COLLAGE OF CITY IMAGES FOR HONGKOU AREA, Shanghai.

Group integrants: Saloumeh Behboud - Jocelyn Danna
Relatore: Prof. Remo Dorigati
Politecnico di Milano - Apello di Laurea July 2010

The National Bureau of Statistics released the results of a 1 percent sample census conducted in 2005. At 0am Nov.1, 2005 China's population in 31 provinces, autonomous regions, municipalities directly under the central government and active army was 1.30628 billion (excluding those in Hong Kong, Macao and Taiwan). Prediction based on the results shows that China's population would hit 1.40550 billion by the end of 2005 (excluding those in Hong Kong, Macao and Taiwan). The survey shows that compared with the fifth census conducted at 0am Nov.1, 2000 China's population has increased by 40.45 million or 3.2 percent. The population grew at an annual rate of 8.09 million on average. The survey took the nation as a whole as the primary framework and provinces, regions and municipalities as the secondary framework, using stratified, multi-phased, cluster probability proportionate sampling as methodology. Final sample units were used as survey districts. It took 17.05 million people as samples, which accounted for 1.31 percent of China's total population. The survey shows that China had a mobile population of 147.35 million, of which cross-province population accounted for 47.79 million. Compared with the fifth census mobile population increased by 2.96 million while cross-province mobile population grew by 5.37 million. Urban population stood at 561.57 million, about 42.99 percent of the total population and those living in rural areas totaled 744.71 million representing 57.01 percent of the total population. The Han nationality made up 90.56 percent of total population and the remaining 9.44 percent were minority nationalities. China had 395.19 million households with the average size of 3.13 persons per household. In the population those with university education (junior college or above) were 67.64 million, those with high school education (including technical secondary school) were150.83 million. 467.35 million people had middle school education while 407.06 million had primary school education.

(By People's Daily Online)

Shenyang: 4'720,000
Tianjin: 7'040,000
Beijing: 10'093,000

**SHANGHAI
17'730,000**

Chongqing: 6'363,000

Guangzhou: 8'425,000
Dongguan: 4'320,000
Shenzhen: 7'233,000
Hong Kong: 7'041,000
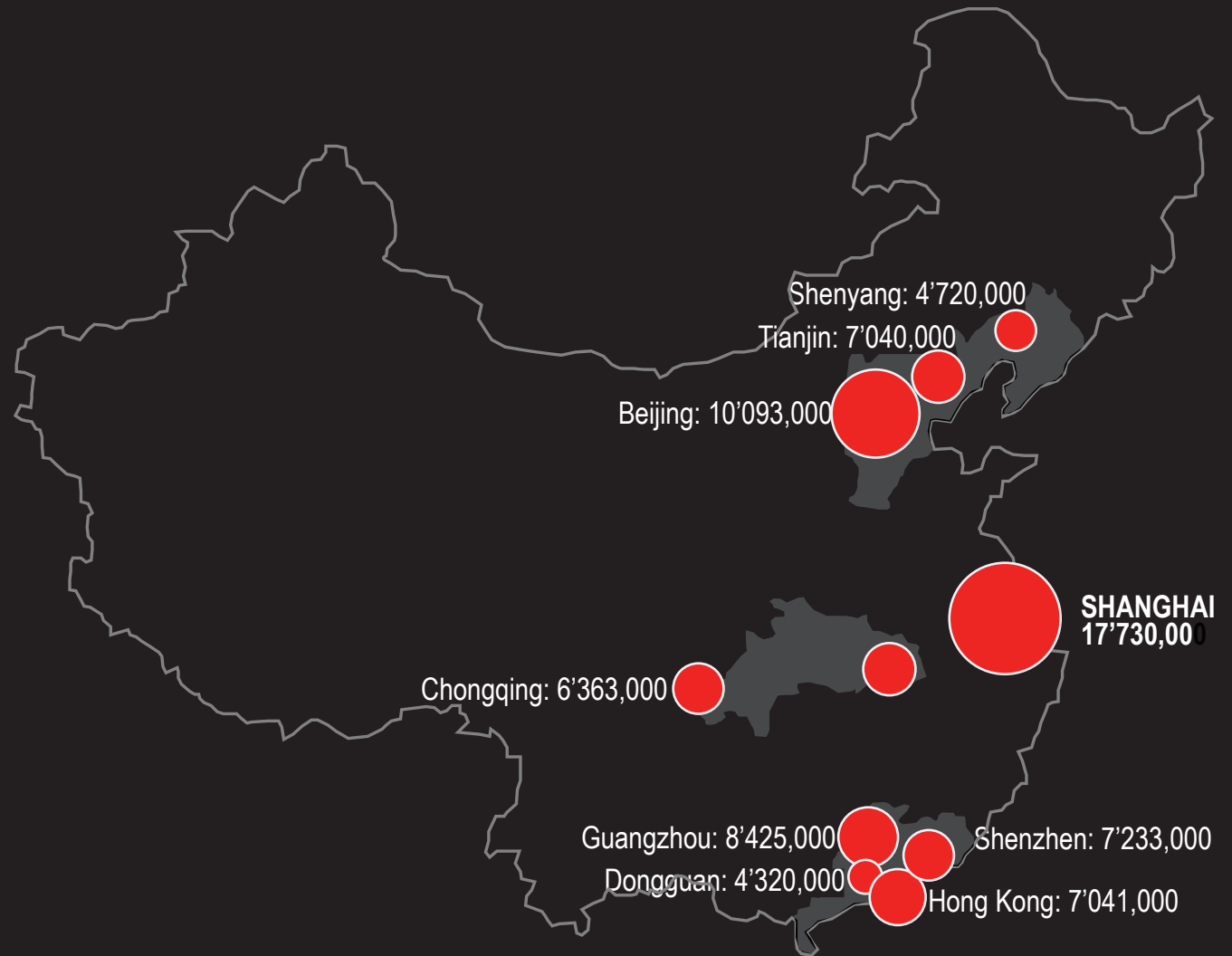
1.Introduction: CHINA'S REVIEW

