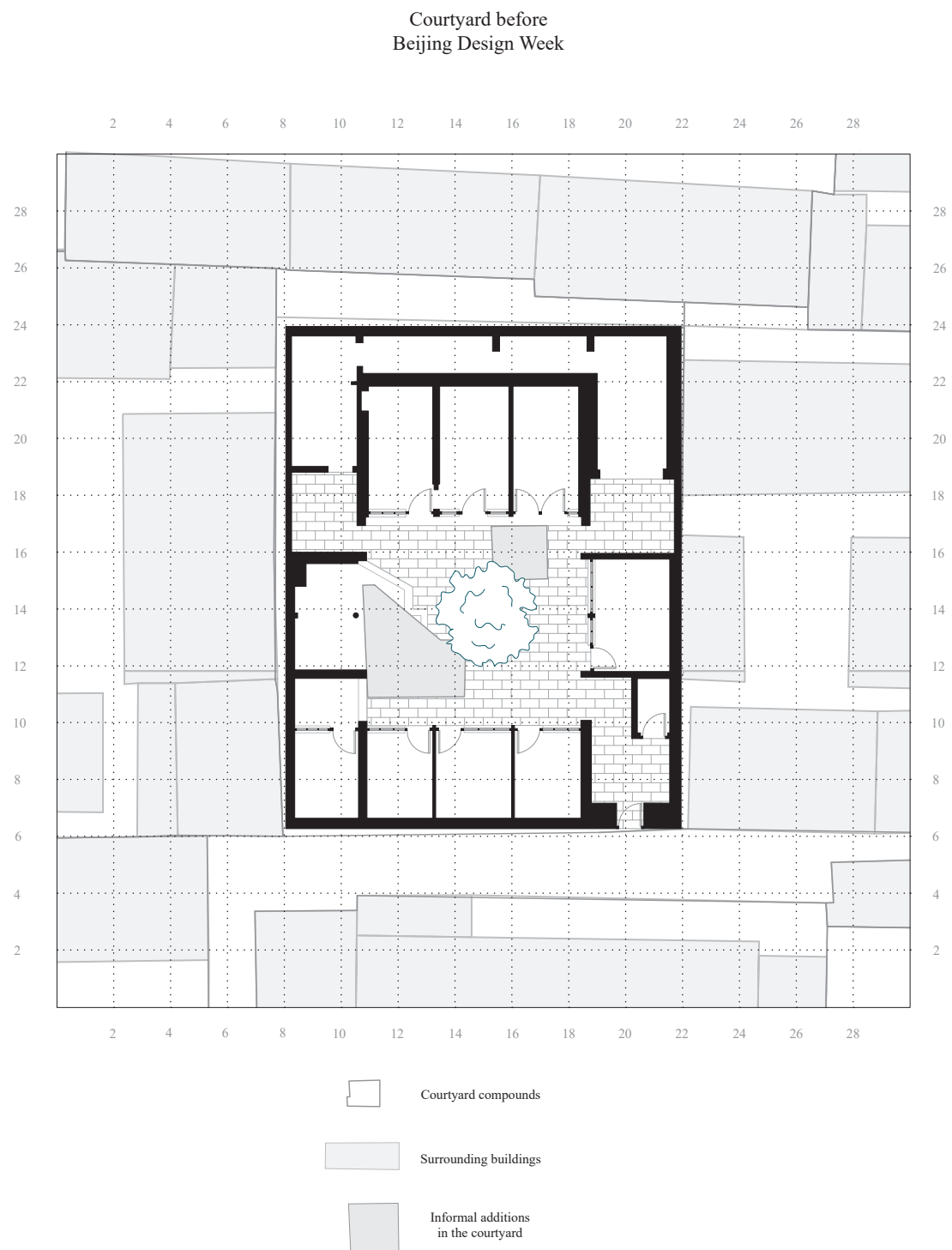
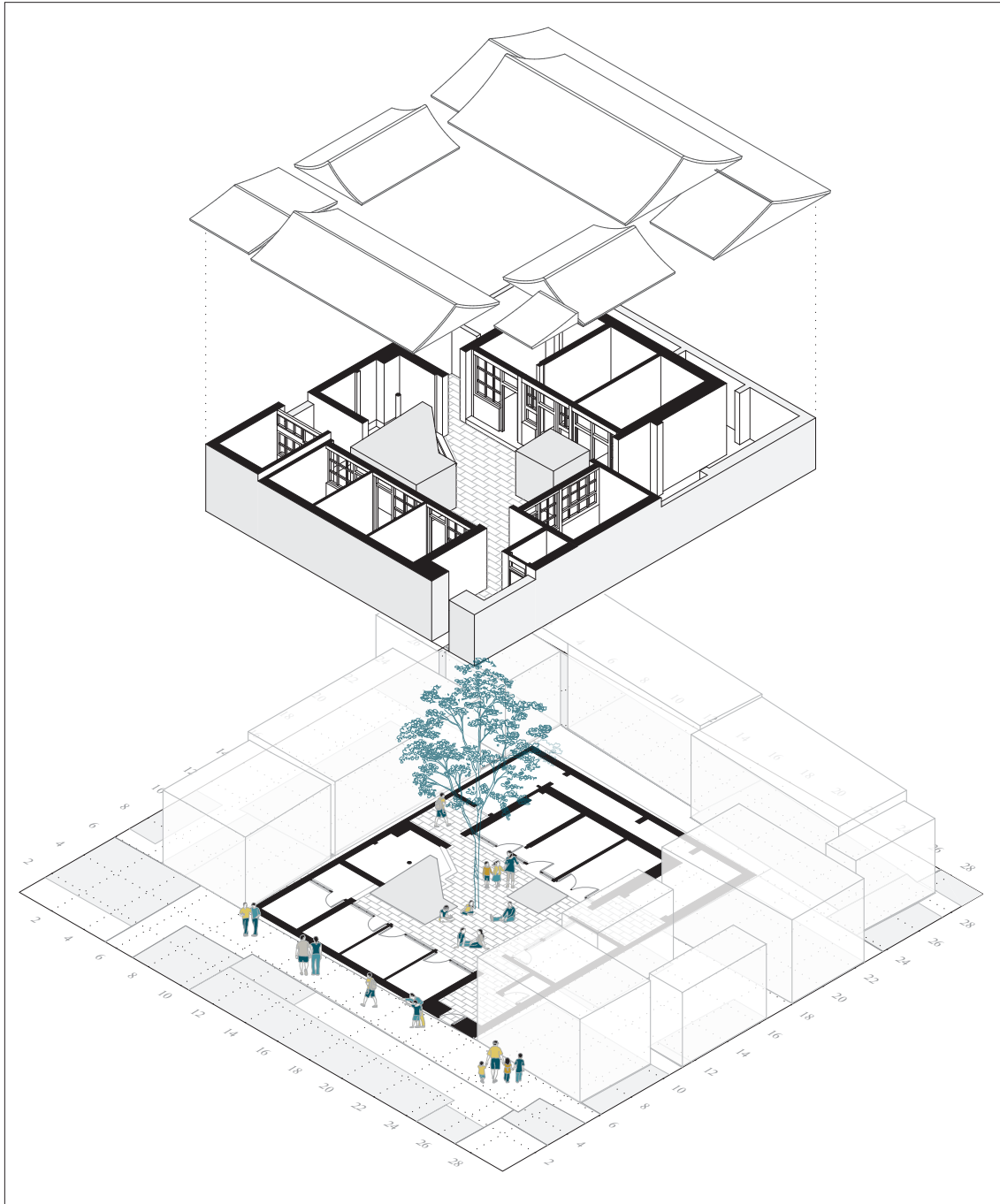


Figure 62 Courtyard floor-plan before Beijing Design Week,
source of data: (reMIXstudio, 2017), drawing elaborated by Lidia Preti

Courtyard before
Beijing Design Week



*Figure 63 Courtyard exploded axonometry before Beijing Design Week,
drawing elaborated by Lidia Preti*

Courtyard before
Beijing Design Week



Figure 64 Courtyard scene before Beijing Design Week,
drawing elaborated by Lidia Preti

Courtyard during
Beijing Design Week

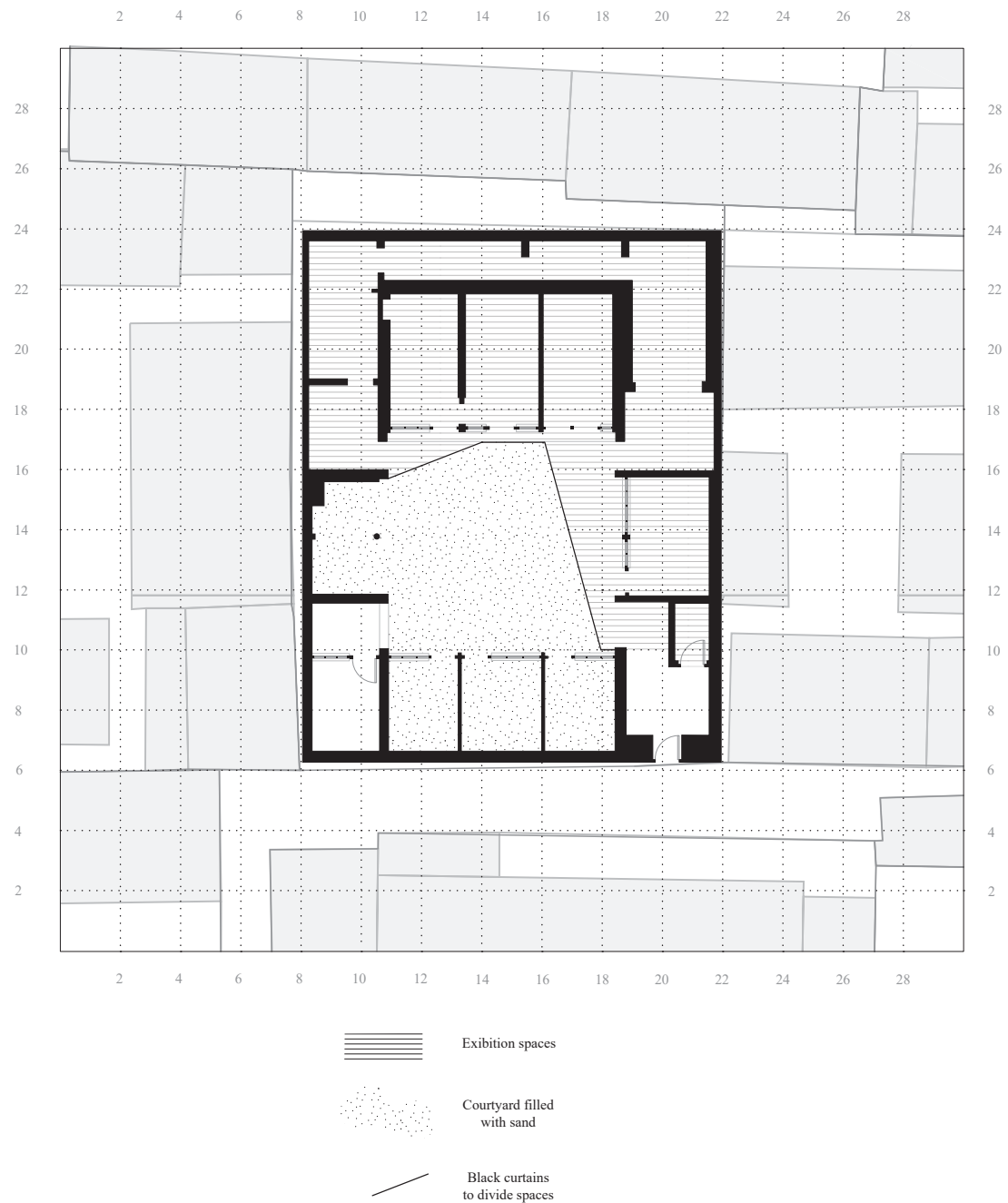
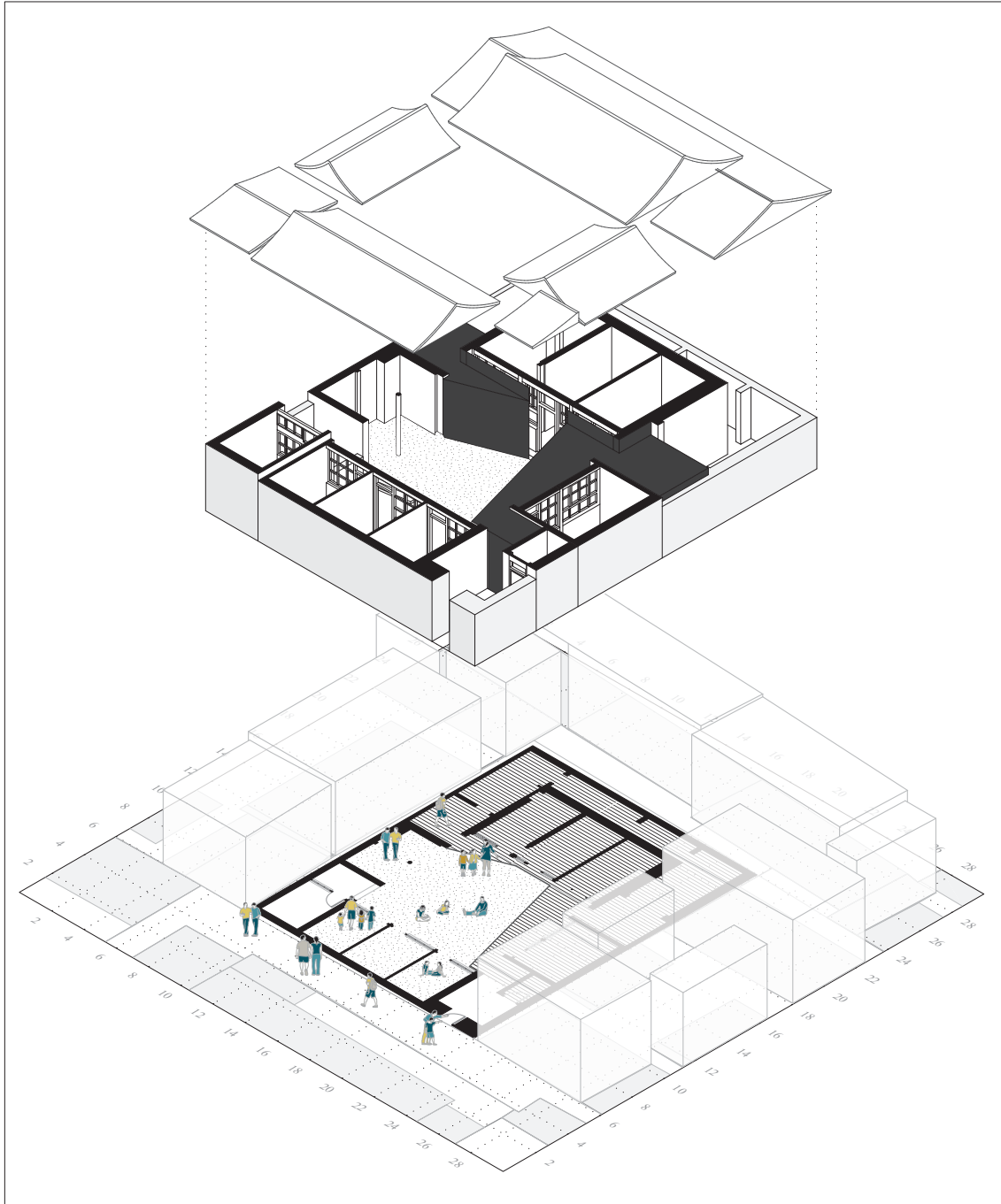


Figure 65 Courtyard floor-plan during Beijing Design Week, drawing elaborated by Lidia Preti

Courtyard during
Beijing Design Week



*Figure 66 Courtyard exploded axonometry during Beijing Design Week,
drawing elaborated by Lidia Preti*



*Figure 67 Courtyard installation, baitaSEA,
photograph by Lidia Preti*

Courtyard during
Beijing Design Week



*Figure 68 Courtyard scene during Beijing Design Week,
drawing elaborated by Lidia Preti*

