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Reinterpreting the Past

**AN INTEGRATED APPROACH TO URBAN TRANSFORMATION
IN HISTORICAL SUZHOU**

Master Thesis

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01 / Abstract

Suzhou is one of the most visited tourist destinations in China, thanks to its well-preserved old town surrounded by canals and the unique urban landscape. The city is also well-known for the magnificent Chinese gardens, most of which are enlisted as UNESCO World Heritage sites as the essence and the traditions of Chinese culture.

After introducing the major features of the site, a portion of the historic town demolished few years ago, the thesis work studies the main concepts of the Chinese gardens and the current dynamics of urban transformation related with the old town. A new form of urbanization is then proposed that reinterprets historical Suzhou; the masterplan proposes a new urban mixite taking into account the historical context and seeking how to supply the current inhabitants and visitors' necessities.

02 / Joint Studio Experience

ABOUT US

The team is composed by five students from the "Politecnico di Torino" who are attending diverse master's degrees programs, making up a multidisciplinary team not only in the educational aspect but also in the cultural one, being the students from different countries namely Italy, China and Colombia.

All students shared from the very beginning the common interest in assuming the dare of design in an unknown territory. They were open to encounters with a new cultural context and to establish new

ways of teamwork. Each one contributed with knowledge and skills in specific fields that have been developed throughout their education and experiences.

The multidisciplinary thesis work encouraged the exchange of information and the discussion of different points of view among the team itself and with people who works in other fields, directed by a common goal: understanding and approaching 'the past' with design tools and experiencing realistic professional dynamics.



LING XIAN
'Architecture construction city'



GIAMBATTISTA CRISAFULLI
'Landscape architecture'



CAROLINA PELOSATO
'Landscape architecture'



NICOLE CARDONA
'Architecture for the restoration and enhancement of the heritage'



CAROLINA MARTINEZ
'Architecture for the sustainability design'

CUHK-POLITO

CHUK - POLITO Joint Studio 2018 theme revolves around 'urban landscapes throughout history' and focuses on Suzhou's garden experience, between conservation and reinterpretation. As a number of Suzhou gardens are UNESCO World Heritage Sites, the city attracts millions of tourists. However, the gardens were initially designed for solitary enjoyment of landscape pockets within the built environment. Visitors experience of the gardens is currently different from the initial one, but also detached from the current local facilities in most cases.

Based on the statement that there is a chance to reinvent the visitor's accommodation and amenities inside the old town, Professor Stanislaus Fung encouraged students from Torino and their Hong Kong colleagues to incorporate into their architectural, landscape and urban knowledge three aspects of cultural memory: procedural, semantic and Allomnesia. The first kind of memory brings up the traditions of the local constructors; the second one refers to the elements such as ornaments and symbols, linked to the local folklore; finally, the third one is about how to provoke past experiences in a new content.

Spending one month in China helped us in gaining a direct experience of the Chinese urban life and culture, leading us towards a personal and professional growth in which many knowledges were acquired. Even if we had other international experiences before, this prepared us to open our minds to other ways of seeing things. We admit that we have at the end of our experience even more curiosity and interest for a country that we knew only superficially before and we understand now as much more complex, constantly changing and even richer in challenging contrasts than expected.

CUHK-Polito Joint studio is a joint initiative of The Chinese University of Hong Kong (CUHK) and Politecnico di Torino (POLITO) that introduces architecture students to a challenging issue with the aim of: sharing skills, exploring different cultures and acquiring new knowledges and competences.

The design studio was organized and directed by the Professors Francesca Frassoldati, Bianca Maria Rinaldi, Gustavo Ambrosini, Mauro Berta, Michele Bonino in cooperation with Professor Stanislaus Fung.



The Chinese University of Hong Kong. School of Architecture CHUK.



Politecnico di Torino
Dipartimento di
Architettura e Design

VISITING SUZHOU AND HONG KONG



The design studio started with readings about Suzhou, its gardens and urban landscape, in order to understand the urban area of study. Since it was essential to know the city and experience the gardens, a first journey to Suzhou was organized on December 2017 and January 2018 in company with CUHK students and professors. This was a first guided experience of the gardens and visit of the area of study.

On March of 2018 a second journey started from the School of Architecture of the Chinese University of Hong Kong. The intention of the trip was exchanging impressions and data collected before, sharing and discovering other methodologies used to analyze and intervene in the same area, providing mutual feedback. The assessment was that despite different ways of approaching them, the main issue was the same.

Continuing with the journey, the next stop was Suzhou where the principal gardens were visited, with the objective of enhancing the research in the complexity of spaces and the sensations evoked inside them. Compared to the first guided visit, this time the purpose was to understand how gardens and their visitors interact with the city, considering the crowd of tourists that get in every day affecting the experience.

Whatever the conditions, visiting the gardens is a wonderful experience, in which despite other people it is possible to concentrate on recurrent elements that compound the space such as water, rock, light, plants, courtyards, corridors and pavilions, which are able to vary in many forms and levels that produce changes in the perception of the space, evoking different emotions.

During our stay in China, one of the main purposes was to explore the cities in three different ways: one as tourists, giving us the opportunity to know the main attractions basically the landmarks; the second one was experiencing the city as residents, since we lived not far from our site for several weeks, trying to observe the daily life of the inhabitants going into areas that were

mostly residential in which visitors seldom enter.

The last one was to live Suzhou as architects visiting new places that show us how contemporary architecture nowadays is dealing with the city of the past. In fact, it was surprising to live in a city in which the boundary between the city and the countryside is sometimes inside the city itself. (Mote, 1974)

“Chinese cities characteristically contained rural life and agricultural activities within them”

(Mote, 1974)

“The landscape design in the garden at the new Suzhou Museum derives from the classic Chinese garden which organically integrates the innovative landscape with traditional elements, including the pool, artificial rockery, small bridge, pavilion and bamboo typical of Suzhou garden”

(Suzhou Museum, 2006)



SUZHOU



Situated in the Southeastern China region, Suzhou is an ancient city surrounded by water canals and offers different urban landscapes. The city has developed more horizontally than other cities in China, and also for this reason the extensively developed network of public transportation does not prevent traffic congestion on the streets due to the massive quantity of scooters and private cars that move in the city. Especially in the old town, in which most of the streets are small, the memory is that of noise and chaos.

On the other hand, the modern sector called “The new city” is completely different, with broad avenues dedicated to

commerce and industry but also providing opportunities for leisure and dwelling. The spaces are extensive, new and are an attractive point for the inhabitants. Ancient and modern sectors have strong contrasts.

The new city is focused on industrial, educational, and commercial aspects having the main attention of the more affluent residents, while the city center emphasizes tourism and is inhabited only by those who live in precarious conditions and do not have chance to move to the new dwellings or by those who can invest in refurbishing old houses amidst temples and historic gardens within the gates of the old town.

Projects such as Suzhou Museum and Suzhou Museum of imperial Kiln Brick show forms of approaching into a current context developing a contemporary architecture that takes into account traditional composing elements producing spaces with an astounding experience.



03 / Framework

REGENERATION PRACTICE IN CHINA

The rapid urbanisation in China has led to a few problems: the uncontrolled urban sprawl, lack of housing and the consequent decline of living quality in the urban area.

To face these challenges and provide solutions, the construction of higher density housing complexes, the regulation through master plans for better zoning the land use in cities, the planning of new districts in the boundaries of cities have been implemented.

The practice of urban renewal in China followed a different trend compared to the West due to its unique political and economic circumstances. Chinese municipal governments have been striving to boost local fiscal revenue through huge capital investments in

infrastructure and urban renewal projects with the purpose of increasing the land's value for sale (lease). In this sense, the local government becomes the developer in initiating massive scale urban projects.

Unfortunately, this has often led to a common practice whereby much historical urban fabric has been entirely removed for new development to maximize profits.

'The articulation of voices around heritage elements is much more complex than for other urban transformations, ranging from local citizens directly affected by the redevelopment projects to external societal components intellectually committed to protect the heritage value

embedded in historic areas.' (Yang, 2014)

There is a dispute in heritage conservation practice regarding the moral and aesthetic 'authenticity' of reviving historic fabrics. Arguably, the modern notion of authenticity on conservation practice goes back to the 1972 World Heritage Convention, which defined authenticity as the primary and essential condition of the heritage. (UNESCO, 2009)

The complete rebuilding together with the total removal of local inhabitants have often led to urban gentrification and the displacement of the actual living patterns of local residents and therefore much of the essence of the place (Smith, 2002).

The Regeneration Programme in historic districts in Suzhou has as main objectives: improvement of the area and clearance of dilapidated housing, enhancement of local living conditions and development of retail and tourism potentials of the area (Suzhou Planning Bureau, 2010).

However, historical and cultural-led urban development evidenced by the preservation

and rebuilding of historical forms, has become a modern phenomenon. Almost every Chinese city is striving to be competitive and attractive, for economic and political reasons, and one common strategy is to revitalise the local areas reawakening awareness of place-based heritage value.

Although the notion of 'authenticity' in relation to heritage and cultural conservation has become a primary asset to guide regeneration practice, often the result has been that many decayed historic districts have been transformed into tourist attractions with questionable authenticity. The production of 'in style' replicas of historical sites mainly is aimed to commercial and tourism interests.

Authenticity can be seen as a matrix of location and setting, form, materials and design, use and function, and intangible or essential qualities.

PINGJIANG DISTRICT CASE STUDY

In the Urban Plan of Suzhou (1985-2000), the Pingjiang district, as a major residential area of Suzhou dating back to the Song dynasty, was marked as an absolute preservation zone because of its typical urban courtyard block pattern with houses connected to the street at the front and to the river at the back.

“In 1988, the city’s urban construction department invited a number of ‘first-class’ domestic universities and planning institutes to work on the urban planning for seven selected streets/districts, including the Pingjiang street. Overall, the planning methodology towards Pingjiang district was to keep the current urban morphology while fulfilling the needs of modern living.” (Ruan and Xiang, 1997)

Many of the courtyard homes of former famous households have now been renovated and a number of these have been sensitively adapted and reused as commercial premises, museums, and hotels. One critical approach that demarcates Pingjiang Street from many other urban regeneration projects that are solely tourist oriented is the inclusion and integration of local residents. Following numerous urban renewal projects in China that have completely removed local residents, in this project it’s admirable to see the recognition of the importance of local living

patterns.

The dwellings that were created proved attractive to many local residents who were living in other historical sectors of the city and wished that their residences would be renovated in the same way (Qu and al, 1990). This renovation project therefore offered a development model for other historic courtyard houses in Suzhou.

It could be argued, however, that despite its achievements, the resurrected townscape of Pingjiang district lacks of socio-cultural authenticity in the living patterns and their associated physical forms (i.e. the courtyard houses and the streets) born in the two fundamentally different historic periods in Suzhou; “one is private and gentrified living in the Imperial period, the other is socialist housing shared by multiple and lower classes in the modern times”. (Xie and Heath, 2017)

In 2010, the Pingjiang District was awarded 4A-class tourism status by the National Tourism Administration and it had become a highly popular destination for local, national and international tourists

The success of these and other adaptive reuse projects has demonstrated the inherent adaptable characteristics of the indigenous courtyard house.

THE PLACES

Suzhou, formerly romanized as Soochow is a major city located in south-eastern Jiangsu Province of East China, about 100 km north-west of Shanghai.

The city is situated on the lower reaches of the Yangtze River and belongs to the Yangtze River Delta region. It is among the largest concentration of adjacent metropolitan areas in the world: it covers an area of 99,600 square kilometres (38,500 sq mi) and is home to over 115 million people as of 2013. (China today, 2013) When the Grand Canal was

completed in the 7th century, Suzhou found itself strategically located on a major trade route. In the course of the history of China, Suzhou has been a strategic centre for industry and commerce on the south-eastern coast of China.

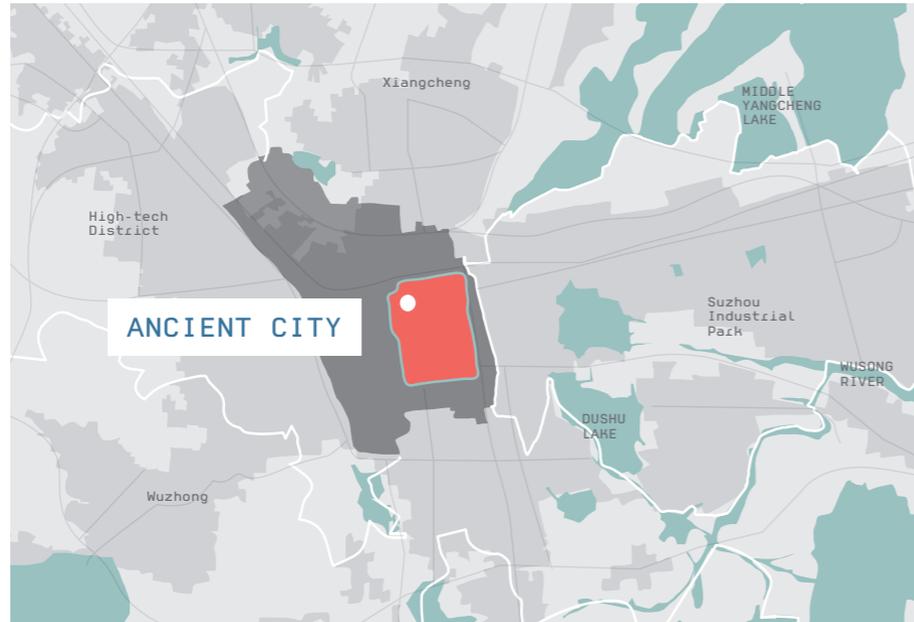
Suzhou had the opportunity to thrive in his context and developed its own urban and architectural style. Whether it is Suzhou gardens or residential dwellings, a rich cultural heritage accumulated and had been well preserved up to now.

**“There is heaven above
and there are Suzhou
and Hangzhou below.”**

Ancient proverb

GUSU

AREA 372 km²
HABITANTS 954.455 inhab
DENSITY 2.565,73 km



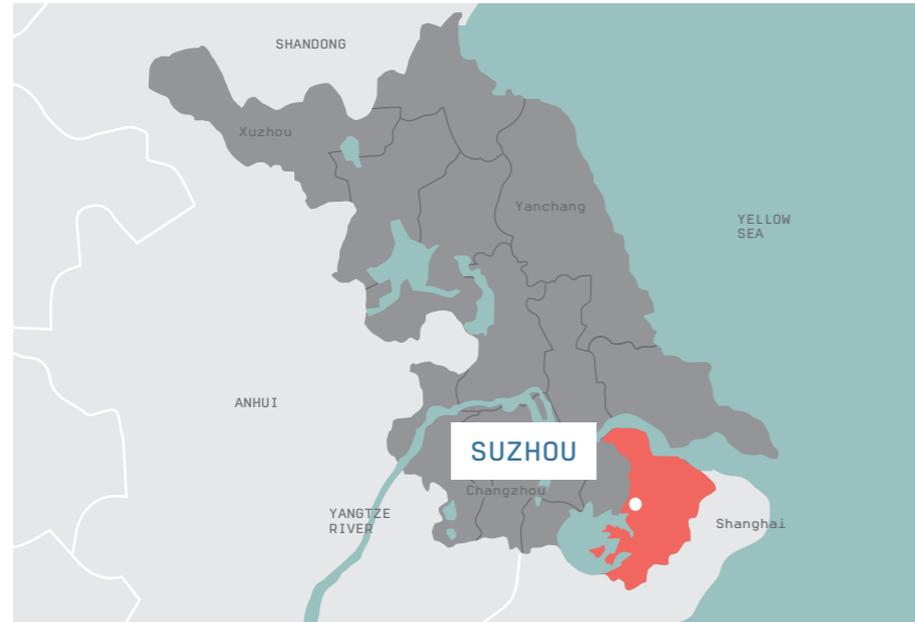
SUZHO

AREA 8.488,42 km²
HABITANTS 10.648.000 inhab
DENSITY 1.300 inhab/ km²



JIANGSU

AREA 102.600 km²
HABITANTS 79.800.000 inhab
DENSITY 780 inhab/km²



CHINA

AREA 9'596.960 km²
HABITANTS 1,369,811,000 inhab
DENSITY 139,6 inhab/km²



SUZHOU BRIEF HISTORY

FOUNDATION AND MAJOR STEPS

The conventional founding date of Suzhou is 514 BCE, back then, during the Dong Zhou dynasty, the ruler of the state of Wu established a city with the approximate boundaries of the today one.

With the building of the Grand Canal, Suzhou became a strategic transportation passage for the rice trade and the commerce in China.

Under the Song (960-1279) and the Yuan (1206-1368) dynasties, Suzhou continued to flourish to grow into a major economic centre for the silk industry and embroidery and a cultural asset for scholarship and the arts.

Under the Ming (1368-1644) and early Qing (1644-1911) dynasties, Suzhou reached the peak of its prosperity.

In 1851 the Taiping Rebellion (1851-64) began and nine years later the army defeated the Qing defences in Suzhou. From 1860 to 1863, Suzhou was occupied and it has led to numerous deaths and many inhabitants fleeing the city. During the retreat the city was to a great extent destroyed.

It was restored in the late 19th century, but its commercial supremacy was then challenged by nearby Shanghai.

In 1911, thanks to the Xinhai Revolution the China's last Imperial dynasty, the Qing dynasty was overthrown, and the Republic of China was established.

The Japanese invasion (1937-1945) during second world war further led to significant air raids on Suzhou with nearly 5000 houses in the old city area being destroyed.

Suzhou remained severely damaged throughout the Civil War period and into the early period of the People's Republic of China, following its formation in 1949.

Further physical damage to the historic city occurred as a result of the Communist Party's Great Leap forward from 1958 to 1961, when the majority of the old city walls were demolished.

Significant additional harm to the unique historic townscape came in 1958 when a central government campaign to eliminate mosquitoes and mice led to fill in and level 12 waterways.

In addition, in the 70s many canals had been utilised for the construction of air-raid shelters that damaged the water system and caused serious pollution. As a result, by 1985 23 waterways had been destroyed.

THE CONTEMPORARY CITY

The city's first railway, linking Suzhou with Shanghai and with Nanjing to the northwest, was opened in 1908.

"Despite wars and invasions, natural disasters, dramatic population changes and economic growth, the social system in China between A.D. 1000 and 1800 displayed remarkable continuity" (Bray, 1997). This has left the imprint on today Suzhou urban fabric.

But periods of disruption, transition and threat from the mid-nineteenth century onwards, had a catastrophic impact in the city urban life.

The city is a centre of learning; Suzhou University and Suzhou School of Fine Arts were established in the early 20th century, and later more universities and colleges.

A new high-technology industrial park, with joint investment from China and

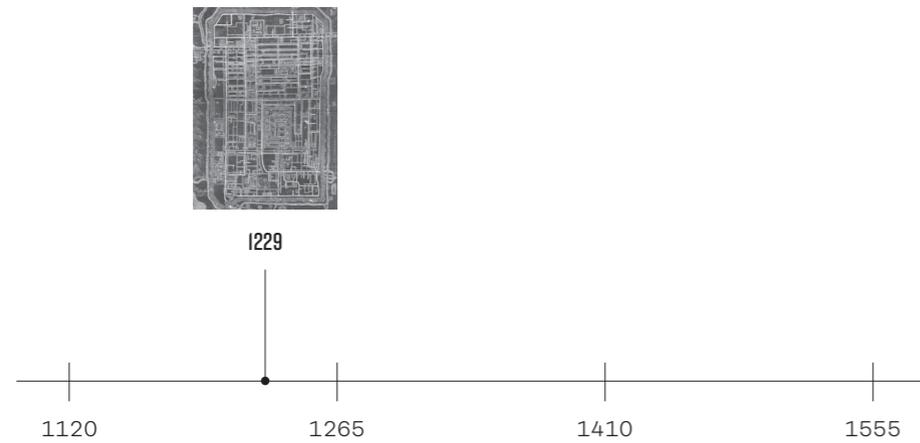
Singapore, has been set up in the eastern outskirts of the city.

December 1978 was a particularly significant moment in Chinese modern history, when strategies and policies for conservation and revitalisation were discussed. This has led to the first overall Urban Plan of Suzhou (1985-2000) approved by the State Council.

Suzhou boasts 150 traditional Chinese gardens mainly dating from the 11th to the 19th century, a number of them were designated a UNESCO World Heritage Site in 1997 and 2000.

The gardens, Suzhou's other cultural and historical sites, and nearby Lake Tai make the area a popular tourist destination.

TIME-LINE



SOUTHERN SONG DYNASTY 1127 - 1278	YUAN DYNASTY 1279 - 1368	MING DYNASTY 1369 - 1643
 1276 MARCO POLO VISIT		
300.000 INHAB APROX.	?	500.000 INHAB APROX.



QING DYNASTY 1644 - 1911	REPUBLIC OF CHINA 1912 - 1948	PEOPLE'S REPUBLIC OF CHINA 1949 - 2018
 1864 - 1850 TAIPI REBELLION	 1940 - 1945 II WORLD WAR	
1.000.000 INHAB APROX.	600.000 INHAB APROX.	954.555 INHAB APROX.

ANCIENT CITY DEVELOPMENT

WATER SYSTEM

Ancient city is characterized by a system of watercourses that goes north-south and east-west inside the old town, producing a unique landscape that other metropolises do not have. In the past canals were the principal element of the urban structure in Suzhou constraining streets pattern and buildings position.

The water network has changed profoundly over time. In Song Dynasty a lot of canals divided the city in many spaces particularly in the north part. Then in Ming Dynasty is evident the development of more canals in the north east part of the city maintaining the existent ducts.

Instead during Qing dynasty, a vast change in the structure can be observed. From 1745 to 1883 the majority of the small canals vanished due to the fact that approximately for 50 years the waterways were really congested because ducts were not clean. As a result, canals that could not be used were turned into built areas.

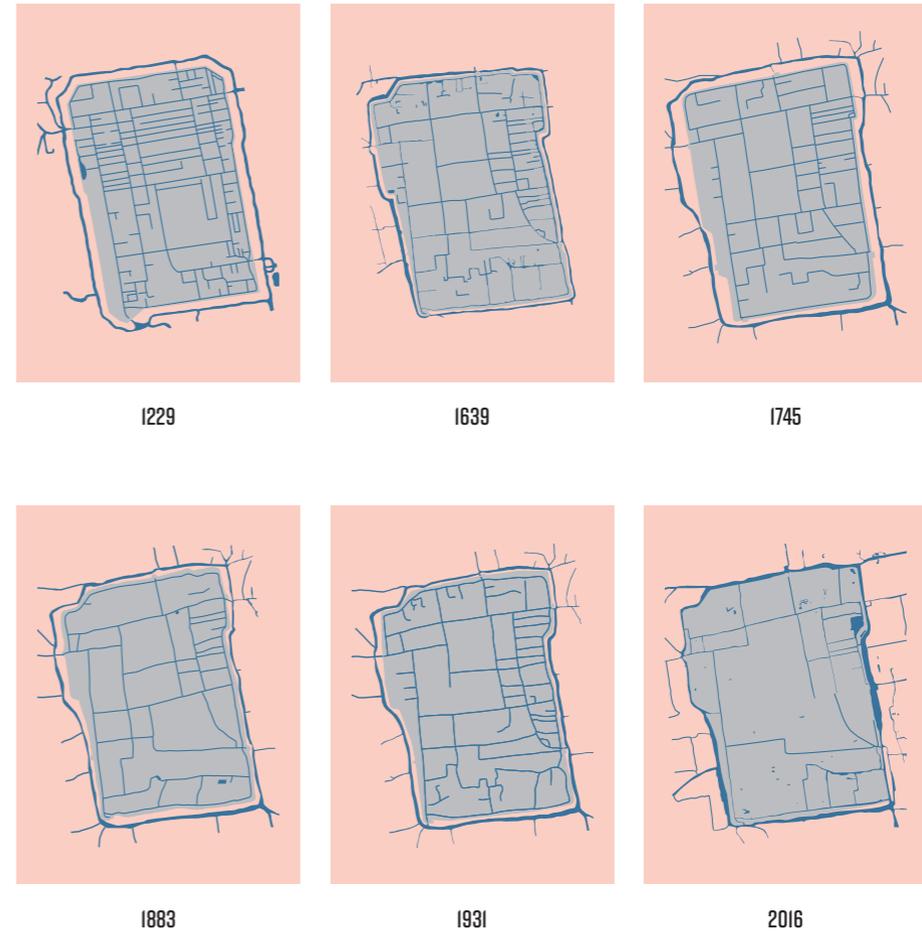
From 1931 till 2016 water system dissolved a lot with the aim of satisfying the requests of the city for its constant development renovating the urban fabric.

Finally, it is possible to say that the development of canals system can be separated in 2 phases, first one is from (1229 - 1639) Song to Ming dynasty being a wealthy time when canals increased a little bit maintaining their form, and then the second phase from (1745-2016) Qing dynasty until nowadays evidence the decreased of them the reduction was from 82 km to 36 km.

As consequence, most of the canals that were in 1229 does not exist anymore demonstrating that waterways lost their importance on the city. Although, canals still regulate the infrastructure of the ancient city limiting the streets and blocks.

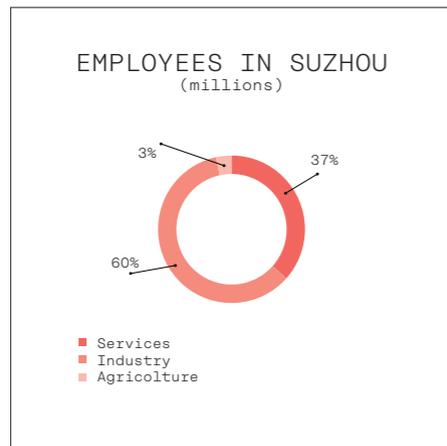
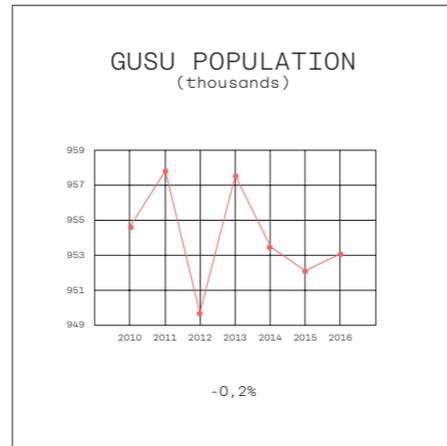
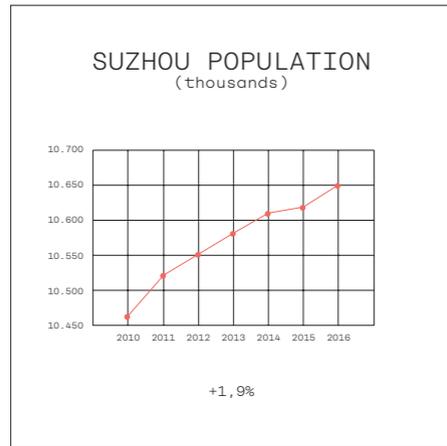
“The vibrant canals were illustrated as the major arteries of urban life,”

(Hung, 2000)



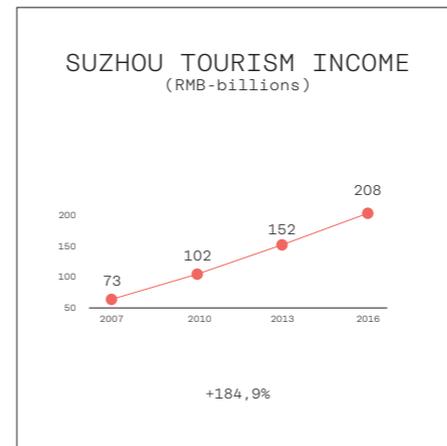
INHABITANTS AND VISITORS

POPULATION DATA



www.suzhou.gov.cn
<http://www.sztjj.gov.cn/>

TOURISM DATA



<http://special.subaonet.com>
<http://www.sztjj.gov.cn/>



Gate to the East

GUSU DISTRICT

Gusu district is one of five urban districts of Suzhou including the ancient city and the surrounding areas with a total area of 85,1 square kilometers and it has a resident population of 950,000.

As one of the cultural and economic centers of the Jiangnan region, Gusu District exerts own cultural advantages to develop tourism economy and the local residents are mainly engaged in technology, cultural and service industries. (Suzhou Statistical YearBook, 2011)

Every year, millions of tourists come in Suzhou to visit gardens, Tiger Hill or just explore the city and enjoy the local dishes. Many traditional neighborhood and streets have also been preserved, such as Ping Jiang road and Shantang street where tourists can enjoy the traditional streetscape and take a boat to visit the ancient city. According to the Suzhou Tourism Research Report of Bath University, nowadays a growing number of tourists are not satisfied with visiting only certain attractions but want a deeper and broader experience. This trend indicates a new direction to create a complete tourism system that combines tourist attractions with surrounding areas and activate ancient city with new facilities to discover the tourism potential of the entire city and to create a distinctive experience of Suzhou city.

Two representative projects related to these trends are Pingjiang Road and Shantang Street, now pedestrian shopping streets which are two of the most protected old neighborhood with water features, and the spatial structure that is still maintained in its previous state: a line of shops parallel to the canal, because the goods used to be mainly transported by water.

With the purpose of historic preservation nowadays the government is very cautious with the new constructions in the ancient city. In fact, there are very few high-rise buildings within the walled city.

Therefore new buildings need to be consistent with the surrounding environment and architectural style.

The original morphology of the city with the traditional streetscape and the facing canals dwellings are still visible.