United Nations World Urbanization prospects: The 2006 Population database

2. Shanghai REVIEW
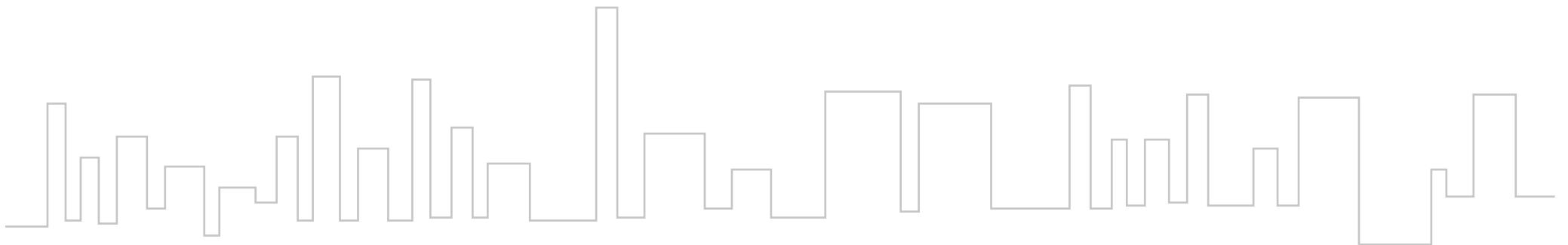
Geographic location
31º14'N, 121º29'E

Administrative Divisions
18 Districts and 1 county

Area
6,305.5 km2

Density
2,796.3/km2

GDP
CNY 67,492

Population
19'000,000

Average life expectancy
80.13 years

Registered Unemployement
4.4%

Average Temperature
18.1º Celsius

Average rainfall
1,200 mm

Elevation
0-103.4 mts

Parks and Gardens
28,900 hectares

Green Area coverage
37% of the city's teritory

Green Area per capita
11 square meters in the city

Being one of the largest metropolitan areas in the world, Shanghai has a large population size, the total being 16.74 million in 2000, occupying the fifth place among the 10 largest cities, next only to Mexico City, Tokyo, San Paulo, and New York. The population density of Shanghai is as 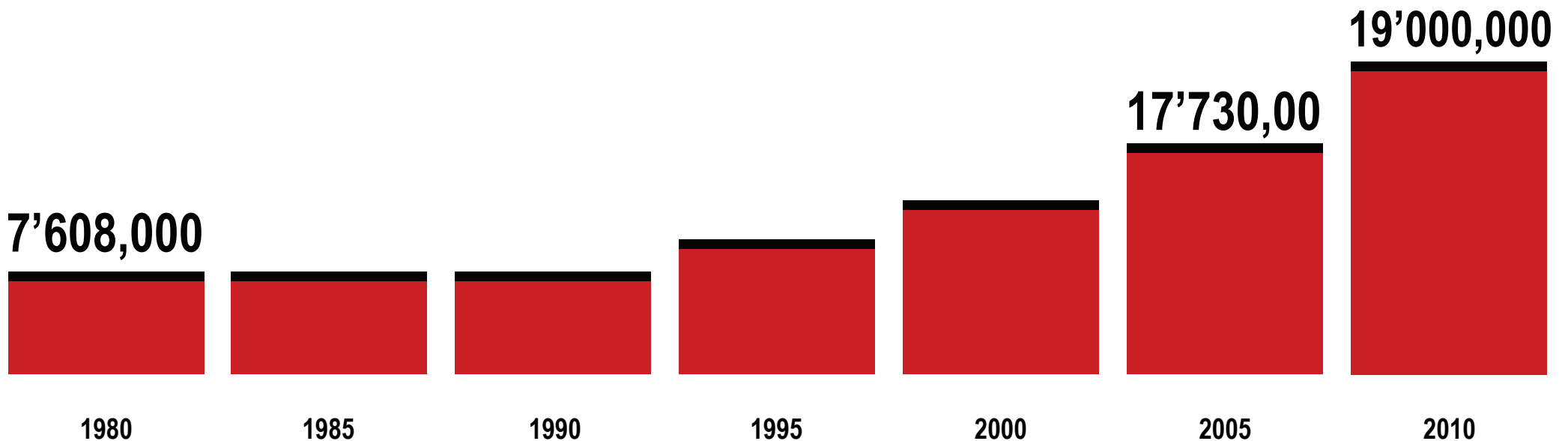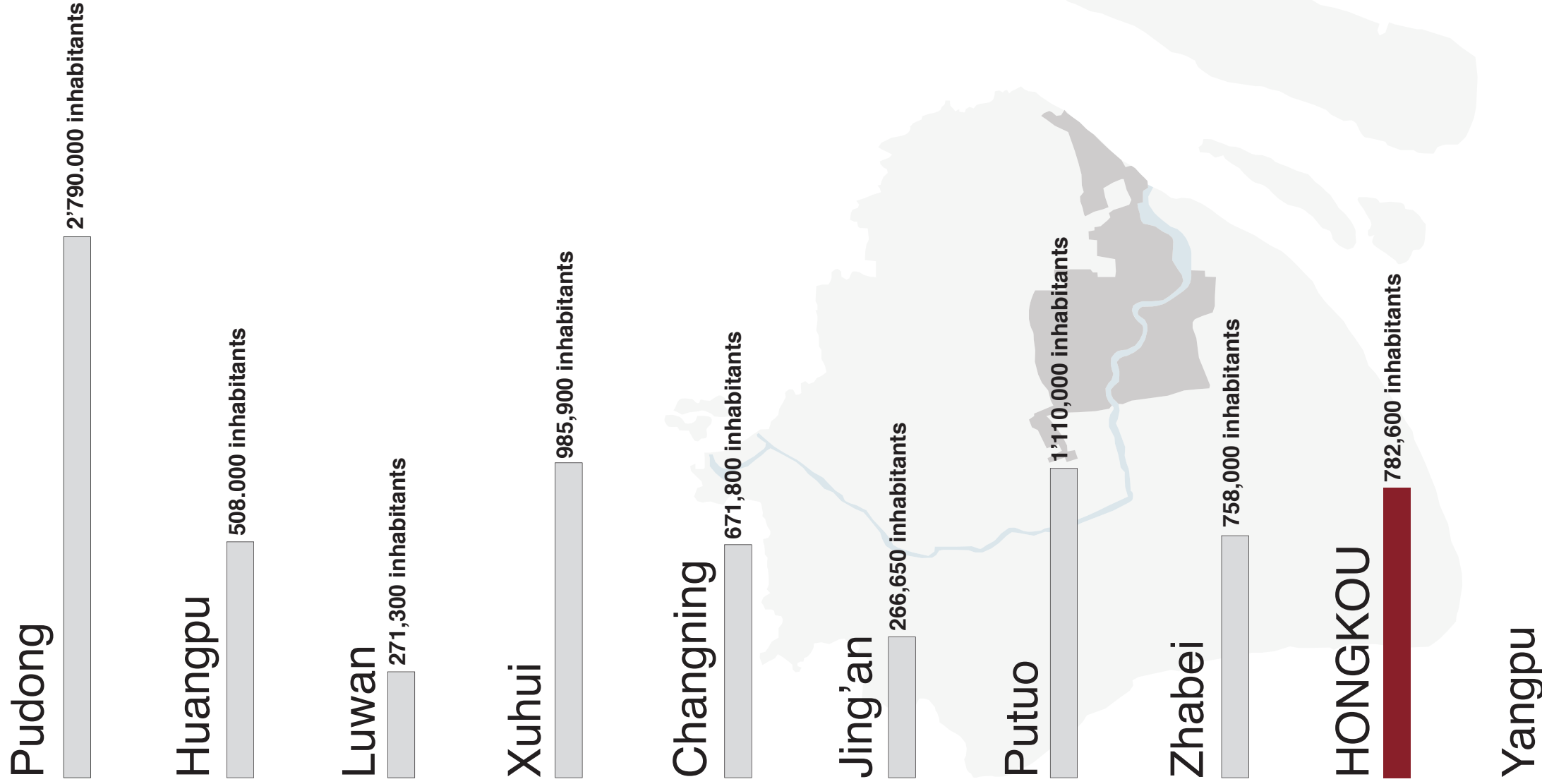high as 2,657/per sq.km on average. Since 1993, Shanghai has been the first region of China to have a negative fertility growth rate in its registered population, while the total number of registered people is increasing owing to in-migration. According to the 2000 population census, the rate of natural increase was -1.9 per 1,000. Besides, along with the urbanization and expansion of metropolitan regions, the urban population of Shanghai increased to 14,78 in 2000, accounting 88.31% to total population. Generally speaking, the trend is such that settlements of urban inhabitants are extending to suburban areas where rural inhabitants are also assembling on the border line of metropolitan areas. (By People's Daily Online)