Courtyard after
Beijing Design Week

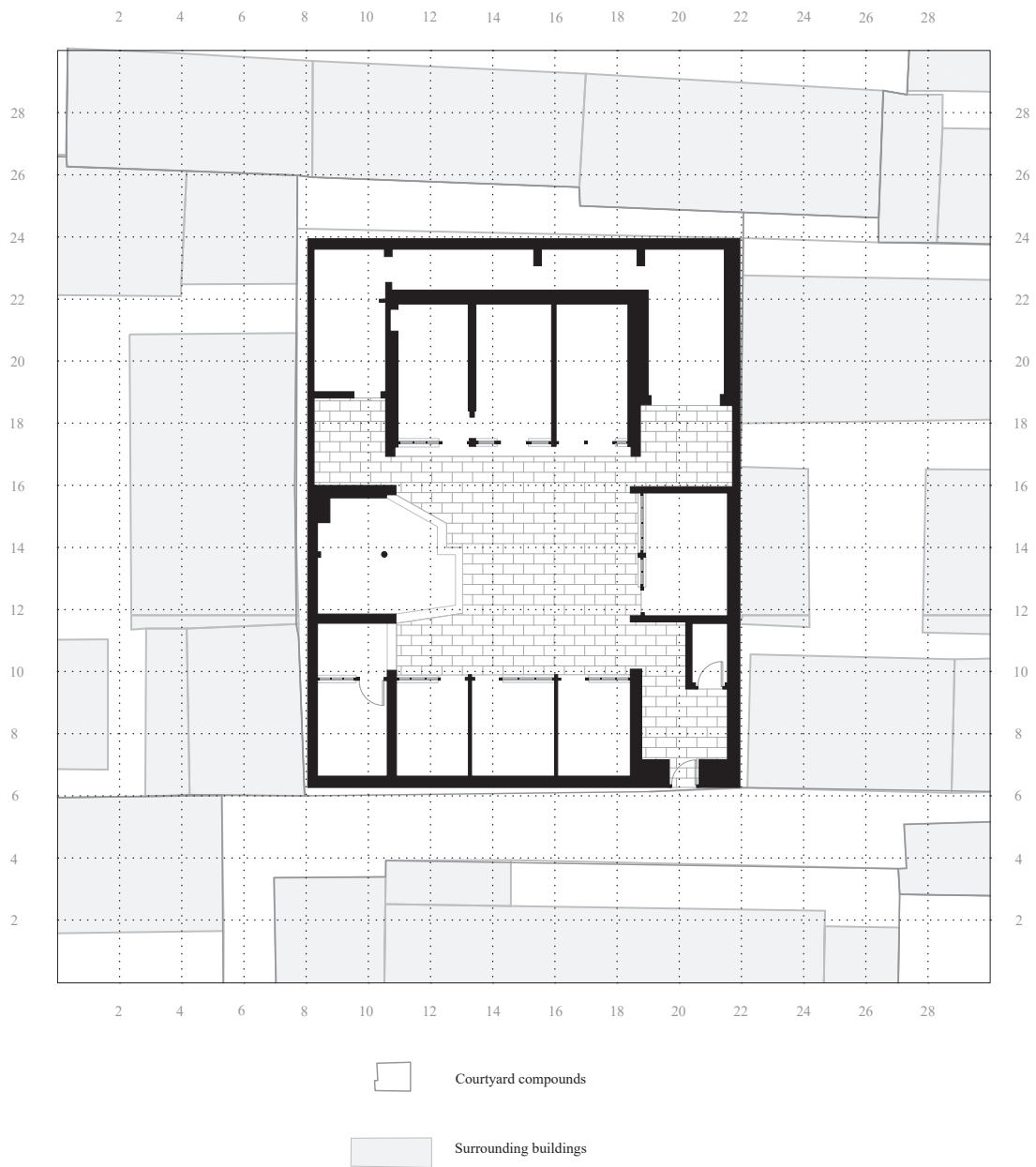
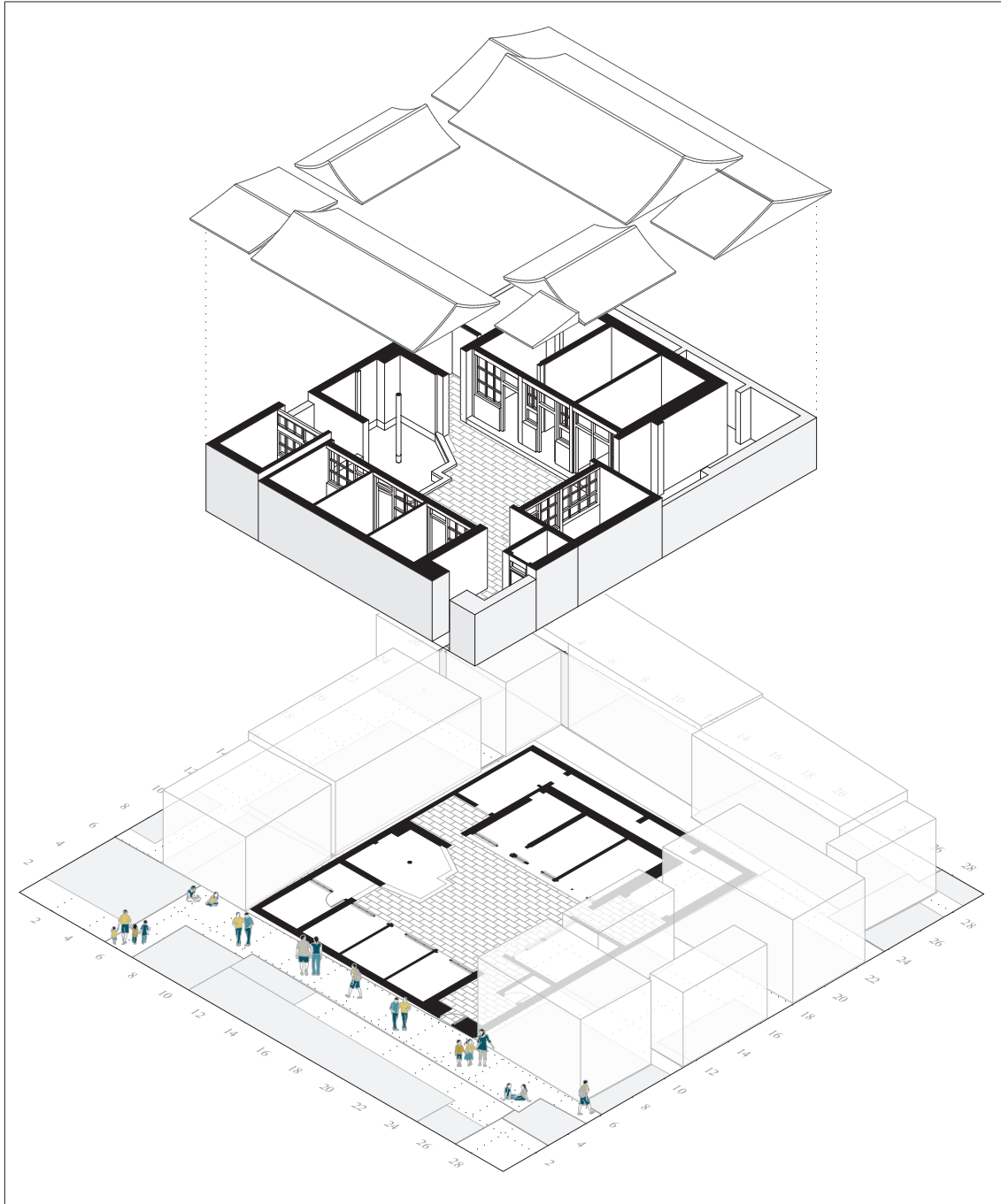


Figure 69 Courtyard floor-plan after Beijing Design Week, drawing elaborated by Lidia Preti

Courtyard after
Beijing Design Week



*Figure 70 Courtyard exploded axonometry after Beijing Design Week,
drawing elaborated by Lidia Preti*

Courtyard after
Beijing Design Week



*Figure 71 Courtyard scene after Beijing Design Week,
drawing elaborated by Lidia Preti*



*Figure 72 Courtyard suspended spaces,
photograph and elaboration by Lidia Preti*



*Figure 73 Courtyard suspended spaces,
photograph and elaboration by Lidia Preti*



*Figure 74 Courtyard suspended spaces,
photograph and elaboration by Lidia Preti*

4.3 Design a fragment: *hutongs* and courtyards as a malleable space

Closely analyzing the tassel, appears clear the residential nature of it. The suspended courtyard used for the exhibition in 2017, is immersed in a defined system of residential compounds. The courtyard itself is surrounded by walls on three sides while the fourth one faces out on the narrow *hutong*. The aim of the project is to preserve the residential nature of the surrounding compounds and to create an ambiguous and malleable space in the courtyard to enhance and support the dynamics of the area. Starting from the concept of a rigid wall typical of the courtyard house system, the aim is to unhinge the traditional inflexible division of spaces to support the dynamics of the inhabitants.

However, how could the rigidity of a space be contrasted while enhancing the practices already present in the area? During the design process, three main hypotheses have been explored to evaluate the possible transformations of the surrounding walls. The first hypothesis shifted through was the totally conservative one, in which the neighboring walls are completely preserved. In this approach the use of the space is limited to one entrance and the users would be confined in the courtyard space itself. The diametrically opposite approach is the totally destructive one. This speculation hypothesizes the fragmentation of the surrounding walls into smaller and discontinuous elements as well as the deconstruction of internal walls to break apart the division of built spaces in between the different courtyards. With this approach, the residential nature of the surrounding courtyards would get lost and the common space of the courtyard would encroach upon the adjacent dwellings. On the other hand, the last approach analyzed is the moderate one, in which the enclosure walls are deconstructed throughout strategic cuts that allows the flow of people in between different courtyards, without denaturing the contiguous and still existing dwellings.

Users



*Figure 75 Collage users,
drawing elaborated by Lidia Preti*

Users



Figure 76 Illustration users,
drawing elaborated by Lidia Preti

Use of the space

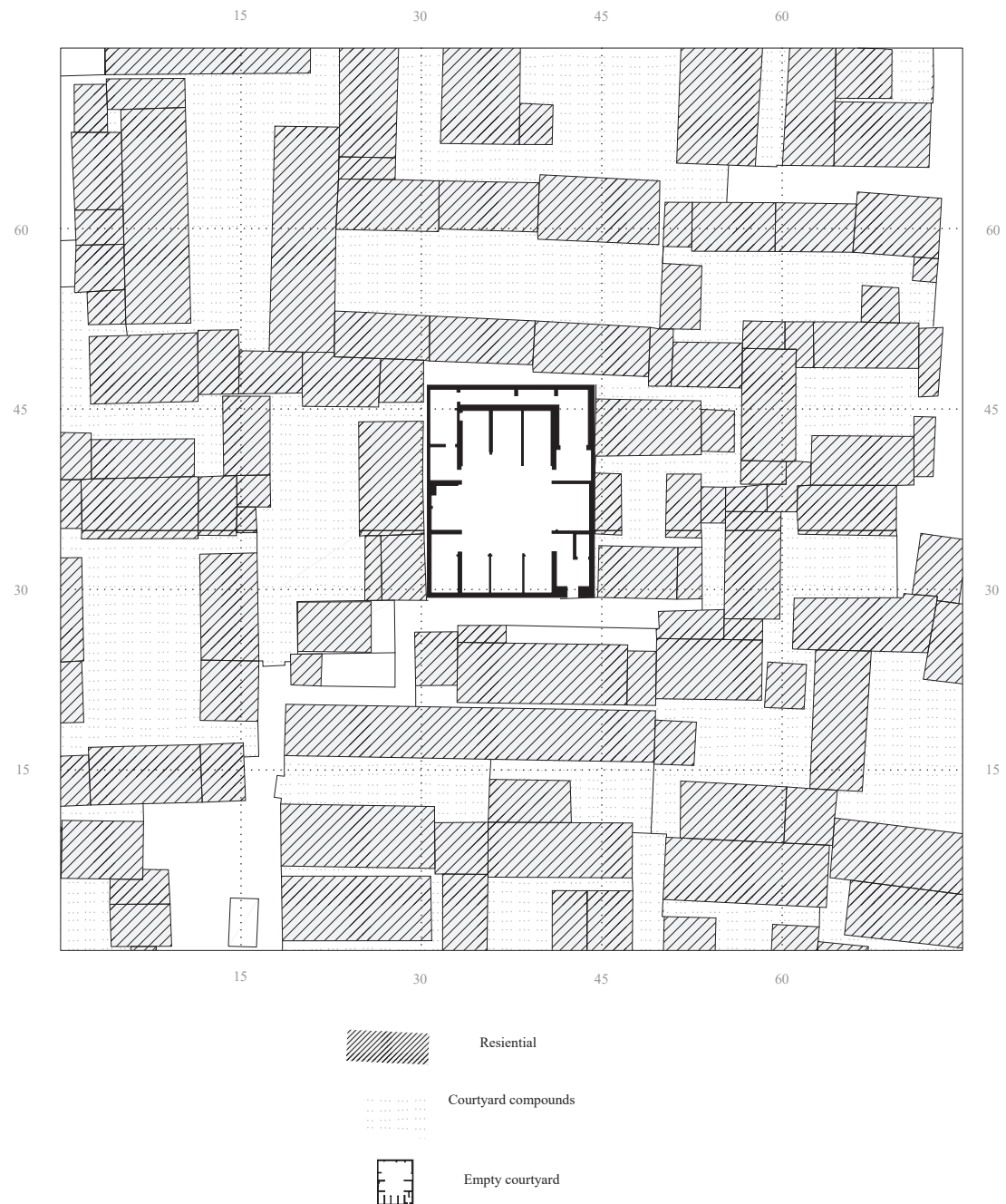
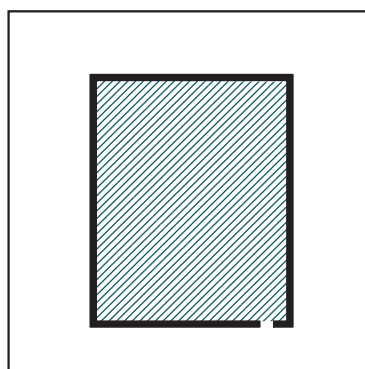
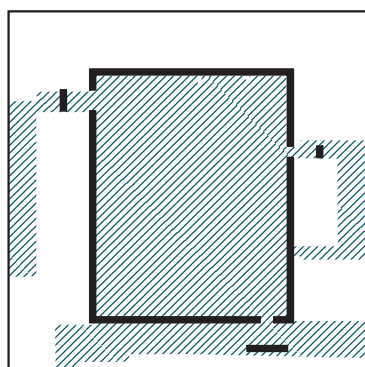