MAIN ATTRACTIONS

Landmarks

- 01. North Temple Pagoda/Beisi Pagoda
- 02. Suzhou Museum
- 03. Tonggui Bridge
- 04. Changmen City Gate
- 05. Temple of Mystery/Xuanmiao Guan Temple

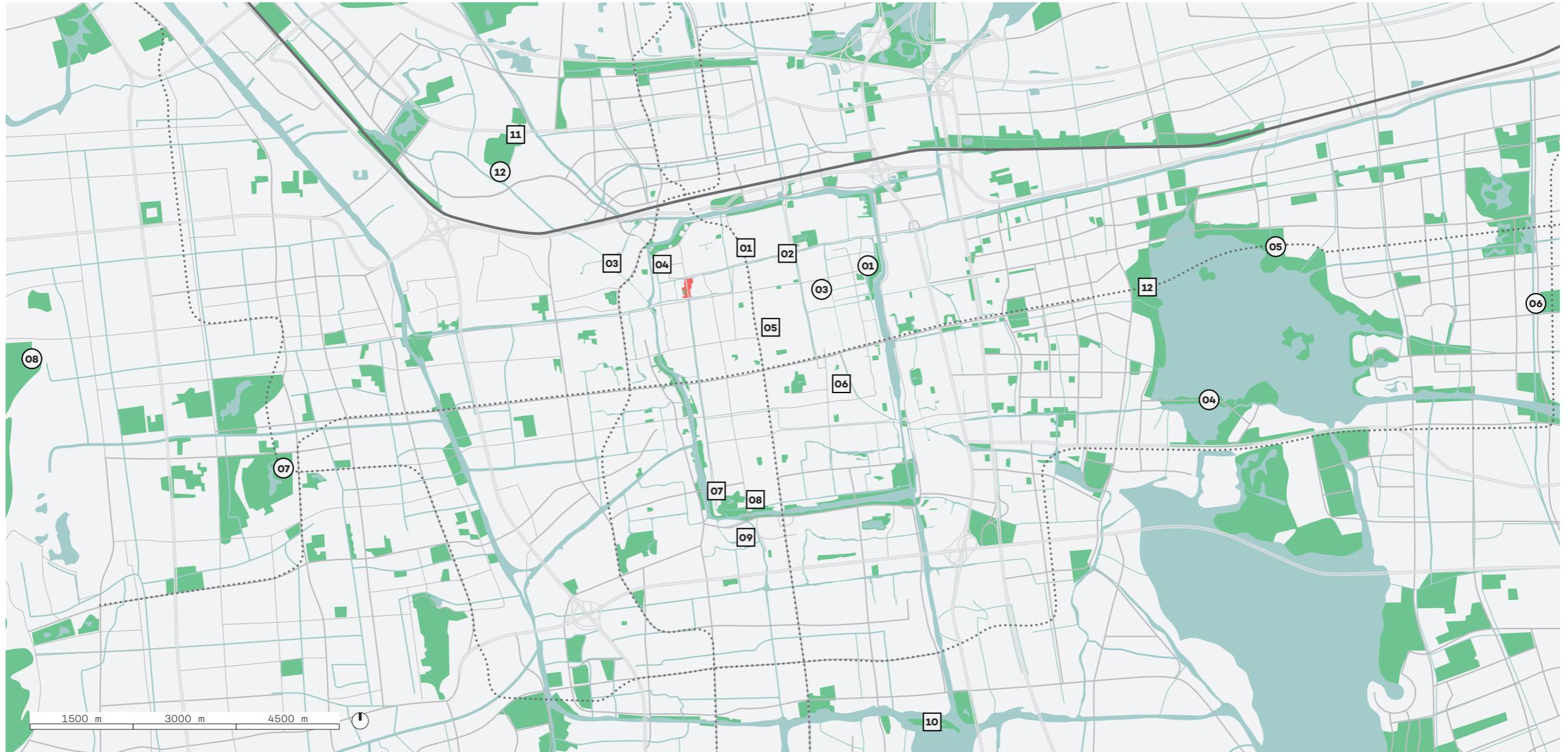
- 06. Twin Pagodas/Luohan
- 07. Ruiguang Pagoda
- 08. Panmen City Gate
- 09. Wumen Bridge
- 10. Precious Belt Bridge/Baodai Bridge
- 11. Tiger Hill Pagoda/Huqiu Tower
- 12. Gate to the East/Trouser building

Commercial and Leisure sites

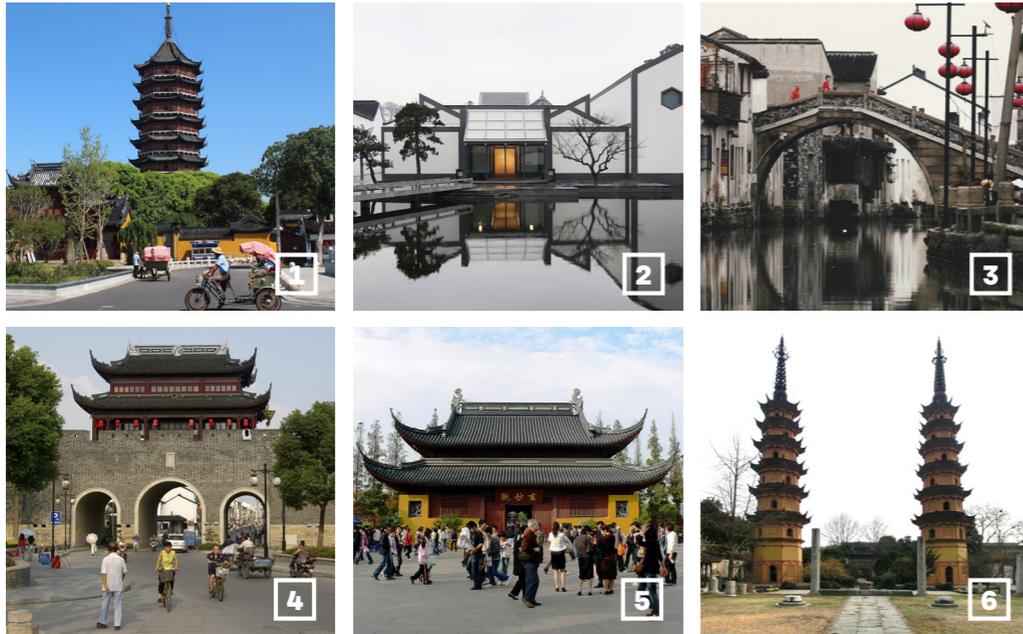
- 01. Suzhou Zoo
- 02. Shantang Street
- 03. Pingjiang Road
- 04. Li Gong Di - shopping hub and nightlife
- 05. Suzhou Culture and Arts Centre

- 06. SIP Suzhou Industrial Park Sports Centre
- 07. Suzhou Amusement Land
- 08. Bai Ma Jian Ecological Park

Project area

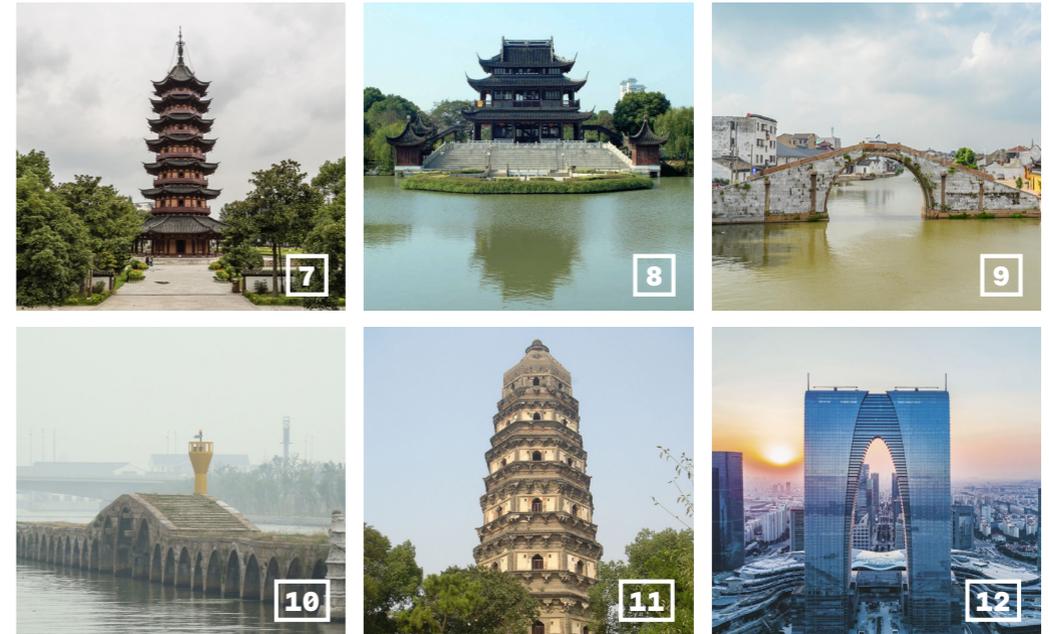


LANDMARKS



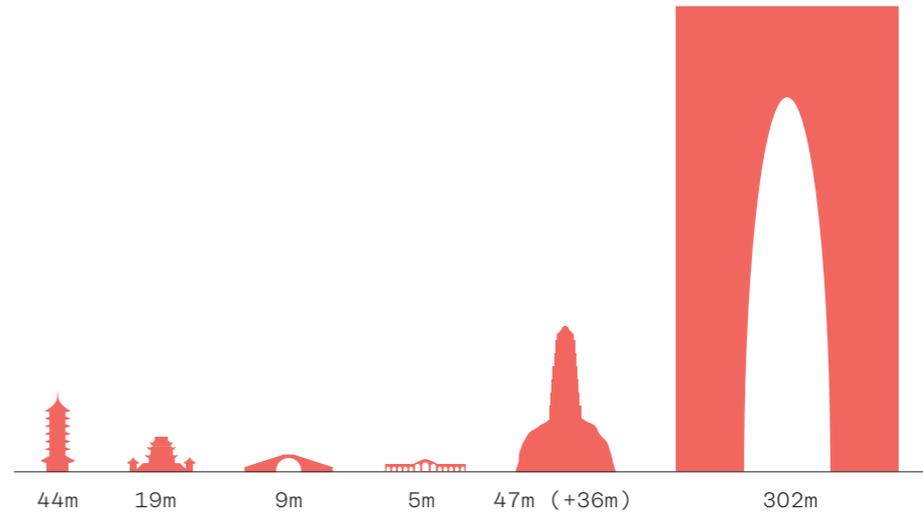
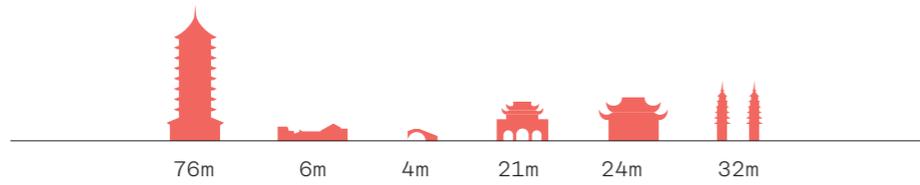
01. North Temple Pagoda/Beisi Pagoda
02. Suzhou Museum
03. Tonggui Bridge
04. Changmen City Gate
05. Temple of Mystery
06. Twin Pagodas/Luohan

(Source: <http://blog.sina.com.cn>,
<https://www.tripchinaguide.com>, <https://www.istockphoto.com>)



07. Ruiguang Pagoda
08. Panmen City Gate
09. Wumen Bridge
10. Precious Belt Bridge/Baodai Bridge
11. Tiger Hill Pagoda/Huqiu Tower
12. Gate to the East/Trouser building

(Source: <http://www.chinatoday.com>,
<http://blog.livedoor.jp>, <https://www.istockphoto.com>)



If tourists look for a visit of the ancient city, local residents enjoy the shopping and entertainment in the new developments.

In modern sense, landmarks are usually referred to as monuments or prominent distinctive buildings, used as the symbol of a certain area, city, or nation. In Suzhou, such landmarks not just play a symbolic role, but they are also closely related to the daily life of the residents. Temples and pagodas have been fully integrated into the daily life of residents as religious buildings. Bridges and gates are indispensable infrastructures in the lives of residents. Over time the events and legends surrounding these landmarks add historical and cultural value to the building itself then a building can become gradually a cultural icon representing the district; sometimes neighborhoods or districts are named by these landmarks.

At the beginning of urbanization, since the traditional urban structure could not satisfy the needs of modern life, the government demolished some blocks in the ancient city to leave space for new buildings and wider roads to cope with the increasing population. However, residents quickly recognized that the newly built neighborhoods did not have the previous vitality and spirit. Because buildings constitute the activity space in a neighborhood, it directly affects how residents move,

communicate and live in this place. As a carrier of community culture and memories, we might wonder what survive once architecture does not exist anymore. Are also the historical value and memories embodied in buildings entirely gone? And what to do with areas within the historic city that have been demolished already? At the moment, the current urban development strategy is to develop new urban areas around the ancient city. On the one hand, it preserves the traditional city aspects, on the other hand, different layers of memory of Suzhou have been conserved, and residents' needs for modern living facilities are satisfied.

Due to the different targets, urban renewal projects show different directions. Shantang Street and Pingjiang Road are two old commercial neighborhood. After renovation, Shantang Street has become a commercial street mainly for tourists but Pingjiang Road has less cheap products and retains the old streetscape, lifestyle, and costume.

The new commercial center is built near Jinji Lake, with the art gallery and gymnasium to satisfy the needs of locals for modern facilities. The mutual development of both sides also promotes the integration of tradition and modernity.

COMMERCIAL AND LEISURE SITES



01. Suzhou Zoo
02. Shantang Street
03. Pingjiang Road
04. Li Gong Di - shopping hub and nightlife

05. Suzhou Culture and Arts Centre
06. SIP Suzhou Industrial Park Sports Centre
07. Suzhou Amusement Land
08. Bai Ma Jian Ecological Park

(Source: <http://ymcatourism.org>, <http://www.bao315.com/>, <http://frasesamor.website>)

ANCIENT CITY

Suzhou had an important economic position in history, so a large number of craftsmen were gathered in the city. That left a profound cultural heritage, and developed handicraft manufacturing. The urban fabric and the way of living the space between the house and the streets and the shared courtyards has are also an intangible heritage.

Suzhou Gardens are the main engine for local tourism development. In addition to these 9 UNESCO gardens, there are more than 60 gardens of all dimension. Suzhou classical garden combines dwellings and gardens. This kind of architectural form is for those who live in the city where there is lack of natural scenery, but still are attached to nature, pursue harmony with nature and try to beautifying and perfecting themselves and the living environment. Therefore, building a garden for their homes was very popular among local literati or wealthy people. This trend was flourishing in the Ming and Qing dynasties.

On the other hand, affected by the traditional forms of Chinese architecture, there are fewer open parks and green spaces in ancient City and gardens have always been privately owned by wealthy families. Even now that they are open to visitors they mostly serve touristic use. There are only a few undeveloped parks which are used by residents as a daily meeting place.

After a series of urban renewals, some open public spaces were built near major streets and the ruins of former wall that has undergone several demolitions in the last century were transformed into a 15.5 kilometers Greenway around the city. However, the average green space per capita is very low in traditional residential areas. The shortage of green open space is still very obvious. How to improve the living conditions of the surrounding area through the new project is one of the main issues of our design.

“While the ‘lesser hermit’ lives in seclusion in the country, the ‘greater hermit’ does so in the city.”

Ancient proverb

MUSEUMS AND MARKETS



□ Museums

- 01. Taohuawu Museum
- 02. Suzhou Silk Museum
- 03. Suzhou Arts and Crafts Museum
- 04. Suzhou Museum
- 05. Suzhou Opera Museum
- 06. Buddhism Museum
- 07. Suzhou Beike Museum

○ Markets

- 01. Shantang Street Market
- 02. Guanqian Street Market
- 03. Pingjiang Street Market

■ Project area

UNESCO GARDENS AND MAIN PARKS



UNESCO Gardens

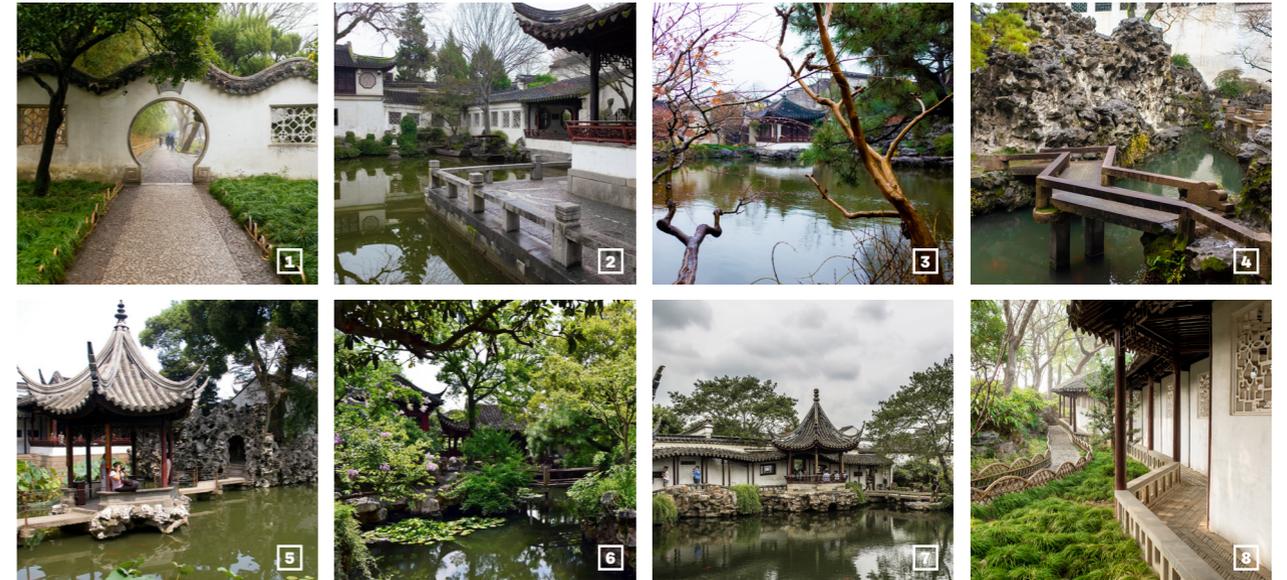
- 01. Humble Administrator's Garden
- 02. Lingering Garden
- 03. Yipu - Garden of Cultivation
- 04. Mountain Villa with Embracing Beauty
- 05. Lion Grove Garden
- 06. Couple's Retreat Garden
- 07. Master of Nets Garden
- 08. Canglang Pavilion - Surging Waves Garden
- 09. Keyuan Garden
- 10. Panmen Scenic Area

Parks and Gardens

- 01. Donghui Park
- 02. Five Peaks Garden
- 03. Guangji Park
- 04. Dongyuan Park (North gate)/ East Garden
- 05. Guanqian Park
- 06. Garden Hotel
- 07. The Garden of Pleasure/Yiyuan Garden
- 08. Suzhou Park / Grand Park
- 09. Keyuan Garden
- 10. Panmen Scenic Area

Project area

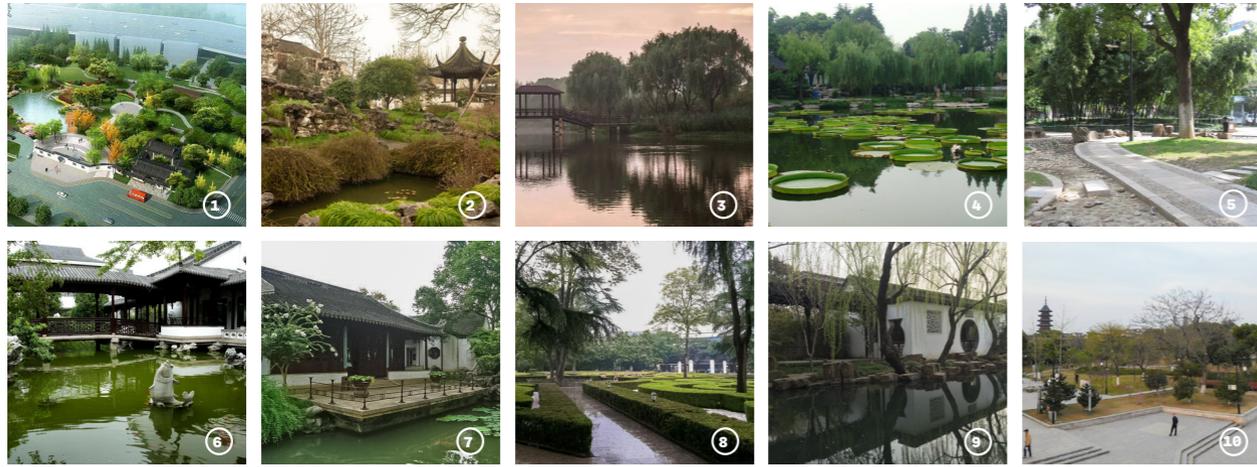
UNESCO GARDENS



- 01. Humble Administrator's Garden
- 02. Lingering Garden
- 03. Garden of Cultivation - Yipu
- 04. Mountain Villa with Embracing Beauty Garden

- 05. Lion Grove Garden - Lion Forest Garden
- 06. Couple's Retreat Garden
- 07. Master of Nets Garden
- 08. Canglang Pavilion - The Surging Waves Garden

PARKS AND GARDENS



- | | |
|---|--|
| 01. Donghui Park | 06. Garden Hotel |
| 02. Five Peaks Garden | 07. The Garden of Pleasure/Yiyuan Garden |
| 03. Guangji Park | 08. Suzhou Park / Grand Park |
| 04. Dongyuan Park (North gate)/ East Garden | 09. Keyuan Garden |
| 05. Guanqian Park | 10. Panmen Scenic Area |

(Source: <https://www.shutterstock.com/>,
<http://m.7xsoft.com/>, <https://www.istockphoto.com>)

GREEN OPEN SPACES



- | | |
|--|---|
| UNESCO gardens | Canal-side naturalistic areas |
| Public parks and gardens | Private green areas |
| Sport and school related green areas | Project area |

MOBILITY



- | | |
|--|--|
| Road system | <ul style="list-style-type: none"> ● Metro line 1 stop ● Metro line 2 stop ● Metro line 4 stop ● Railway Station ● Bus Stations ● Long Distance Bus Terminal ● Tourist Boat Dock |
| <ul style="list-style-type: none"> Highways Streets, accessible to vehicles Paths, accessible to pedestrians and motorbikes The ancient moat ring fitness path | <ul style="list-style-type: none"> Project area |
| Public transportation | |

The city's transportation system is mainly based on motor vehicles and subways. In the north of the city are located railway stations and highway entrance that connect Suzhou with other distant destination. Due to the presence of the canal, the inner road system remains half modern and half traditional. Before the 20th century the canal was an important system for transportation and commerce, but with the initial urban modernization, canals gradually lost their importance.

"Compared with the general urban roads, the traditional street system of an ancient city is often the result of historical sedimentation. Its neat layout and clear order contain the valuable cultural heritage. With the acceleration of urbanization and the rapid development of motorized transportation, it is inevitable to transform some roads which need more space." (Zhou, Zhang and Dai, 2013)

Due to the limits of space and preservation of traditional streetscape, most of the roads still maintain the original scale. Since the cars can't move freely in the city, the people chose electric bikes as transportation that is more suitable for the scale of the street. Tourists mainly chose buses or subways to go round in the city. In addition, the Bicycle-sharing system is also developed in Suzhou. Combining these public transportations tourists can easily reach every place.

Nowadays around the railway station to the north of the ancient city is forming a transportation hub. Through that most of the tourists arrived interchange bus or metro going to the ancient city. The proximity of the project area to the train station can be considered a location advantage to establish a touristic route bus or waterway between the two places.

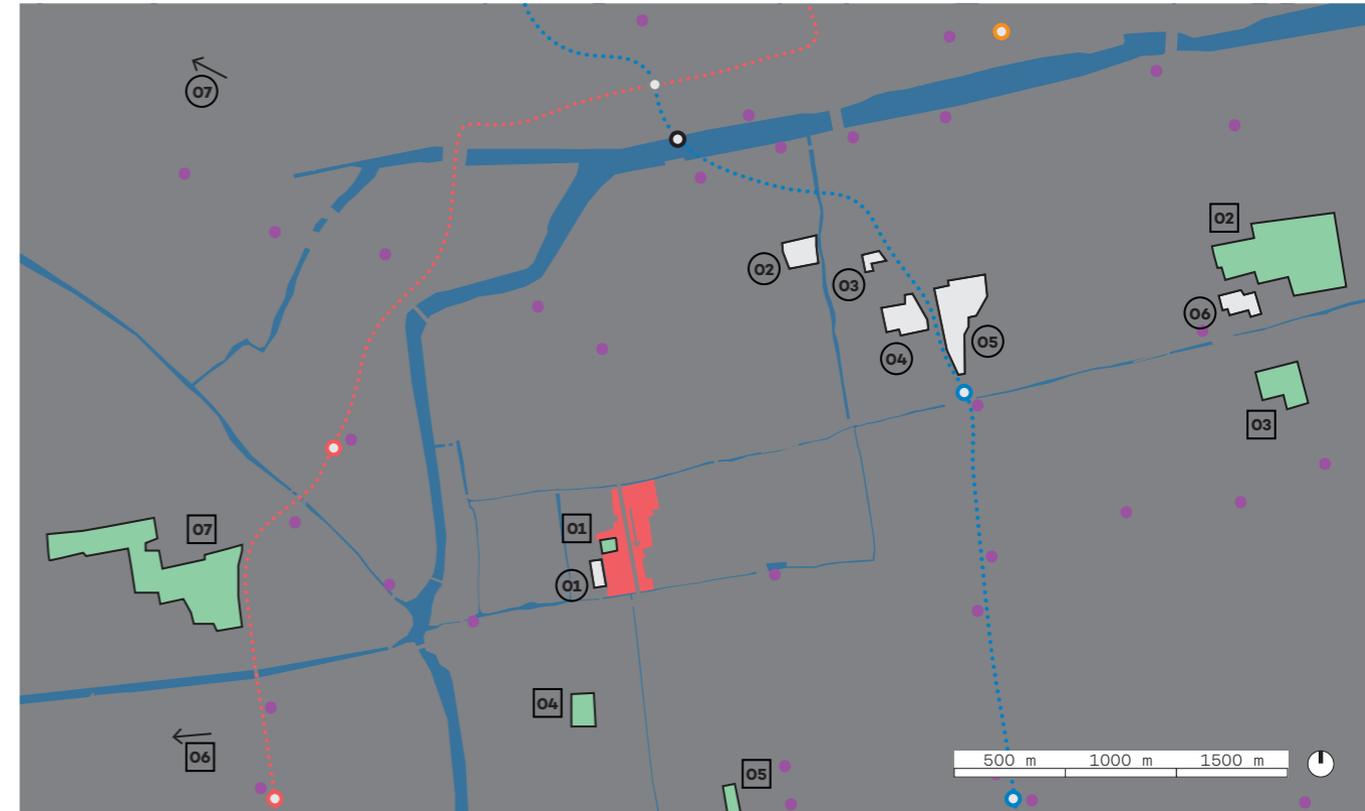
NORTH OF ANCIENT CITY

The project site is located in the Northwest part of the city, surrounded by residential buildings facing the street and leaning against the canal. There are various gardens and cultural attractions in this area, such as Five Peaks Garden, Tai Bo Temple, Garden of Cultivation and Mountain Villa with Embracing Beauty. Because the woodblock New Year Prints produced in this place are very famous. There are still some handicraft workshops in this neighborhood.

The road to the south of the site connects to Shantang Street through the Changmen Gate which was once the busiest commercial street in Suzhou, and the road to the north connects some important monuments such as the Beisi Pagoda, the Humble Administrator's Garden, and the Suzhou Museum.

Moreover, this part of the canal system is relatively intact. There is a canal on each side of the site that connects to the moat to provide the possibility of developing water transportation for tourists. The distance from the site to the two subway lines and the train station is within 1.5 km and there are many bike sharing stations in the surrounding area. With public transportation, visitors can easily reach every place in the city

FACILITIES AND FOCAL POINTS



- | | | |
|--|--|---|
|  Gardens | | Public transportation |
| 01. Five Peaks Garden | 01. Taibo Temple |  Metro line 2 stop |
| 02. Humble Administrator's Garden | 02. Taohuawu Museum |  Metro line 4 stop |
| 03. Lion Grove Garden | 03. Suzhou Art Gallery |  Railway Station |
| 04. Garden of Cultivation | 04. Suzhou Silk Museum |  Bus Stations |
| 05. Mountain Villa with Embracing Beauty | 05. Beisi Pagoda |  Tourist Boat Dock |
| 06. Lingerin Garden | 06. Suzhou Museum |  Bike sharing stations |
| 07. Guangji Park | 07. Tiger Hill | |
| | Road system |  Project area |
| |  Highways | |
|  Landmarks |  Main streets | |

04 / Understanding the Chinese gardens

UNESCO GARDENS IN SUZHOU

The classical gardens of Suzhou are regarded in Chinese culture as one of the highest artistic and architectural achievements. These masterpieces, which used to represent the identity of cultural elites of the Imperial China as were attached to the private houses of government official, aristocrats or merchants, were differently designed to compared to those for the imperial palaces and the temples.

This section introduces seven out of nine gardens that became since 1997 a well-known Unesco World Heritage Site such as Cang Lang Pavilion (Surging Wave Pavilion), Master of Nets Garden (Wang Shi Yuan), Lion Grove Garden (Shi Zi Lin), Humble Administrator's Garden (Zhuo Zheng Yuan), Garden of cultivation, Lingering Garden (Liu Yuan), and Mountain Villa with embracing beauty.

Immerse on a dense context, they represent an oasis that gives a breath to the city. In relation with the urban fabric of Suzhou, different aspects of the morphology of the gardens regarding the size and the scale (FIGURE), evidence that the dimension of the garden is not necessarily a limiting aspect. Some gardens, smaller than others, develop the illusion of grandeur due to the rich composition of elements. In search of privacy, the gardens pursue a sense of separation from the outer world, also applying specific techniques to multiply views inside and magnify the dimensions despite being sometimes rather small. Thanks to these spatial effects, natural scenes are reinterpreted as in paintings and poems. Scenes lead the visitor through different atmospheres and unexpected experiences that sought to exalt the ideology of "height of purity and elegance". (Dunzhen and Wood, 1982) of the time.

Nowadays, the gardens are open to the public under a payment as an space of leisure that can be enjoyed by the city dwellers and tourist. By becoming a tourist site, many of these gardens were part of transformations inside and in its surroundings. However, the city adopted the responsibility to preserve the heritage's authenticity and contribute with the historical continuity

with a minimum intervention strategy. Likewise, the UNESCO proposed a Conservation Plan as a tool that regulate and manage the restoration and the protection of those cultural relics. Rather soon, the local government joined UNESCO's efforts and created the Suzhou Municipal Garden and Landscape Department in order to administrate and supervise the conditions of the protected gardens.