There were once sharp rises and falls in the population caused by migration throughout the period from 1949, the establishment of the People's Republic, to the year 1980. Since then, the migration rates have tended to be stable with a constantly larger in-migration than out-migration rate, and the wave motions were much less obvious than those of the prior period, with an average net in-migration figure of 39,800 each year. The main determinants for those moves are job transfer, education, and technical training. A very high sex ratio can be observed in immigrants from other provinces, and sometimes the number of males could be twice that of females, which will definitely have a continuing effect on the sex ratio of the future population of Shanghai. The net migration, i.e. the number of immigrants minus emigrants, in 1997 amounted to 47,500, and the percentage increase caused by immigration was 3.6 per 1,000.

Additionally, the size of the floating population of Shanghai is expanding. Based on a survey conducted on October 20, 1998, the total "drifting population without household registration in Shanghai Municipality had reached 1,246,000, among which 1,058,000 were moving from neighboring provinces and foreign countries and all the others from suburban counties. In 1997, economic activities, such as laboring, business affairs, etc., were explained to be the major reasons for in-migration, amounting to 67.5% of the total, and non-economic activities, such as visiting relatives, marriage tours, and tourism, amount to 22.9% of the total. The rest, about 4.4% of the total, were involved with cultural activities, such as technical training and all kinds of meetings. Moreover, international migration in Shanghai now runs at the highest level in China.