Figure 77 Tassel map, land use,
drawing elaborated by Lidia Preti

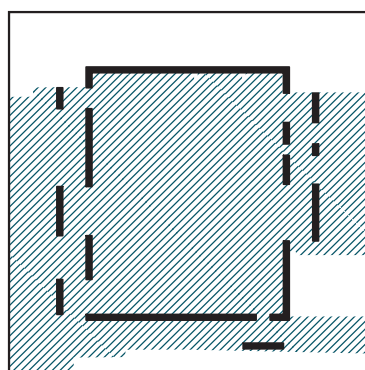
Design approaches



1. Conservative

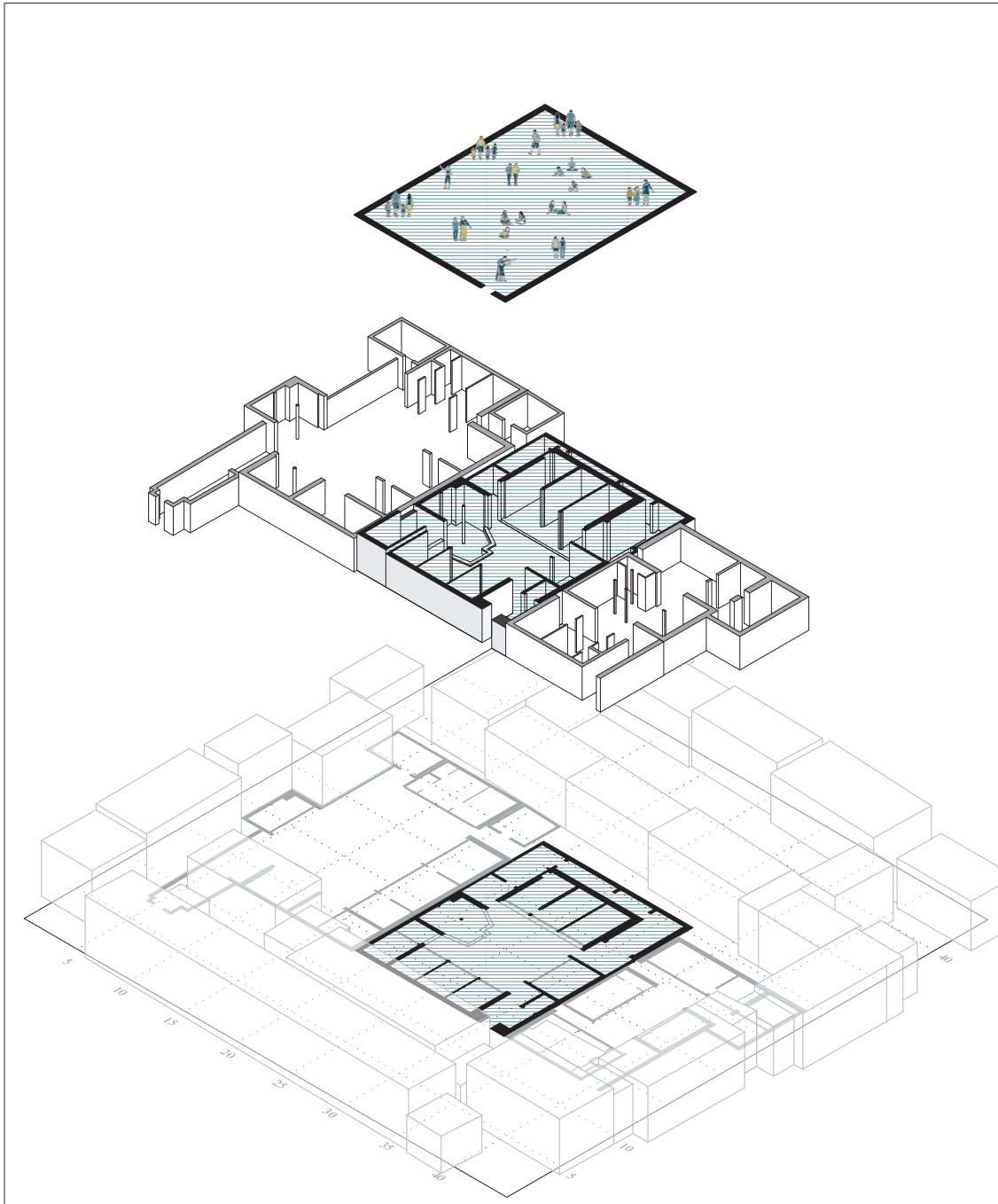


2. Moderate



*Figure 78 Design approaches,
drawing elaborated by Lidia Preti*

Approach 1:
totally conservative



*Figure 79 Design approach 1: totally conservative,
drawing elaborated by Lidia Preti*

Approach 2:
est modus in rebus

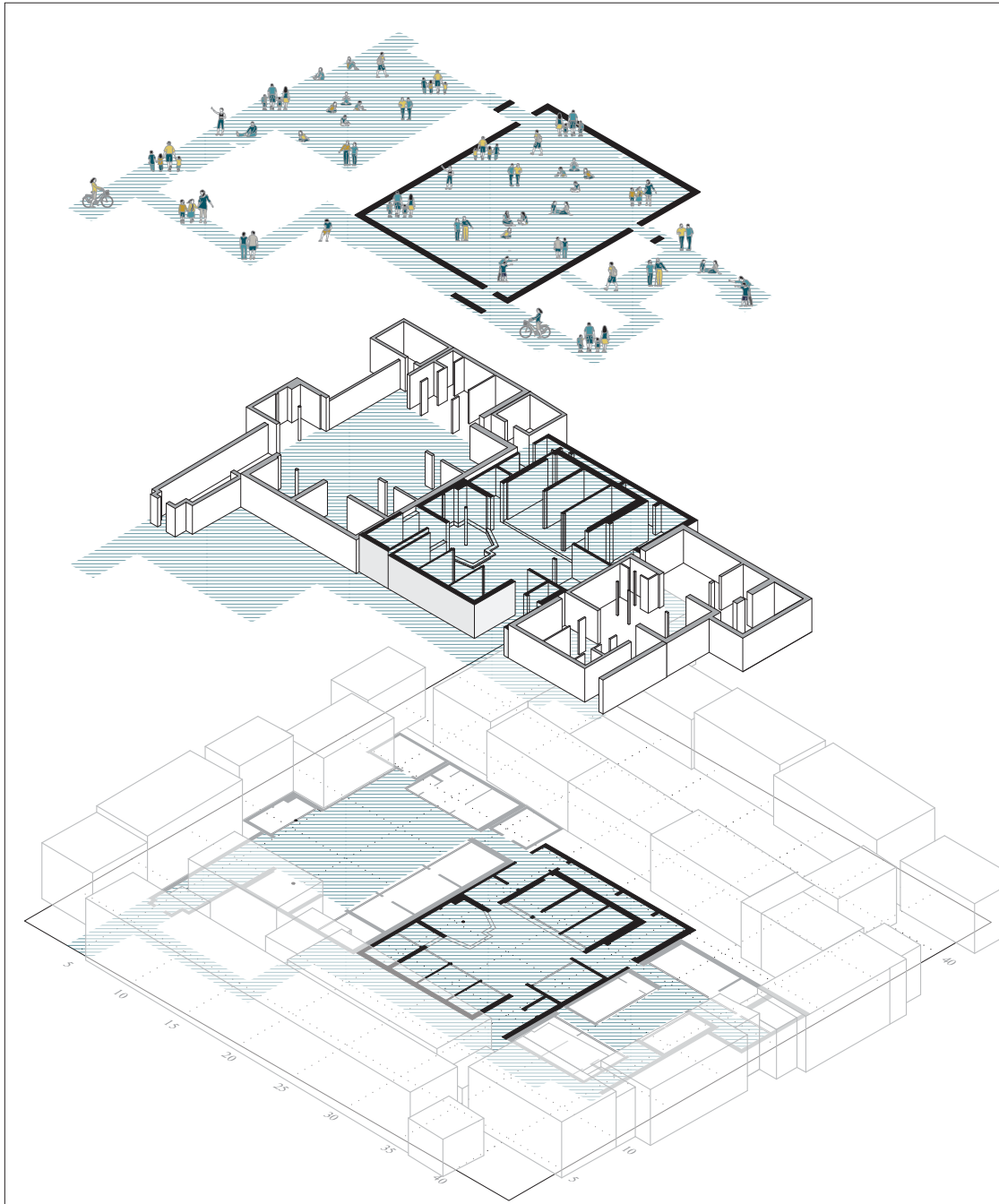
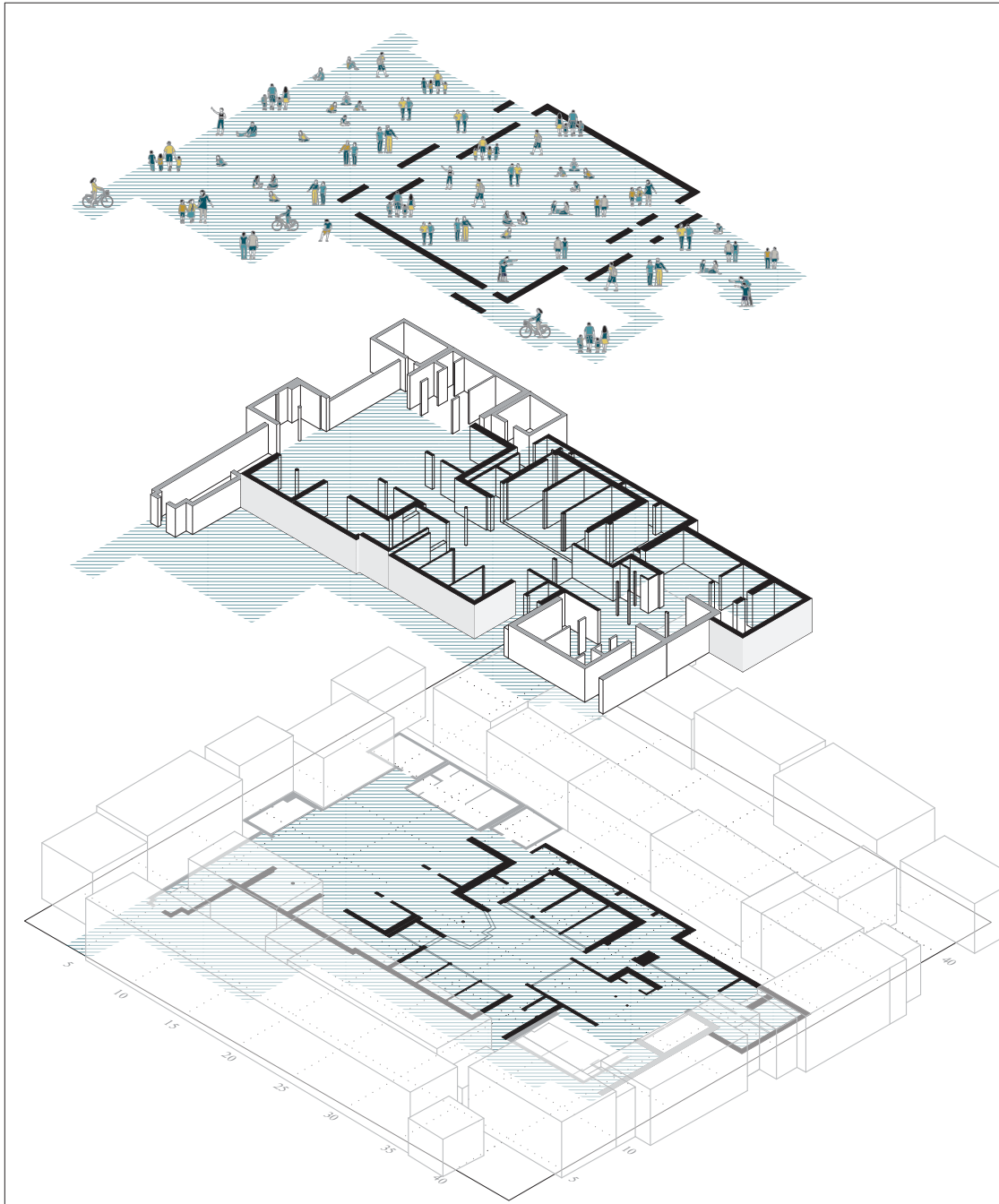


Figure 80 Design approach 2: moderate,
drawing elaborated by Lidia Preti

Approach 3:
totally invasive

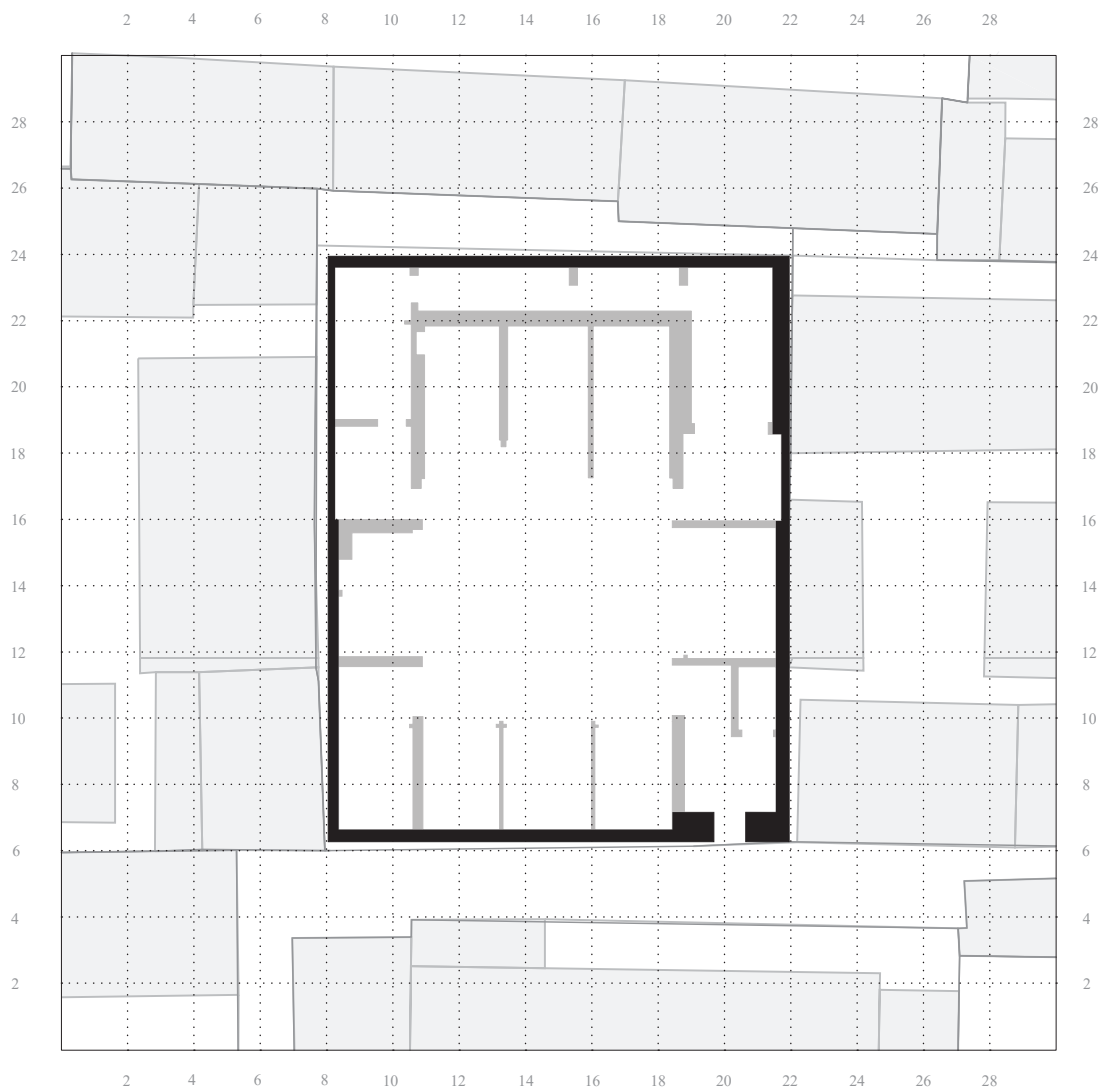


*Figure 81 Design approach 3: Totally invasive,
drawing elaborated by Lidia Preti*