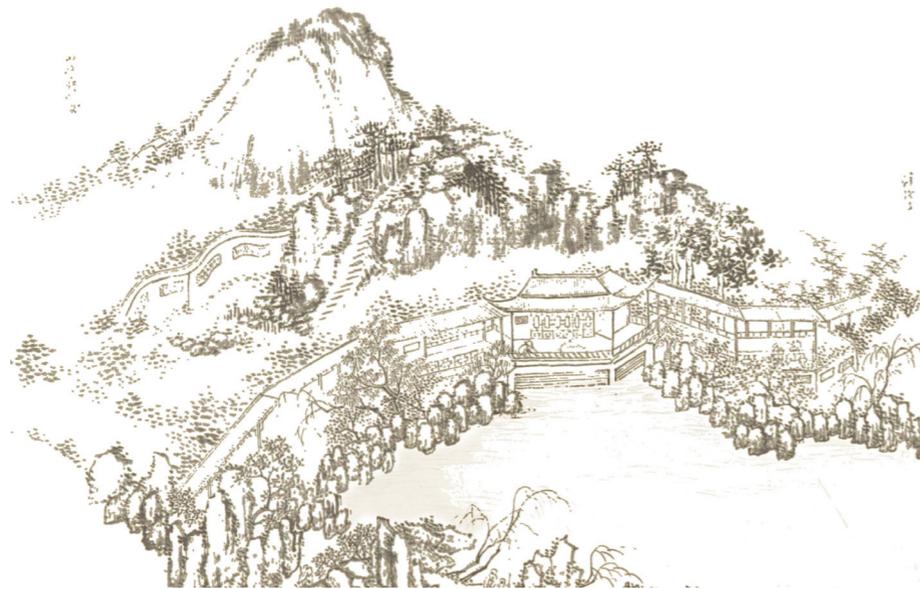
Among the various aspects, these measures were an incentive to realize a planimetric scheme for each garden. Considering that the construction of the garden was not based on technical drawings and the successive representation of the gardens was provided via paintings and descriptions, the map was not existing before and allow now a different understanding of the spatial relationships at the architectural level. Nevertheless, analysing the gardens and their context let us understand the ancient urban fabric of Suzhou and the connective system through each ambience inside the garden.

At the urban level, the gardens are spaces capable of bringing together the three components that make up a historical place and make them an ideal tourist space: the Cultural space, the Leisure space and the Landscape space. (Wang and Al, 2015)

“What distinguishes a map from a plan according to the Chinese vision, is that the first shows several dimensions of the garden, while the second shows only one [...]: it gives only one top view.”

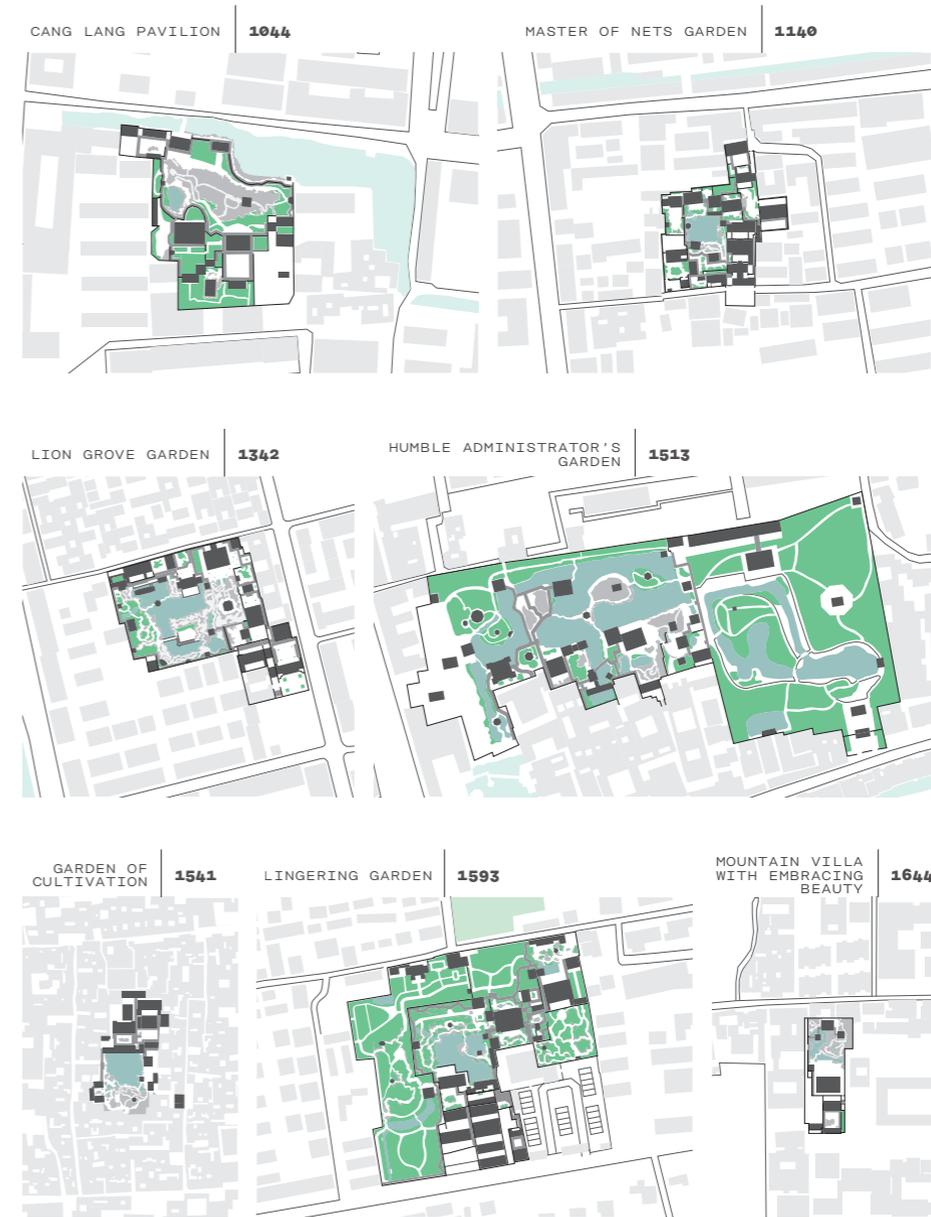
(Escande, 2016)

Although in the Chinese tradition, the garden was conceived on the model of painting, the analysis of the gardens will be illustrated by means of plans, with the aim of understanding the different overlapping dimensions and their spatial organization.



(Source: Congzhou, 1984. On Chinese Gardens)

OVERVIEW



45 m 90 m 135 m



READING THE GARDENS



(Source:Escande, 2016. Purification ceremony at the Pavilion of Orchids)

Each garden is taken as an individual case of which a deconstruction is made of the main layers and elements. A sequence of photographs complement the idea of how gardens look like spatially, and what can be learned in terms of design devices.

The Buildings, the Courtyards, and the Nature are considered as three different essential elements that give identity to the gardens. Those three layers, allowed us to understand the architectonic strategies used at the traditional Chinese gardens such as the building volume in each garden, the balance of open spaces formed by the courtyards and the natural layout.

According the writer Xu Yinong, in the volume "Chinese city

in space and time", buildings respond to three criteria: the form, the location and its function. Buildings were not thought to be considered individually, but working in set with different kind of structures that make up in harmony an integral composition. Each one becomes a module that functions as a viewpoint from which to admire the wonderful design of the landscape.

Thus, four types of buildings can be differentiated within the system of the architecture of Chinese gardens, such as: the main hall (ting, tang, guan), towers and pavilions as an scenic part of the garden, small pavilions (ting) located against wall or corridors, and the galleries or corridors (lang).

In this way, all the different types of courtyard within the gardens are individuated by a scheme as a methodology of lecture to understand this important element composing the structure of each garden. This scheme is done by the interaction between three elements: the Building (B), the Wall (W), and the Corridor (C). The number of elements that define each courtyard in the gardens analysed is identify by the typology "B1 W1 C1" for exemple.

The interaction between those elements, generates centripetal and centrifugal forces that guides your experience inside the garden, and create the ambiguity of the dimension of every space by the use of elements and lights.

“ For groups of buildings, the repeating unit of space was the courtyard (ting, yuan, or tinyuan), its measurements being closely associated with those of the buildings adjacent to it... The courtyard and gardens, if any, were always an integral part of the building compound rather than something additional and separate”

(Xu, 2000)

CANG LANG PAVILION

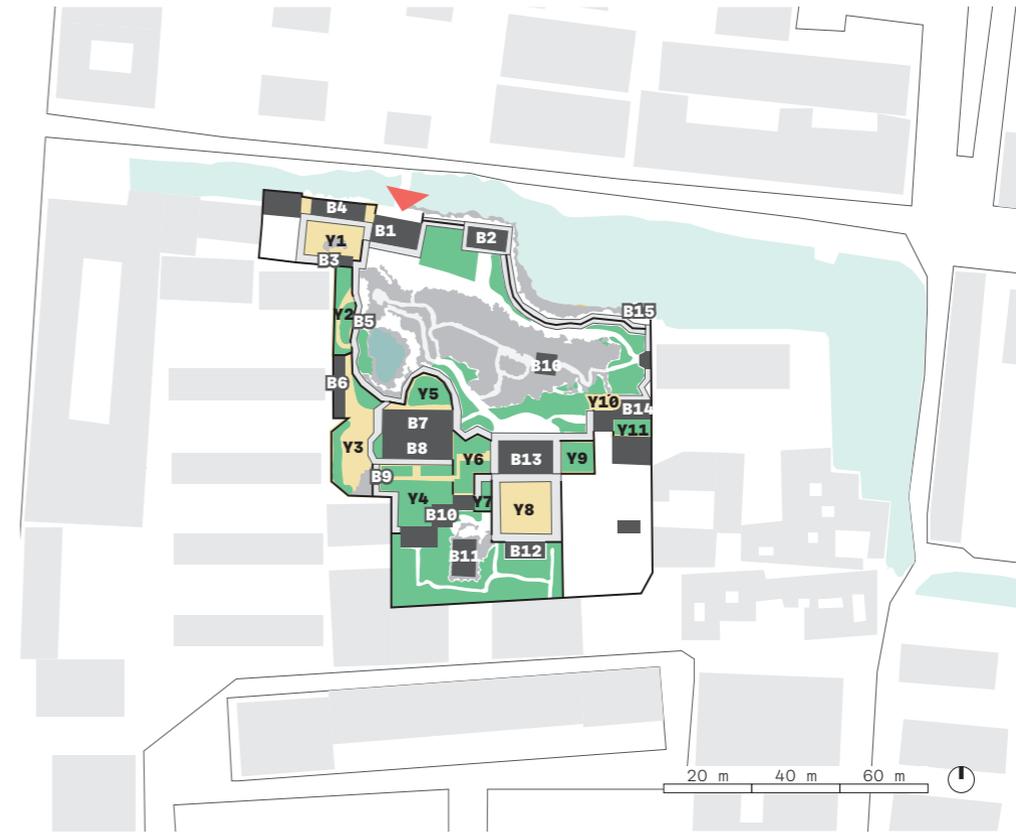
FROM NORTHERN SONG DYNASTY 960-1126

Journey perception:

From the first instance, the structure of this garden is revealed and its elements seem to concentrate in an individual and introverted way: a large mountain of rocks receives the visitor to have then an intimate relationship with the water. Promptly, a journey through the small corridors that surround the pavilions, take you by the hand along a path of sensations, smells and sounds generated by the bamboo when moving with the wind. It is a garden of sensations.



PANORAMIC MAP



- Courtyards [Y]
- Buildings [B]
- Corridors
- Water
- Green area
- Rocks
- Walls
- Context
- Entrance

ANALYSED GARDEN ELEMENTS

Buildings



Courtyards



Nature

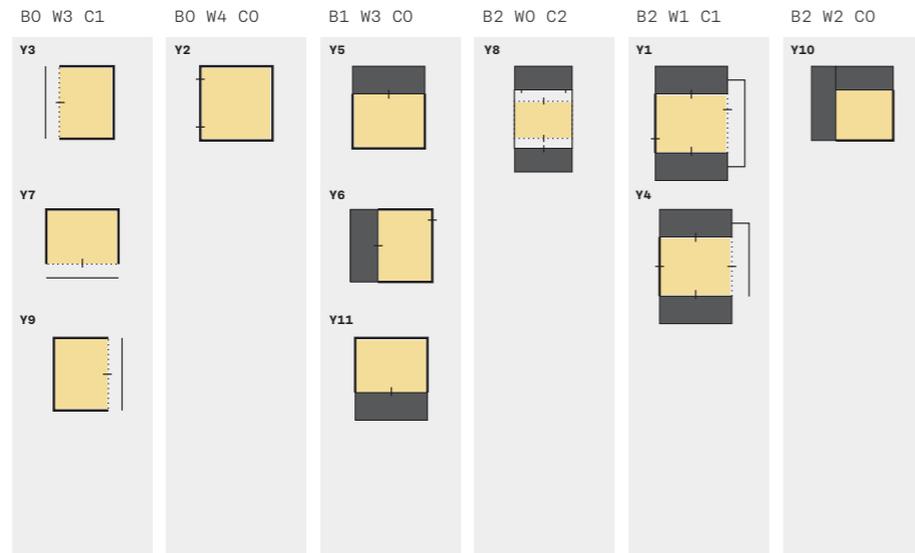


BUILDINGS



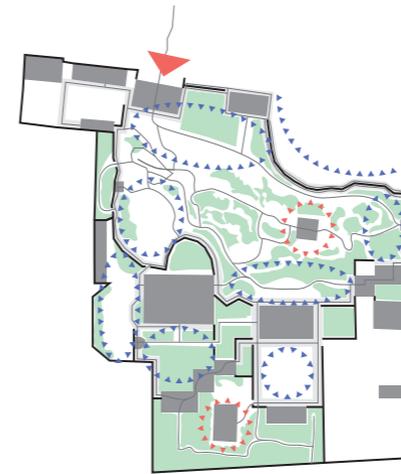
- | | | | |
|-----|------------------------------------|------|-----------------------------------|
| B1. | Reception Hall | B9. | Elegant Bamboo House |
| B2. | The Pavilion Fronting Water | B10. | The Mountain in View Tower |
| B3. | Administration | B11. | The Realm of Yaohua |
| B4. | The Water Pavilion of Lotus Blooms | B12. | The Enlightenment Hall |
| B5. | The Imperial Stele Pavilion | B13. | The Smelling Prunus Mume Pavilion |
| B6. | The Pure Fragrance House | B14. | The Recitation Pavilion |
| B7. | The Temple of 500 Sages | B15. | |
| B8. | The Reverence Pavilion | B16. | |

COURTYARDS

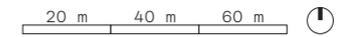


- Courtyards
- B - Buildings
- C - Corridors
- W - Wall

CENTRIPETAL AND CENTRIFUGAL FORCES



- Centripetal
- Centrifugal
- Circulation
- Entrance



MASTER OF NETS GARDEN

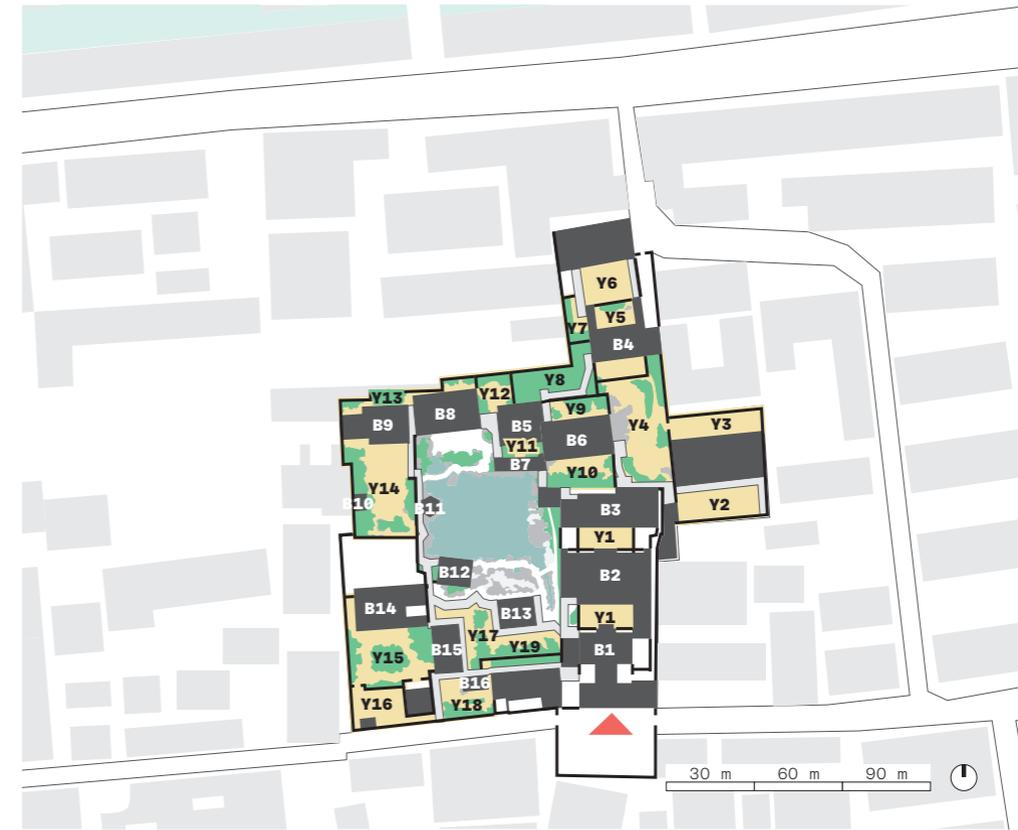
FROM SOUTHERN SONG DYNASTY (1127-1278)

Journey perception:

This garden takes the visitor through a succession of small courtyards and entrances of lights that give the sensation of being parallel in and out of a space. The game of the different dimensions of the elements help to recreate the perception of depth inside the garden and lead you through a serene journey to the moon-shaped door, which frames its wonderful central scene. Even if it seems to be small, Master of Nets proposes an ambiguous experience that makes the visitor believe that there is still more to discover.



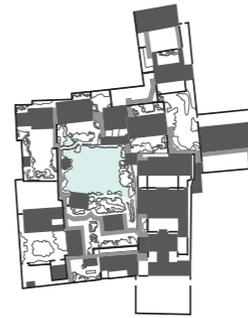
PANORAMIC MAP



- Courtyards [Y]
- Buildings [B]
- Corridors
- Water
- Green area
- Rocks
- Walls
- Context
- Entrance

ANALYSED GARDEN ELEMENTS

Buildings



Courtyards



Nature

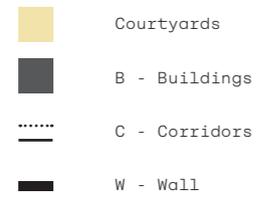
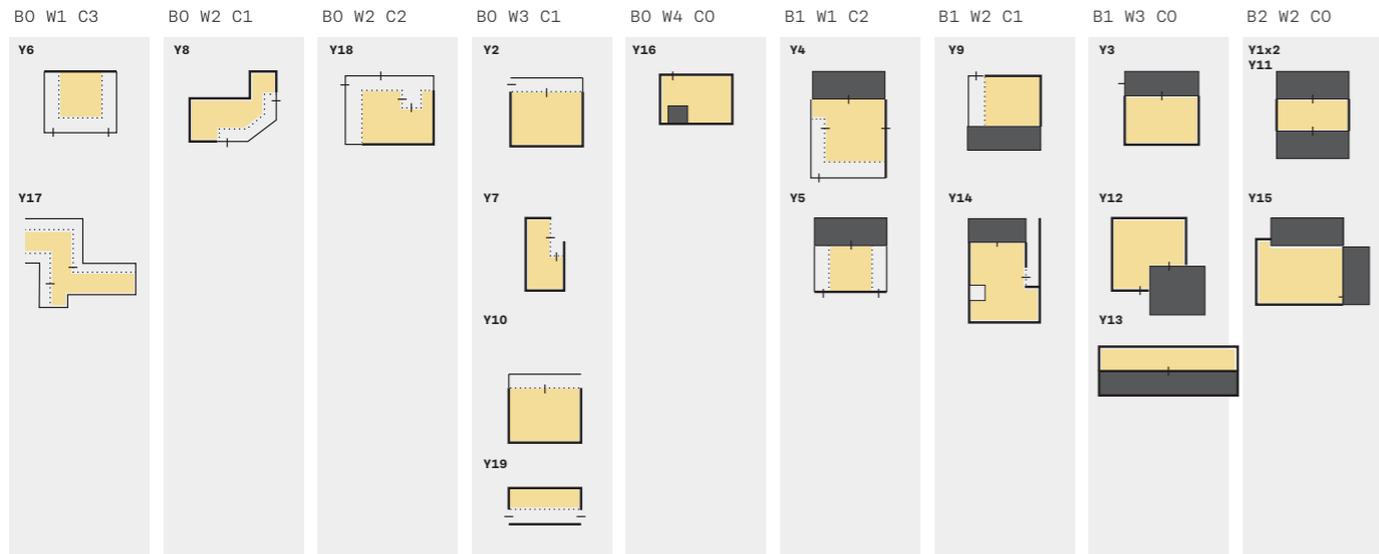


BUILDINGS

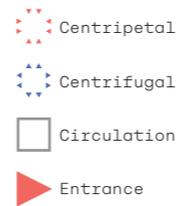
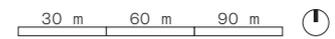


- | | | | |
|-----|---|------|---|
| B1. | The Sedan Chair Hall | B9. | The Peony Study |
| B2. | The Hall of 10.000 Volumes | B10. | The Pavilion |
| B3. | The Beauty Within Reach Tower | B11. | The Moon Comes with Breeze Pavilion |
| B4. | The Cloud Stairway Room | B12. | The Washing Cap - Ribbon Pavilion |
| B5. | The Meditation Study | B13. | The Small Hill and Osmanthus
Fragrans Pavilion |
| B6. | The Five Peaks Library | B14. | Tea House |
| B7. | The Prunus Mume Pavilion | B15. | The Daohe House |
| B8. | The Watching Pines and
Appreciating Paintings Studio | B16. | The music Room |

COURTYARDS



CENTRIPETAL AND CENTRIFUGAL FORCES



LION GROVE GARDEN

FROM YUAN DYNASTY (279-1367)

Journey perception:

Lion Forest Garden is a sumptuous and vain garden looking to show that it has everything from the start with its imponent buildings, its luxurious galleries full of stained glass and decoration with even golden details. Inside, the garden leads you along paths and passages, up and down, both along its corridors, as well as within the various artificial rocky mountains located on the edge of the large mirror of water. An attraction that generates intrigue, expectation, chaos and surprise through the different environments that are discovered little by little.



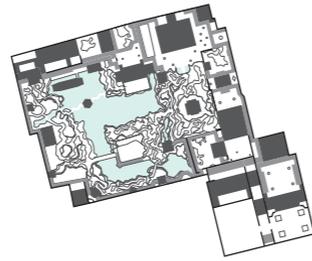
PANORAMIC MAP



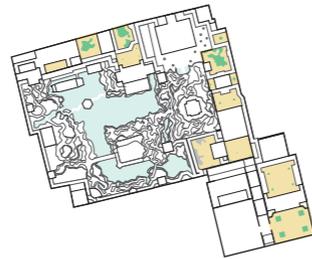
- Courtyards [Y]
- Buildings [B]
- Corridors
- Water
- Green area
- Rocks
- Walls
- Context
- Entrance

ANALYSED GARDEN ELEMENTS

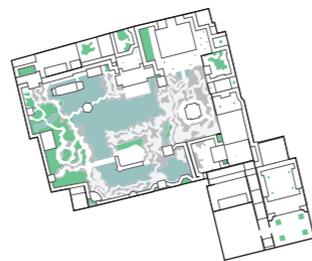
Buildings



Courtyards



Nature



BUILDINGS



- B1. The Entrance Hall
- B2. The Ancentral Hall
- B3. Hall of Standing in the Snow
- B4. The Bamboo Pavilion
- B5. The Imperial Stele Pavilion
- B6. Pavilion of Wen Tanxiang

- B7. The Fan Pavilion
- B8. Angelic Plum and Lotus Blooms House
- B9. Asking Plum Pavilion
- B10. Waterfall Pavilion
- B11. The Pavilion
- B12. The Exhibition Hall

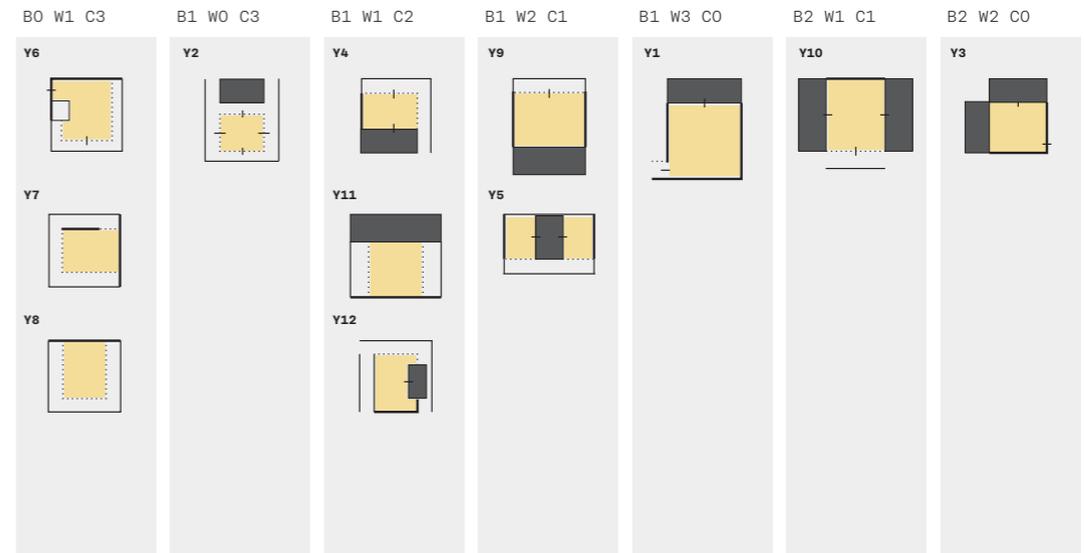
BUILDINGS



- B13. Slight Plum Sweet and Scare Shadow Tower
- B14. The Stone Boat
- B15. True Delighth Pavilion
- B16. Ancient Five Pines Garden
- B17. Flower Basket Hall
- B18. Mountain in views Tower

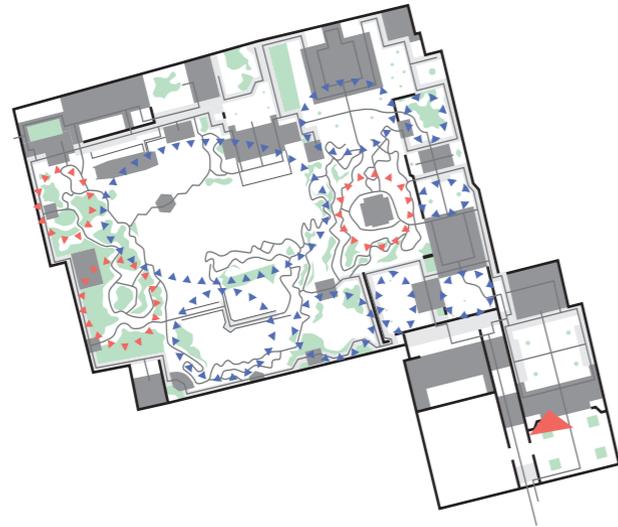
- B19. Mind-Lake Pavilion
- B20. Hall of Pointing to the Cypress
- B21. Room for Sleeping in the Cloud
- B22. Pavilion of Contrast
- B23. Small Square Hall
- B24. Hall of Joyous Feast

COURTYARDS



- Courtyards
- B - Buildings
- C - Corridors
- W - Wall

CENTRIPETAL AND CENTRIFUGAL FORCES



-  Centripetal
-  Centrifugal
-  Circulation
-  Entrance

HUMBLE ADMINISTRATOR'S GARDEN

FROM MING DYNASTY (368-1644)

Journey perception:

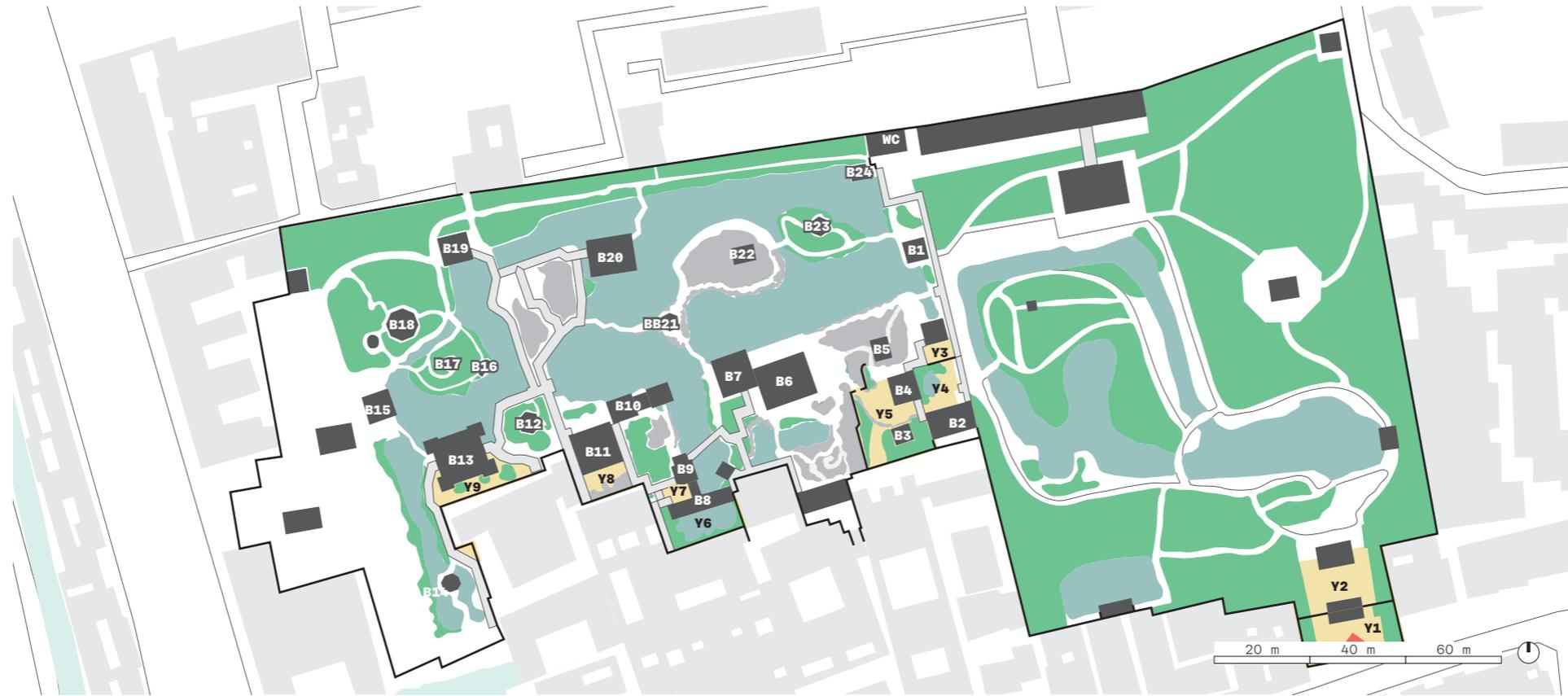
Although the current intervention has no relation with the old and generates contrast, the garden is a great space for oblivion.

The game of different elements, take the visitor to a rich experience that gives the impression of being in a mountain where the view is constantly renewed and give the feeling of a garden composed of different dimensions and environments; spaces not very long and different between them.