| 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 |

7'608,000

17'730,00

19'000,000

2.1. Population VS Density

Pudong — 2'790.000 inhabitants

Huangpu — 508.000 inhabitants

Luwan — 271,300 inhabitants

Xuhui — 985,900 inhabitants

Changning — 671,800 inhabitants

Jing'an — 266,650 inhabitants

Putuo — 1'110,000 inhabitants

Zhabei — 758,000 inhabitants

HONGKOU — 782,600 inhabitants

Yangpu
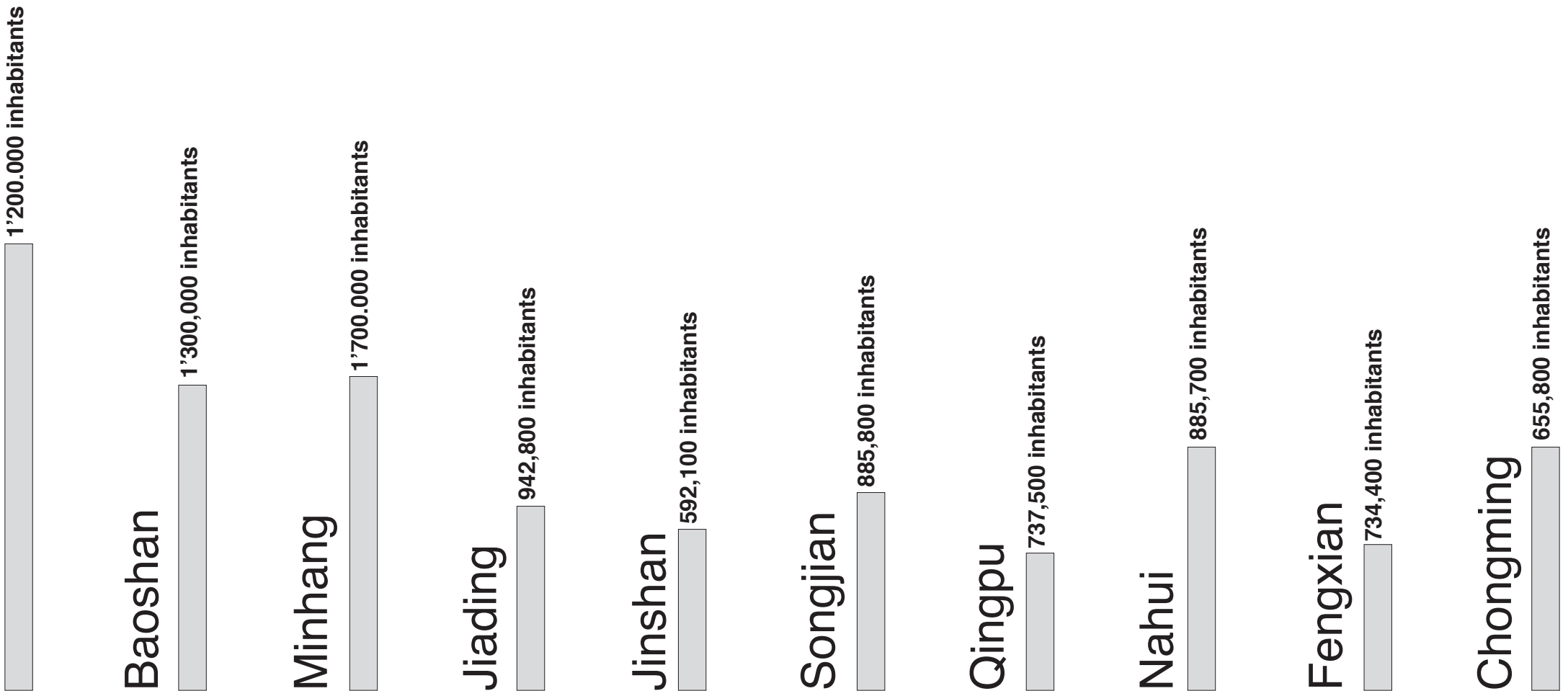
The first part of this booklet will consist on the gathering of general data from China but more in detail about Shanghai, this is done in order to establish certain comparisions and provide a better understanding of the context.

Some of the graphics have been adjusted according to the needs, to mention that the first source of information where this data has been obtained from is the Shanghai Statistical Yearbook 2006 by the Shanghai Municipal Statistics bureau.

The graphics that have been used were chosen based on how the different elements as industry value, residential use, buildable area and population can affect the density and development of the areas.

Baoshan	Minhang	Jiading	Jinshan	Songjian	Qingpu	Nahui	Fengxian	Chongming
1'200.000 inhabitants	1'700.000 inhabitants	942,800 inhabitants	592,100 inhabitants	885,800 inhabitants	737,500 inhabitants	885,700 inhabitants	734,400 inhabitants	655,800 inhabitants
1'300,000 inhabitants								

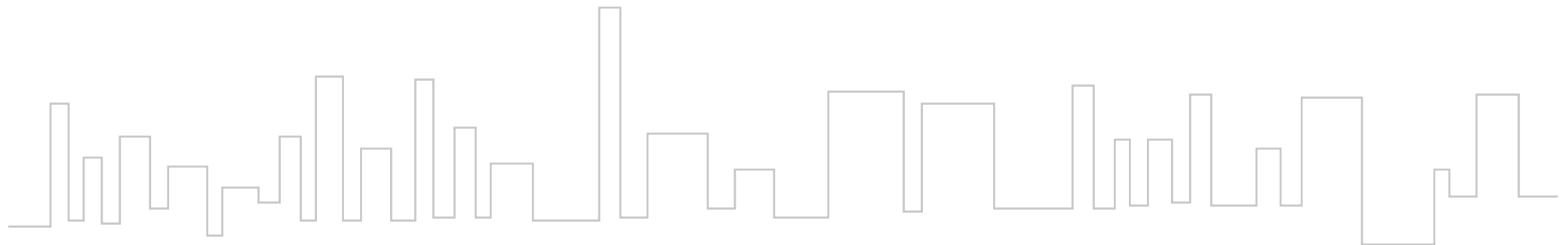As any other cities, the most frequent land use is the residential.