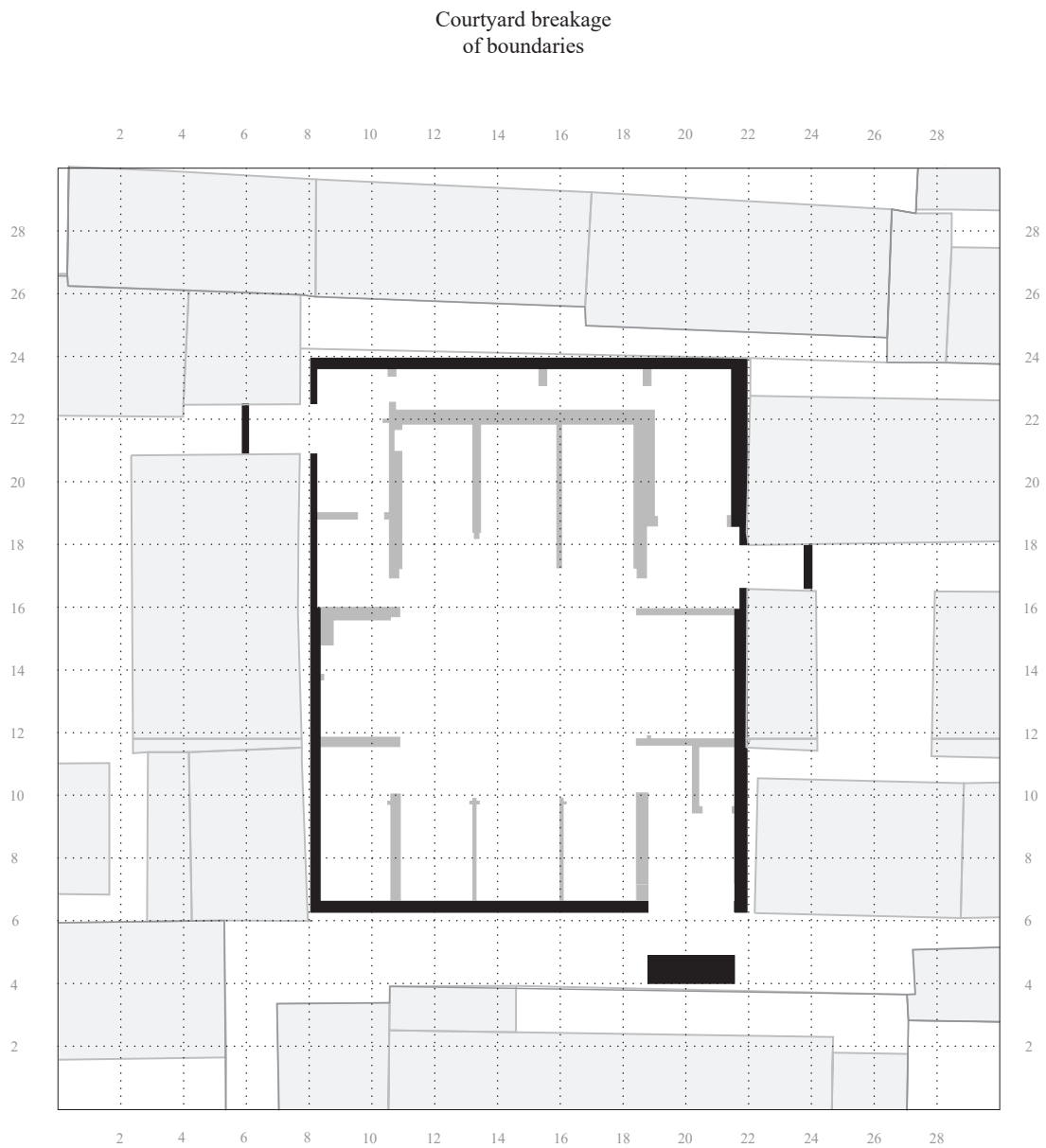
Among the different hypothesis, the thesis work focuses and analyzes the moderate one. The aim of the project is to create a malleable common space for the inhabitants of the tassel to supports the social dynamics presents in the area and could be used in different occasions. The so defined suspended courtyard can be regarded as a potential space for the neighborhood becoming a spatial support for the inhabitants of the area. The title *Hutong Interior* plays on the juxtaposition of two words that refers to diametrically different sphere, therefore, provocatively the project aims to unhinge the traditional division between indoor spaces, the more private ones, and outdoor spaces as the courtyards, to merge them in one unique system. The traditional typology of courtyard house protected and surrounded by walls, is now challenged toward the creation of a hybrid space that follows the appropriation practices observed in the area. The urban space of the *hutong* is conceptually absorbed into the courtyard which becomes a common space easily usable by the residents.

Throughout the realization of strategic cuts in the surrounding wall, the courtyards develop into a more permeable space with an osmotic relation with the surrounding courtyards. Following the existing morphology of the courtyard the entrance from the alleyway is enlarged and two new strategic openings are created to make the space permeable from the adjacent courtyards. In this way, as can be observed in the following figures, the gathering space, traditionally represented by the courtyard surrounded by buildings, is conceptually widespread as well in the built space, permeating in the indoor spaces as well as the outdoor ones indiscriminately. With the same principle, the common space permeates in the neighbor courtyards on the east and west side, creating a shared system.

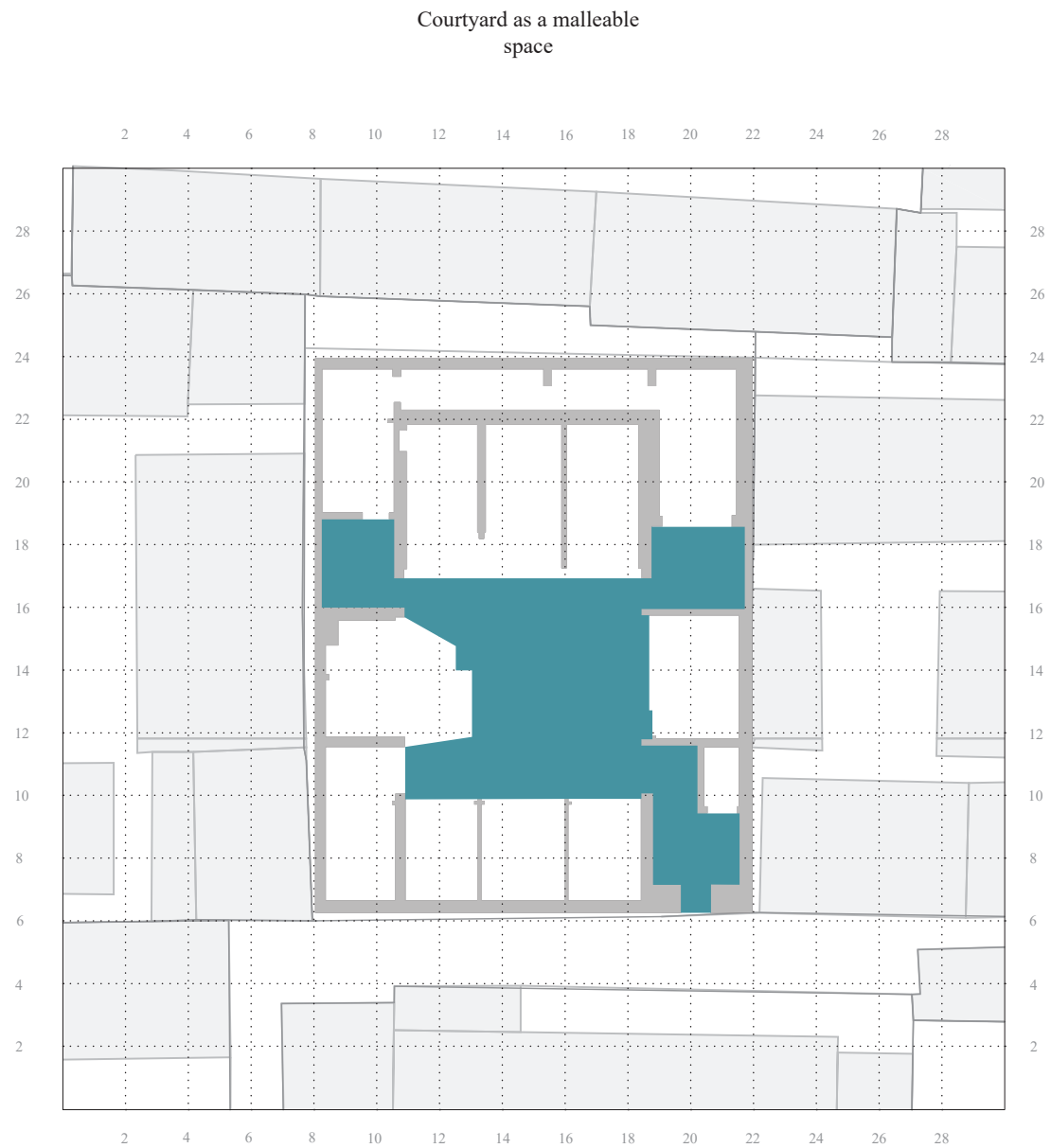
Courtyard boundaries



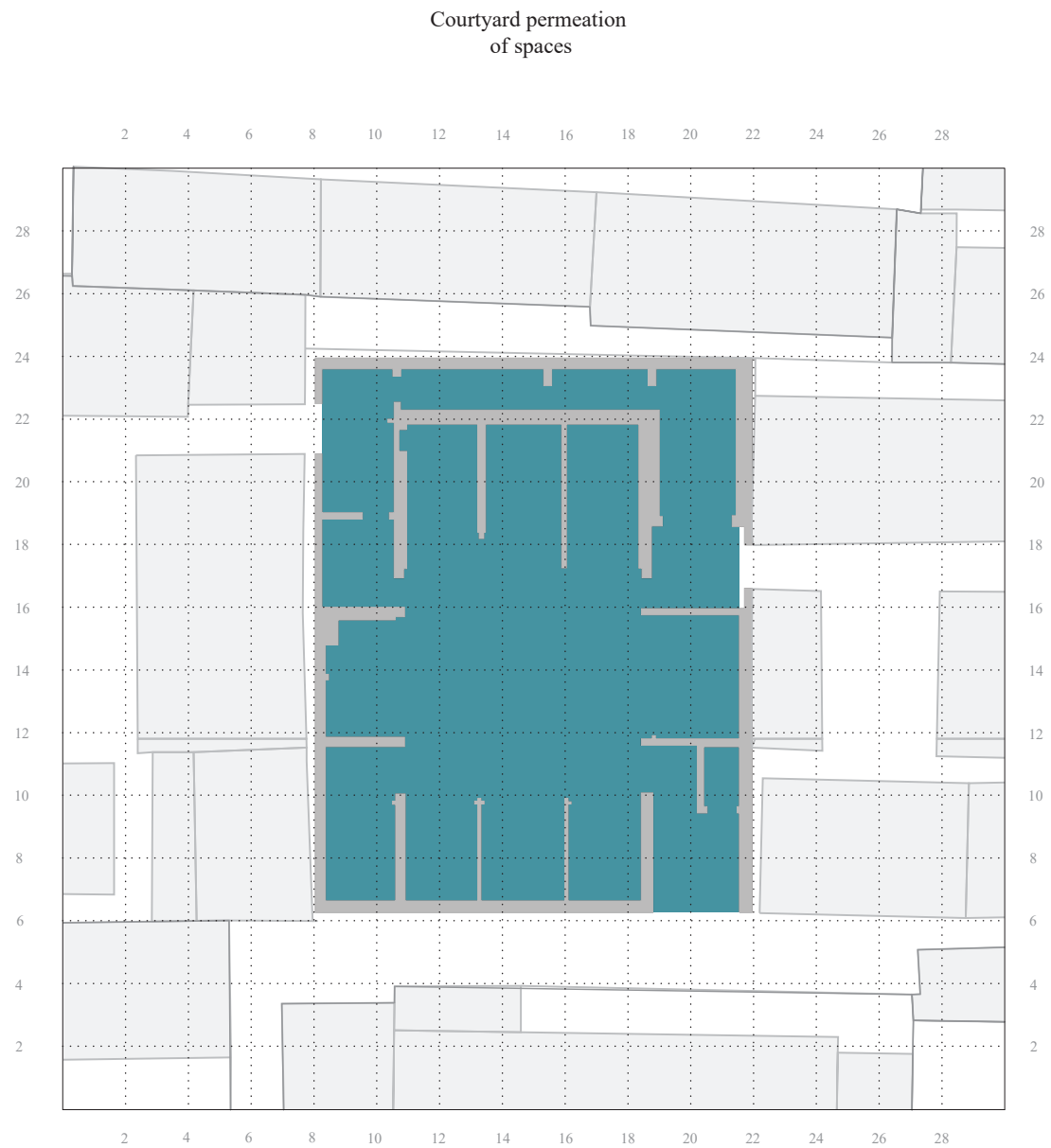
*Figure 82 Courtyard existing boundaries,
drawing elaborated by Lidia Preti*



*Figure 83 Courtyard breakage of boundaries proposal,
drawing elaborated by Lidia Preti*



*Figure 84 Courtyard gathering space becomes malleable,
drawing elaborated by Lidia Preti*



*Figure 85 Courtyard space conceptually pouring into the buildings,
drawing elaborated by Lidia Preti*



*Figure 86 Courtyard space flowing in the surrounding spaces,
drawing elaborated by Lidia Preti*

Bringing the focus on the built spaces inside the chosen courtyard, the design centers the attention on preserving the main structure, avoiding the denaturation of the traditional features of the courtyard houses. Few secondary changes have been realized to turn the spaces into a more comfortable one and adapt it to host groups of people. Above all, the courtyard has been equipped with primary infrastructures as the toilet, at the disposal of the users. Secondly the narrow corridor behind the north building, has been designated as a storage space. The third change has been realized to the partition of the north and south edifice where the internal walls have been reduced to have the possibility to create larger and more welcoming spaces. Lastly in the east building, the front *façade* has been removed to create a different typology of space to host a new function. The proposed configuration host new public function, provocatively different from the usual residential nature of the courtyard. The aim is to provide the different spaces with a light furniture easily adaptable to the different situations and needs. To give an example in the west building, originally designed without the front *façade*, has been inserted a modular and prefabricated stair, an element adaptable to different uses.

The courtyard under discussion, following the inspiration offered by the Beijing Design Week, overturn the traditional dwelling function of the courtyard compounds to turn it into a spatial support for the inhabitants. The functions selected for the courtyard take the distances from the traditional rigidity of the courtyard system therefore they are not strictly defined. The indoor spaces, designed as malleable ones, can be adapted to the different needs of the users and, when necessary, extended to the outdoor spaces.