On the other hand, the water expands along the garden and appears to be infinite. Its buildings seem to levitate above the water and the landscape, composed of different layers, does not generate limits or edges in a visual level.



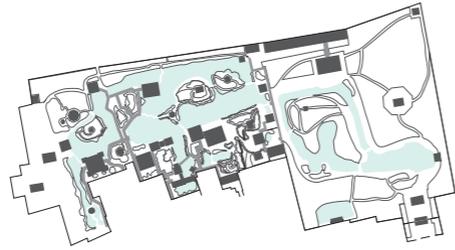
PANORAMIC MAP



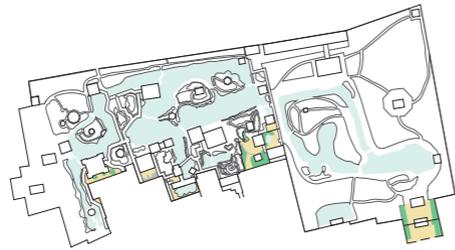
- Courtyards [Y]
- Buildings [B]
- Corridors
- Water
- Green area
- Rocks
- Walls
- Context
- Entrance

ANALYSED GARDEN ELEMENTS

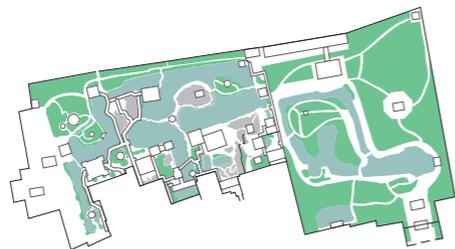
Buildings



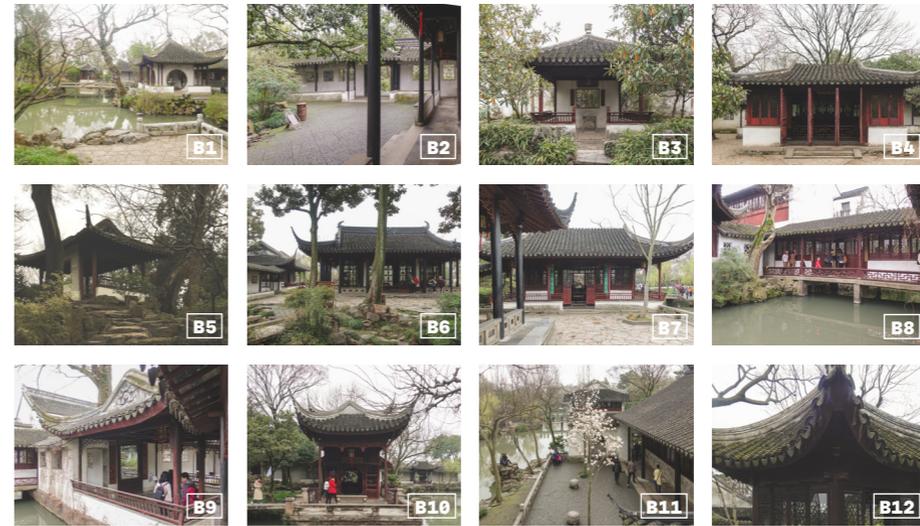
Courtyards



Nature



BUILDINGS



- B1. The Secluded Pavilion
- B2. The Listening To the Sound of Rain Pavilion
- B3. The Loquat Pavilion
- B4. The Hall of Elegance
- B5. The Paeonia Pavilion
- B6. The Hall of Distant Fragrance

- B7. The Bamboo Pavilion
- B8. The Small Cang Lang
- B9. The True Nature Pavilion
- B10. The Fragrant Isle
- B11. The Magnolia Hall
- B12. The Good for Both Families Pavilion

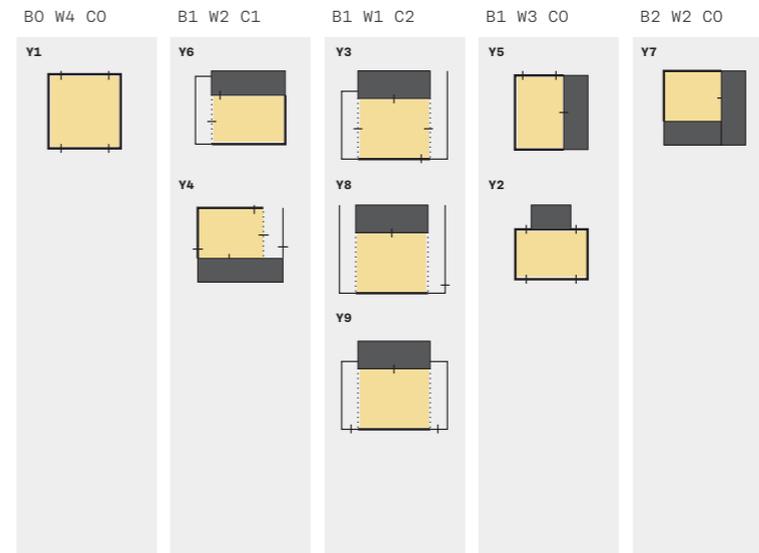
BUILDINGS



- B13. The Hall of 18 Camelias
- B14. The Pagoda Reflection Pavilion
- B15. The Keep and Listen Pavilion
- B16. With Whom Shall I Sit? Pavilion
- B17. The Inducalamus Pavilion
- B18. The Floating Green Tower
- B19. The Tower of Reflection

- B20. The mountain in view Tower
- B21. The Pavilion in Lotus Breezes
- B22. The Snow- Like Fragrant Prunus Mume Pavilion
- B23. The Orange Pavilion
- B24. The Green Ripple Pavilion

COURTYARDS



- Courtyards
- B - Buildings
- C - Corridors
- W - Wall

CENTRIPETAL AND CENTRIFUGAL FORCES



-  Centripetal
-  Centrifugal
-  Circulation
-  Entrance

GARDEN OF CULTIVATION

FROM MING DYNASTY (368-1644)

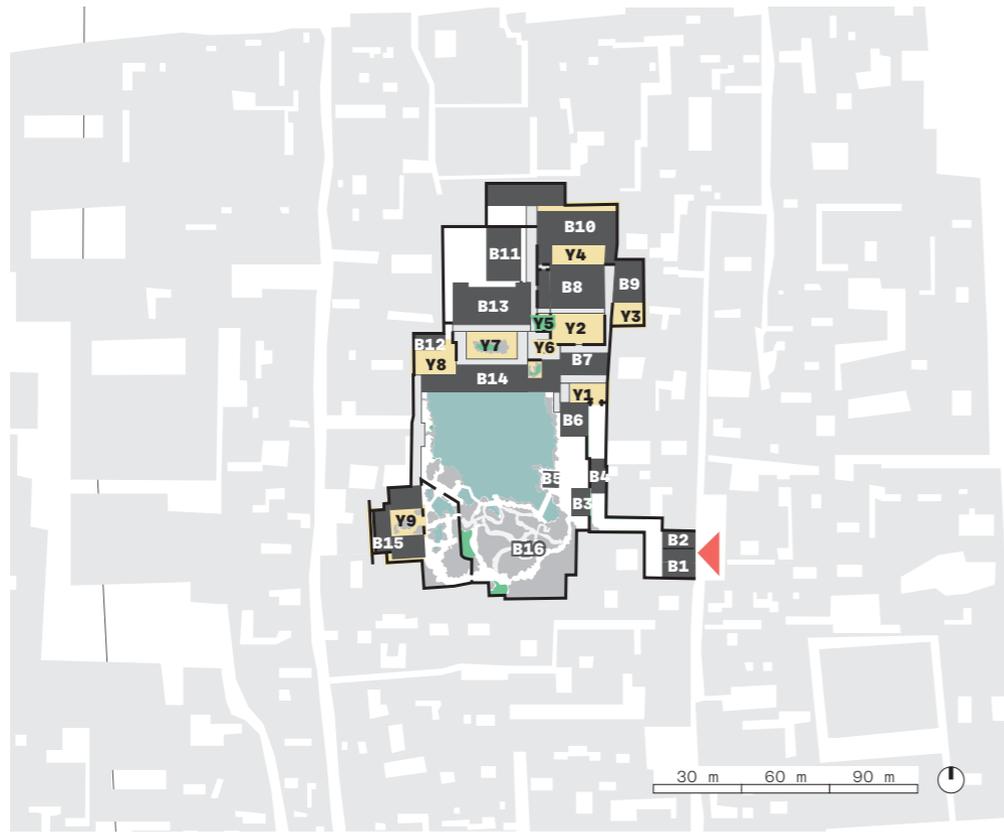
Journey perception:

Although the garden is immersed in a residential block and appears almost imperceptible, inside, the garden is an ode to the contemplation. Each path seems to be part of a runway that evokes the elegance that characterizes the community of Suzhou. From its long corridors, its courtyards and even from the top of the mountain of rocks, the visitor can be observed.

On the other hand, the architecture contrasts with the natural perspectives composed of small pavilions and the silhouette of the old trees. A strong presence of the built can be perceived.



PANORAMIC MAP



- Courtyards [Y]
- Buildings [B]
- Corridors
- Water
- Green area
- Rocks
- Walls
- Context
- Entrance

ANALYSED GARDEN ELEMENTS

Buildings



Courtyards



Nature

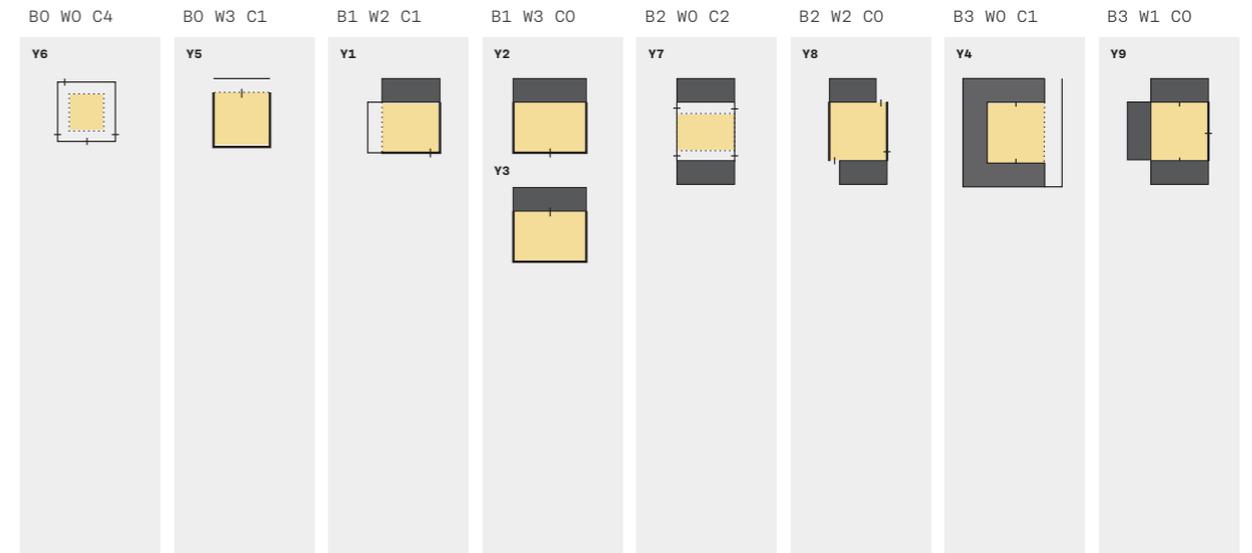


BUILDINGS



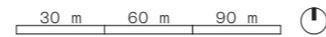
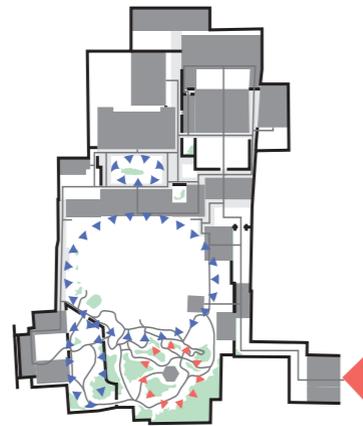
- | | | | |
|-----|----------------------|------|----------------------------------|
| B1. | Gate Entrance | B9. | The Botuo Room |
| B2. | Administration | B10. | The Pavilion |
| B3. | View Pavilion | B11. | Hall of Erudition and Palace |
| B4. | Passing Pavilion | B12. | The Pavilion |
| B5. | The Fry Pavilion | B13. | The Yanguang Pavilion- Tea House |
| B6. | The Lotus Lover Room | B14. | The Bright Valley Teaching Room |
| B7. | The Shilun Hall | B15. | The Sweetgrass House |
| B8. | The Donglai Cottage | B16. | The Zhaoshuang Pavilion |

COURTYARDS



- Courtyards
- B - Buildings
- C - Corridors
- W - Wall

CENTRIPETAL AND CENTRIFUGAL FORCES



-  Centripetal
-  Centrifugal
-  Circulation
-  Entrance

LINGERING GARDEN

FROM MING DYNASTY (368-1644)

Journey perception:

The experience for this garden is guided by the corridors, who seem to be architecturally a strong and recurrent element. Along the route, each corner is an opportunity to frame and immortalize nature through different frames. Even the two largest paintings characterized by a sober nature and an architecture that does not contrast, are perceived from the frame formed by a corridor.



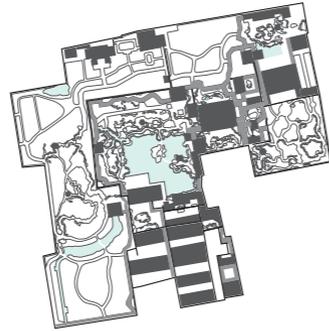
PANORAMIC MAP



- Courtyards [Y]
- Buildings [B]
- Corridors
- Water
- Green area
- Rocks
- Walls
- Context
- Entrance

ANALYSED GARDEN ELEMENTS

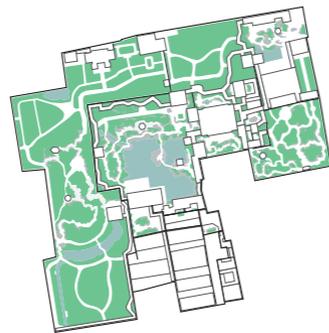
Buildings



Courtyards



Nature

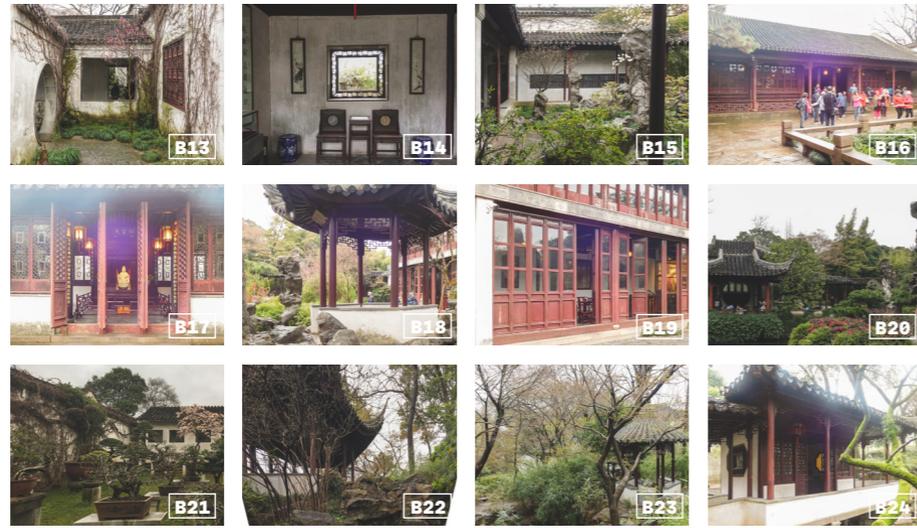


BUILDINGS



- | | | | |
|-----|---|------|----------------------------------|
| B1. | The Entrance Hall | B7. | The Distant Green Tower |
| B2. | The Court pavilion | B8. | The Study of Enlightenment |
| B3. | The Green Shade Pavilion | B9. | The Celestial Hall of Five Peaks |
| B4. | The Pellucid Tower and Hanbi Mountain villa | B10. | The Hao Pu Pavilion |
| B5. | The Osmanthus Fragrants Pavilion | B11. | The Winding Stream Tower |
| B6. | The Passable Pavilion | B12. | The Stone Forest yard |

BUILDINGS



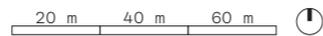
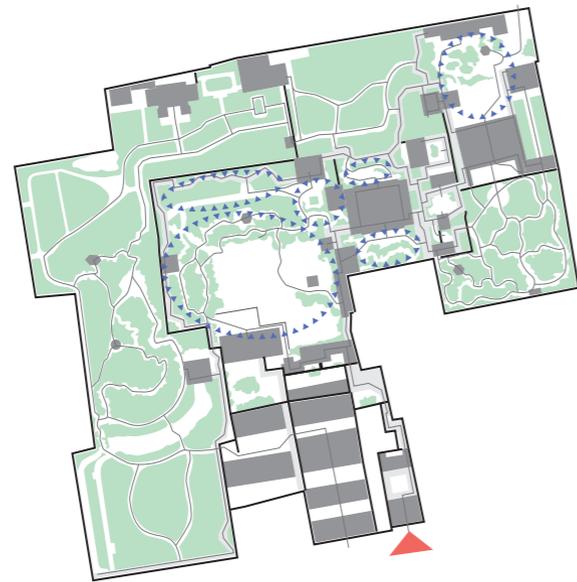
- | | | | |
|------|---------------------------------|------|---------------------------|
| B13. | The Pavilion | B19. | Tea House |
| B14. | The Whorshipping Stone Pavilion | B20. | The Good Farming Pavilion |
| B15. | The Return to Read Study | B21. | The Bonzai Garden |
| B16. | The Old Hermit Scholars House | B22. | The Delightful Pavilion |
| B17. | The Awaiting Cloud Temple | B23. | The Free Roaring Pavilion |
| B18. | The Cloud Capped Peak | B24. | The Place of liveliness |

COURTYARDS



- Courtyards
- B - Buildings
- C - Corridors
- W - Wall

CENTRIPETAL AND CENTRIFUGAL FORCES



-  Centripetal
-  Centrifugal
-  Circulation
-  Entrance

MOUNTAIN VILLA WITH EMBRACING BEAUTY

FROM QING DYNASTY 1645-1911

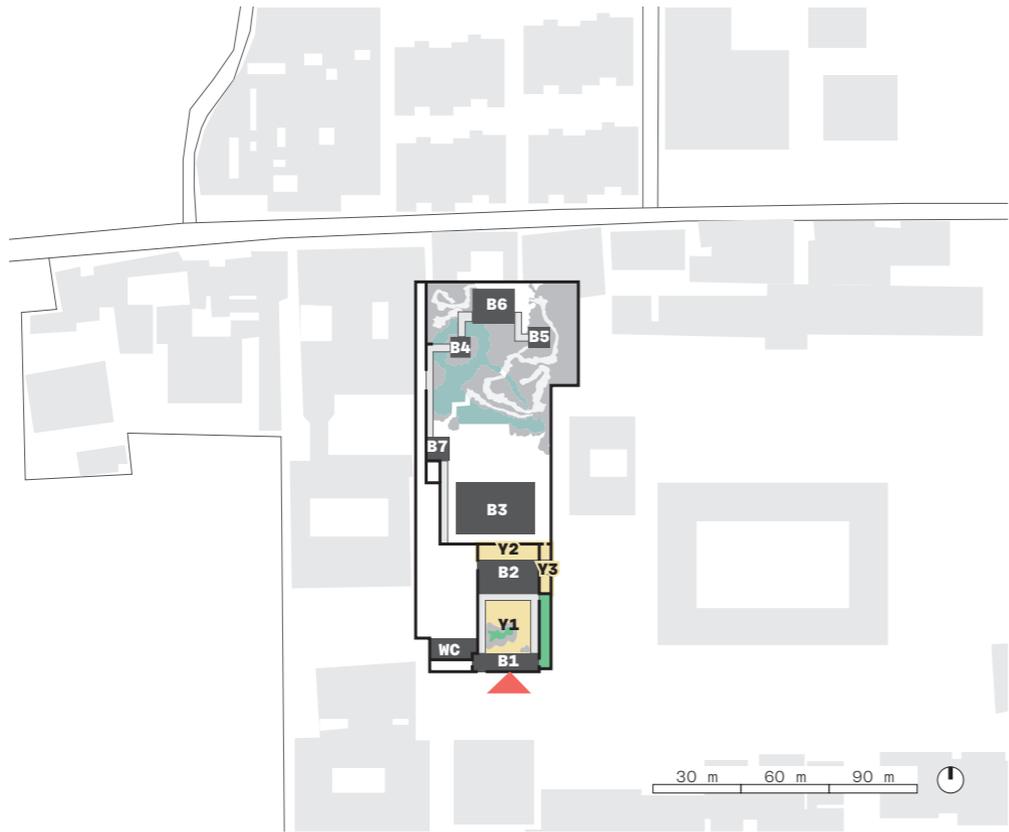
Journey perception:

Small garden with a more familiar scale, composed of different spaces that make reference to the game and life in community. Their views connected to each other, generate the idea of a large continuous space.

On the other hand, the secret visuals towards the ceilings give the sensation of being far from the city. The landscape is sober and the architecture gives the impression of not competing with each other.



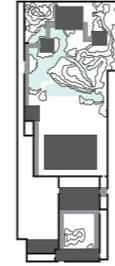
PANORAMIC MAP



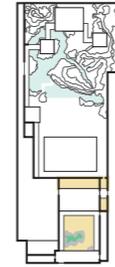
- Courtyards [Y]
- Buildings [B]
- Corridors
- Water
- Green area
- Rocks
- Walls
- Context
- Entrance

ANALYSED GARDEN ELEMENTS

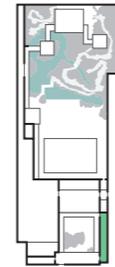
Buildings



Courtyards



Nature

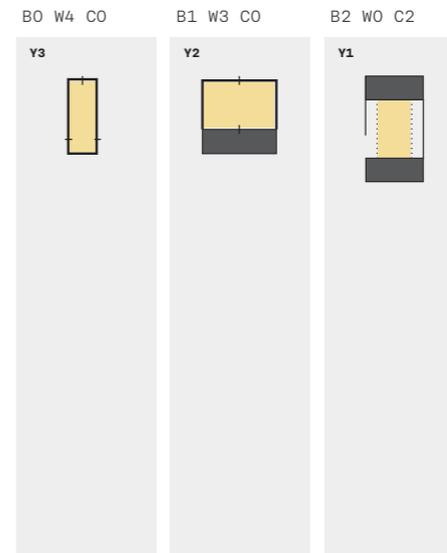


BUILDINGS



- B1. The Main Entrance
- B2. The You Gu Hall
- B3. The Mountain Villa With Embracing Beauty
- B4. Putting a Question To the Spring
- B5. The Housing Mountain Pavilion
- B6. The Make up autumn Galley
- B7. The Side Building and Corridor

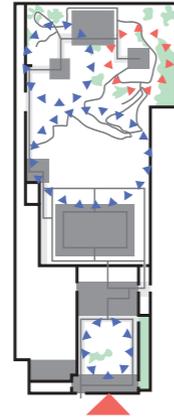
COURTYARDS



- Courtyards
- B - Buildings
- C - Corridors
- W - Wall

CENTRIPETAL AND CENTRIFUGAL FORCES

-  Centripetal
-  Centrifugal
-  Circulation
-  Entrance



COMPOSITIONAL ELEMENTS

COURTYARDS

As an strategy to understand the courtyards as elements that consolidate the structure of the space inside the Chinese gardens, as well as the sequence between the covered, open and indoor spaces (or in other words: the corridor, the garden and the building), a matrix is created that highlights the 16 existing different types derived from the reading of the 7 gardens. In this way, the matrix is transformed into a design tool. When putting the illustrations of the courtyards parallel, recurrent typologies are highlighted, allowing also to compare them, and understand how the same typology can present different forms or ways of organization using the same elements.

However, in order to appreciate the design of these fascinating small environments and extension of the different pavilions, it is necessary to make a synthesis that can be used in the future as a tool to apply in the landscape and architectural design, and project in this context today.

From the reading of this matrix, 7 types are obtained that persist in the different gardens studied: B0 W1 C3, B0 W3 C1, B1 W1 C2, B1 W2 C1, B1 W3 C0, B2 W1 C1 and B2 W2 C0. Later, each of them will be individually observed in a more detailed way, complemented by schemes that evidence the co-existence of regularity and irregularity through the orthogonal architecture and the organic shape of the nature.

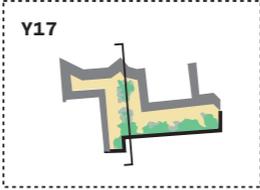
Thanks to this operation it is possible to validate that each typology, despite being composed of the same number of elements, may present different morphological structures according to the recombining location of the elements that make up the courtyard. On the other hand, the experience of these courtyards show in their interior the need to have a natural refuge within the city.

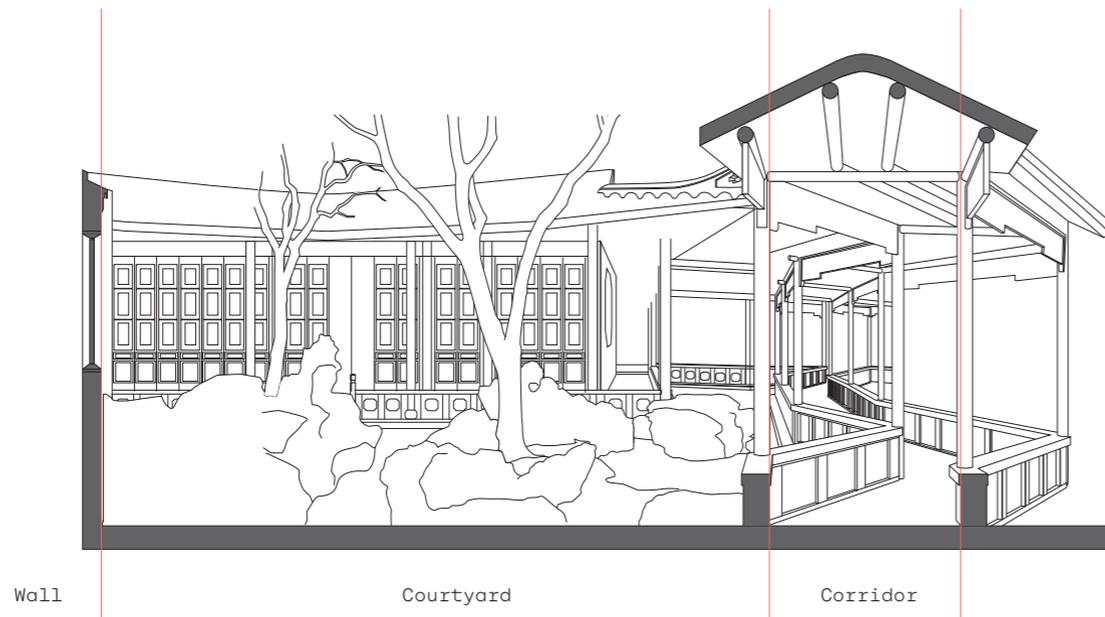
MATRIX

	B0				B1			
	B0 W0 C4	B0 W1 C3	B0 W2 C1	B0 W2 C2	B0 W3 C1	B0 W4 C0	B1 W0 C3	B1 W1 C2
Cang Lang Pavilion					Y3 	Y2 		
Master of Nets Garden		Y6 	Y8 	Y18 	Y2 	Y16 		Y4
		Y17 			Y7 			Y5
Lion Grove Garden		Y6 					Y2 	Y4
		Y7 						Y11
		Y8 						Y12
Humble Administrator's Garden						Y1 		Y3
Garden of Cultivation	Y6 				Y5 			Y8
								Y4
								Y9
Lingering Garden				Y2 			Y9 	Y4
								Y10
								Y11
Mountain Villa with Embracing Beauty					Y3 			

	B2				B3			
	B1 W2 C1	B1 W3 C0	B2 W0 C2	B2 W0 C4	B2 W1 C1	B2 W2 C0	B3 W0 C1	B3 W1 C0
Cang Lang Pavilion		Y5 	Y8 		Y1 	Y10 		
		Y6 			Y4 			
		Y11 						
Master of Nets Garden	Y9 	Y3 				Y1 Y11 		
	Y14 	Y12 				Y15 		
		Y13 						
Lion Grove Garden	Y9 	Y1 			Y10 	Y3 		
	Y5 							
Humble Administrator's Garden	Y6 	Y5 				Y7 		
	Y4 	Y2 						
Garden of Cultivation	Y1 	Y2 	Y7 			Y8 	Y4 	Y9
		Y3 						
Lingering Garden	Y6 	Y8 		Y1 	Y5 	Y3A 	Y12 	
		Y14 			Y7 	Y3B 		
					Y15 	Y16 		
					Y13 	Y16 		
Mountain Villa with Embracing Beauty		Y2 	Y1 					

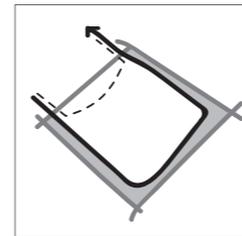
TPOLOGY BO WI C3

CANG LANG PAVILION	MASTER OF NETS GARDEN 	LION GROVE GARDEN Y6  Y7  Y8 	HUMBLE ADMINISTRATOR'S GARDEN	GARDEN OF CULTIVATION	LINGERING GARDEN	MOUNTAIN VILLA WITH EMBRACING BEAUTY	
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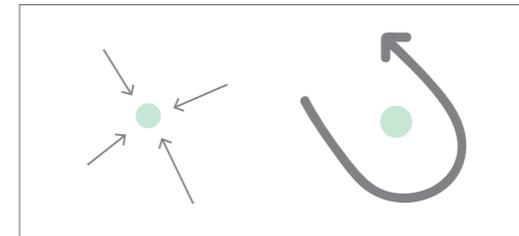


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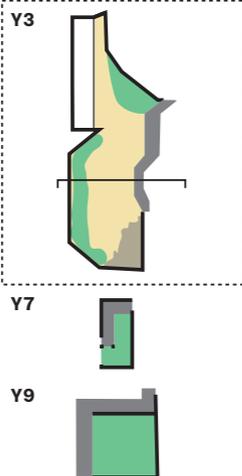
Surrounding path
More walking time