In the first chart the settlements with residential and high density have been colored in yellow. The metropolitan area of Shanghai, divided into 19 districts and 1 county is the home of new developments or "new towns" as they are called, with low densities and traditional architecture from International lands.
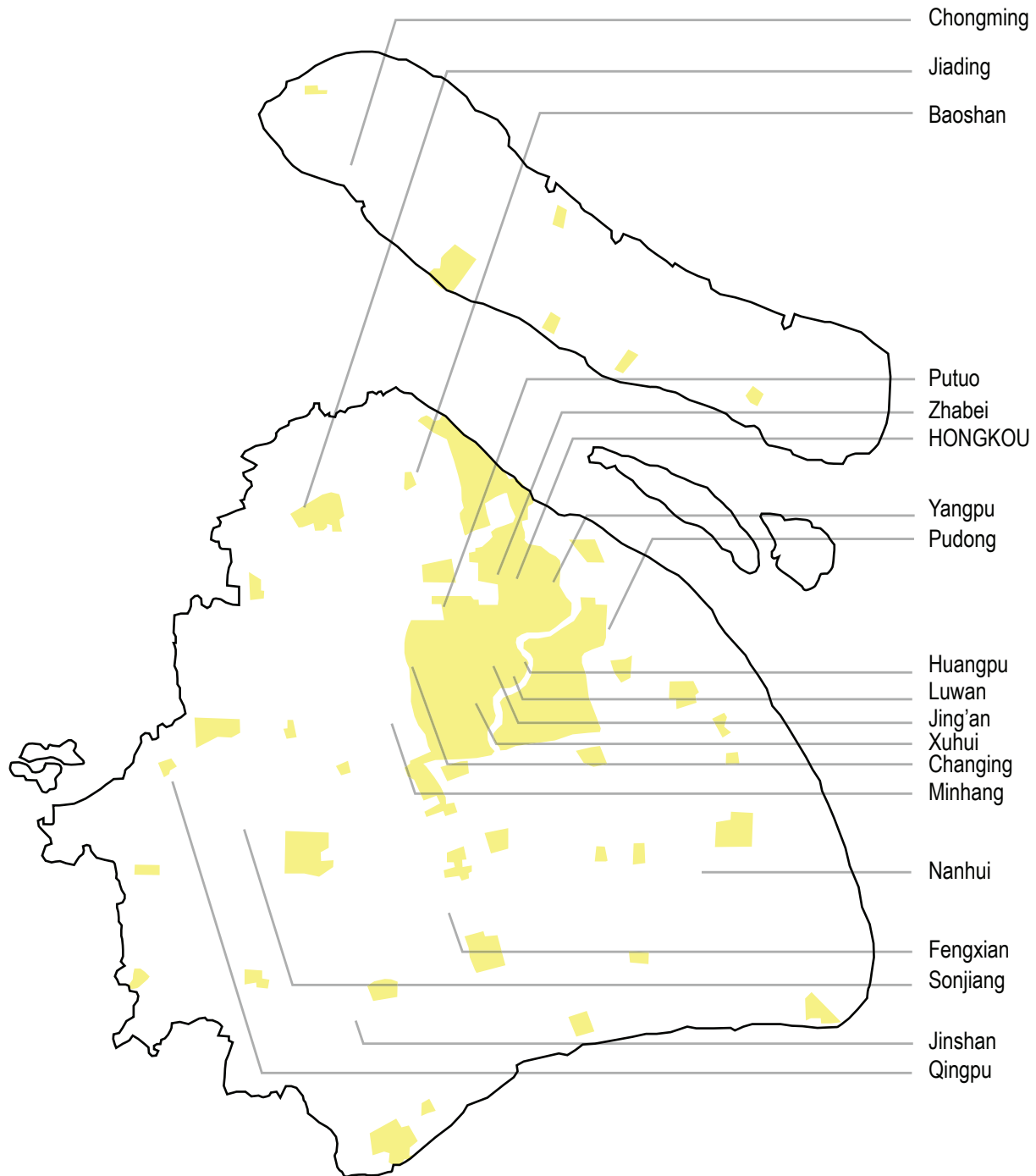
The inner ring of Shanghai (central city) is mostly framed by skyscrapers especially in the downtown area of People's square and lujiazui, keeping in mind that this last area belongs to Pudong and that district according to statistics that will be shown in the next pages, is not the one that counts with most density in the city.

Hongkou, the area of study, is the 4th most dense in the city of Shanghai, having only 23 km2 for development but built over 280 km2.

The towns planned under the foreign names have very low density (mostly because their outer location) but also because the need to establish more friendly urban scales in different areas of the city, where living is based more on a human scale rather than a large one, case of Zhu jia jiao, Cheng Qiao, An Ting, Luo Dian, Song Jiang, Pu Jiang, Feng Cheng, Feng Jing.

2.2. Residential use

Chongming

Jiading

Baoshan

Putuo

Zhabei

HONGKOU

Yangpu

Pudong

Huangpu

Luwan

Jing'an

Xuhui

Changing

Minhang

Nanhui

Fengxian

Sonjiang

Jinshan

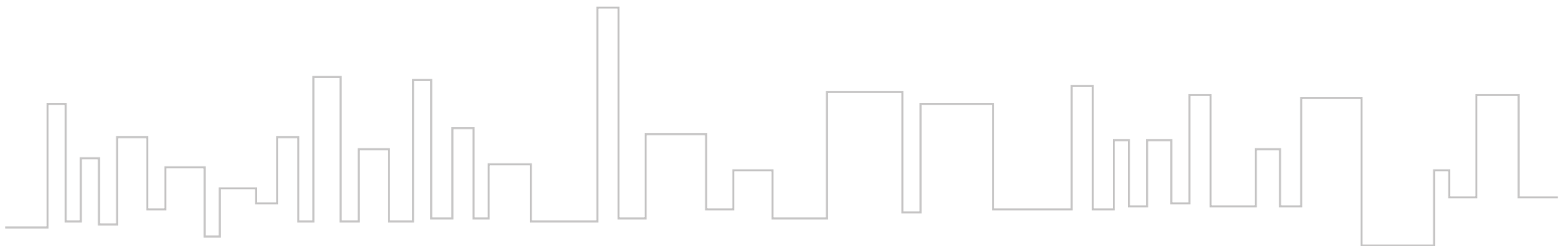Qingpu

Shanghai transforming, Iker Gil

The Education chart has been included because for the reason to have the presence of one of the largest Universities in the city, which makes it already an important point of reference among the other districts.

The district has 782,600 inhabitants and out of those 4,100 access to primary school and 10,800 to Secondary school, 1,90% of the population of the area is already attending to some degree of education.

Toward the end of 2010, there will be altogether 37 colleges and universities with students totaling 226,789 and staff and workers 60,799. Shanghai also has 861 regular secondary schools with 795,400 students and 76,600 teaching staff. Shanghai has 1,021 primary schools with 788,600 students and a teaching staff of 61,300. The attendance rate of school-age children was 99.99%.

As a whole, the education level of Shanghai is quite high: the total educated population in the year 1990 reached 10,720,000, accounting for 78.5% of the total, which is higher than the mean level of the country but still lower than Beijing, Tianjing and Liaoning Province. In 1997, the figure increased to 91% and the illiteracy rate was 9.03%. In 1990, Shanghai inhabitants who had completed junior middle school made up 39.3% of the total population, holding the largest share. The persons who completed primary school ranked the second, amounting to 28.3% of the total and those who graduated from senior middle school ranked the third amounting to 24.3% of the total. In 2000, junior college and above graduates accounted for 11.34% to the population of age 6 and above, senior secondary/secondary technical school graduates was 23.87% to age 6 and above, and primary school graduates also declined to 19.67%.