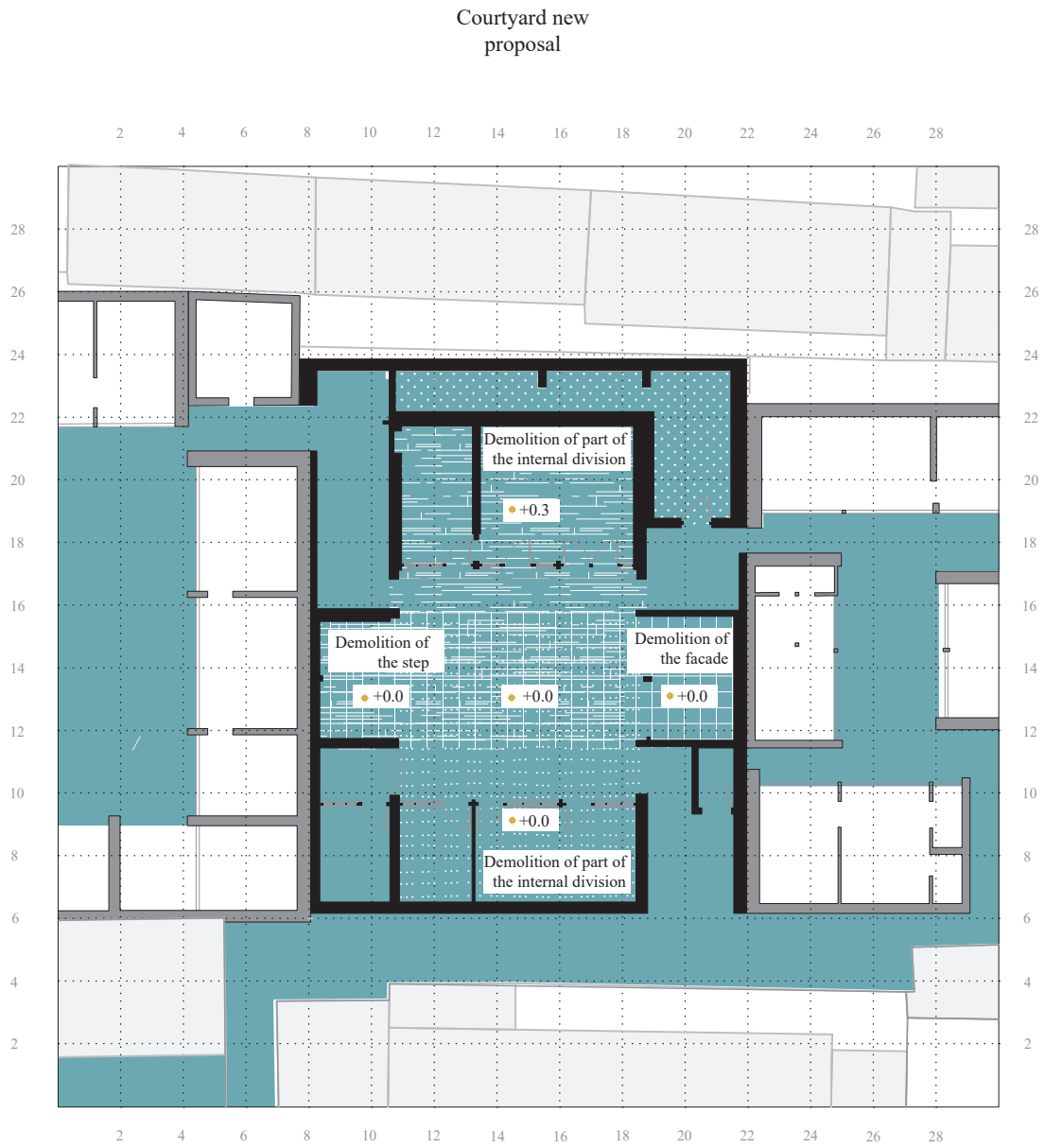


Figure 87 Courtyard existing configuration,
drawing elaborated by Lidia Preti



Figure 88 Courtyard new proposal,
drawing elaborated by Lidia Preti

Scheme functions

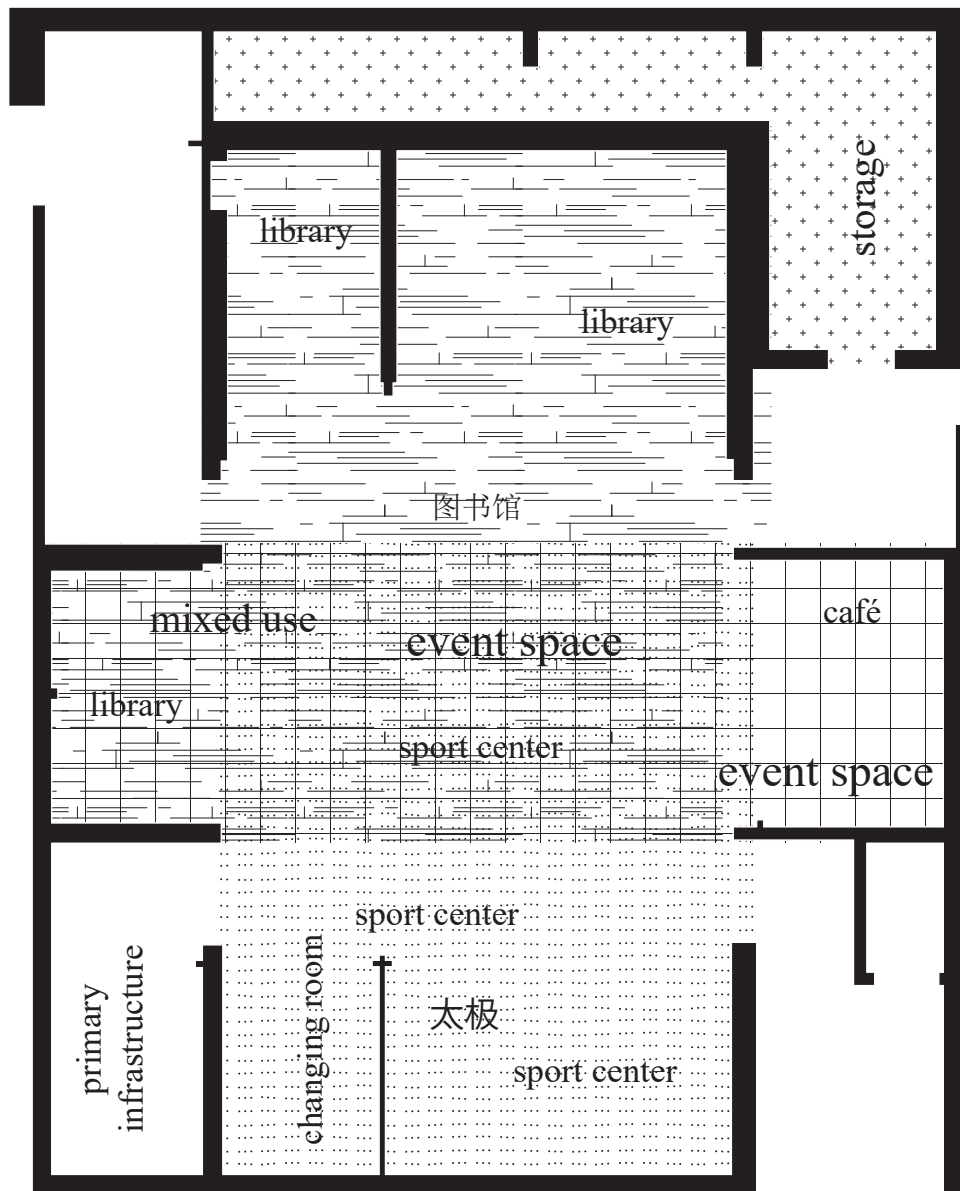


Figure 89 Functions scheme,
drawing elaborated by Lidia Preti

To enhance the concept of an elastic space, the floor-plans show the different use of the same space in different times. To easily understand the use of the spaces in the different moment, the floor-plans have been marked with the initials T_1 , T_2 , T_3 , T_4 , T_5 , to address the different instants.

The instant T_1 , shows the configuration of the courtyard when the two different activities proposed are kept separated. The northern edifice has been converted into a small library while the southern building has been designed as a small sport center. The space, equipped with the basic elements as the small changing room, is easily adaptable to different uses throughout different times. Thereafter the instant T_2 , shows the library space conceptually pouring out from the building constrains to invade the courtyard and use the support offered both by the east and west edifice. The successive instant analyzed, T_3 , on the other hand, examine the space of the sport center flowing into the courtyard and using it as an outdoor space for sport classes. Lastly the instants T_4 and T_5 , have been designed taking the central space in between the east and west building as a space of possibilities. The west edifice, equipped with a two-tier structure for sitting and the east one, furnished with facilities for a small café, offer different possibilities of use. To give an example, the time T_4 shows, with just the addition of a light pavilion stretched out between the two buildings, the creation of a gathering space where people could chat, having a beverage from the bar and spend time together. The same space in the instant T_5 , is turned into a concert space where people can sit on the two-tier structure to enjoy the music event.

Among these five possibilities, two of them, the instant T_2 and the instant T_4 , have been analyzed in detail throughout the use of perspective sections, axonometries and views to comprehend the spatial potential of these spaces.

T₁: Defined space

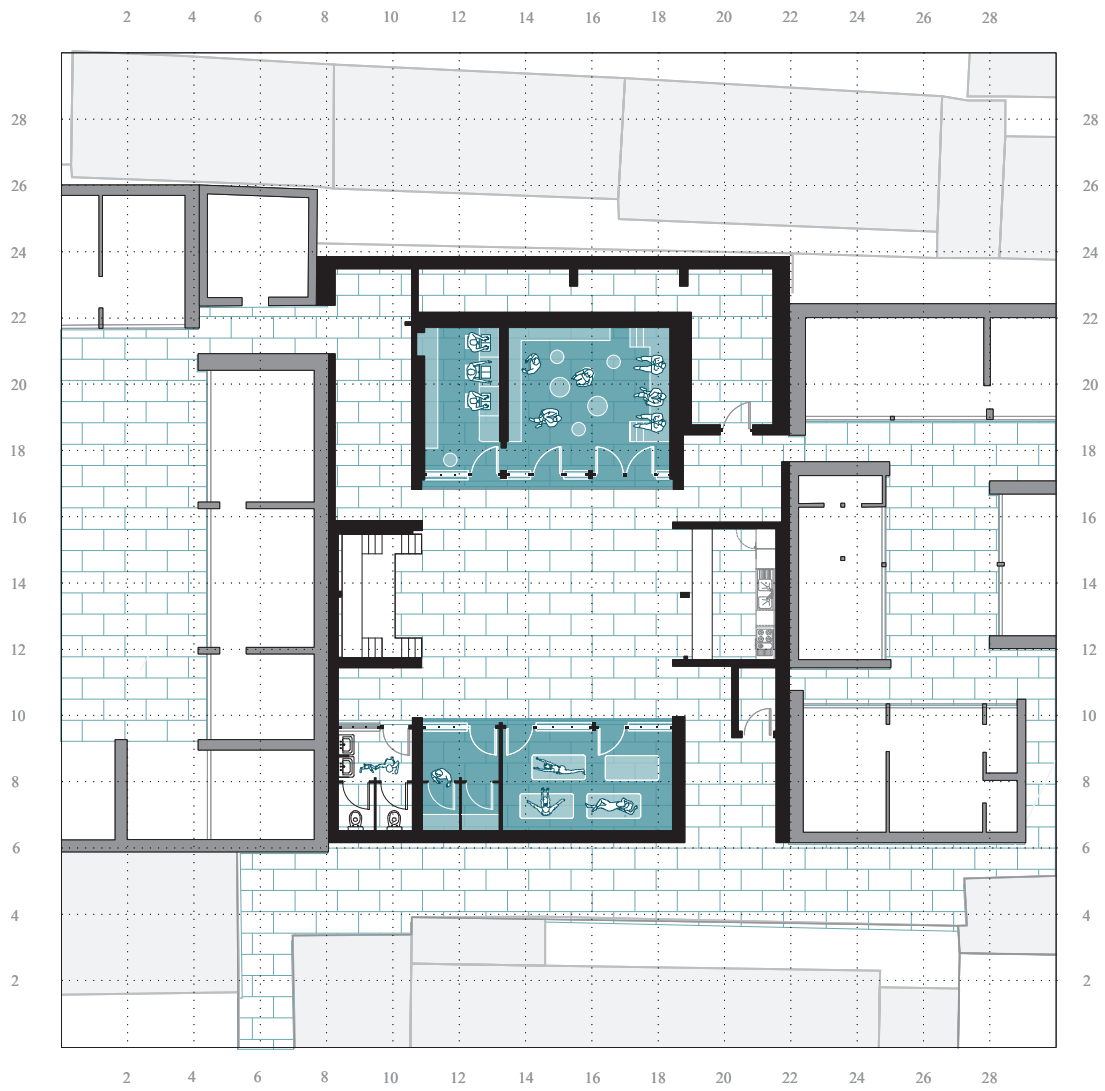


Figure 90 Courtyard floor-plan instant T₁: defined spaces,
drawing elaborated by Lidia Preti

T₂: Library pouring out

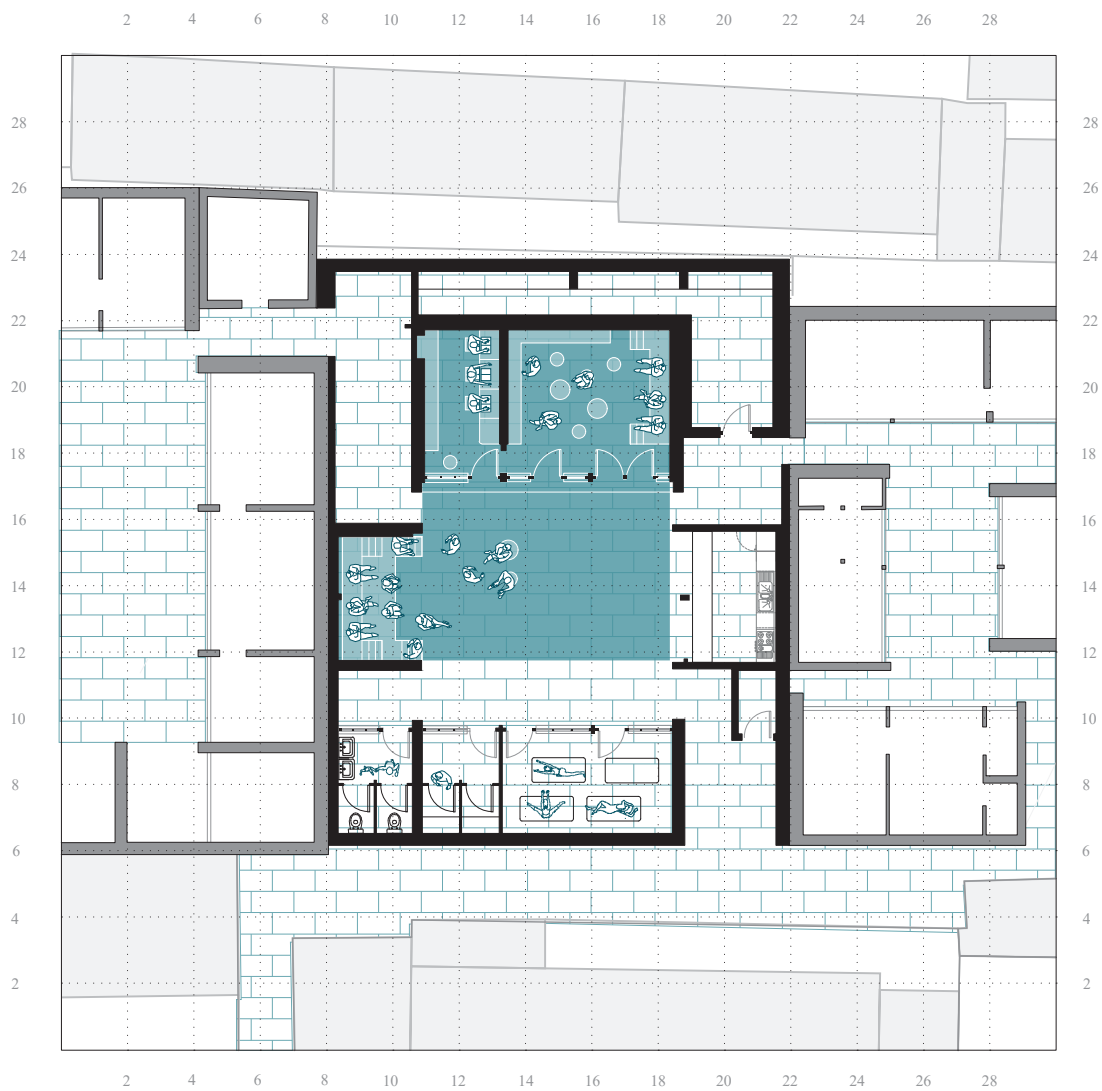


Figure 91 Courtyard floor-plan instant T₂: library space pouring out,
drawing elaborated by Lidia Preti