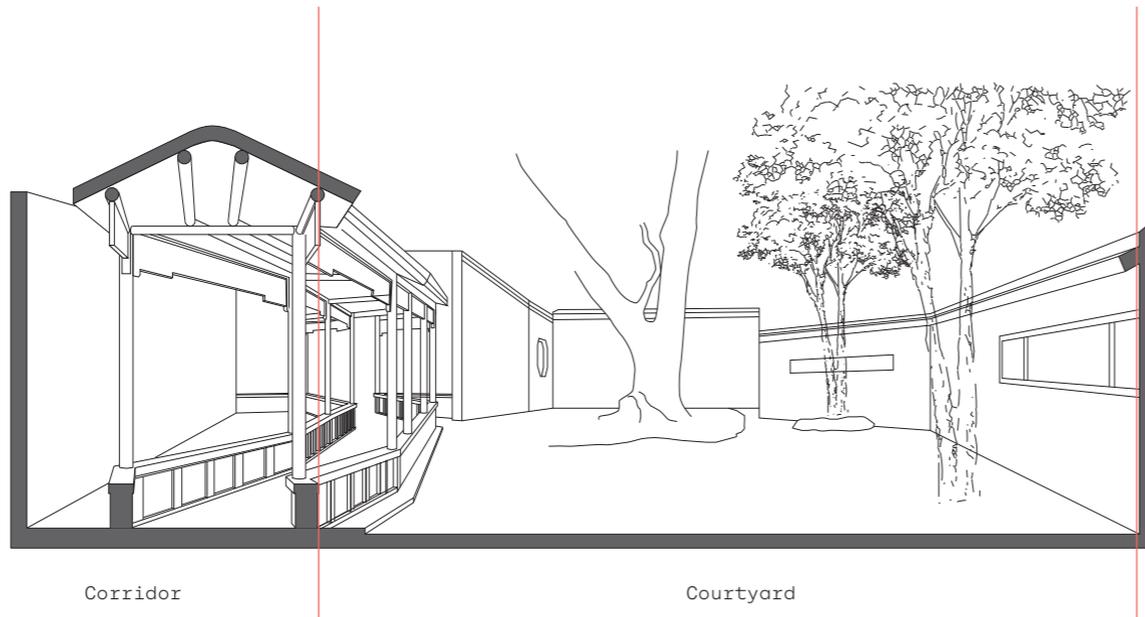


Nature as a focal point



TPOLOGY B0 W3 C1

<p>CANG LANG PAVILION</p> 	<p>MASTER OF NETS GARDEN</p> 	<p>LION GROVE GARDEN</p>	<p>HUMBLE ADMINISTRATOR'S GARDEN</p>	<p>GARDEN OF CULTIVATION</p> 	<p>LINGERING GARDEN</p>	<p>MOUNTAIN VILLA WITH EMBRACING BEAUTY</p>	
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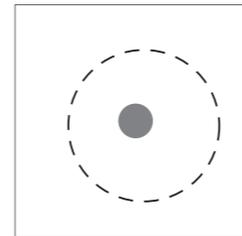
Corridor

Courtyard

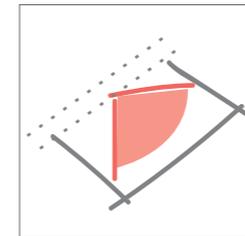
Wall

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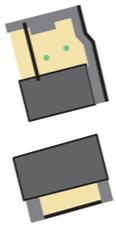
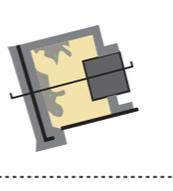
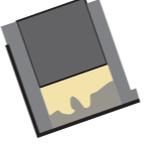
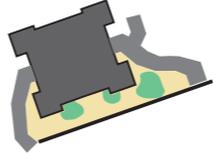
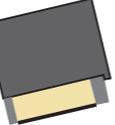
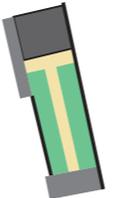
Inside-outside

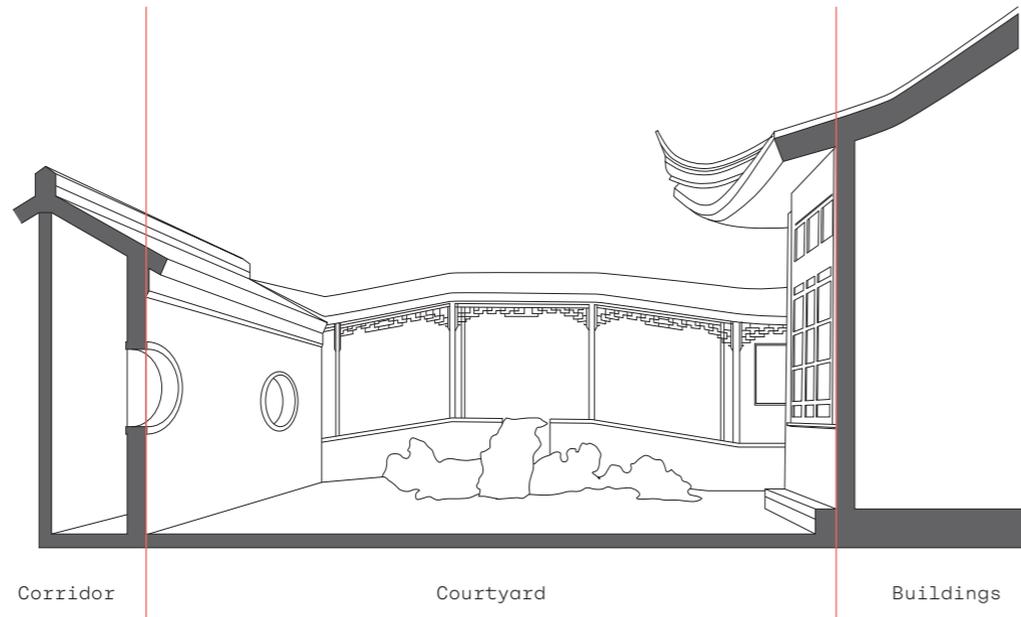


Close perspective
One point of view



TPOLOGY BI WI C2

CANG LANG PAVILION	MASTER OF NETS GARDEN Y4  Y5	LION GROVE GARDEN Y4  Y11  Y12 	HUMBLE ADMINISTRATOR'S GARDEN Y3  Y8  Y9 	GARDEN OF CULTIVATION	LINGERING GARDEN Y4  Y10  Y11 	MOUNTAIN VILLA WITH EMBRACING BEAUTY	
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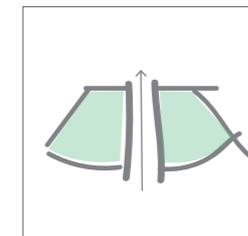
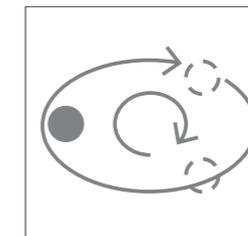
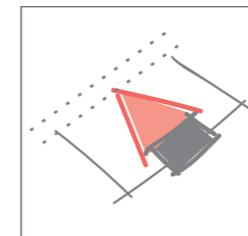


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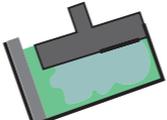
Point of view towards the building

Wave effect

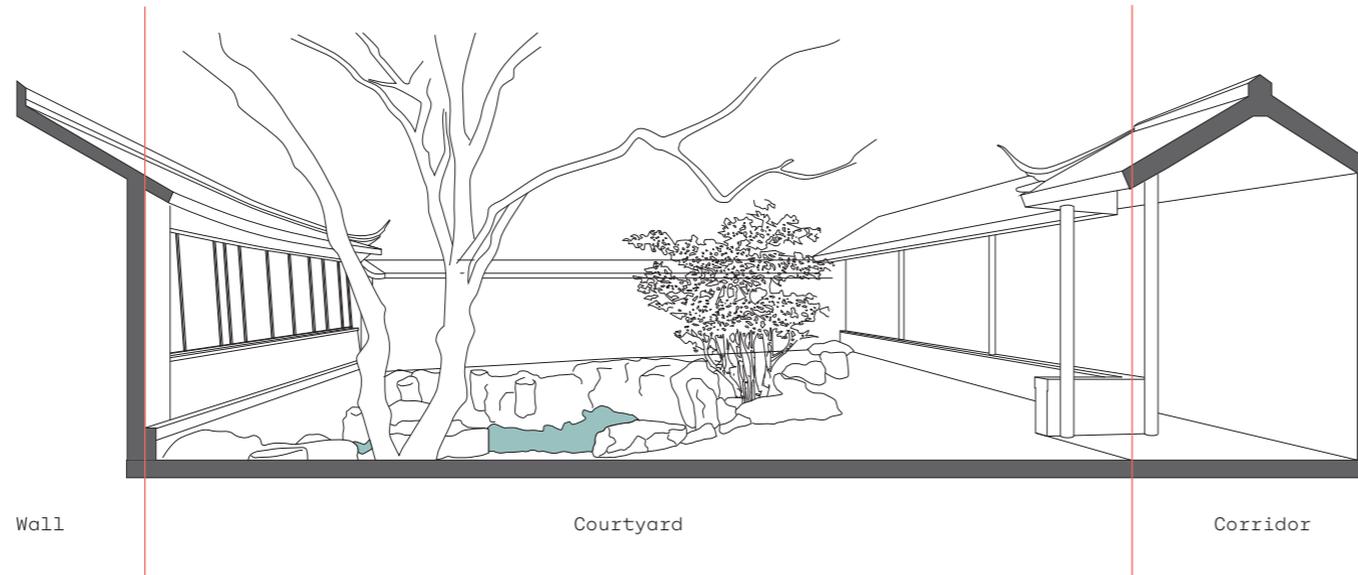
Nature guides the path



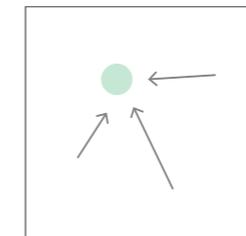
TYPOLGY BI W2 CI

CANG LANG PAVILION	MASTER OF NETS GARDEN Y9  Y14 	LION GROVE GARDEN Y9  Y5 	HUMBLE ADMINISTRATOR'S GARDEN Y6  Y4 	GARDEN OF CULTIVATION	LINGERING GARDEN Y1 	MOUNTAIN VILLA WITH EMBRACING BEAUTY Y6 	
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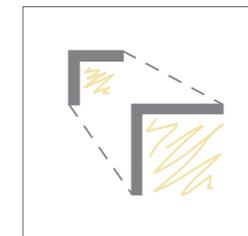
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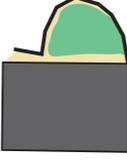
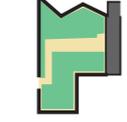
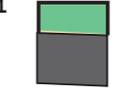
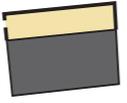
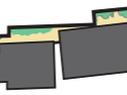
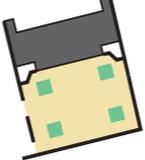
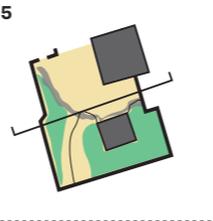
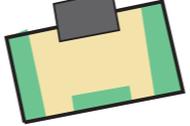
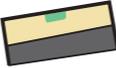
Nature as a main angular element

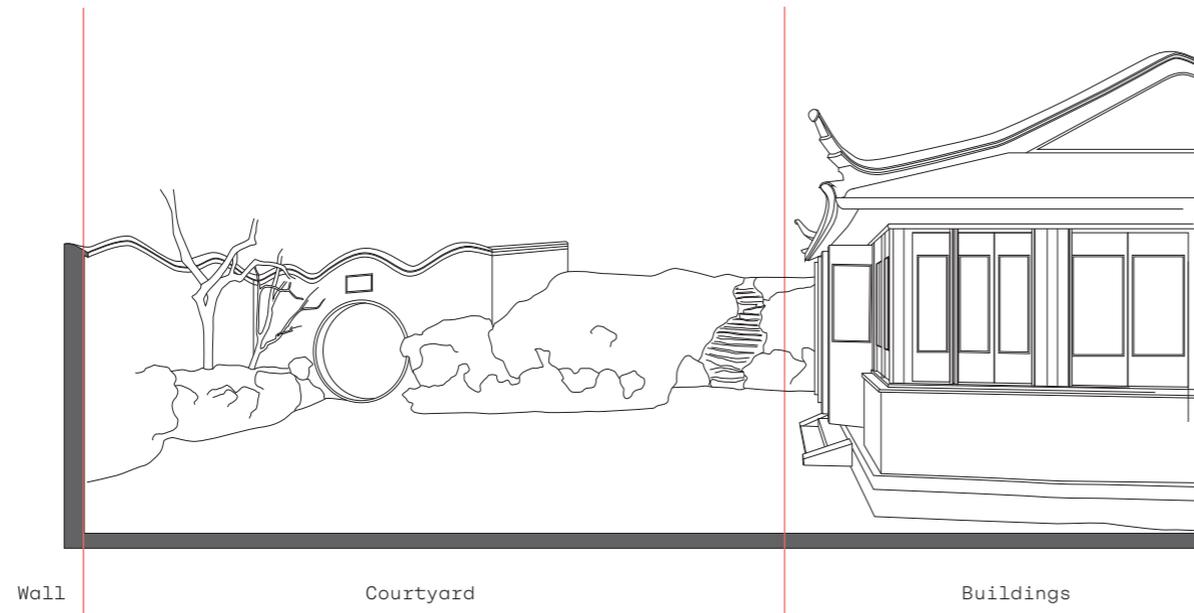


Focal angle enlarge spatial perception



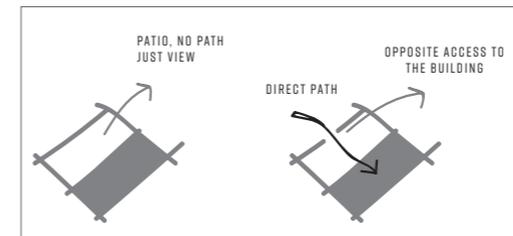
TYPOLGY BI W3 C0

<p>CANG LANG PAVILION</p> <p>Y5</p>  <p>Y6</p>  <p>Y11</p> 	<p>MASTER OF NETS GARDEN</p> <p>Y3</p>  <p>Y12</p>  <p>Y13</p> 	<p>LION GROVE GARDEN</p> <p>Y1</p> 	<p>HUMBLE ADMINISTRATOR'S GARDEN</p> <p>Y5</p>  <p>Y2</p> 	<p>GARDEN OF CULTIVATION</p> <p>Y2</p>  <p>Y3</p> 	<p>LINGERING GARDEN</p> <p>Y8</p>  <p>Y14</p> 	<p>MOUNTAIN VILLA WITH EMBRACING BEAUTY</p> <p>Y2</p> 	
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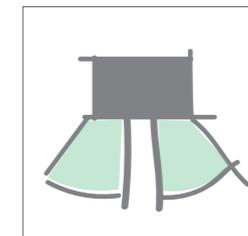


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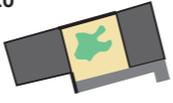
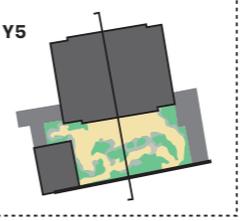
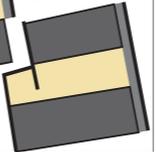
Patio and transition path

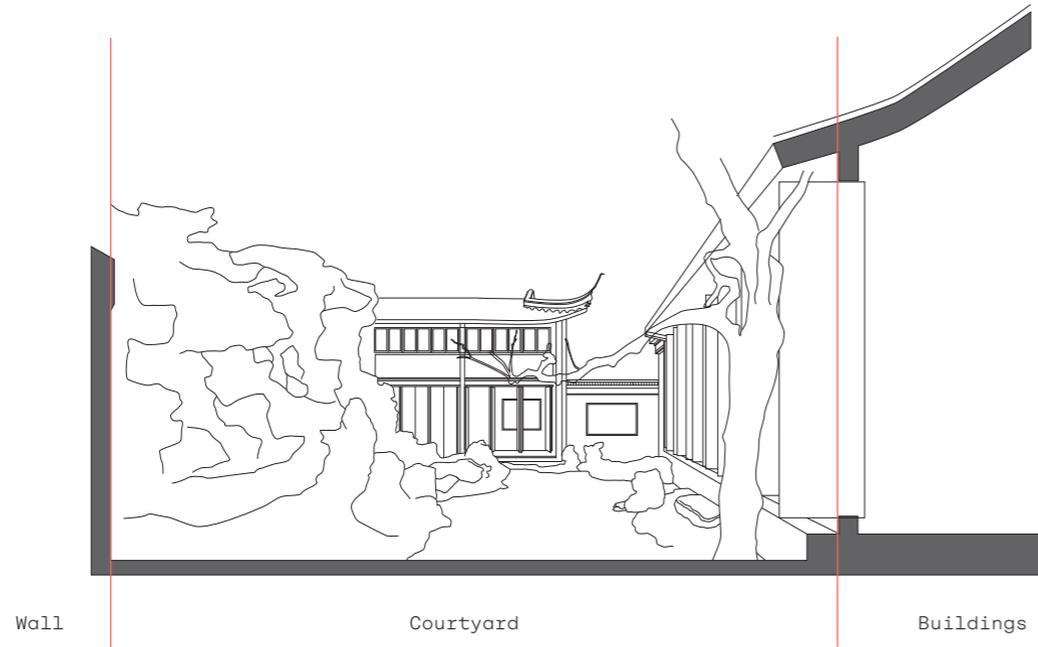


Nature frame access to the building



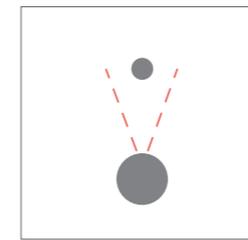
TYPOLGY B2 WI CI

<p>CANG LANG PAVILION</p> <p>Y1</p>  <p>Y4</p> 	<p>MASTER OF NETS GARDEN</p>	<p>LION GROVE GARDEN</p> <p>Y10</p> 	<p>HUMBLE ADMINISTRATOR'S GARDEN</p>	<p>GARDEN OF CULTIVATION</p>	<p>LINGERING GARDEN</p> <p>Y5</p>  <p>Y13</p>  <p>Y7</p>  <p>Y15</p> 	<p>MOUNTAIN VILLA WITH EMBRACING BEAUTY</p>	
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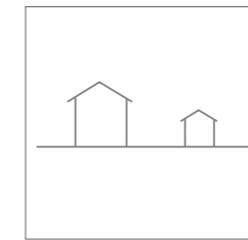


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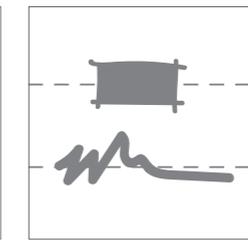
Little building as a part of background



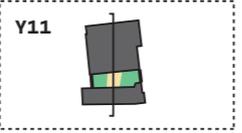
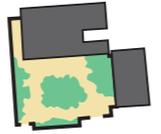
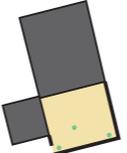
Contrast remarks hierarchy

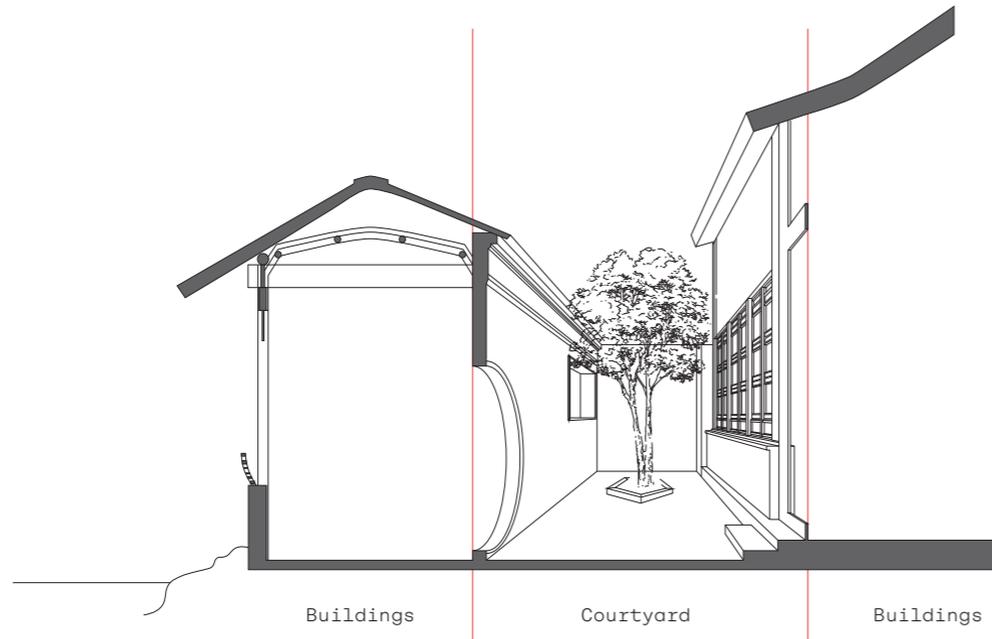


Layers: nature-building



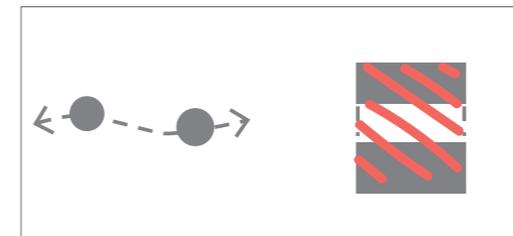
TYPOLGY B2 W2 C0

<p>CANG LANG PAVILION</p> <p>Y10</p> 	<p>MASTER OF NETS GARDEN</p> <p>Y1x2</p> <p>Y11</p>  <p>Y15</p> 	<p>LION GROVE GARDEN</p> <p>Y3</p> 	<p>HUMBLE ADMINISTRATOR'S GARDEN</p> <p>Y7</p> 	<p>GARDEN OF CULTIVATION</p> <p>Y8</p> 	<p>LINGERING GARDEN</p> <p>Y3A</p>  <p>Y3B</p>  <p>Y16</p>  <p>Y17</p> 	<p>MOUNTAIN VILLA WITH EMBRACING BEAUTY</p>	
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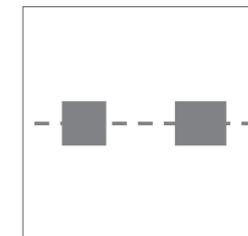


RECREATED ATMOSPHERE:

Transition between buildings

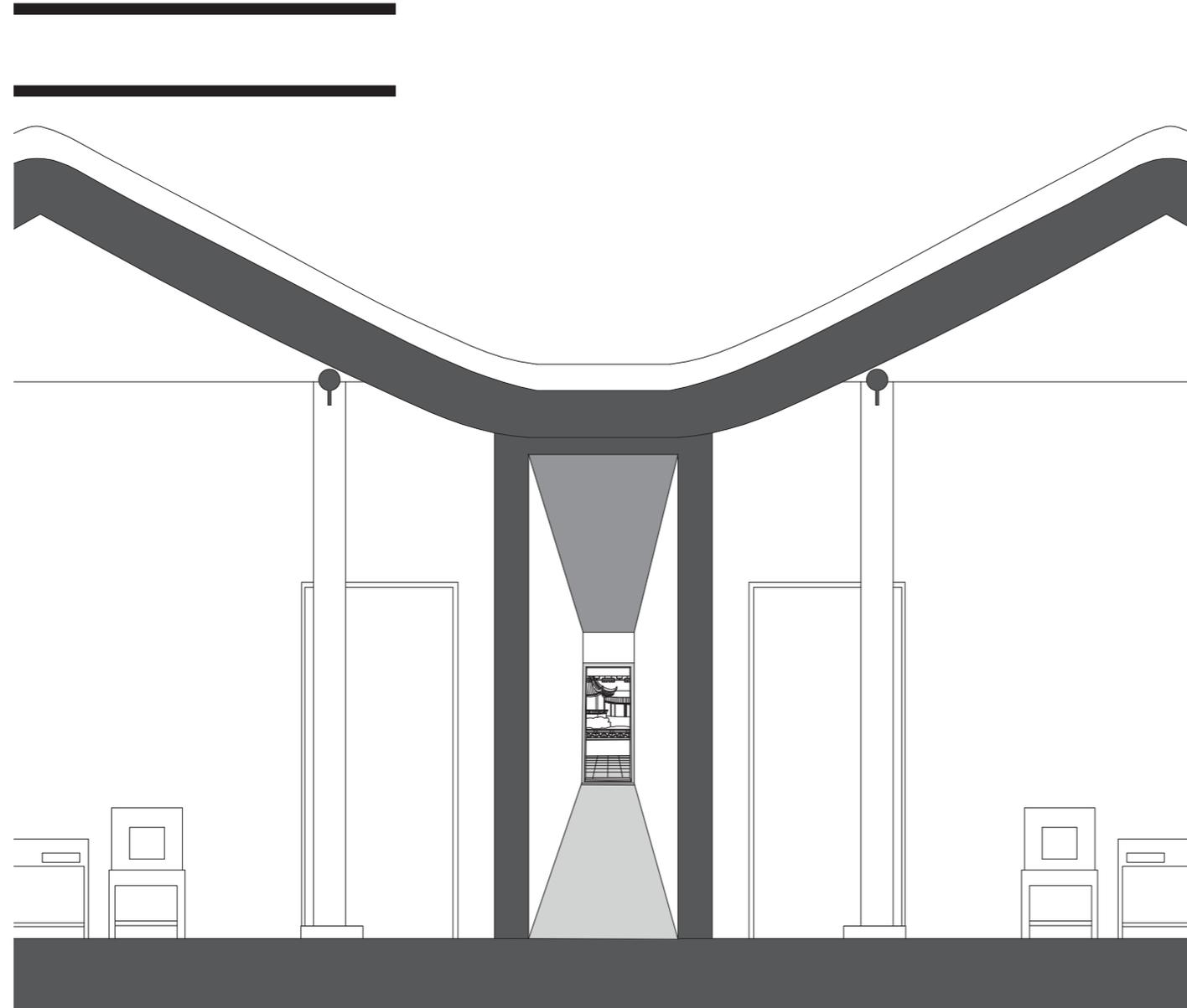


Feeling of pause in the path



CORRIDORS

WITH WALLS



"In designing of garden, the designer should make a plan for an optimal tourist route to lay out the attractive sights, similar to the use of introduction, elucidation of theme, transition to another viewpoint and summing up in writing an essay, or to the foreword, the picture and the postscript of a handscroll, which bring about an integrated whole, the order of whose components admits of no wanton reversal." (Chen, 2017)

An important characteristic of Chinese architecture is that the single buildings are very simple, generally rectangular or square. So there must be contradictions: how to combine simple buildings into a tortuous and varied complex. This contradiction is mainly solved by the connection of the 'corridor'.

As a connecting component in the garden, the 'corridor' plays the role of integrating the scenery of each part and then matches the different types of Carved hollowed-out lattice windows on the wall or columns to connect the space on both sides forming a series of rhythmic tours. The route makes the sceneries of the garden connect as a whole.

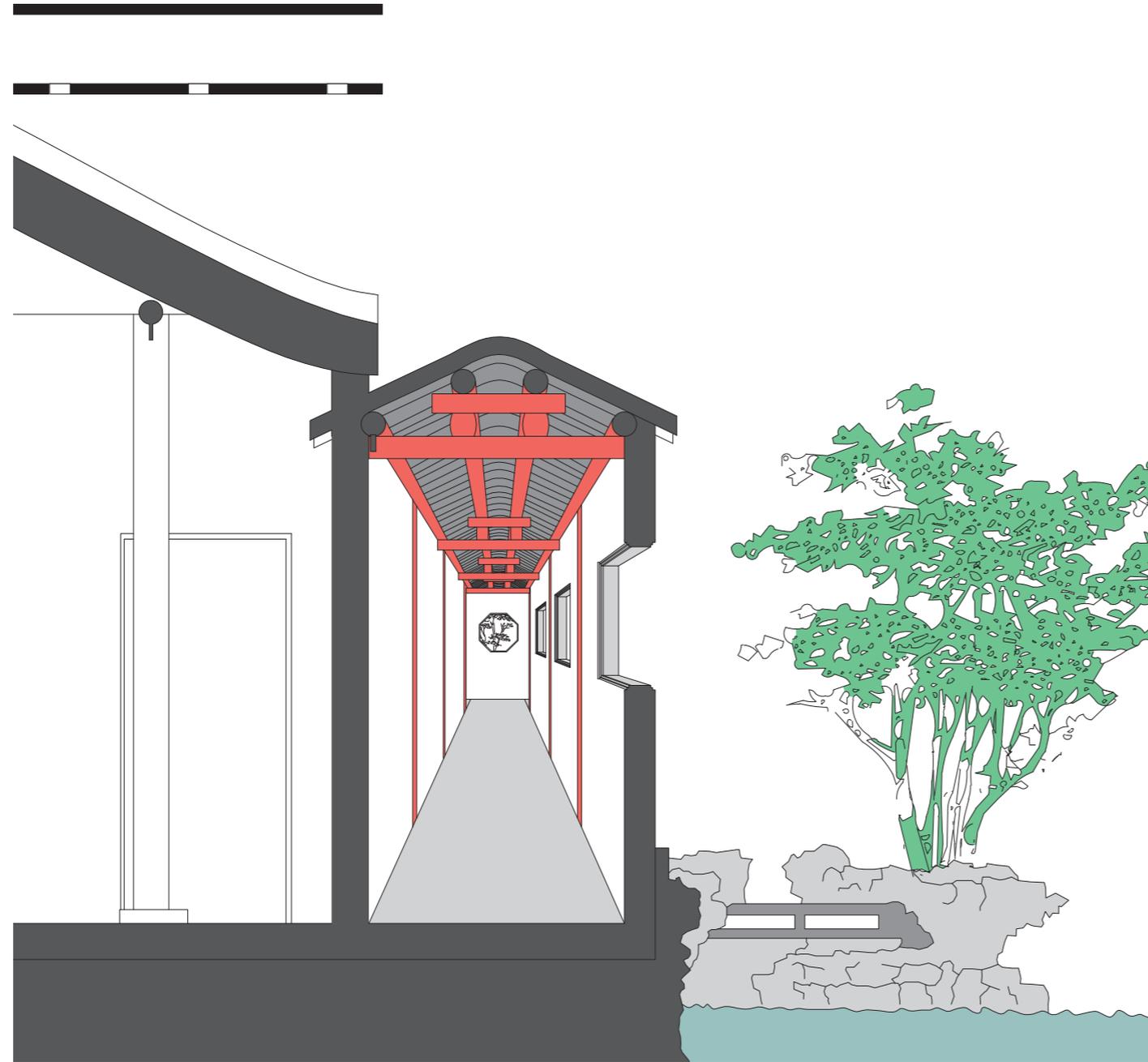


Garden of Cultivation



Master of Nets Garden

WITH OPENINGS AND WALL



SINUOUS MOVEMENT

Because of its simple structure, small size and flexible combination, the Corridor can create a sinuous and flowing route by changing the form and type. Winding bridges, paths, and corridors were originally intended to facilitate movement between places.