2.3. Education institutions

Chongming 10200 3200
Jiading 7400 4600
Baoshan 12200 8000

Putuo 13100 5400
Zhabei 11000 4300
HONGKOU 10800 4100

Yangpu 14400 5500
Pudong 31100 19200

Huangpu 8700 2400
Luwan 3600 1400
Jing'an 5200 1900
Xuhui 14500 6400
Changing 8400 3500
Minhang 13100 8100

Nanhui 12200 6400

Fengxian 7800 5200
Sonjiang 9300 5200

Jinshan 8000 3700
Qingpu 7300 4500

Secondary School new students enrollment

Primary school new students enrollmen

Shanghai transforming, Iker Gil

Hongkou, for being located close to the city center (Inner Shanghai ring) represents one of the lowest Industry values outputs for the city.
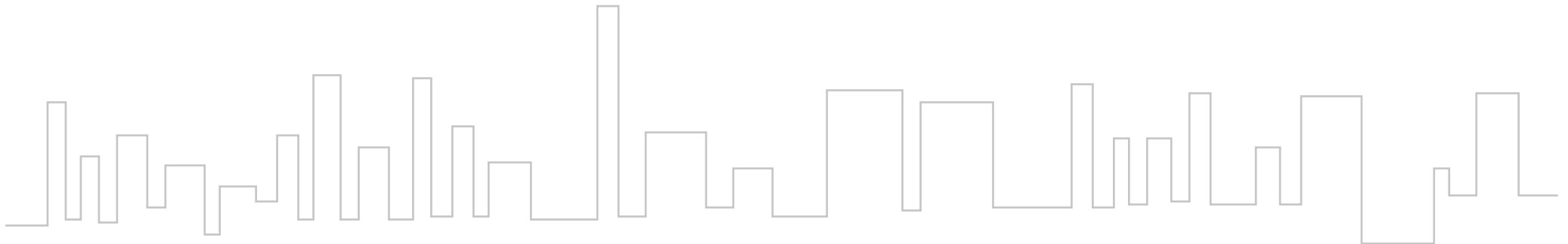
The type of industries that eventually could be part of the area will be electronic information, finance, trade and circulation and real state, for this type of industry the areas according to industry should be prepared.

It is stated that around 100 million Yuan are put every year into the district of Hongkou, being one of the lowest rates in the city, making us think that the use that is most common is again, the residential with services planned for it.

Pudong, Minhang, Sonjiang, Baoshan, Zhabei and Jiading are the areas that represent the highest input of value into the city, mostly because of their location near the waterways and good connection with the harbours and trading centers, also because of being catalogued as "heavy industry" which is highly contaminating and according to land use regulations should be placed where it doesn't represent harm for the city inhabitants.

Other industries present in the city are Automobile (production and sales), Petrochemical and fine chemical, Equiplment concepts, Fine steel, bio-medicine, Whole-set equipment manufacturing among others.

2.4. Industrial value

Legend:
- 1-1000
- 1001-2000
- 2001-3000
- 3001-4000 (100 million Yuan)

District	Value
Chongming	24400
Jiading	292300
Baoshan	373200
Putuo	58400
Zhabei	41000
HONGKOU	23600
Yangpu	62900
Pudong	473600
Huangpu	21900
Luwan	23700
Jing'an	8300
Xuhui	90700
Changing	24400
Minhang	153600
Nanhui	144200
Fengxian	146800
Sonjiang	303700
Jinshan	120360
Qingpu	203300