T_3 : Sport center pouring out

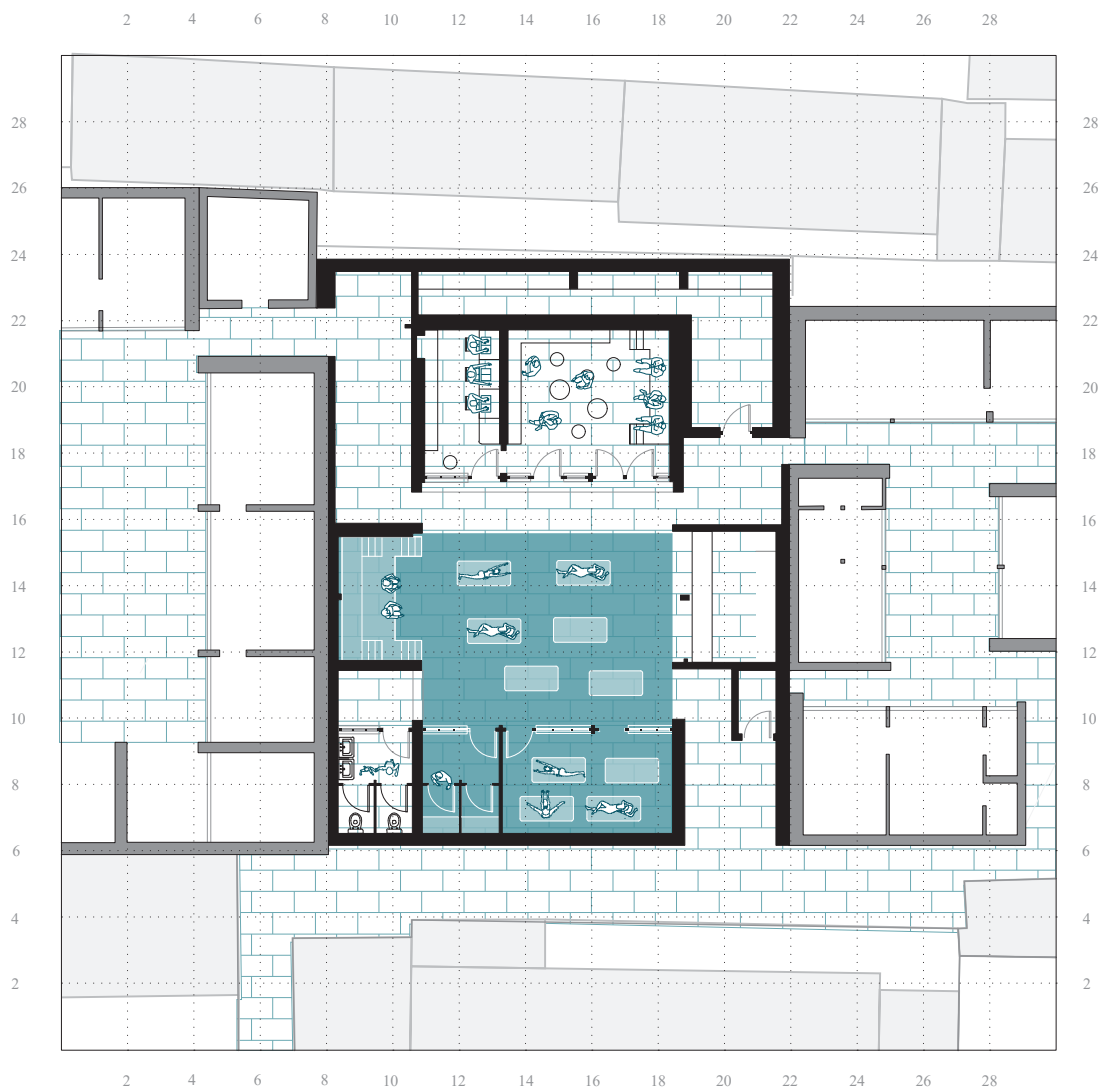


Figure 92 Courtyard floor-plan instant T_3 : sport center space pouring out, drawing elaborated by Lidia Preti

T₄: Event space

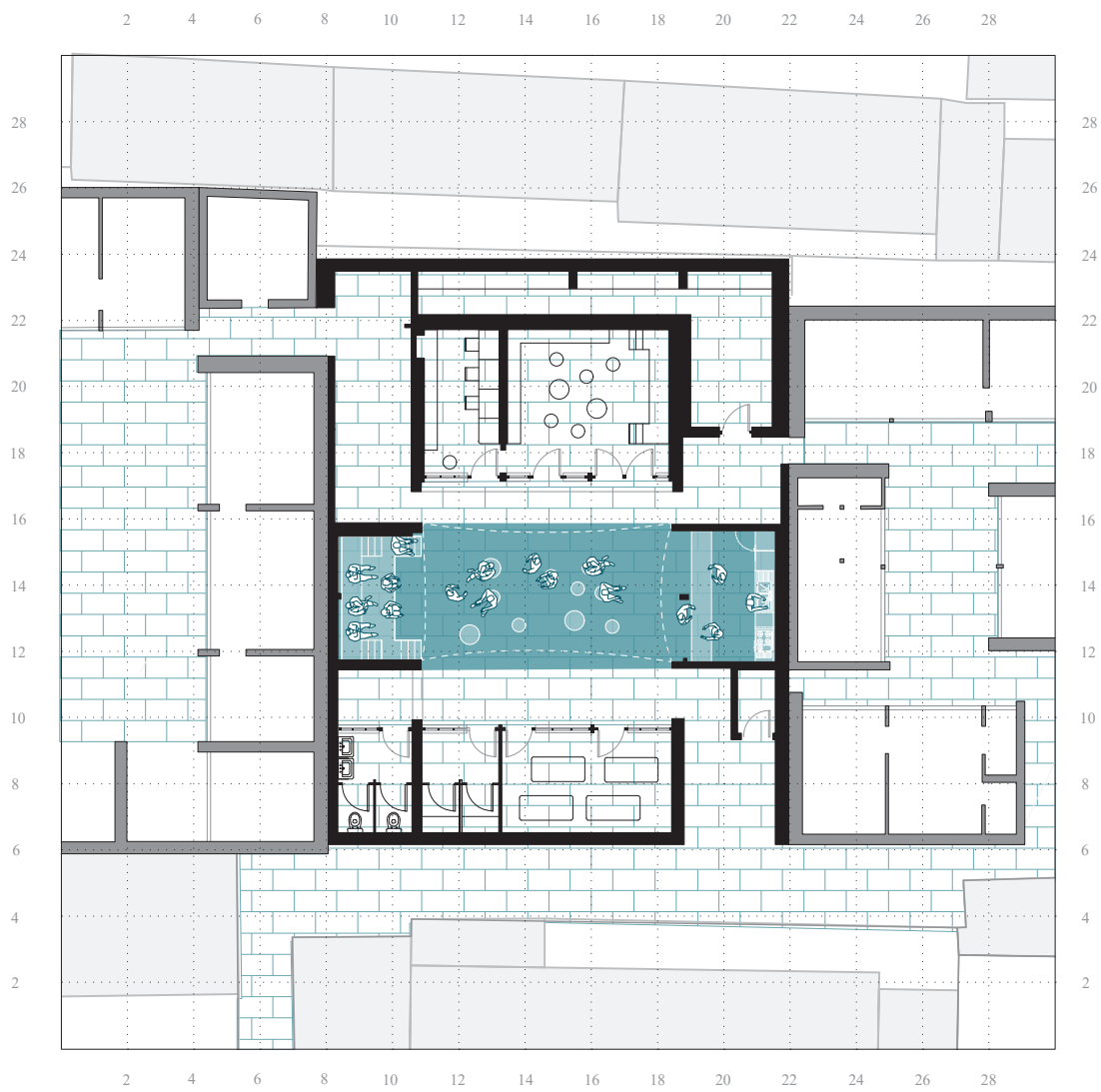


Figure 93 Courtyard floor-plan instant T₄: event space,
drawing elaborated by Lidia Preti

T₅: Event space

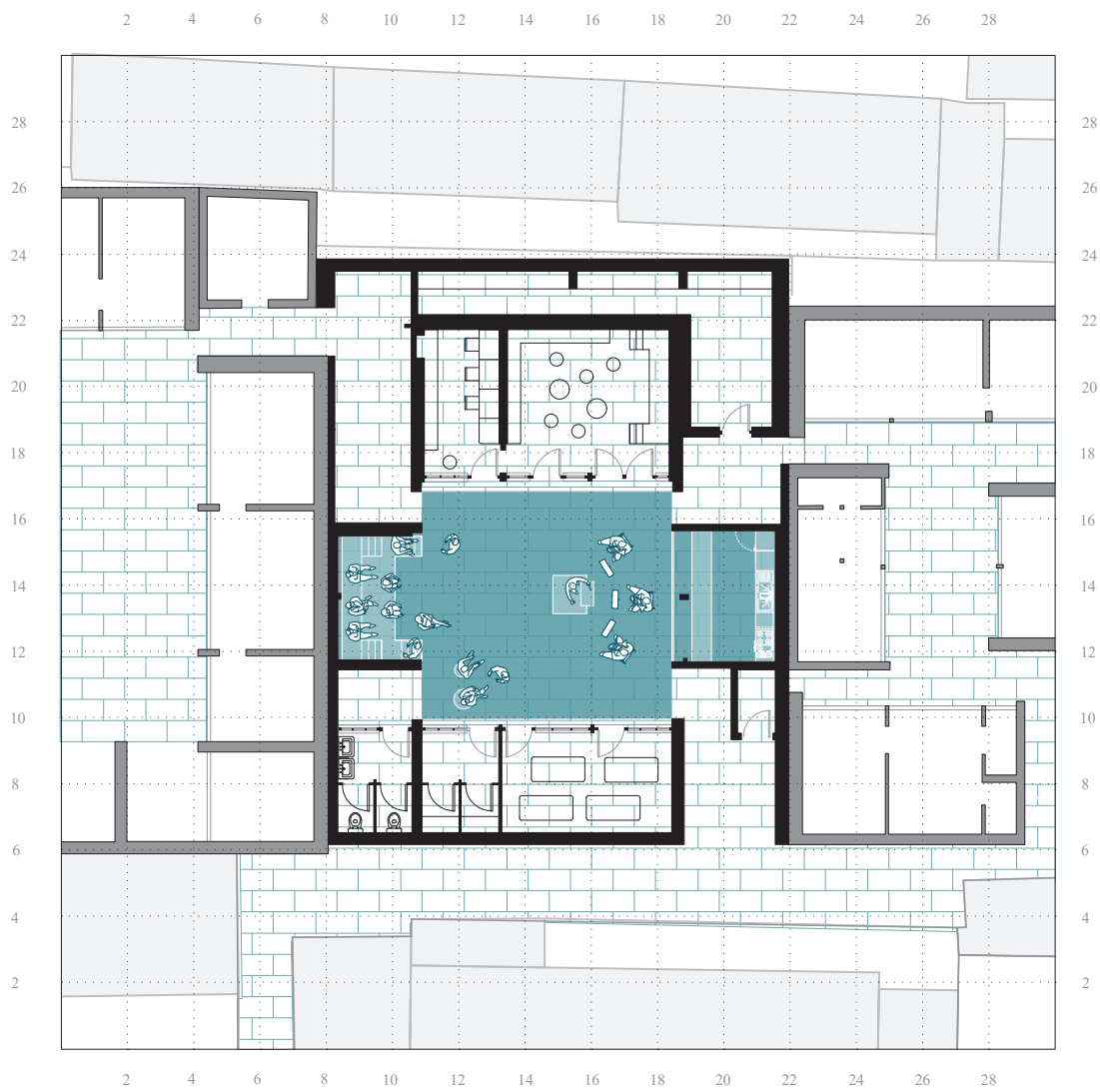


Figure 94 Courtyard floor-plan instant T₅: concert space,
drawing elaborated by Lidia Preti