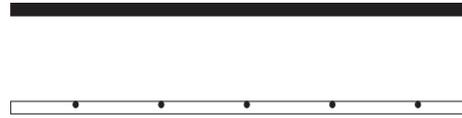
The garden is landscaped on all sides and if the designer plans curving paths instead of straight ones the visitors will be flanked on both sides by the pleasant scenery.

The route may seem longer and more alluring. Moreover, the tortuous movements can make people perceive the space bigger than its actual size. Using this sensory illusion can create a more profound and varied spatial experience in a small space.



Lingering Garden

WITH PILLARS AND WALL



SPATIAL CONTRAST

From the entrance, it does not directly enter the main garden but will pass through a series of halls. From the building into the main courtyard, it is generally connected by a corridor. Before entering into the large space people should pass a small space in a corridor.

Therefore the field of vision will have a process of compression and building of expectations.. Due to the contrast between the spaces the large space will give people a greater spatial perception.

For example, in the Master of Nets Garden, entering the main courtyard from the hall, there is a narrow path enclosed by both sides, People can only see the light coming from the garden. But as you went on some dozens of paces, a wide view suddenly opened before you.

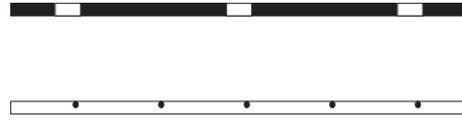


Lion Forest Garden



Lingering Garden

WITH PILLARS AND OPENINGS



FRAME VIEW

Except for the tortuous form, the “corridor” also has Carved hollowed-out lattice windows on the walls, which let people can see the scenery in the corridor. Each frame can be seen as a layer. Every time the sight passes through the window, it is seen as a superposition of layers. Sometimes it can reach three or four layers. The layers can confuse the perception of distance that increases the depth of the space. Frame views and layers make Suzhou gardens contain more sceneries in a limited space and walking in the garden the view changes with every step.

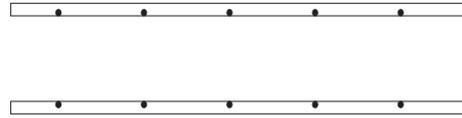
REVEALING AND DRAWING OUT THE SCENERY

There will always be different windows on either side of the gallery. Carved hollowed-out lattice windows have the effect of “revealing the scenery” and “the scenery”. The frame views formed by the windows give a preview of the scenery outside the wall, which evokes people’s curiosity then want to go to find out it. Let the tourists subconsciously follow the established route.



Lingering Garden

WITH PILLARS



ROUTE STRATEGIES

The path through the garden include a sequence of in-position viewing and in-motion viewing. As a long and tortuous space, the corridor cannot only connect the space at both ends but also create different atmospheres by changing its own spatial forms to control the rhythm. For example, a small and closed space will make people want to as soon as possible arrive at the other end of the corridor; conversely, the open space will allow people to enjoy the surrounding scenery. Choosing different form it lets the visitors pass quickly or stroll. That will create a route with different rhythm in gardens.

Chinese gardens may be divided into two kinds: those for "in-position viewing" i.e. lingering observation from fixed angles, and those for "in-motion viewing" i.e. moving observation along a route of some distance. For small-scale gardens like Master of Nets Garden and Garden of Cultivation, the former type is more frequent than the latter and the reverse should be the case for large-scale gardens such as Lingering Garden.



Master of Nets Garden



Lingering Garden

DOUBLE WITH PILLARS



UPS AND DOWNS

Since Suzhou gardens are located in the city, the variety of topography is limited. Therefore, garden planners pay attention to the use of artificial methods combining with natural topography to create more spatial varieties.

Laying stones and finding stream they try to imitate the sceneries of mountains and rivers in the natural landscape. Due to the different altitude of buildings, sloping galleries are used to connect each point passing through the rocks.

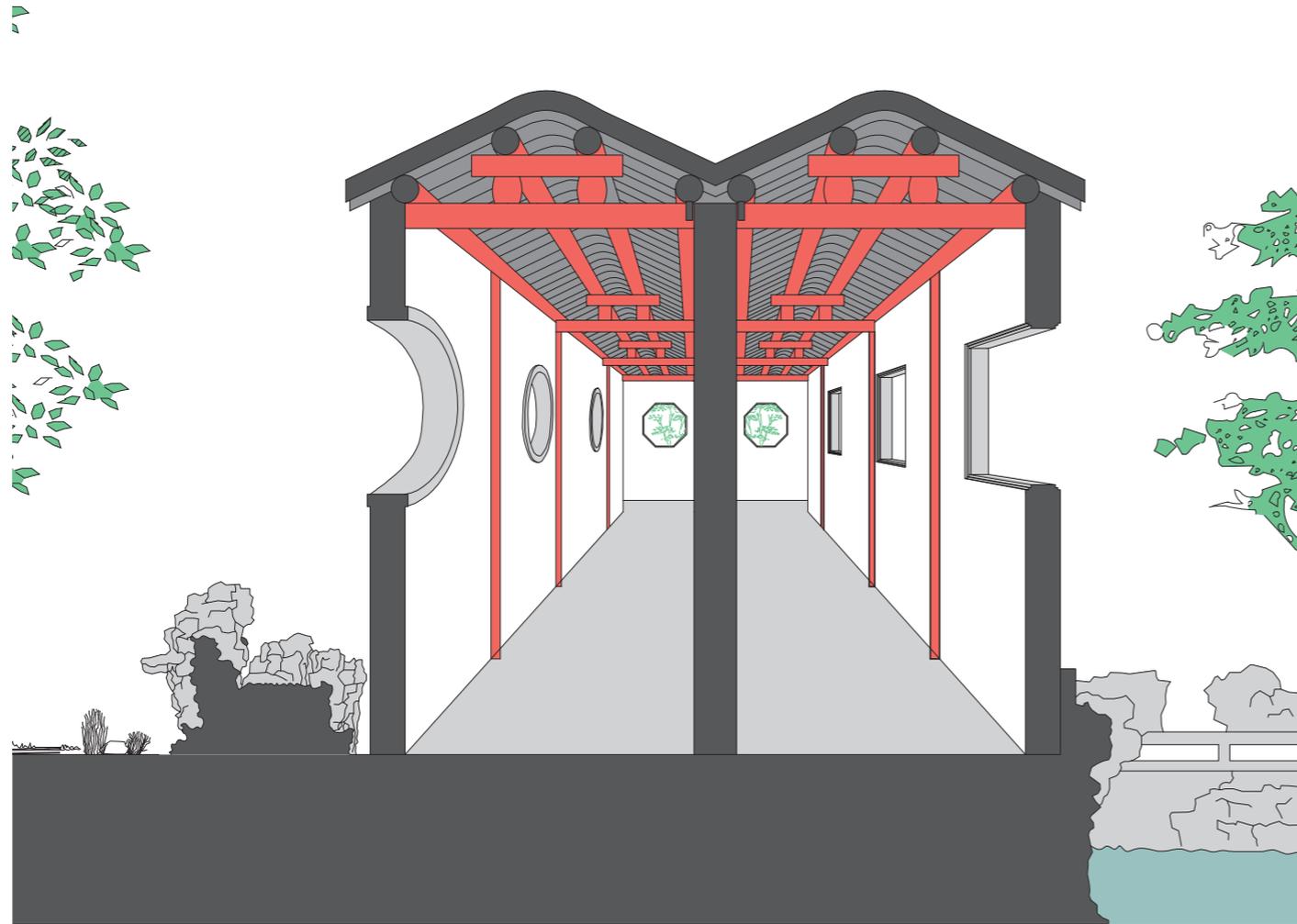
Strolling in the corridor people will inevitably go up and down. These changes of perspective can also make a route more various and interesting.

Moreover, the 'corridor' pass between the rockery and the vegetation, and the looming silhouette itself becomes also part of the landscape.



Garden of Pleasence

DOUBLE WITH OPENINGS



SPACE SEPARATION

The shape of the “corridor” is flexible and is often used for the boundaries between spaces. In a garden, there are always two adjacent courtyards that possess a different atmosphere.

The corridor can separate two spaces along the tortuous boundary but through windows, it creates a visual connection, which seems to have an ambiguous relationship.

For example, the anterior courtyard and posterior one in Garden of Pleasure are divided by a double corridor. No matter which side of the wall you walk on, you can see the scenery of another side through the window.



Lion Grove Garden

05/ Principles derived from the Chinese gardens

CONTROLLED JOURNEY

Due to the limited footprint and the small scale of the Chinese gardens in the Jiangnan region nothing is left to chance. The journey is meticulously planned for each visitor, taking into consideration all the variants could occur; many aspects are revealed once at a time.

Therefore, designated paths connect points of interest in the garden setting diverse experiences. A direct link as opposed to a more peripheral connection return different perceptions of the space. The same path can affect the mood, in fact an angular route has an effect of tension where a curvy way gives the impression to be more relaxed.

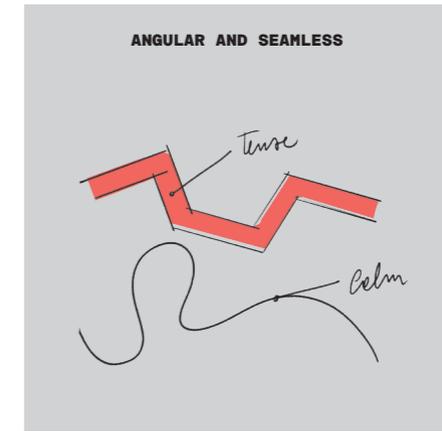
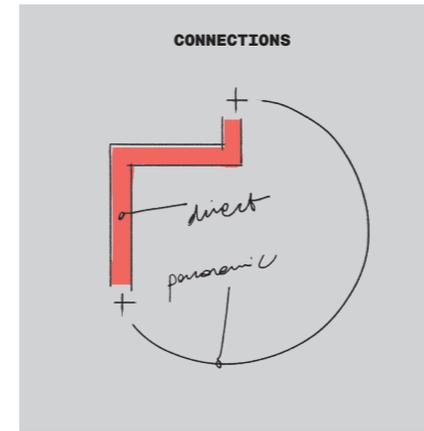
Definitely rhythm is a paramount element in the fruition of the place. An engaging experience is based on

a balanced combination between movement and stops, in order to allow progress in the visit and rest to admire the landscape. Certain paths suggest a faster pace than others; usually narrower tracks prompt rapid moves, on the other hand broad roads authorize slower walks.

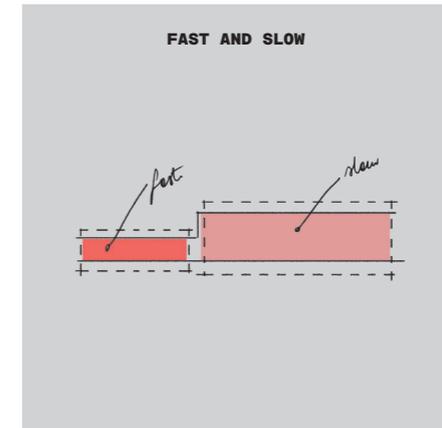
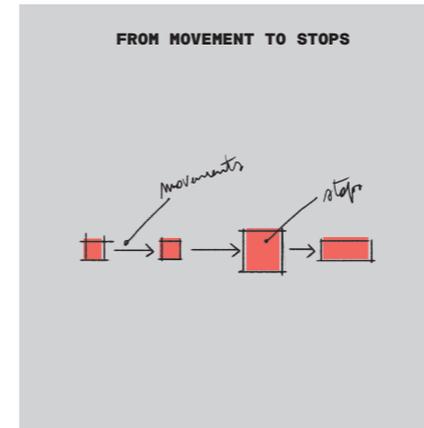
Open air spaces and internal ones are not easy to decode, in fact the whole garden is planned pretending not to be an enclosed area. There isn't an Inside or an Outside, but an elaborate system of spaces that creates a sort of 'Chinese boxes', dependent on the point of view.

The blueprint structure itself presents defined spaces, when the borders are marked, or creates extra-spaces, whenever the buildings stretch out in the outside territory.

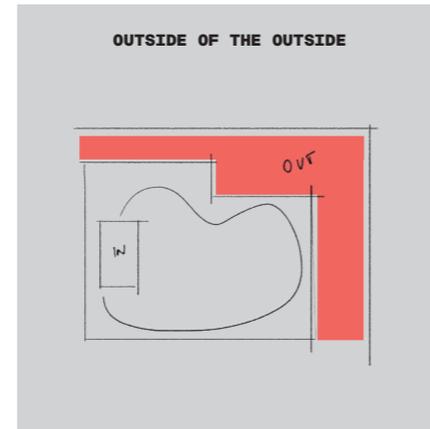
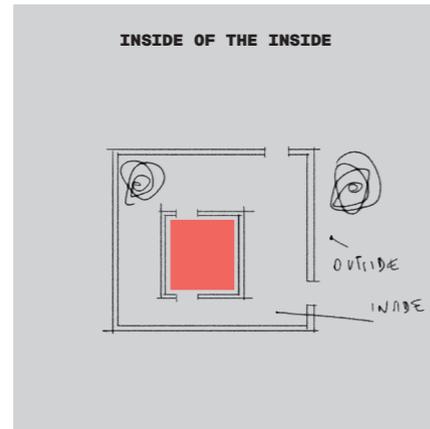
Paths



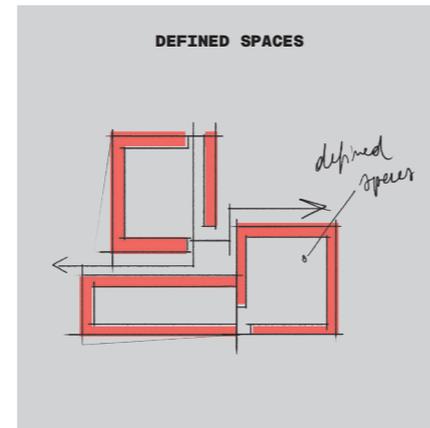
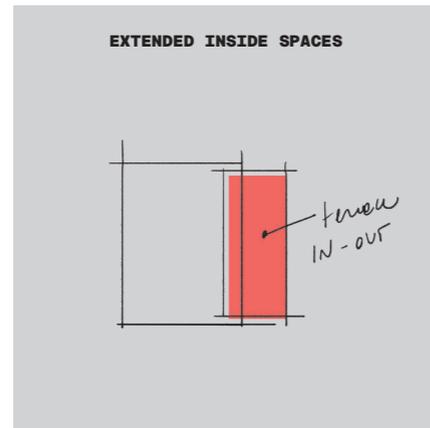
Prescribed Rhythm



Nested Spaces



Structure

SENSORIAL EXPERIENCE

The Chinese garden experience is often an exposure to all senses. The detailed layout and the sequence of items engage not only the sight but involve and heighten hearing, touch and smell too. The wind flow through the bamboos, the fragrant blossom, the refreshing water, the milky mist and the tactile pathways are likewise fundamentals.

Furthermore, a true experience contemplates a mental involvement, that means being in a specific place at that moment, aware of the context and the surroundings. It takes one detail to provide a conscious journey.

Playing with the narrative of the foreground and background layer reveals different mood possibilities of the same setting.

Complexity provides an element of diversion, key to generate interest and forge unpredictability.

Shade is as essential as sunshine. Objects cast a shadow that can be more fascinating than the objects themselves. Besides shadows are not fixed and at different times of the day interact distinctively with the surroundings. Spread glows or dimmed rays draw customized ambiances.

Water is a ever-present element in the Chinese culture, symbol of life and flow of time. Combined with a natural setting conceive picturesque displays. The pond ripples form shimmering reflections picturing a fuzzy ambiance while the calm water reflects a duplex world.

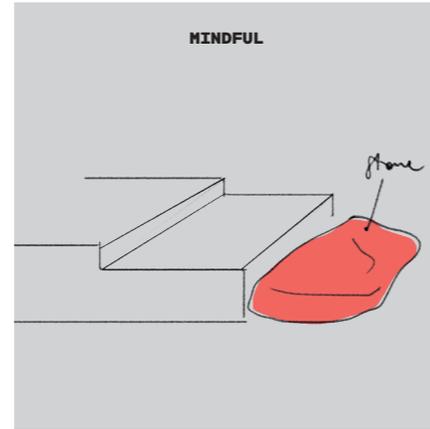
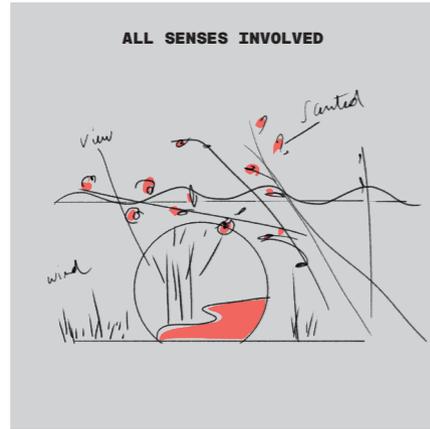
“A garden’s scenery is constantly altered by the shifting effects of light and the seasons, which form an important part of one’s experience of a garden and help engage all the senses, not just sight.”

Department of Asian Art,

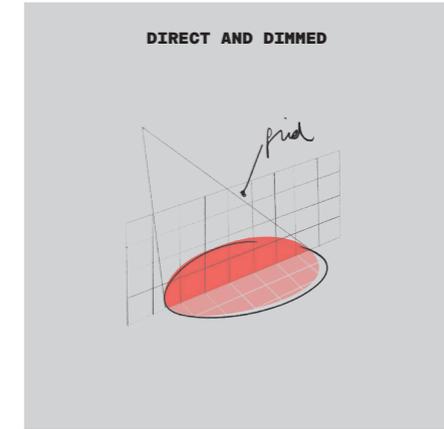
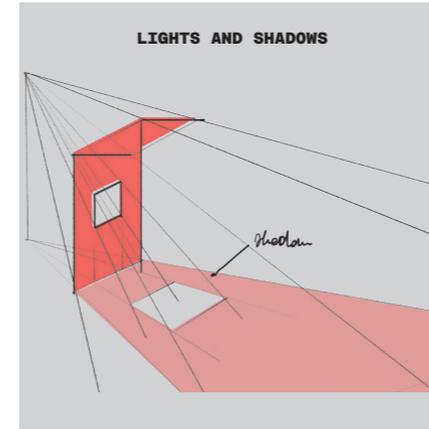
“Chinese Gardens and Collectors’ Rocks.” In Heilbrunn Timeline of Art History.

New York: The Metropolitan Museum of Art. October 2004

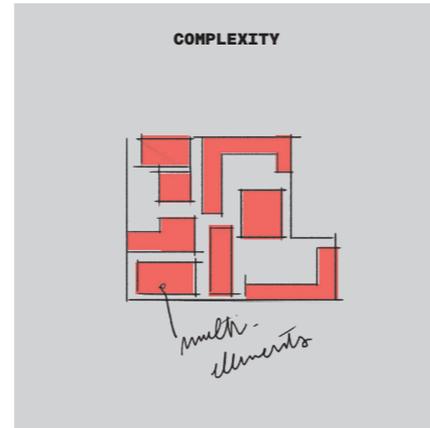
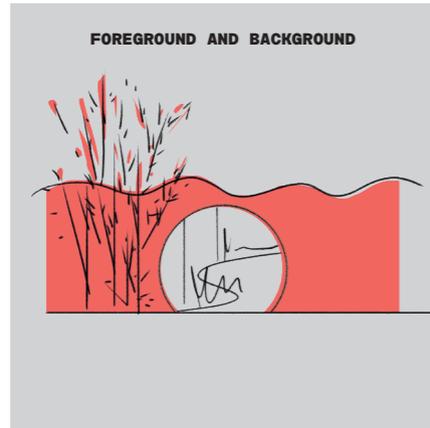
Full immersion



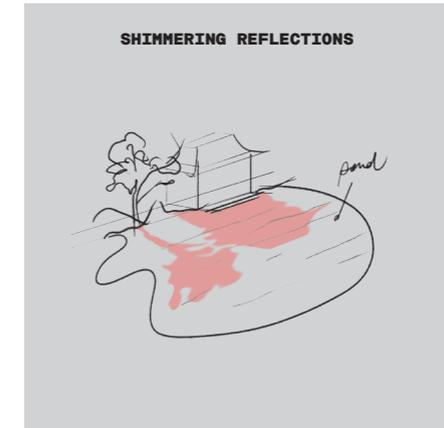
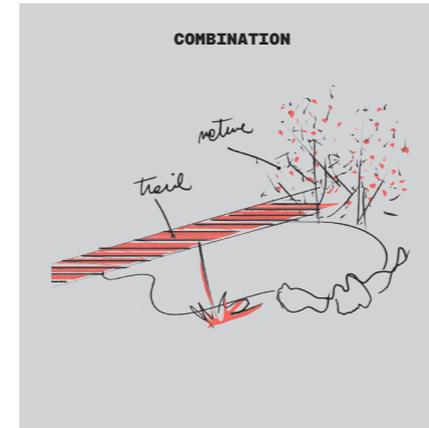
Light



Layers



Water



ARTICULATED ATMOSPHERE

Outstanding atmospheres can be achieved by a specific composition, in which centripetal forces are generated by a 'magnetic' field of one or more elements. These cores provide a pivotal dynamism to the layout.

Like paintings reality is a two-dimension configuration, where parts are set side by side to shape an elegant unity.

Another approach is given by patterned windows and doors, used to visually join open-air and enclosed spaces, facilitating the transition between the two.

The antagonism and blending of opposites are equally valued in the overall experience. It can

be seen as an harmonic whole of organic figures and geometric architectures. "Irregularly shaped rocks next to smooth, rectangular clay tiles; soft moss growing on rough rocks; flowing water contained by a craggy grotto". (MET Museum, 2004)

Views are the key to discover the amazement that the garden has in store. They lead to the revelation through different expedients.

Apertures stage sneaky glimpses of the landscapes; open sights unveil the amplitude of the panorama; framed openings portray a chosen vista whereas reflected views show fragmented glances of an upside-down scenario.

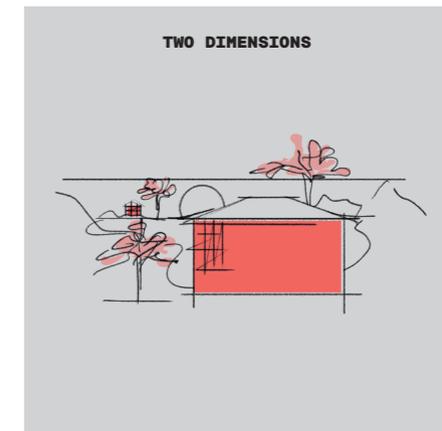
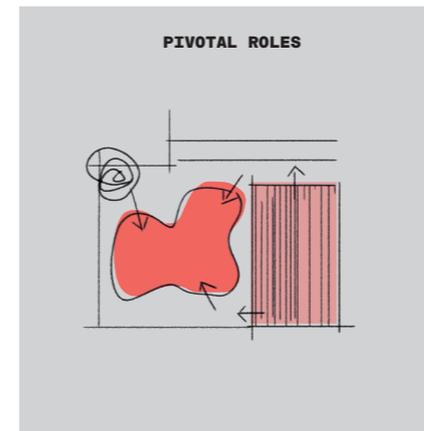
“One of the most important considerations in garden design is the harmonious arrangement of elements expressing different aspects of yin and yang.”

Department of Asian Art,

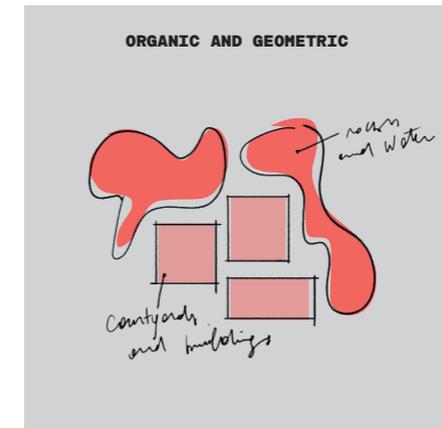
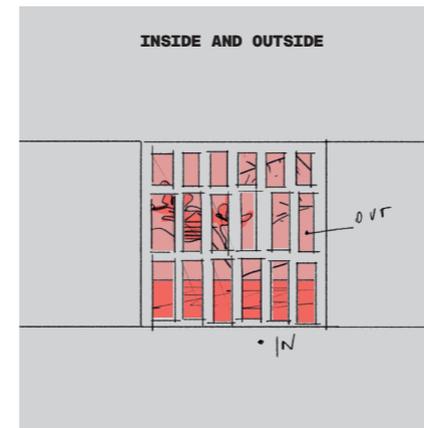
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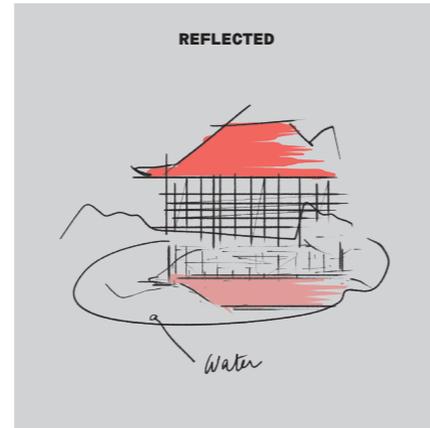
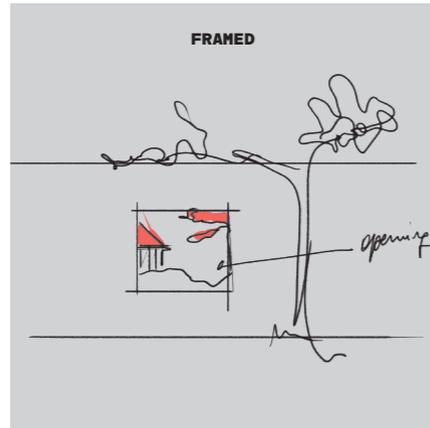
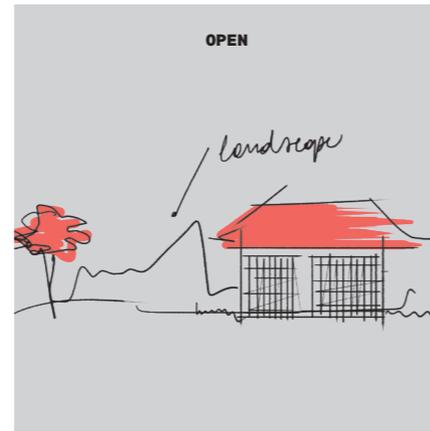
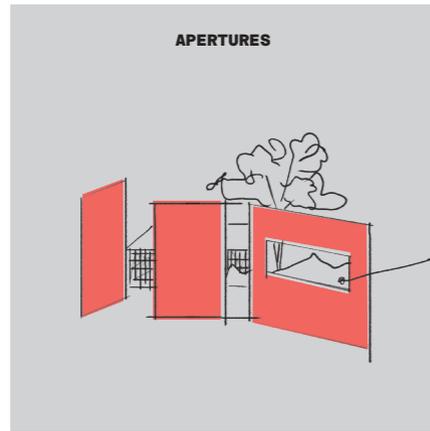
Composition



Combined elements



Views

ROLE OF IMAGINATION

A profound knowledge of a place doesn't preclude the interpretation of the same one. The visitor of the Chinese garden has an active role in the encounter. Looking beyond and letting himself go in this mesmerising scenario is all required.

Gardens are conceived as a larger world of nature. In tiny courtyards are reproduced vast landscapes: small ponds resemble natural rivers and lakes, miniature trees and bushes suggested ancient trees and forests; staged rocks evocate mountains and towering peaks. These separate microcosms are neither relating with the outside environment nor

communicating each other. And in this replica, nothing is too obvious or too literal.

Imagination is driven by the influence of anticipation. Building on visitor's expectations and curiosity is a regular expedient to enrich the garden experience. Blocked views and turning paths are widely used with this intent.

Misleading ratios trick the user in the judgement and measure of compared objects. One of the perceptive outcomes could be a wider space.

Reflections can also beguile the mind, picturing other courtyards or a continuous path where is instead a blind wall.

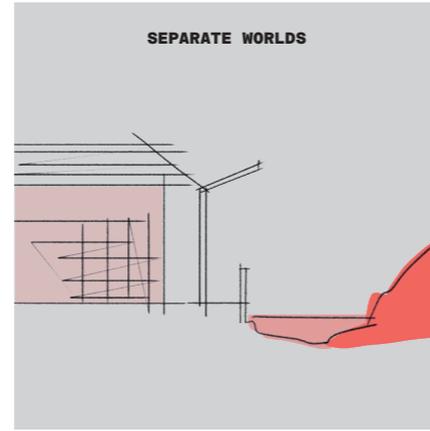
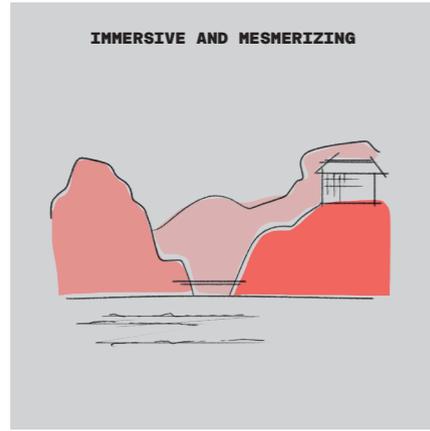
“Traditional Chinese gardens were meant to evoke a feeling of being in the larger natural world, so that the occupant could capture the sensations of wandering through the landscape.”