Shanghai transforming, Iker Gil

The green color is representing the land in each district ▮

The black color is the construction beyond the urban land (density) ▮

2.5. Districts densities
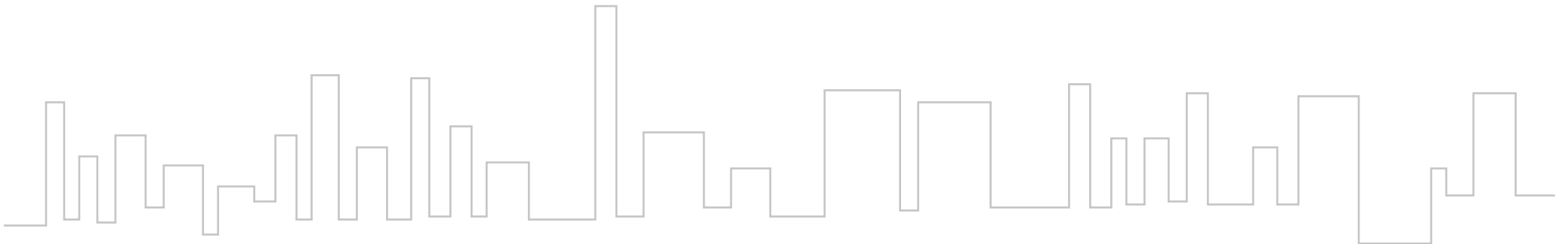
Pudong
1043 km2
522 km2

Minhang
639 km2
371 km2

Baoshan
479 km2
271 km2

Yangpu
415 km2
61 km2

Putuo
426 km2
55 km2

Xuhui
418 km2
55 km2

Jiading
398 km2
458 km2

Sonjiang
631 km2
605 km2

Nanhui
687 km2
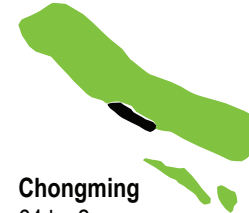687 km2

Hongkou
287 km2
23 km2

Zhabei
257 km2
30 km2

Qinpu
141 km2
676 km2

Fengxian
135 km2
687 km2

Chagning
290 km2
38 km2
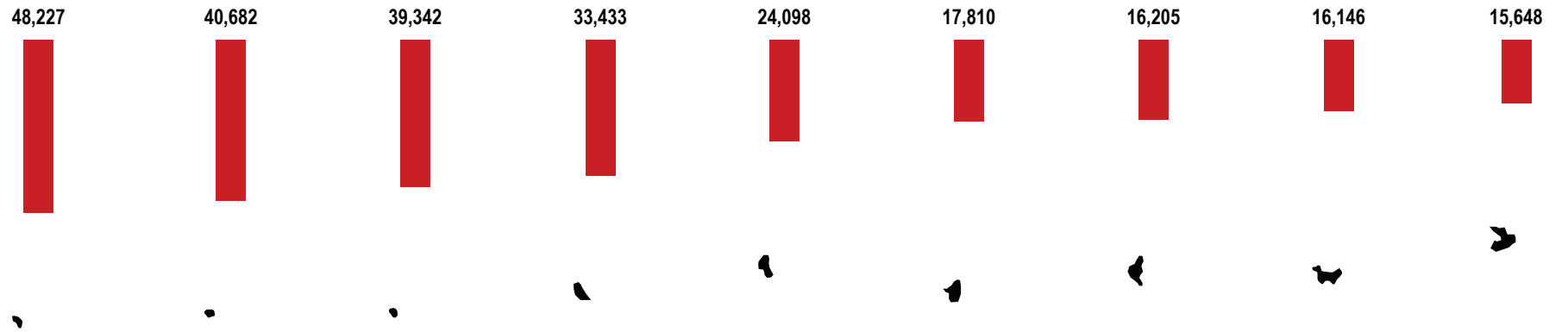
Chongming
64 km2
1185 km2

Jinshan
143 km2
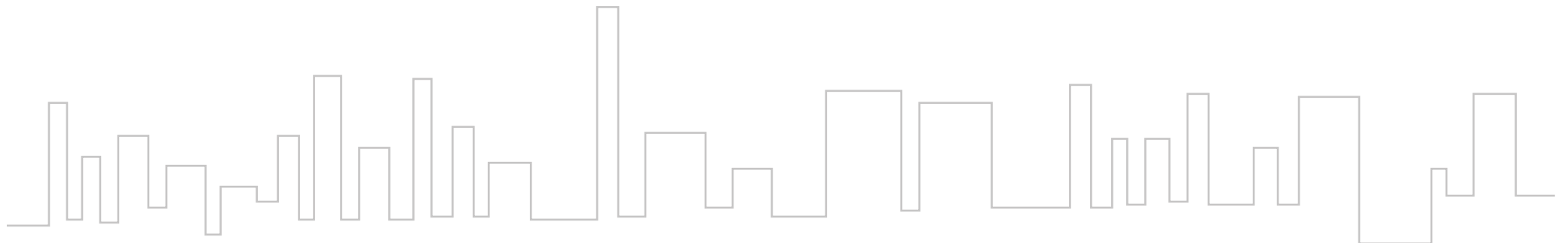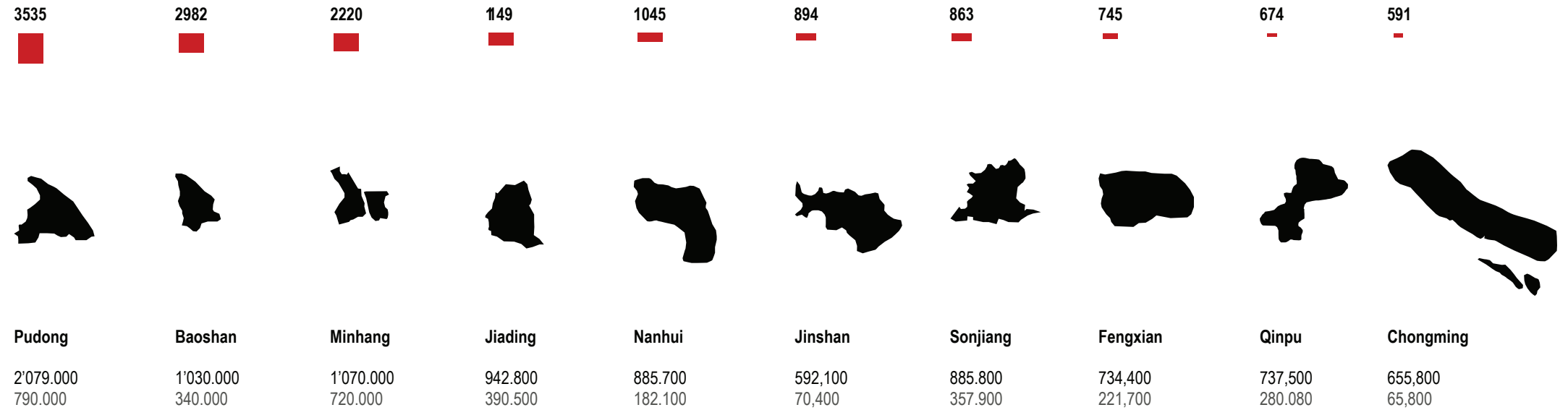586 km2

Huangpu
186 km2
12 km2

Luwan
124 km2
8 km2

Jing'an
149 km2
8 km2

District	Huangpu	Jing'an	Luwan	Hongkou	Zhabei	Yangpu	Xuhui	Chagning	Putuo
	48,227	40,682	39,342	33,433	24,098	17,810	16,205	16,146	15,648
Population	508,800	266,650	271,300	782.600	758.100	1'020.000	985.900	671,800	1'010.000
	71,500	32,600	33,000	104.700	103.400	140.000	158,300	110,600	210.000

Districts densities

3535	2982	2220	1149	1045	894	863	745	674	591

Pudong	**Baoshan**	**Minhang**	**Jiading**	**Nanhui**	**Jinshan**	**Sonjiang**	**Fengxian**	**Qinpu**	**Chongming**
2'079.000	1'030.000	1'070.000	942.800	885.700	592,100	885.800	734,400	737,500	655,800
790.000	340.000	720.000	390.500	182.100	70,400	357.900	221,700	280.080	65,800