Upside down axonometry
 T_2 : Library space pouring out

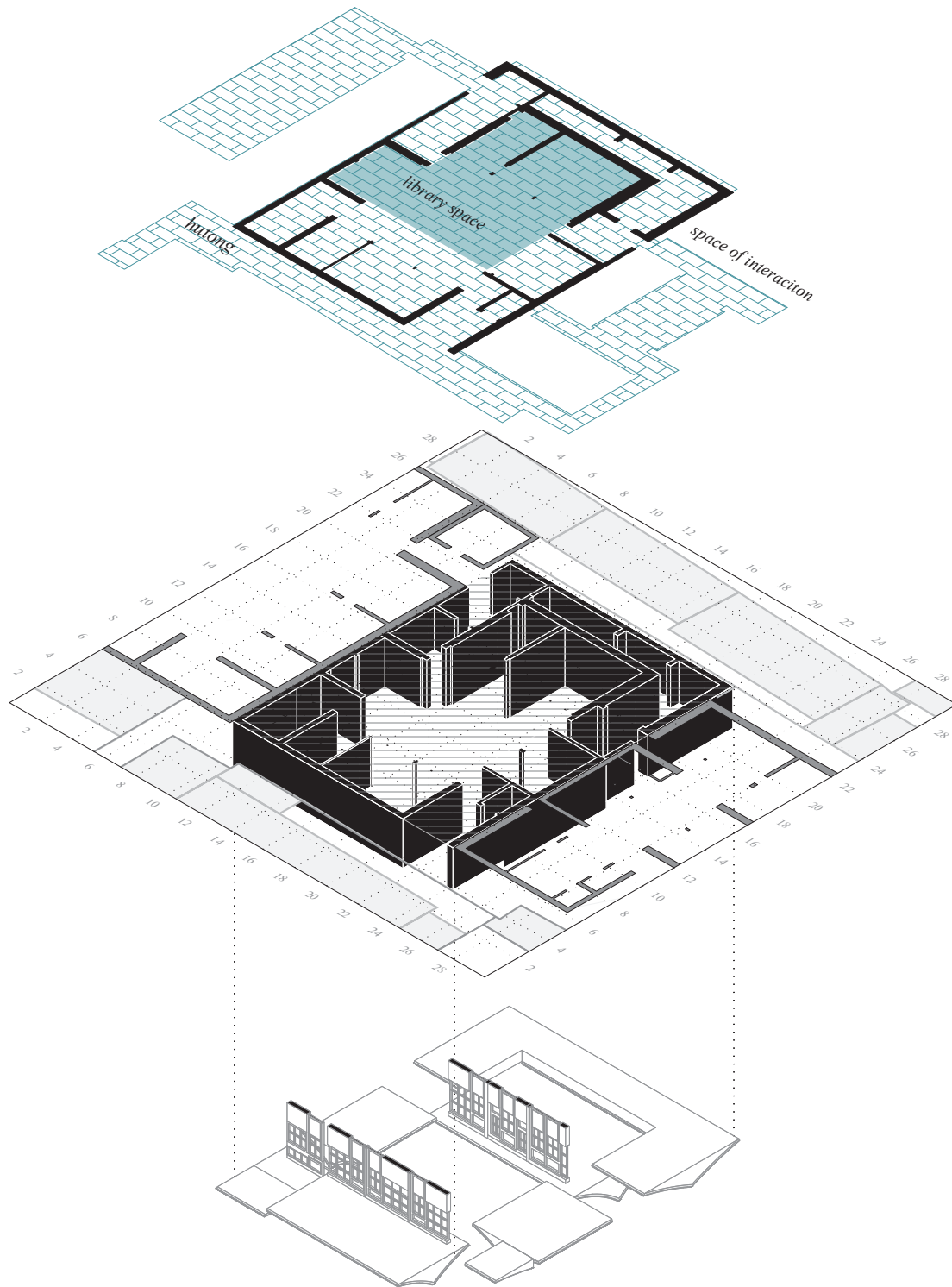


Figure 95 Upside down axonometry instant T_2 ,
drawing elaborated by Lidia Preti

Axonometry
 T_2 : Library pouring out

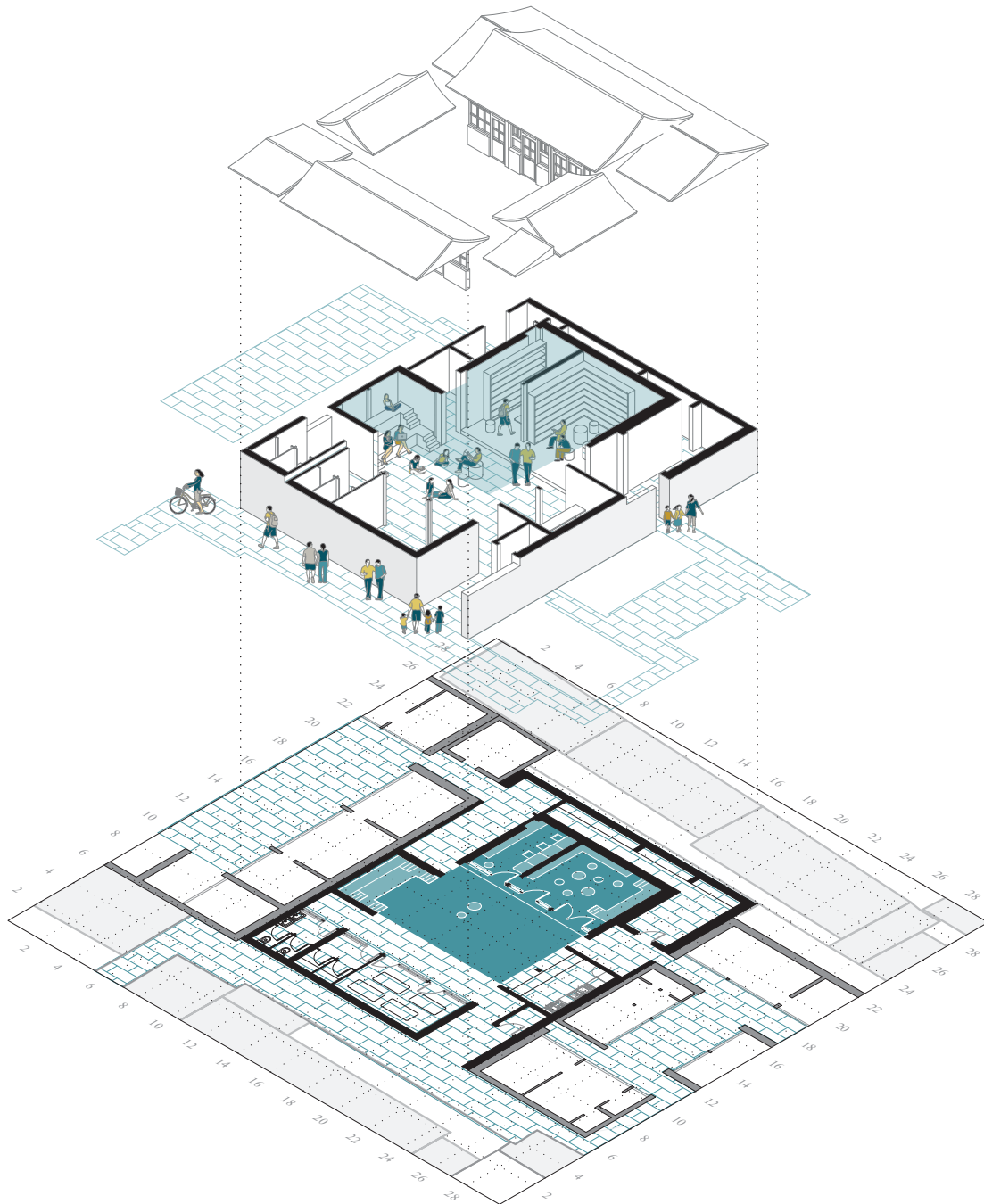


Figure 96 Courtyard exploded axonometry instant T_2 ,
drawing elaborated by Lidia Preti

T₂ Perspective section

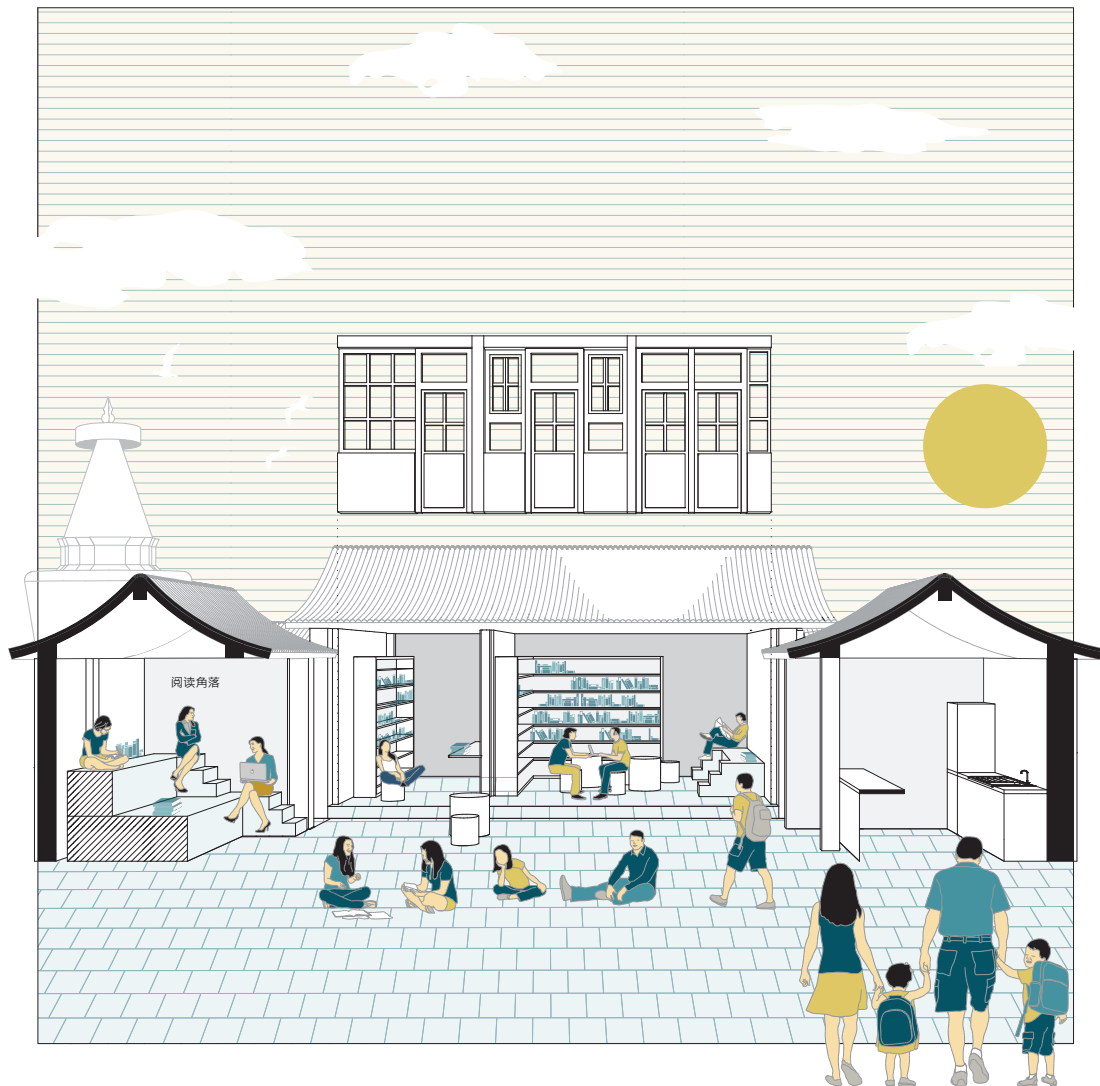


Figure 97 Courtyard perspective section instant T₂,
drawing elaborated by Lidia Preti

T_2 View



Figure 98 Courtyard perspective section instant T_2 ,
drawing elaborated by Lidia Preti

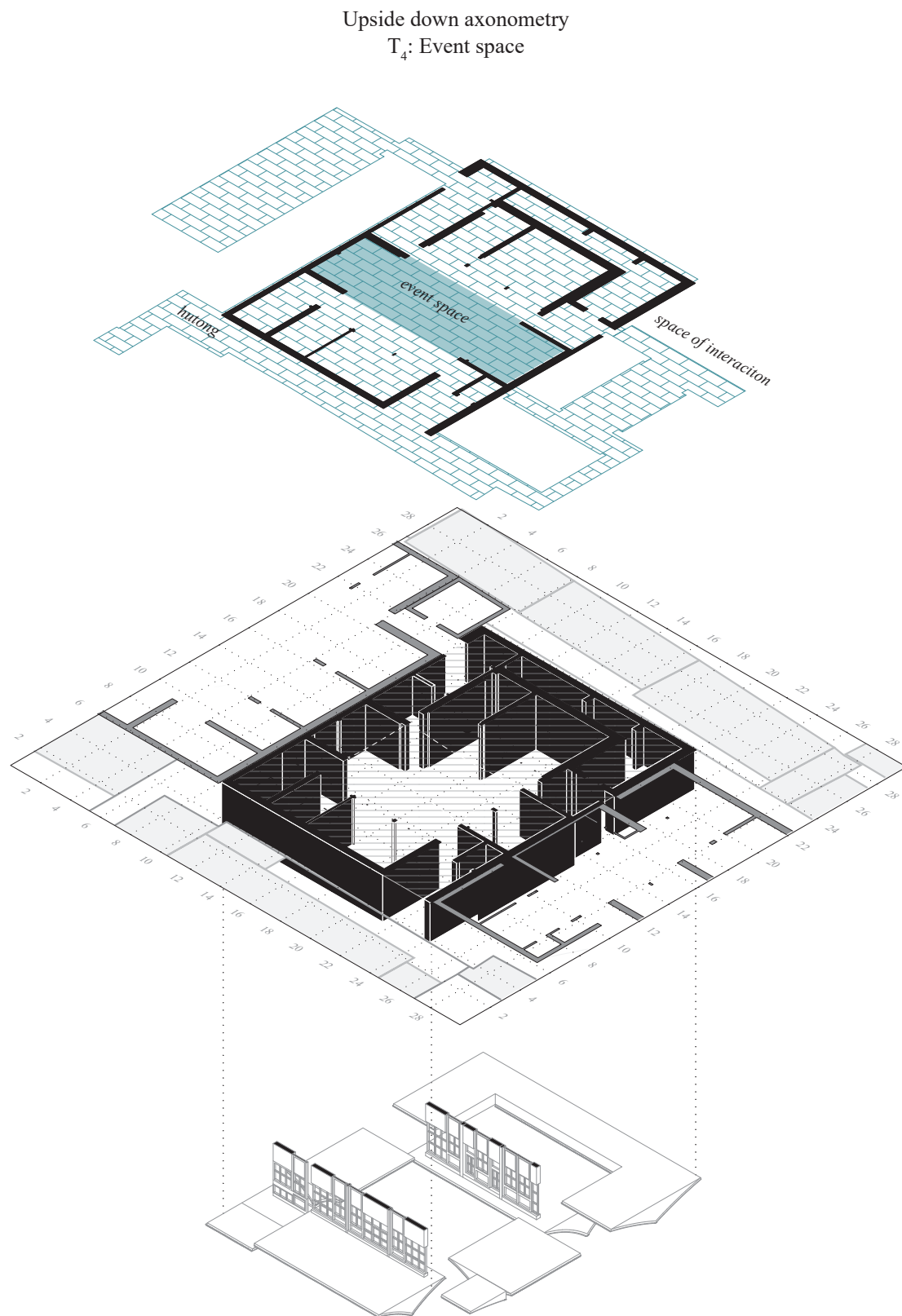


Figure 99 Upside down axonometry instant T_4
drawing elaborated by Lidia Preti

Axonometry
 T_4 : Event space

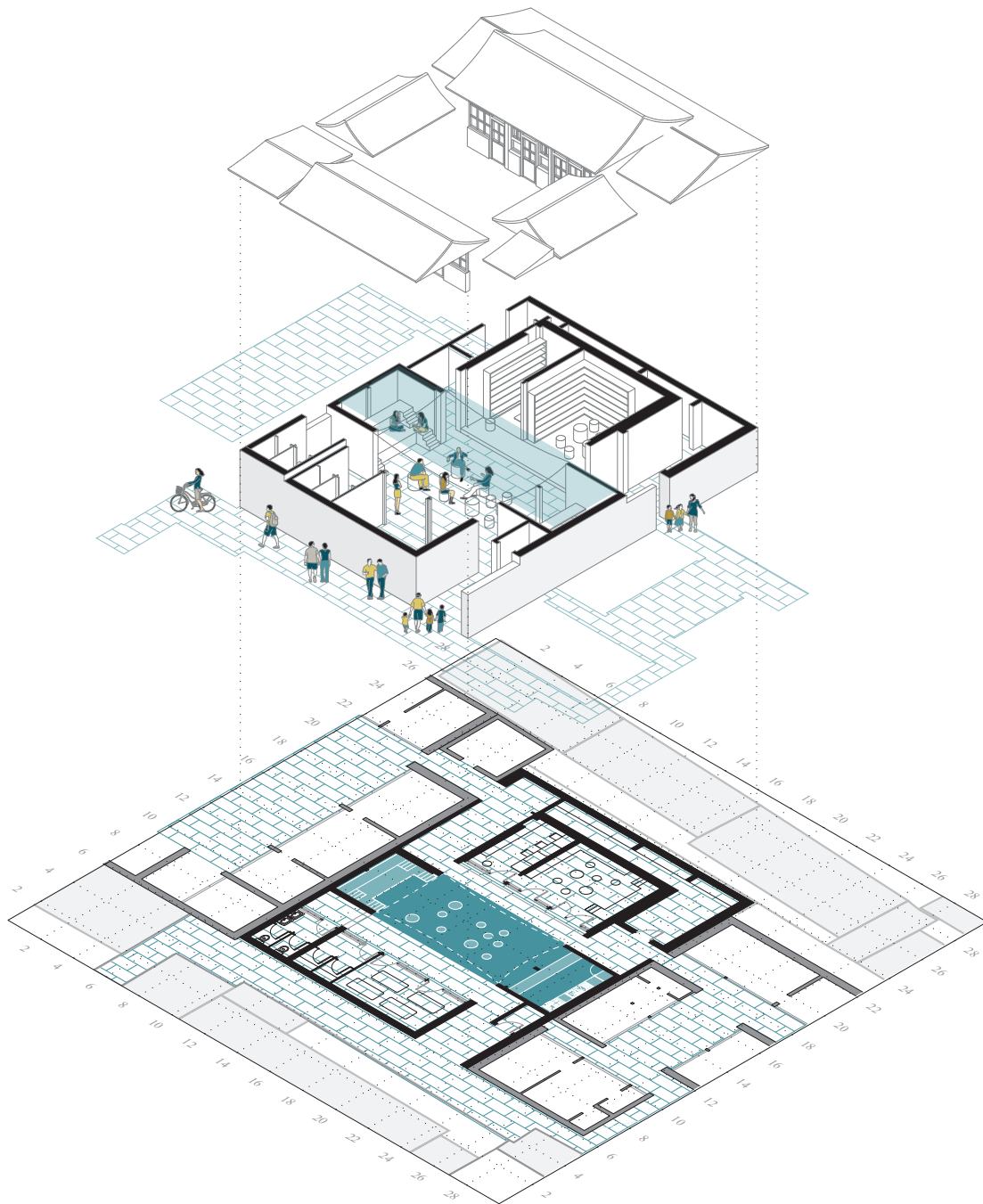


Figure 100 Courtyard exploded axonometry instant T_4
drawing elaborated by Lidia Preti

T₄ Perspective section



Figure 101 Courtyard perspective section instant T₄
drawing elaborated by Lidia Preti