Department of Asian Art,

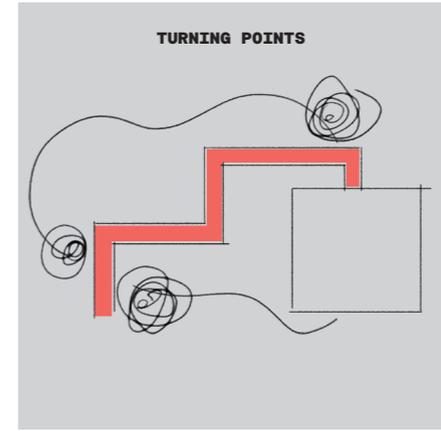
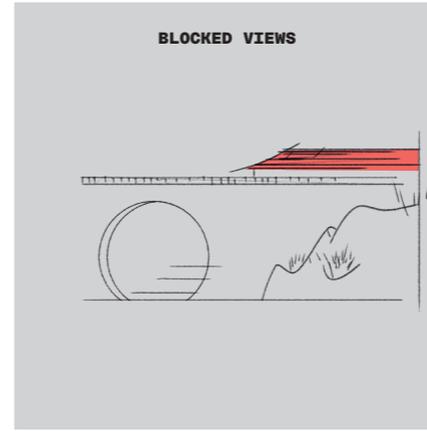
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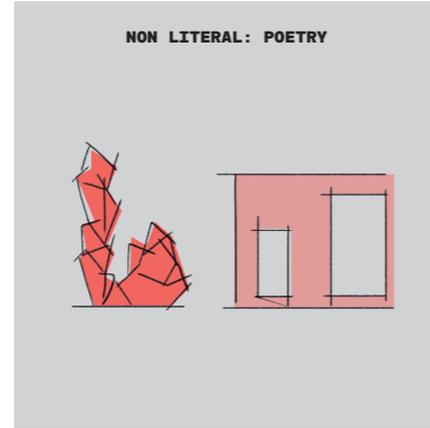
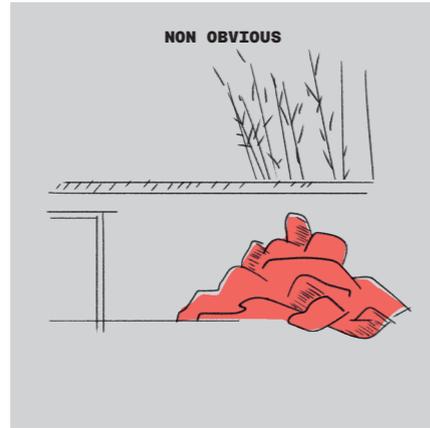
Microcosms



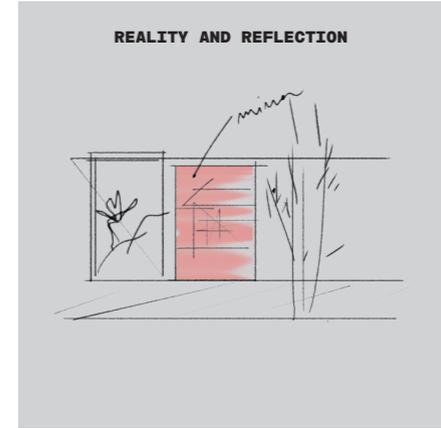
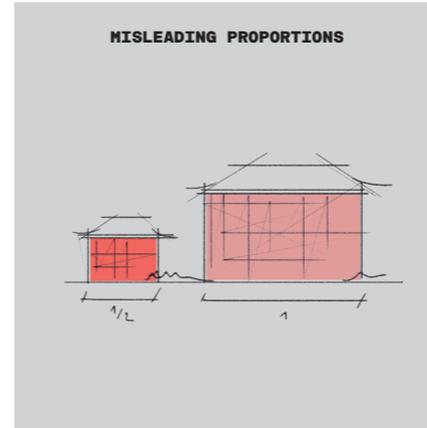
Anticipation



Evocation



Deception



06 / Understanding the built morphology

"THE VENICE OF THE EAST"

THE TRAVELS OF MARCO POLO

In the 13th century the Venetian traveler Marco Polo visited Suzhou and wrote its splendours.

“ Soochow is a very great and noble city. The people are subjects of the Great Khan, and have paper money. They possess silk in great quantities, from which they make gold brocade and other stuffs, and they live by their manufactures and trade.

The city is very great, as large as 60 square miles. It contains merchants of great wealth and an incalculable number of people. Indeed, if the men of this city and of the rest of the country had the spirit of soldiers they would conquer the world; but they are not soldiers at all, only accomplished traders and most skilled craftsmen. There are also in this city many great philosophers and others who do not appear to work.

In this city there are 6.000 bridges, all of stone, and so lofty that two ships together could pass underneath them. In the mountains belonging to this city, rhubarb and ginger grow in great abundance. The city has 16 other great trading cities under its rule. ”

Marco Polo. 1276

COMPARISON OF SUZHOU AND VENICE

1:50.000 MAP



Ancient city defined by the main channel
Main canal surrounds the city
Sparse transportation connections
Minor green areas spread around



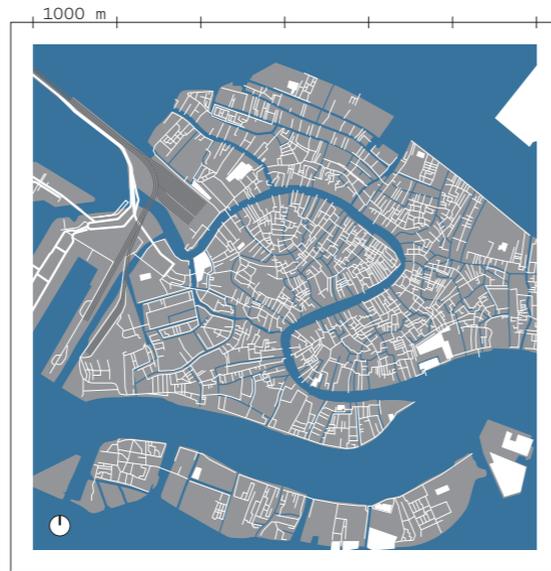
Historic city defined by the sea
Main canal divides the city
Concentrated transportation connections
Relevant green areas localised in certain spots

1:25.000 MAP

1:5.000 MAP



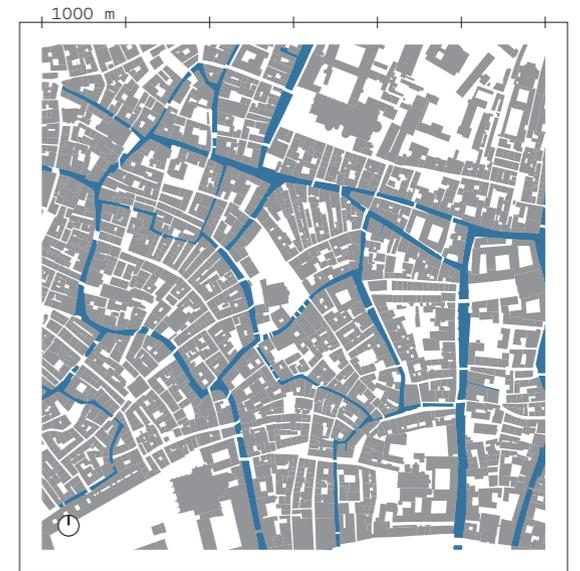
Regulated road system
 Geometric and uniform block structure
 Orthogonal pattern (streets and canals)



Convoluted road system
 Varying block structure
 Swirl pattern (streets and canals)



Fragmented buildings
 Limited water canals presence
 Contrast: paths and main roads size



Joined buildings
 Extensive water canals presence
 Contrast: streets and widenings

ANALOGIES AND DIFFERENCES

One of the main attractions in Suzhou, beside pagodas and gardens is the water system shaped by canals and stone bridges.

Likewise, Venice is world-known for its waterway structure and the resulting unique atmosphere.

In these cities canals design a distinctive urban fabric. In Suzhou the road arrangement combined with the water system form an orthogonal grid.

Whereas in Venice canals have wavy routes and the pathways are perpendicular to the

streams, building a spiral pattern.

Suzhou block is characterised by winding paths scattered in a fragmented arrangement of buildings and narrow courtyards.

On the other hand, in Venice, each block consists of neat joint buildings, well organised along the canals and enclosing time to time surprisingly wide squares.

The comparison through different scales allows to relate different elements depending on the selected zoom.

URBAN FABRIC

BEFORE

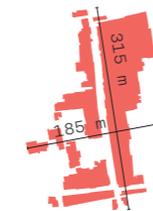


AFTER



Whether in Suzhou or Venice, tourists love to visit the city by boat, because there is no such experience in other places.

Most of the project area, except listed buildings, underwent demolition.



DEMOLISHED AREA:
19.000 m²
DEMOLISHED VOLUME:
78.500 m³

COMPOSITIONAL ELEMENTS

BLOCK STRUCTURE

In the recent twenty years, China's rapid economic growth and urban transformation have attracted attention from all over the world. Urban constructions took place both inside and outside urban areas. In the old towns, new constructions are erasing the old urban fabric. In suburban areas, huge scale development projects eat up large areas of rural land.

Throughout its development, the urban structure of Suzhou city has remained concentric. The historic town retains the role of city's shopping centre and cultural centre. However, as the competition for developments between individual district is increasingly significant in Suzhou and each wants to create an important urban node in its part of the city, there is a trend of forming a multi-nucleated urban structure.

During the process of modern urban reconstruction, the historic town in Suzhou has already been damaged seriously. Disastrous damage has been caused to the town since Chinese liberation period when constructions of feudal remains have to be demolished because of political reasons. The historic walls were torn down, seven out of ten historic gates were demolished. Major changes took place in the 1980s after the national reform.

Because of building height control in the Historic City, new malls had to increase their floor areas so as to achieve higher density, and therefore gradually replacing the fine pattern of traditional blocks. Mixed uses such as recreational, restaurant and office were introduced in the shopping malls adding to the diversity in the traditional trading centres. Since larger malls could not fit into the size of the old street blocks, they were built at the T junction leading to the Guanqian Street and along major streets such as along Renming Road.

**“... small bridges,
streaming waterways,
houses”**

A line in a poem by famous Yuan scholar Ma Zhiyuan (1964) describes a picture of these lively and prosperous farming and fishing neighbourhoods south of the Yangzi River.

EXAMPLE A



EXAMPLE B



50 m 100 m 150 m



In the evolution of the urban texture in Suzhou can be seen an organization of the historic city in blocks, externally regular in shape, created by canals and main streets, while internally the composition is ruled by buildings disposition and the narrow streets that characterize these blocks. The relationship between dwellings, streets and canals and their interaction assume countless configurations generating several urban landscapes and raise different feelings.

In their studies of Suzhou urban planning during the Song dynasty, Yu (1980) and Johnston (1983), illustrate a typical residential block in the Pingjiang district.

The urban ward with a total length of 500 m contained 12 residential plots each with a fixed depth of 150 m and varying widths from 30x70 m. Each of the dwellings was a courtyard house, with its own gated entrance that together formed a large walled urban block. The housing plots were set in an ideal south-north direction whilst the arterial streets and waterways, such as Pingjiang Street and Pingjiang

River, in this direction had less interaction with the houses.

In contrast, the alleys and waterways with an east-west orientation had direct access gates to the households. Suzhou urban fabric, extremely dense, is ruled by hierarchy based on the proportions of paths that run inside the blocks.

There is always a clear and universal spatial structure in the block routes. Buildings and streets demonstrate the city's historical context and reflect regional characteristics. These features constitute important facets of the city's memory. The layout of canals and streets is a direct spatial reflection of the local landscape features of the Suzhou historic street, which are known as "small bridge, flowing water and dwellings".

Therefore, special elements of historical streets, including waterfront land, water and water scenery, have become core elements of landscape space. Reasonable street and water layouts will enable visitors to appreciate the poetic nature of bridges, buildings, and dwellings.

STRUCTURE



WATER RELATIONSHIP

Together, the streets and waterways create the traffic system of the whole city and are typical of this area of China.

The waterways were not only appropriated for traffic but also served as spatial dividers that formed the residential blocks. In addition to a conventional city layout, the canal system in Suzhou played an essential role in facilitating disappearance of the enclosed marketplace and the walled ward system and shaping the physical structure of the city. The relationship between city and water was strong and deep since Suzhou was built.

During the Imperial period, at the rear of the house, if there was a waterway, then stone steps or a wharf would be built leading into the water to act as both a functional and recreational place.

Canals have always been essential for economic and everyday life of the city. To a certain extent the waterways in Suzhou assumed a more important position than the streets as large quantities of goods were shipped from the countryside into the city and sales would occur on the wharfs or even directly through the windows of the households.

The residents would also wash their clothes and vegetables at

the wharfs and children would play in the water. In a sense, the waterways and the houses were seamlessly connected as an indispensable part of domestic life and organic extension of the house.

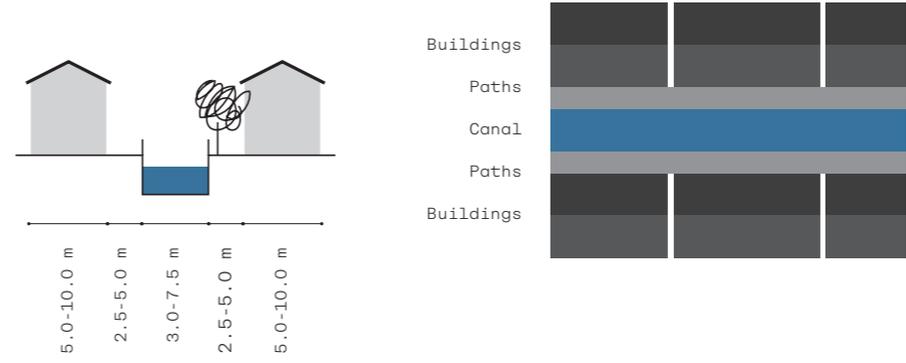
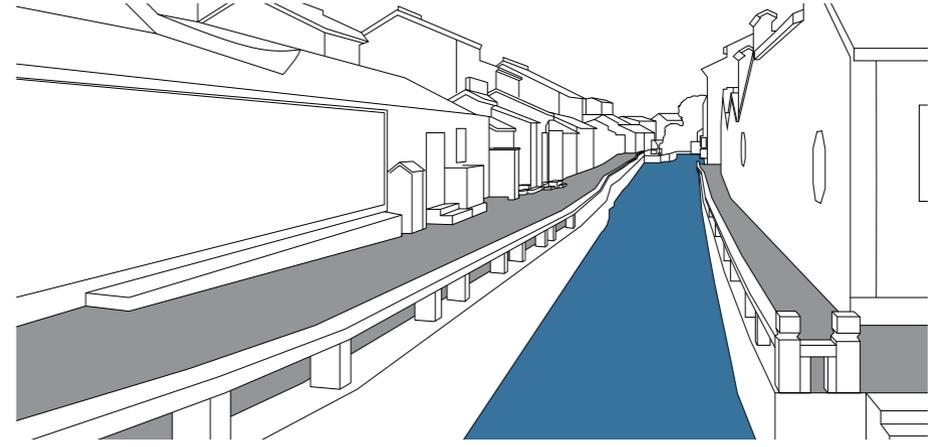
Even if the number of canals has been drastically reduced over time, the structure of the city and the everyday practice remain deeply connected to the waterways, which mark Suzhou from north to south and from east to west. Concomitantly with the number, even the functions of canals were reduced.

In the present conformation, there are three main typologies which show different interrelation between canals and city and create various atmospheres and different spaces.

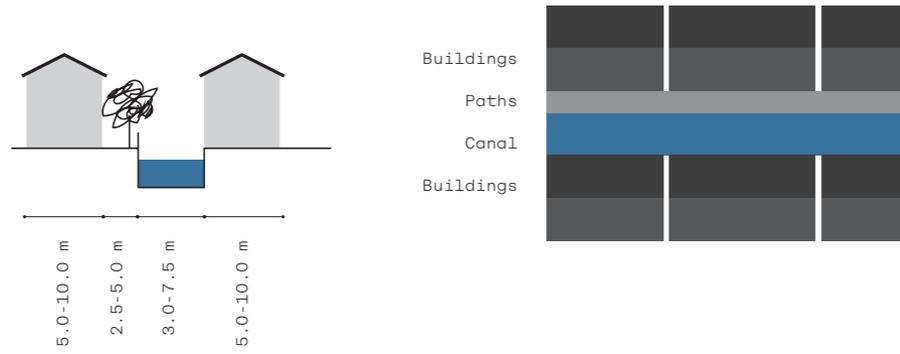
The controlled use of these typologies in the recent retraining of the historical streets of Pingjiang road and Shantang street has allowed to create spaces that alternate different rhythms and allow the visitors to live a good and characteristic experience. This diverse landscape combination reflects a living environment that has fused humans with water through history, enriching tourists' experiences of landscapes in the historical street of Suzhou.



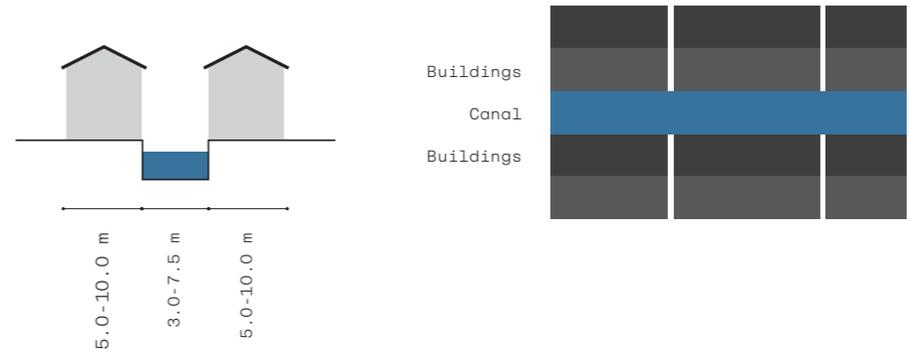
FORMATION I



FORMATION 2



FORMATION 3



COURTYARDS AND ACCESSES

Waterways and streets create a modular juxtaposition of courtyard houses.

"The city was made up, apart from the city walls, moats and gates, of buildings, and the texture of urban space was determined principally by the spatial pattern of individual buildings and building complexes, and by the mode in which they formed an integral whole". (Xu, 2000)

The role of courtyards inside the urban texture is crucial and has very long-standing roots. In contrast to the European tradition of designing vast open spaces like squares where people could socialize, in China the concept of square in the western sense develops in more recent times and normally is associated with political power.

The open space suited to host community activities in Chinese culture is historically represented by courtyards of large temples, like The Daoist Temple Xuanmiao Guan in Suzhou. Throughout history this space has become a focal aggregation point due to the

central position and to the fact that was far away from any government office or in general from political life of the city. This place offered an open location where people could spend free time and carried out several activities, and at the same time a four-wall fenced space that created a safe atmosphere.

"Therefore, when we talk about the non-existence in Chinese cities of public squares, which were essential to most European cities, it is not so much that the city residents "had less need of them" than their European counterparts, as that spaces of this kind were inconceivable and meaningless to them. The courtyards of large temples, characterized by their utilitarian functions in society, became the loci of miscellaneous social activities." (Xu, 2000)

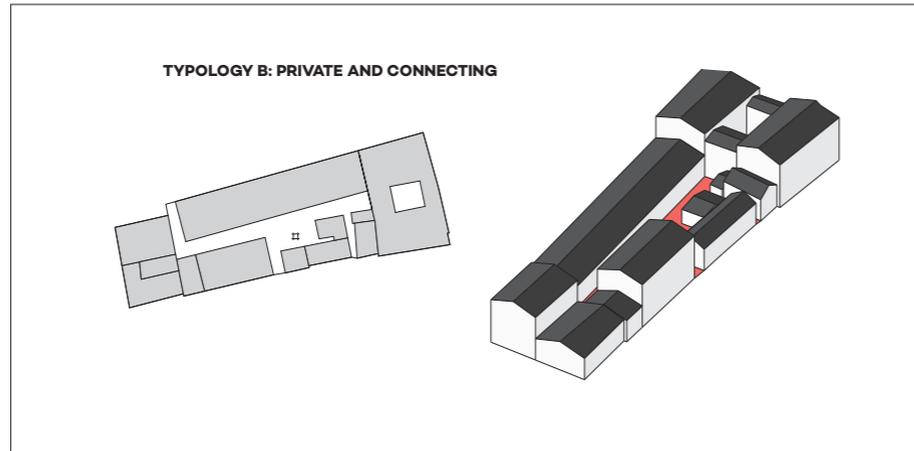
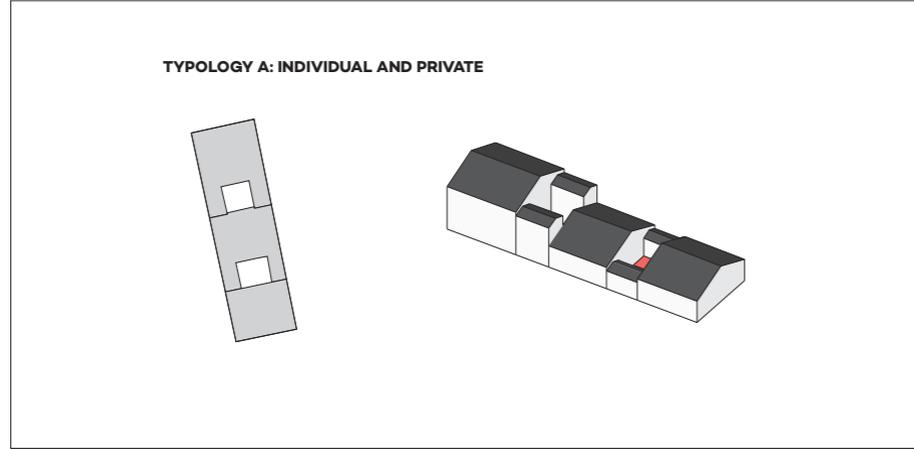
The courtyard seen as shared space is an essential element in everyday life of the Chinese people. A space which replaced, throughout history, the concept of square understood in a western sense.

From the courtyards of the temples, to the courtyards of the traditional gardens, to the tiny dwellings' ones, these places full of social, cultural, and functional meaning, are the open spaces most used by the community.

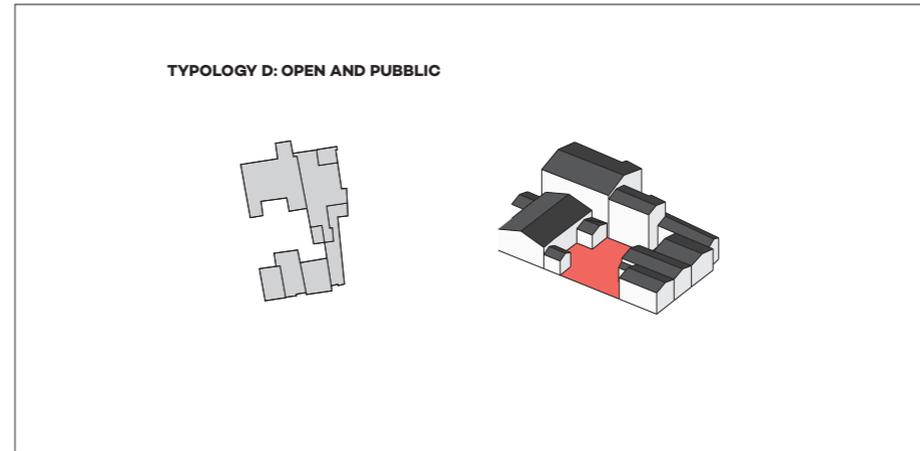
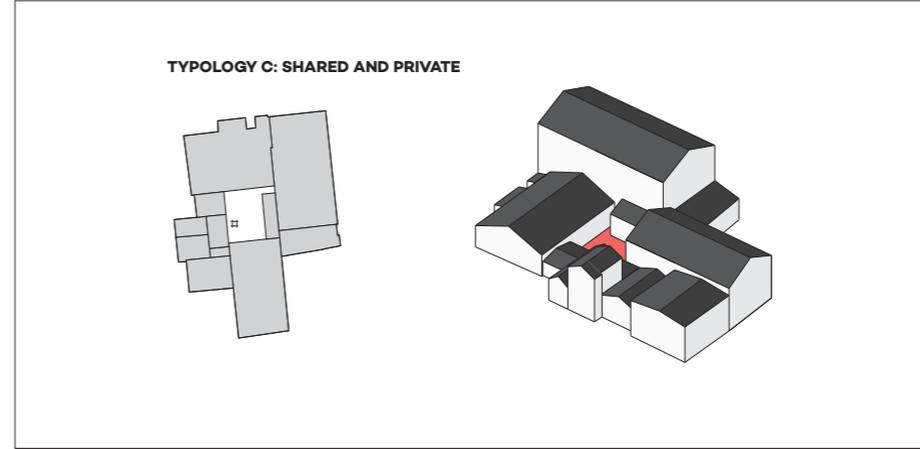
EXTRA SPACES FOR STORAGE, PARKING, LAUNDRY



TPOLOGY A-B



TPOLOGY C-D



SHARED SPACE

EXTREME CULTIVATION, HANGING, PERGOLAS AND MARKETS



FITNESS, BUINESS, PLAYING, SOCIALISING AND CHORES



These places no-places are crucial for locals, are part of the history of Suzhou and are extremely interesting to figure out the local culture.

In historic Chinese cities, the relationship between the street and houses is important, not just in a physical sense but even more so in terms of the social order that they establish and the meanings of their co-existence. Although in the planning precepts from Imperial China, streets were underlined as a key element constituting a city, in the reality the houses and their households articulate the physical and perceptive forms of the streets.

Several factors contribute to the formation of spontaneous spaces that peoples actively live. The urban texture density finds just in courtyards and streets the chance to live open spaces. Many inhabitants of the blocks don't have enough space in their houses for daily activities.

The culture of sharing and participation that is absolutely typical of the Chinese people, leads to the spontaneous appropriation of public spaces, available for the community.

The streets breathe and create spaces between dwellings and roads which are used by residents in the most varied ways. These places, extremely irregular in forms and dimensions, become unplanned food markets, social spots,

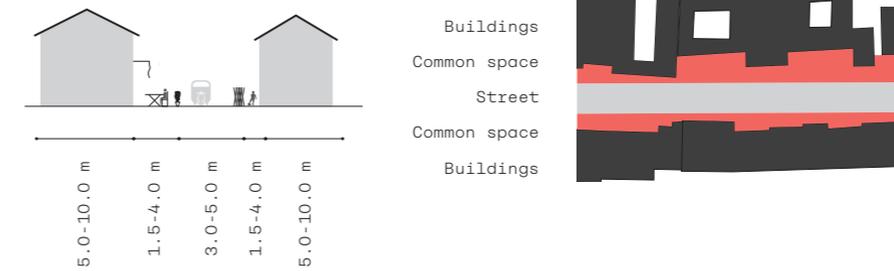
urban gardens, meeting points, improvised playground for kids, places where dry clothes or dance in the evening.

Shared spaces are attractive urban landscape not just for locals, but also for tourists that may prove a characteristic experience of daily life. "Characteristic" is a development feature that is focused on cultural space, leisure space and landscape space. "Characteristic" spaces of historical streets play an important role in meeting modern needs for personality.

It is not only an important factor in tourist decisions but also acts as a primary incentive for visitors to experience the unique cultural aspects of a city. The "characteristic" is a key factor in promoting leisure consumption in historical streets.

These strategies should reflect the core values of historical streets and form "characteristics" for historical streets that are central to the city culture and that embody the leisure experience offered." (Wang, Niu, Lu, 2014) Constructing cultural space involves combining hystorical and modern culture through the popularization of traditional culture.

FORMATION



WAYS OF TRANSPORT

CARRYING GOODS OR PEOPLE



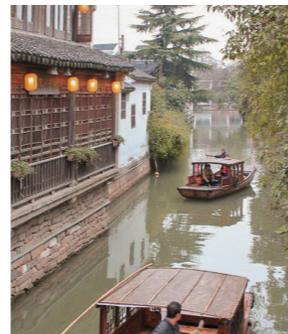
Suzhou has a good public transport system, which includes metro, tram and buses. With the increasing tourist development and the expansion of the city, these services have been incremented and respond well to the flow of people that live or just visit every day Suzhou.

Residents prefer private transport. The most commonly used are two-wheeled vehicles. With traffic and the presence of many restricted section streets inside the blocks, these vehicles allow people to move nimbly and fast.

Even canals are still used for tourist and local transport. In non-tourist places, waterways are used for garbage transport and for maintenance vehicles.



In the historical location, visitors can find characteristic boats which make it possible to see Suzhou from the perspective of water.



COMMUNITY

In this precarious state, inhabitants have learnt how to live together. Everyone finds a corner to raise vegetables and carry out activities.



In this analysed neighbourhood of Suzhou many families live in an seriously condensed space. It's an underprivileged district of the ancient city, where the limited facilities are shared, and people still use public wells for sustenance.

People are humble but with a strong sense of belonging, they have the ability to create forms of microeconomics in order to support the community.

They conduct modest lives and they ask just for more open spaces for sports and daily activities.



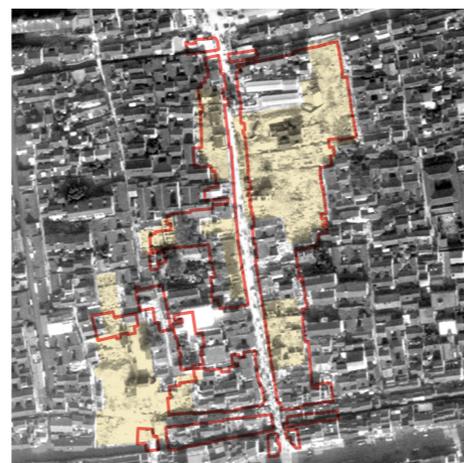
XIJIE E CHANGMEN BLOCKS

DEMOLITION STEPS

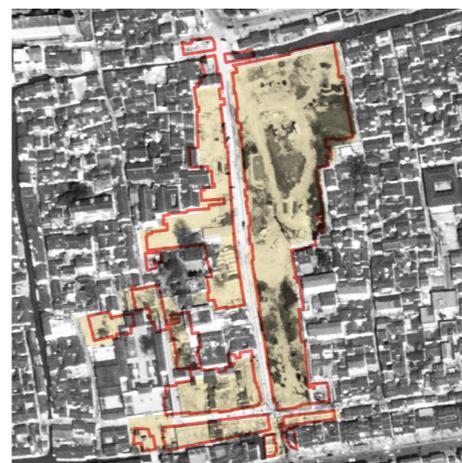
2009



2011



2014



2017



Neighborhoods Xijie e Changmen compose the area of our design exercise; they are divided by the main street that constitutes the project area. During the research and fieldwork, we discovered that the area has experienced relevant changes over time.

In 2009 the urban fabric was completely built, showing a dense residential pattern in which small buildings alternated with few open spaces. Two years later in 2011 some houses were already demolished with the purpose to open space for the construction of a commercial project dedicated to small retail spaces.

In 2014 the destruction of more houses ended up leaving a total of 22.028 square meters and about 89.644 cubic meters destroyed. Unfortunately, one year later the construction was suspended but some basis for the project already were done such as the foundations of the structure without forget the

external walls that were build up to separate the working area from the streets generating an empty urban space with neither any access possible nor use.

In 2017 the area was still abandoned, negatively affecting the surrounding spaces. Indeed, the context nearby the site have adapted to a different circulation, because perimeter walls reduced the size of the main street; interrupting the preexisting road pattern where only scooters are able to transit. Yet, congestion nodes are generated at the intersections.

Nowadays the place remains the same. Some plants grew up in the site that was excavated for foundations and underground water reached the surface, generating an unexpected urban wetland environment.



Project area current situation

CONTEXT



- | | |
|-------------------------------------|-------------------------|
| Hotels and hostels | Other sites |
| 01. Suzhou Caolu Hostel | Markets and restaurants |
| 02. Starway Qianshengyuan Hotel | Historic sites |
| 03. jiu Feng Youth Hostel | Toilettes |
| 04. Shengshengman Youth Hostel | Wells |
| 05. 99 inn Hostel | Bus stop |
| Schools and Universities | Gardens and green areas |
| 01. Taowu middle school former site | Canals |
| 02. Tao Hua Kindergarden | Demolished area |
| 03. Specialised school | |
| 04. Yangjia Kindergarden | |

The urban analysis of the area helped us to understand the solid infrastructure in the district and the changeable conditions related to buildings and uses. This allowed the identification of anchor points and interfaces that could be more easily manipulated in the design proposal.

The first structural element is the water that limits the space in a north south direction, with the two canals at the begin and end of the demolished zone. The second element is the main commercial street that divide the project area in an east- west sense.

Inside the sector is possible to find some points of interest, such as the five peaks garden which, despite not being part of the UNESCO gardens, is a small historic and also very significant garden for landscape garden historians and is used by the local inhabitants on a daily basis, given that they have

adequate there spaces for reading, painting, drinking tea, playing cards, chatting and doing physical exercise. Near by the garden is located a temple with a square that also is very active and important as five peaks.

Due to the compactness that exists in the blocks there is a scarcity of shared spaces and open spaces to practice this kind of activities. As a consequence, people do most of these things in the streets, which are the only space that remain, even if the street section is not so large as the site makes part of the ancient city.

However, additional public services were discovered in the area, such as public toilets that are essential since not all private houses have indoor bathroom, common spaces for laundry and wells, which are central in social organization and are used intensively by the community. These spaces

were even more abundant in the past, but changes in the dwelling features are reducing the need of them.

Relatively close exist some educational spaces such as kindergarten and middle schools. Some isolates historic buildings are also remaining in the site, for instance there is one that define the edge of the project area. The district was before WW2 rich in dwellings for civil servants, but only few of them remain. Currently the historic building is abandoned in extremely bad conditions, nevertheless, may become a potential aspect for the proposal.

The area is not intended as a site for visitors, therefore there are not so many accommodation spaces and facilities that invite new travelers to come to stay in the site. The commercial part is located in designated fragments at the edges, producing a type of segregation inside the area; several parts of the area are empty during part of the day and the night because there are no functions other than dwellings that maintain active the spaces.

Density of the area is rather peculiar: buildings are mostly between one and two floors high, with an average height per floor of 2.65 meters.

Nevertheless, the district is pretty much compact horizontally, because there are no so many open spaces outside or inside the built fabric.

In the site there are no green areas except the Five Peaks Garden, thus communal activities take place in the narrow streets increasing the impression of denseness.

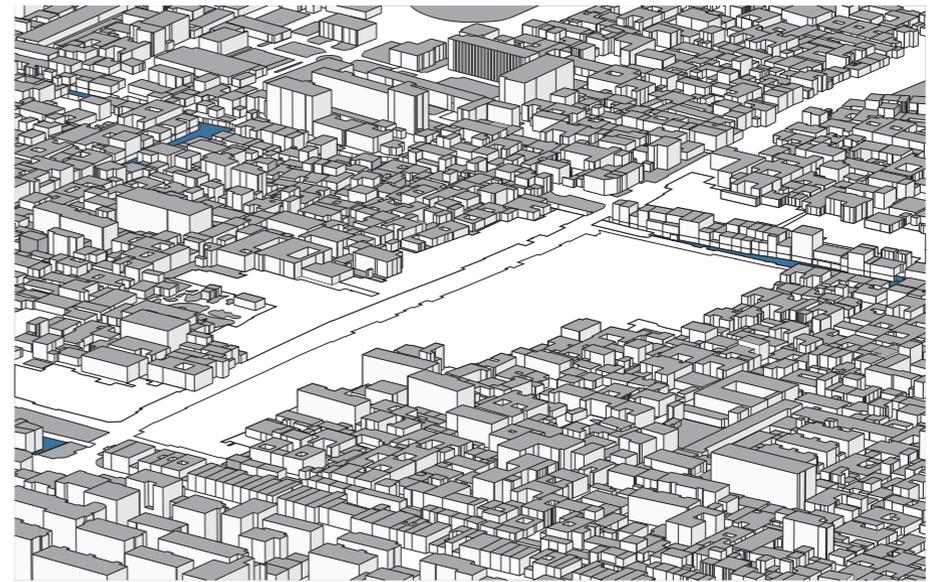


Project area, west side

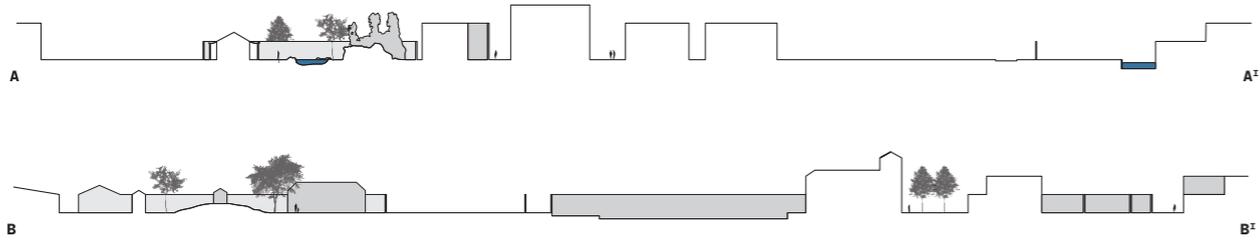
HEIGHT DISTRIBUTION



Image source
www.map512.cn

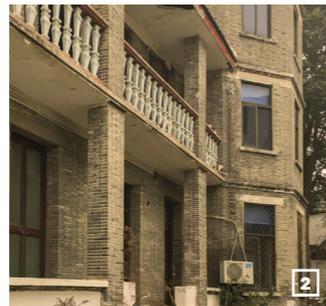


A-B SECTIONS



1. Panoramic view of Five Peaks Garden

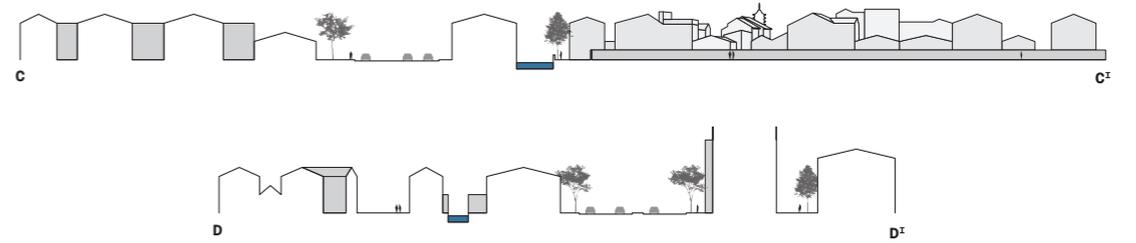
Cross section A-A shows five peaks garden in relation with the immediate context while the longitudinal section B-B present the relationship between the main street with the important historic building.



2. Air force Guest House



C-D SECTIONS

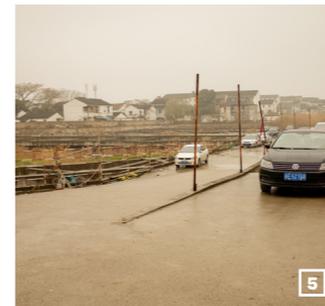


3. Side walk channel



4. Project's area, looking at Beisy Pagoda

Cross section C-C shows the actual relation of the project area with the canal and streets while cross section D-D displays the relationship between streets, buildings and the canal in the context.



5. Project's area, at the gate

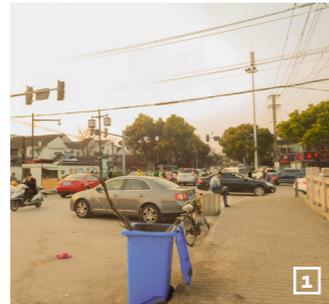


STREET ACCESSES

Nowadays, the street accesses became in parking's creating disorganization and affecting the circulation of the area.

In consequence the passage of cars gets difficult and scooters overcome the pedestrians.

However, the street has a potential due to the fact that unifies two neighborhoods.

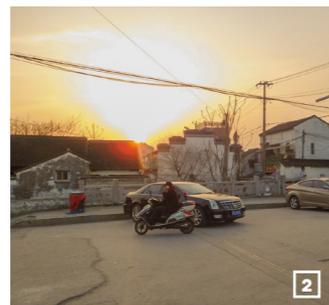


1. Bridge traffic node (2 lanes to 4 lanes)

2. Bridge towards the residence area

3. Bridge towards the project area

4. Bridge towards Commercial street node (2 lanes)



FINDINGS AND OPPORTUNITIES

The urban analysis helped to point out some strengths and deficiencies of the area which the starting point of the masterplan proposal were; always having present that some of these aspects need to be improved and others might change completely even beyond our expectations.

Nowadays the area presents unbalanced features compared to those prevalent in the Suzhou populated by visitors and the places where local inhabitants have more ordinary life. It is a residential area, but the rearranging of communal places and the changes in population daily activities generated a shortage of public parks and playgrounds. During our fieldwork we have seen that any private or common space available is utilized for vegetable gardens.

There is a mobility problem since pedestrians, cars, and scooters intersect their flow without any safety concern. Moreover, with flows that are so precariously organized, parking spaces are not designated at all, increasing the chaos in the area. The conventional approach that was implemented and not completed with the demolitions started after 2009 has considered the project area as a blank space. Since this has happened already, our approach is not to introduce any functions that damage the surrounding areas and, at the same time, consider uses that do not only replicate what we have at the moment.

We have focused on different forms of accommodation for our reasoning, including both residents and visitors with the aim of reconnecting short term stay and eventually tourism with other ordinary activities. At the moment most of the functions are located in specific areas distanced from other activities, and also producing a hierarchy of places that are used day and night and others that are not even provided with minimum street lighting.

However, the area has many characteristics to take advantage of. One of them is the favorable position near to the new and old town, adjacent to the main railway station. The presence of two water canals, considering other urban projects in the historic town, could also be considered an advantage. An important point is the significant proportion of visitors to the historic Five Peaks Garden that, contrary to the majority of Suzhou garden, is visibly made of more local inhabitants than incoming tourists. Therefore, considering the vicinity of other gardens, our approach attempts at combining experiences instead of targeting only one kind of user

07 / Design proposal

Our proposal attempts at qualifying the demolished area taking advantage of the empty space; we think that it is viable the reduction of the density, prioritizing the pedestrians, and providing a different mix of functions in which both built and open spaces do not separate entirely the necessities of visitors and the community.

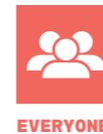
The proposal wants to transform the experience of the area making good use of the main concepts learned in the analysis of the Suzhou classical gardens.

Our intention is not to limit access to open spaces, but to include different spaces that are discovered and experienced according to individual paths. We would like to re-imagine the district as a space where all have the opportunity to interact with each other or to enjoy and reflect with selected companion or in solitude.

Never the less there are designated spaces for specific activities and functions. For the inhabitants is vital to create flexible spaces where they can cooperate do things together and safely. Since many houses were destroyed, new dwelling spaces are proposed, offering a new way of living the old town that focuses around the communal space of the courtyards.

On the other hand, new spaces for visitors' accommodation - such as hotel and a guest house - are provided and complemented with some tourist facilities and site-specific opportunities related to the Five Peaks Garden, developing a network linked to the main points of interest inside and outside the district. The backbone of the entire proposal is the open space, both in the form of courtyards inside the building groups and an urban park, articulated in a sequence of experiences.

TARGETS



EVERYONE



COMMERCE

- MARKETS & SHOPS
- HANDCRAFTS
- PUBS & RESTAURANTS



LEISURE

- SPA
- SPORT
- NIGHTLIFE



OPEN SPACES

- URBAN PARK
- WATERFRONT
- PLAYGROUND



MOBILITY

- PARKINGS
- MOTORBIKE PATHS
- SIDEWALKS



CULTURE

- LIBRARY
- THEATRE



RESIDENTS



COMMUNITY CENTRE

- SOCIALISING
- BUSINESS
- TABLE-GAMES



DWELLING

- NEW RESIDENCES
- ELDERLY PEOPLE INCLUSION



COURTYARDS

- URBAN VEGETABLE
- GARDENS
- HANG OUT CLOTHES



VISITORS



ACCOMODATION

- HOTELS
- GUEST HOUSES

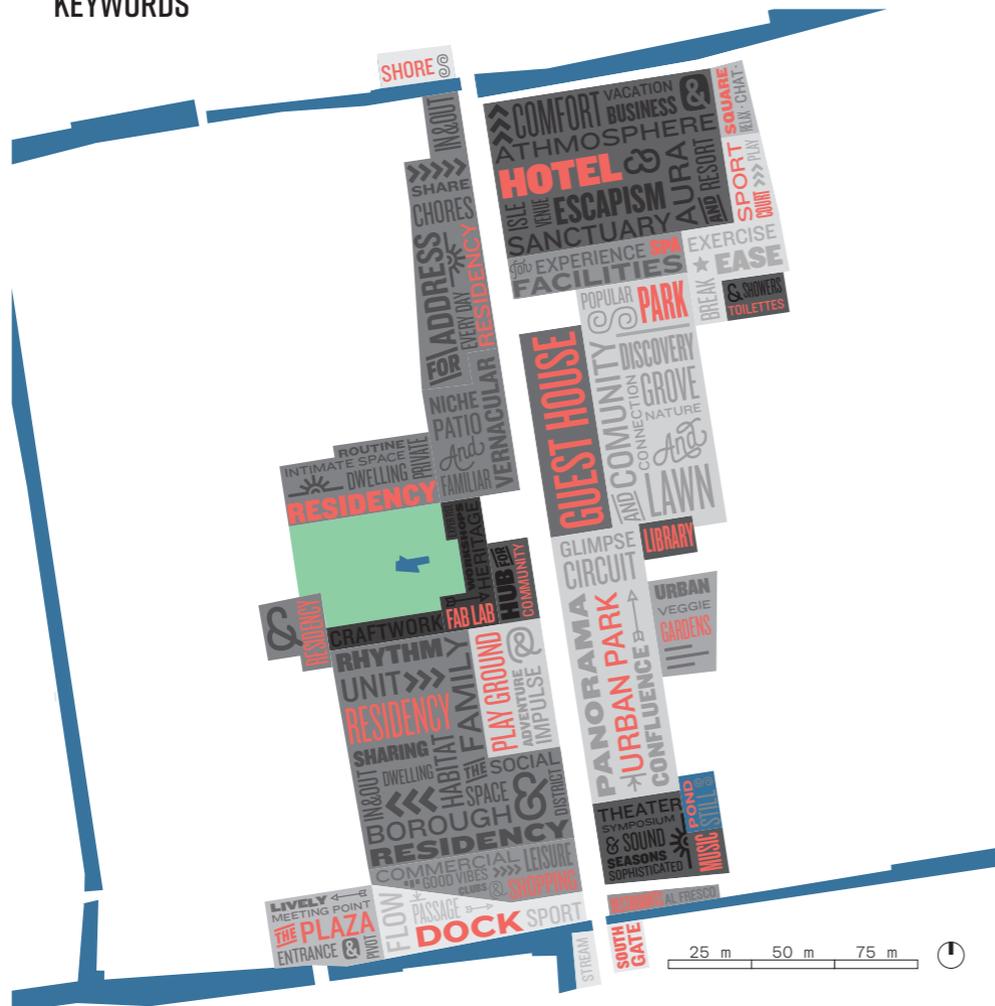


FACILITIES

- INFO POINTS
- LOCAL EXPERIENCES
- CONNECTIONS TO LANDMARKS

SITE LAYOUT

KEYWORDS



BUILDINGS

- Residency**
- Hotel**
- Guest House**
- Hotel and Guest House Fac.**
Spa
Restaurants and Café

- Fab Labs**
- Commercial and Restaurants**
- Public**
Toilettes and showers
Library
Community Centre
Theatre

OPEN SPACES

- Park and Playground**
- Sport courts**
- Urban Vegetable Gardens**
- Dock**
- Plaza**

Different spaces are alternating inside the project area. Solids and voids have been calibrated to produce a harmony between new environments and consolidated context. Every zone has distinctive features assigned according to functions and typologies of users that will utilise it.

The masterplan generates a game of contrasting atmospheres, views, roles, that raise diverse emotions, summarized in keywords useful to give an idea of the character of each of these places.

FLOWS

The main street is reactivated by a constant flow from north to south with the aim to unblock the traffic nodes and provide a new character to the road. A new rhythm inside the street is created with different speeds (high-medium-low) with the goal of giving prevalence to the pedestrians.

In this way, the vehicles decrease velocity in the entrance of the buildings and public areas. Similarly, it is proposed a pedestrian flow with some stop areas that allows the social interaction through the sharing spaces.

Seeking to connect the roads with the main street. Besides, new pedestrian and cyclist paths gives form to the built blocks and green areas proposed.



- | | |
|---------------------------------------|---------------------------------|
| ● Traffic nodes | ▽ Pedestrian and bikes accesses |
| ○ Bus Stops | ▲ Vehicle accesses |
| ↔ Direction of motion | ■ Buildings |
| ■ Existing Multi-lane vehicle streets | ■ Paved Areas |
| ■ Existing Mono-lane vehicle streets | ■ Green Areas |
| ■ New Mono-lane vehicle streets | |
| Pedestrian and bikes paths | |
| New pedestrian and bikes paths | |

INTERCONNECTIONS



- | | | |
|----------------|----------------|---------------|
| — Wall | — Blocked View | ■ Green Areas |
| --- Apertures | — Connections | |
| ... Permeable | ■ Buildings | |
| ... Reflection | □ Paved Areas | |

Based on the porosity of the Chinese gardens, the main purpose of the project is to highlight the visual game with a connection between each space proposed such as the built and green areas, shared spaces and the main street.

The masterplan proposes different levels of porosity according to the relationship of the blocks with the context and between them. In consequence, the walls are elements that can adhere to the existing blocks or on the contrary conform the face of

the street in some cases with the purpose of isolate to create privacy.

The limits with openings have a relationship more linked to public uses. As for those permeable, the character is much more private than the previous one, allowing the user to see and not be seen.

Finally, the reflection is a reinterpreted strategy of the gardens use in an urban level on the areas where the relationship with water is closer.

FUNCTIONS

The layout has been divided into macro areas characterised by functions in order to inform the following design phase. A good balance between new buildings and open spaces was assured.

Everything was investigated and collocated according to needs and possibilities of the surrounding context, trying to mix thoroughly functions within the site and making it a place to be discovered.

New residential buildings

bind to the existing context, tourist ones developed on the north side of the area, close to the facilities, public transport and historical sites.

Other buildings outside spaces are distributed separately on the project area with the aim to generate continue interest.

The whole thing is tied up by the open space system. Furthermore, to each zone was assigned a name to be recognisable and marked into the user's minds.



- | | | |
|--|---|--|
| 1 Tamed Night
Residency | 7 Goods and Foods
Commercial | 13 Bouncing Pods and Pads
Playground |
| 2 Prosperous Hermit
Hotel | 8 Falling Rain
Showers and Toiletttes | 14 The Wise Kale
Vegetable Gardens |
| 3 Hidden Light in the Forest
Guest House | 9 The Curious Pupil
Library | 15 Suzhou and the Clouds
Dock |
| 4 Misty aura
Spa | 10 Turning Tables
Community Hub | 16 The Temple and the Pig
Plaza and Market |
| 5 Exclusive Date
Cafè & Restaurants | 11 Voices' Stream
Theater | 17 The Scene Way
Shared Spaces |
| 6 The Cherry Wood Flaw
Fab Labs | 12 Quiet Rebirth
Park | |

RELATIONSHIPS



CONNECTION	TARGET	AREAS
Functional	▨ Visitors	■ Built
∨ Visual	▤ Residents	■ Open
∩ Both	▩ Everyone	

In our proposal, this area is transformed from a demolished lot that used to be mostly residential into a multi-functional space, including by residence, tourist facilities, commerce, a multitude of open spaces and public parks.

Issues related to the connection with the existing area and interconnection between different internal activities also were our first concern. We considered both: functional relationship and visual relationship, according to the characteristic of each activity.

Open spaces such as parks and gardens are intertwined with indoor functions, providing a place for leisure and entertainment for the surrounding residents and visitors. The waterfront next to the canal introduces a canal view that integrates with the

traditional dwellings to create a reinterpreted experience of Suzhou as a water town. Along the canal, it provides also an open space for the commercial street and creates a visual relationship with the city behind the canal.

The new residential area integrates with the existing one, creating a complete urban pattern that also maintains functional continuity while improving the surrounding living environment.

In order to strengthen the relationships with the surrounding areas, a couple of streets have been opened up between the project and old neighbourhood to provide residents with more street space. That promotes the integration of new and old communities and introduces surrounding residents to new parks.

08 / References

BIBLIOGRAPHY

Berlanda, T. 2014. *Architectural Topographies. A graphic lexicon of how buildings touch the ground.* New York, Routledge.

Böhme, G. 2014. *Architectural Atmospheres: On the Experience and Politics of Architecture.* Basel, Birkhäuser.

Brunon, H. and Ribouillault, D. 2016. *De la peinture au jardin.* Firenze, Leo S. Olschki.

Burns, C. J. and Kahn, A. 2005. *Site Matters. Design Concepts, Histories, and Strategies.* New York, Routledge.

Chen, C. Z. 2007, *On Chinese Gardens*, 65.

Chen, F. and Thwaites, K. 2013. *Chinese Urban Design: A Typomorphological Approach.* Farnham, Ashgate Publishing.

Chen, Y. 2006. *Urban Space: Morphology, Typology and Meanings -The Typomorphology Evolution of the Old City Suzhou.* Nanjin, The Southeast University Press.

Congzhou, C. 1984. *On Chinese Gardens.* Shanghai, Tongji University Press.

Congzhou, C. 1957. Translated by Wenjun, Z. and Wei, C. 2008. *Suzhou Gardens.* Shanghai, People's Publishing House.

De Jong, M., Chen Y., Joss, S., Lu, H., Zhao, M., Yang, Q. and Zhang, C. 2018. *Explaining city branding practices in China's three mega-city regions: The role of ecological modernization.* Journal of Cleaner Production, 18th January.

Dunzhen, L. and Wood, F. 1982. *The traditional gardens of Suzhou (Su zhou gu dian yuan lin).* The Garden History Society, 10, no. 2, 108-141.

Wang, D., Niu, Y., Lu, L. and Qian, J. 2014. *Tourism spatial organization of historical streets e A postmodern perspective: The examples of Pingjiang Road and Shantang Street, Suzhou, China.* Tourism Management 48, 370-385.

Escande, Y. 2016. *Le jardin sous influence: Quand la peinture modèle le jardin chinois,* Firenze, Leo S. Olschki, 27-41.

Fang, X. Q. 2004. *Ancient Aroma and Modern Atmosphere of Pingjiang Street.* Nanjing, Jiangsu Literature and Art Publishing House.

Fung, S. 2009. *Notes on Architectural Criticism and Contemporary China.* Journal of Architectural Education 62, No. 3, Criticism in Architecture, Taylor & Francis, 16-17, 96.

Fung, S. 2005. *The Language of Cultural Memory in Chinese Gardens.* Structure and Meaning in Human Settlements, University of Pennsylvania Museum of Archaeology and Anthropology, Tony Atkin and Joseph Rykwert Editors, 123-132.

Fung, S. 2003. *Movement and Stillness in Ming Writings on Gardens.* Landscape Design and the Experience of Motion, edited by Conan, M. Dumbarton Oaks Research Library and Collection, 243-262.

Fussell, B. 1988. *Exploring Twin Cities By Canal Boat.* The New York Times.

Gong, H. 2010. *'The Old Suzhounese' Time on Pingjiang Street.* China Today, June, 48-49.

Haijing, L., Daichun, Y. and Siqi, Z. 2018. *Small property rights housing in major Chinese cities: Its role and the uniqueness of dwellers.* Habitat International, 30th January.

Healey, P. 1997. *Collaborative planning. Shaping place in fragmented societies.* London, MacMillan.

Huang, P. C. C. 1993. *'Public Sphere'/'Civil Society' in China? The Third Realm between State and Society.* Modern China, 19, 216-240.

Kuitert, W. 2015. *Borrowing scenery and the landscape that lends*

- *the final chapter of Yuanye*. *Journal of Landscape Architecture* 10/2, 32-43.

Leng, L. M. 2013. *Tranquil as Pingjiang, Prosperous as Shantang - the famous Historical Cultural Street of China Pingjiang Street and Shantang Street*. *Jiangsu Urban Planning* 4, 20-23.

Liu, H. and Wan, Q. 2006. *Reconsidering the Conservation and Planning System for 'Historic and Cultural Cities'*. Collection of International Symposium on Conservation of Historical Cities and Buildings, The University of Hunan Press, 24-28.

Manley, A. and Silk, M. 2015. *Suzhou Tourism Research Report*. University of Bath, 7-16.

Mote, F. W. 1973. *A Millennium of Chinese Urban History: form, Time, and Space Concepts in Soochow*, the Rice University Studies 59, 35-65.

Peng, Y. G. 1986. *Analysis of the traditional Chinese garden*, Peng Yigang, 31.

Rinaldi, B M. (edited by). 2015. *Ideas of Chinese Gardens. Western Accounts, 1300-1860*. University of Pennsylvania Press.

Rinaldi, B M. 2011. *The Chinese Garden: Garden Types for Contemporary Landscape Architecture*. Birkhauser Architecture.

Ruan, Y. S. and Liu, H. 1999. *An Exploration of the Strategic Thinking and Theory of Preservation Planning for the Pingjiang Historical district in Suzhou*. *Planners* 15, 47-48.

Shi, N., Liu, H., Clark, G. and Webster, D. 2010 *Urban Regeneration of Industrial Areas: Affordable Housing for Low Income Populations in Cities*. London Department for International Development.

Smith, N. 2002. *New Globalism, New Urbanism: Gentrification as Global Urban Strategy*. *Antipode* 34, 427-450.

SREAB (Suzhou Real Estate Administration Bureau). 2004. *Ancient Residences in Suzhou*. Tongji University Press.

Suzhou Planning Bureau. 2010. *Regeneration Plan of Suzhou. Suzhou: Taohuawu Historic and Cultural District*.

S dfZB. 2014. *A Brief Account of the Colonial Area in Suzhou*. The Selective Biographies of Suzhou, Suzhou Local Biography Editorial Committee.

Thorpe, A. 2003. *Suzhou: Real China outside Shanghai*. The Times.

Townsmen, A. 2011. *Visit some of China's best gardens next week*

without a passport. Arts/Entertainment, Andover.

UNESCO (United Nations Educational, Scientific and Cultural Organisation). 2011. *UNESCO Recommendation on the Historic Urban Landscape*. Report presented at the UNESCO's General Conference, 10th November.

Verdini, G., Frassoldati F., Nolf C. 2016. *Reframing China's heritage conservation discourse. Learning by testing civic engagement tools in a historic rural village*. *International Journal of Heritage Studies*. 23/2017-Issue 4, 317-334.

Verdini, G. 2015. *Is the incipient Chinese civil society playing a role in regenerating historic urban areas? Evidence from Nanjing, Suzhou and Shanghai*. *Habitat International* 50, 366-372.

Verdini, G. and Yang, X. 2014. *Voices for alternative urban regeneration practices in China: the case of the historic district of Taohuawu*. Paper presented at the International Symposium on Historic Urban Landscape, Tongji University, Shanghai, 9th-10th December.

Wang, J. J. 2003. *Suzhou Old News*. Suzhou, Guwuxuan Publishing House.

Whitehand, J. W. R., and Gu, K. 2007. *Urban Conservation in China: Historical development, Current Practice and Morphological Approach*. *Town Planning Review* 78, 643-670.

Whitehand, J. W. R. and Zhang, J. 2011. *Urban Morphology and Conservation in China*. *Cities* 28, 171-185.

Xia, X. M. and Ma, Y. 2009. *Thoughts on Cultural Conservation in Block Conservation of Suzhou Pingjiang district*. *Southeast Culture* 5, 22-25.

Xie, J. and Heath, T. 2016. *Conservation and revitalization of historic streets in China: Pingjiang Street, Suzhou*. *Journal of Urban Design* 22, 455-476.

Xu, Y. 2018. *The universal and the local: some new features in the built environment of contemporary China*, *The Journal of Architecture*.

Xu, Y. N. 2000. *The Chinese City in Space and Time*. Honolulu, University of Hawaii Press.

Yang, K. 1993. *Research on Ancient Chinese City Systems*. Shanghai, Shanghai Ancient Literature Press.

Yigang, P. 1986. *Analysis of the traditional Chinese garden*. Beijing, China Architecture & Building Press.

- Yinglin, Z. 2004. *The Atlas of Ancient Suzhou*. Suzhou, Suzhou gucheng ditu. Gu Wu Xuan Publishing House.
- Yu, S. F. 1986. *The Conservation and development of the famous City Suzhou*. City Planning Review 05, 9-13.
- Yu, S. F. 1980. *A Masterpiece of the Ancient Chinese City Planning*. Jianzhu Xuebao 1, 15-20.
- Yuan, Y. X. 2004. *Ancient City of Suzhou Pingjiang Historical Street*. Shanghai Sanlian Press.
- Zhang, S. and Zhou, J. 2010. *On development of Preservation System for Modern and Contemporary Architectural Heritage*. Urban Heritage Conservation, College of Architecture & Urban Planning, Tongji University Press, 136-142.
- Zhang, S. 2008. *An Introduction to Integrated Conservation: A Way for the Projection of Cultural Heritage and Historic Environment*. Tongji University Press.
- Zhou, L., Zhang, G. H. and Dai, J. F. 2013. *Exploration and Innovation in Urban Transportation Planning – A Case Study of Suzhou*. Zhou Le Zhang Guohua Dai Jifeng.
- Zhu, Y. J. 2015. *Cultural Effects of Authenticity: Contested Heritage Practices in China*. International Journal of Heritage Studies, 1-15, Thomson Reuters.

WEBSITES

- <https://baike.baidu.com/item/%E8%8B%8F%E5%B7%9E/122945>
- http://blog.sina.com.cn/s/blog_e46f8b8c0102v82p.html
- <https://en.wikipedia.org/wiki/Suzhou>
- <https://sites.fas.harvard.edu/~chgis/>
- <http://whc.unesco.org>
- <https://www.academia.edu>
- http://www.chinatoday.com/city/china_yangtze_river_delta.htm
- <http://www.dfzb.suzhou.gov.cn>
- <http://www.efloras.org>
- <http://www.elsevier.com/locate/habitatint>
- <https://www.gooood.cn>
- https://www.metmuseum.org/toah/hd/cgrk/hd_cgrk.htm
- <https://www.researchgate.net>
- <http://www.szghj.gov.cn>
- <http://www.szgis.cn>
- <http://www.sztjj.gov.cn/SztjjGzw/tjnj/2017/indexeh.htm>
- <https://www.tandfonline.com>
- <http://www.unescobkk.org>
- <http://www.whitr-qp.org>