T₄ View



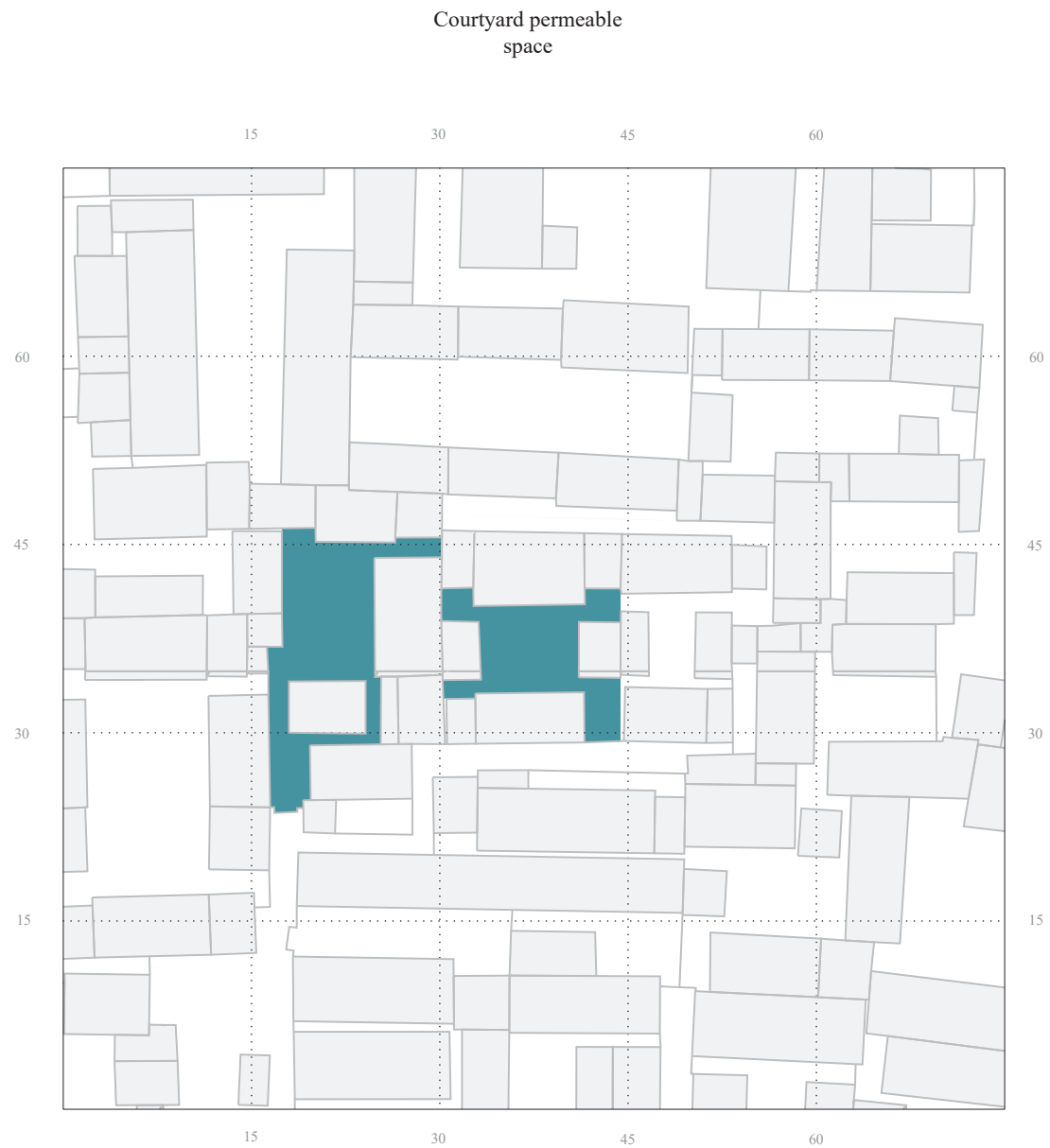
Figure 102 Courtyard view instant T₄
drawing elaborated by Lidia Preti

How can this principle support the dynamics of *Baitasi* area? The aim is to establish a prototype to turn the suspended spaces of the area into used ones as matching pieces of system that supports the dynamics of hybrid use of the space displayed by the inhabitants. Looking at the phenomenon at the neighborhood scale the potentiality of the project is to create a spread system in the whole *Baitasi* neighborhood to avoid the gentrification of the *hutongs* areas. The courtyard used for the Beijing Design Week and left vacant after the use, from obstacles in the area can be turned into positive and potential spaces accessible to all the community. The suspended courtyards, following the principles of the prototype proposed by the design proposal, might become an unexpected resource of space, a permanent rationalized support. The “occasions” that the Beijing Design Week created with the temporary installations, could be turned into a permanent shared spatial support, the temporary features of the installation can become a stabilized solution in the area. The principle of hybrid uses of this space can be applied to the larger scale leaving the floor to possible future expansion. The following drawings aim to show how, starting from the space of the exhibition courtyard, the courtyards common space could conceptually invade the adjacent courtyards creating a shared system. Thereupon, from the scale of the tassel the maps show how the same principle could be applied to all the courtyards left vacant after the Beijing Design Week can be, throughout small interventions, progressively switched on again to create a solid system of common spaces inside the area.

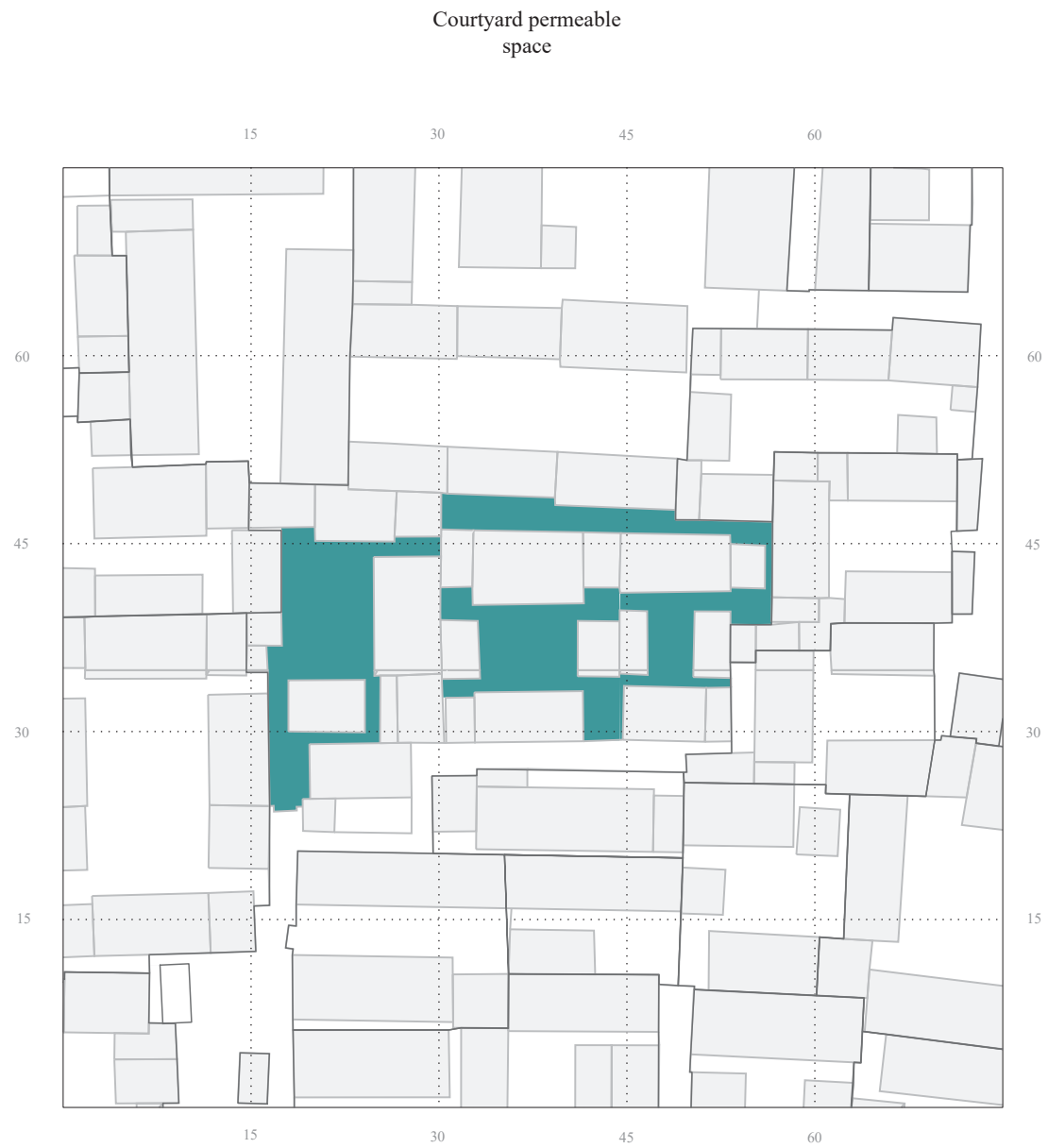
Courtyard inner space



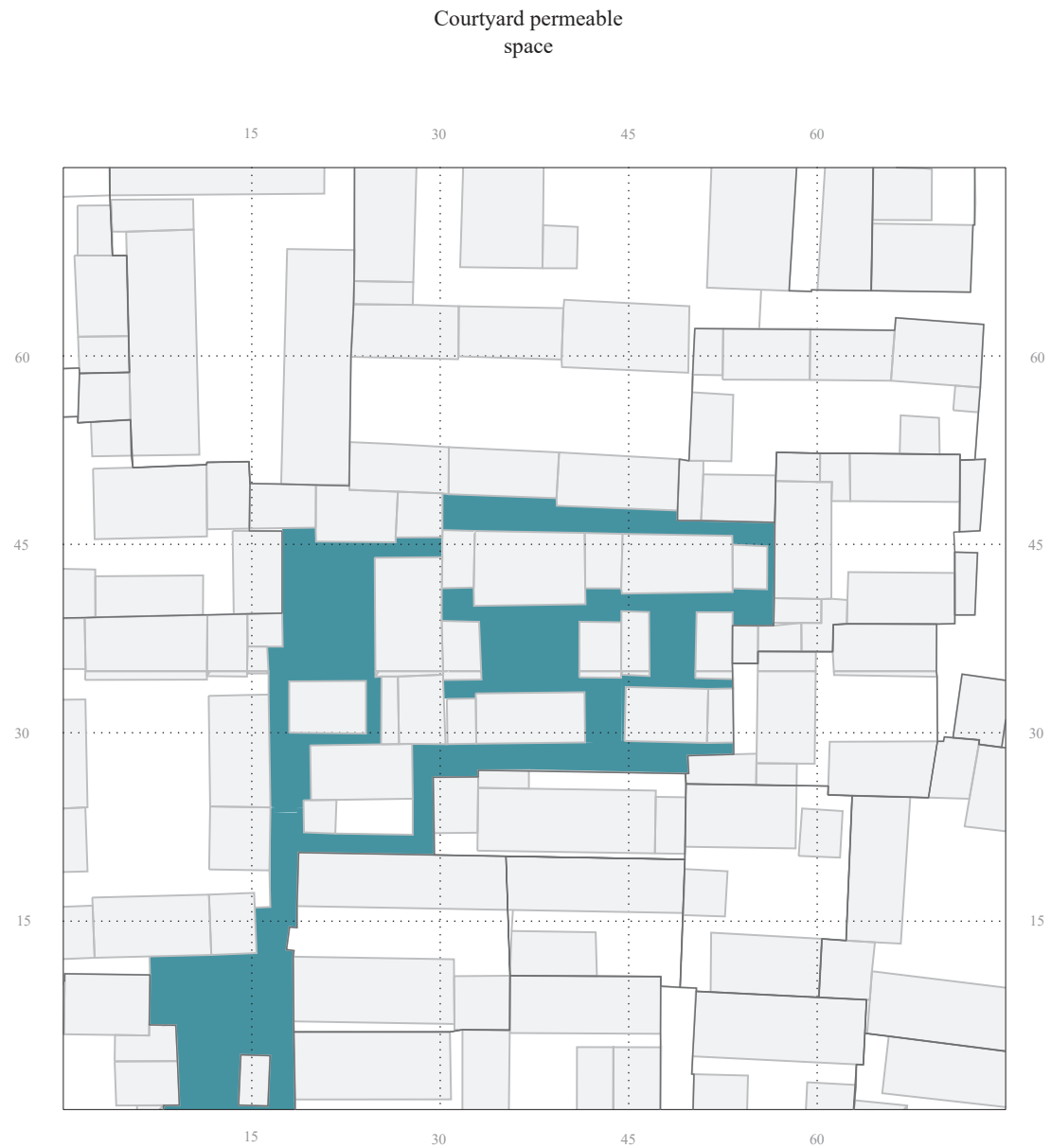
*Figure 103 Courtyard inner space malleable,
drawing elaborated by Lidia Preti*



*Figure 104 Courtyard space expansion,
drawing elaborated by Lidia Preti*



*Figure 105 Courtyard space expansion,
drawing elaborated by Lidia Preti*



*Figure 106 Courtyard space expansion,
drawing elaborated by Lidia Preti*

Courtyards Beijing
Design Week 2017



*Figure 107 Suspended courtyards after Beijing Design Week ,
drawing elaborated by Lidia Preti*



*Figure 108 Some of the courtyards “switched on”,
drawing elaborated by Lidia Preti*



*Figure 109 Creation of an urban prototype,
drawing elaborated by Lidia Preti*



*Figure 110 Expansion of the urban prototype,
drawing elaborated by Lidia Preti*



*Figure 111 Expansion of the urban prototype,
drawing elaborated by Lidia Preti*

Conclusions

Chapter 5 Conclusions

The paper points out how the rapid urbanization as well as the changes occurred in the 20th century to the courtyard house system in Beijing lead to a different use of the spaces. The overcrowding of the dwelling spaces due both to the policies of the previous century as well as the earthquake of 1970 lead to the self-adaptation of the built spaces by the inhabitants of the area. The social dynamics observed in one specific area of the city of Beijing, have clearly shown how the traditional division of indoor and outdoor spaces is now blurred and the indoor activities are poured out in the outdoor areas in search of space. In this background, the appropriation of some courtyard of the area by the Beijing Design Week in 2017 as well as the subsequent emptying on these spaces after the exhibition, left the area studded with suspended spaces without a function, a surplus space waiting to be transformed. The interest of the project is, starting from the phenomenon observed in the area as well the presence of suspended courtyards, to create a prototype that could support the social dynamics as well as convert the suspended spaces into a permanent shared spatial support for the inhabitants. Starting from the concept of hybrid use of the space and from the observation of the domestic space flowing outside, provocatively the aim is to propose a shared space that from the street penetrate inside the courtyard that once was a dwelling space in order to create a permanent spatial support.

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声 明/Personal Statement

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09.2018-07-2013 High School diploma (Scientific studies), Niccolò Copernico, Turin, Italy

Workshop

02.2018 National University of Singapore (NUS), Sharing cities, the example of Keppel Harbor, Singapore, Singapore
01.2018 Tsinghua University Beijing, Sharing cities, the example of 75 district; Beijing, China

Working experience

05.2019	Spokeswoman for Polito China day 2019, sharing experience, Polytechnic of Turin, Italy
03.2019-06.2019	Tutor for design studio: Architecture and urban space, Polytechnic of Turin, Mater degree architecture construction and city, Turin, Italy
03.2019	Photographic report for the meeting Trans-Urban Eu-China Horizon 2020, Turin, Italy
12.2017-01.2018	Project based collaboration at office MaisonH Beijing, China
09.2017-10.2017	Collaborator for Beijing Design Week, in collaboration with Polytechnic of Turin, Hutong playground, Beijing, China

Web mentions

05.2018	Design studio final project, “The orange ribbon”, sharing work project for the 751-art district Beijing, China, mentioned in: 751DPARK, https://mp.weixin.qq.com/s/yKnwalfnOO-iV-g6duch7gQ
04.2018	Photographic report, Tianjin Library MVRDV, published in: Il Giornale dell’architettura, http://ilgiornaledellarchitettura.com/web/2018/05/07/cina-e-tempo-di-biblioteche/
12.2017	Design studio final project, “The canyon”, Archi-puncture, designed for Tsinghua University campus, Beijing, China, mentioned in: Maison H, http://maisonh.nl/project/archi-puncture/
12.2017	Hutong playground, Beijing Design Week 2017, collaborator for Polytechnic of Turin, Beijing, China, mentioned in: Design-Boom, https://www.designboom.com/architecture/politecnico-di-torino-hutong-playground-12-10-2017/
01.2016	Design studio final project, “Traverser la ville fragile”, urban planning project, Polytechnic of Turin, Turin, Italy, mentioned in:

- Territori della condivisione, <https://territoridellacondivisione.wordpress.com/2016/06/21/traverser-la-ville-fragile-1/>
- 03.2015 Design studio final project, “Territories in crisis, The disuse of industrial heritage, the example Olivetti, Scarmagno (To)”, urban analysis, Polytechnic of Turin, Turin, Italy, mentioned in: Territori della condivisione, <https://territoridellacondivisione.wordpress.com/2015/01/25/cio-che-resta-del-sogno-olivettiano-scarmagno-d-u-a-a-2014-2015-territories-in-crisis/>