The smallest districts of the city are the ones representing the highest levels of density in comparision with the large lands surrounded by green that belong mostly to the outer areas. Hongkou district is the 4th most dense in the city of Shanghai.
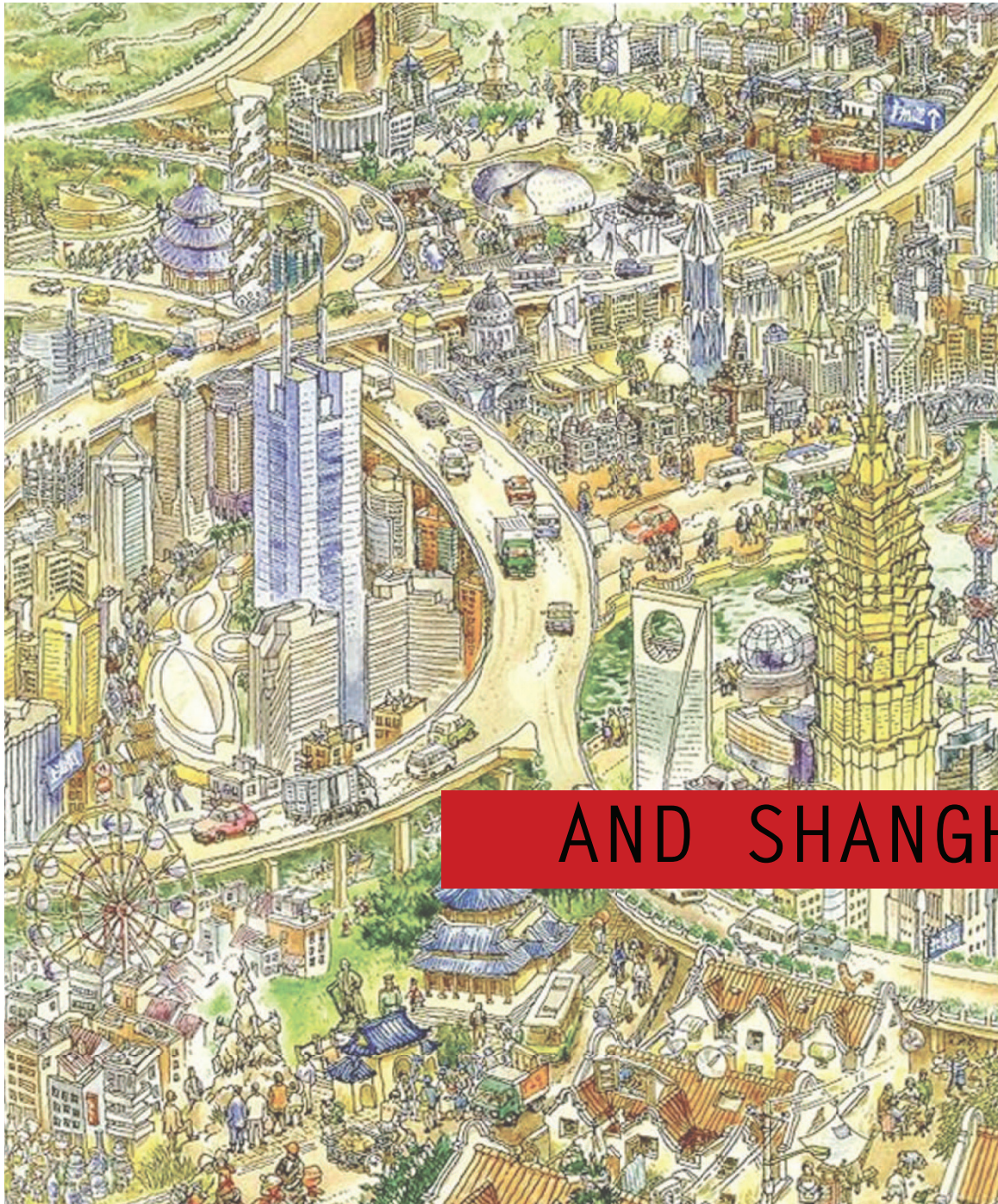
it's a collage
of people
and activities
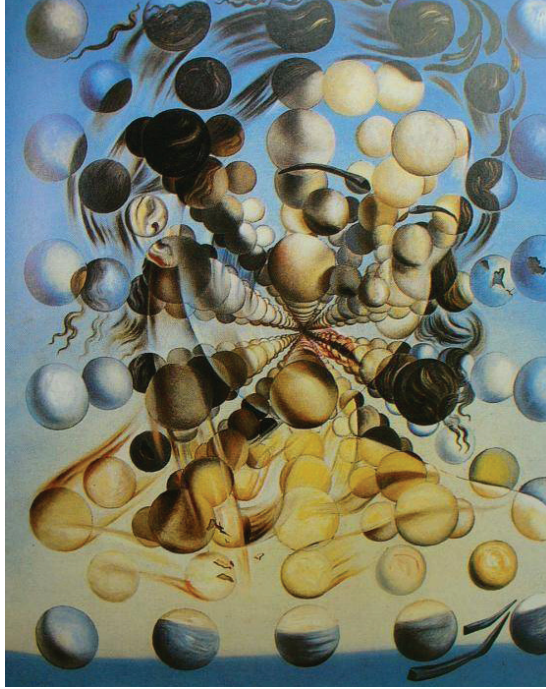and elements
and typologies
and spaces
voids and filled

LAYERS
layers
LAYERS
layers
LAYERS
layers
LAYERS

AND SHANGHAI IS FULL OF...

LAYERS
layers
LAYERS

Pattern A

Pattern B

Optical Ilussions

Pattern C

THINGS ARE NOT WHAT THEY SEEM

An optical illusion (also called a visual illusion) is characterized by visually perceived images that differ from objective reality. The information gathered by the eye is processed in the brain to give a percept that does not tally with a physical measurement of the stimulus source. There are three main types: literal optical illusions that create images that are different from the objects that make them, physiological ones that are the effects on the eyes and brain of excessive stimulation of a specific type (brightness, tilt, color, movement), and cognitive illusions where the eye and brain make unconscious inferences. They can also be known as "mind games"

A sample of different typologies of density present in the city of Shanghai and some other contexts (taken as reference for the future development), they have been identified by city observation method and reccurent presence in the city.
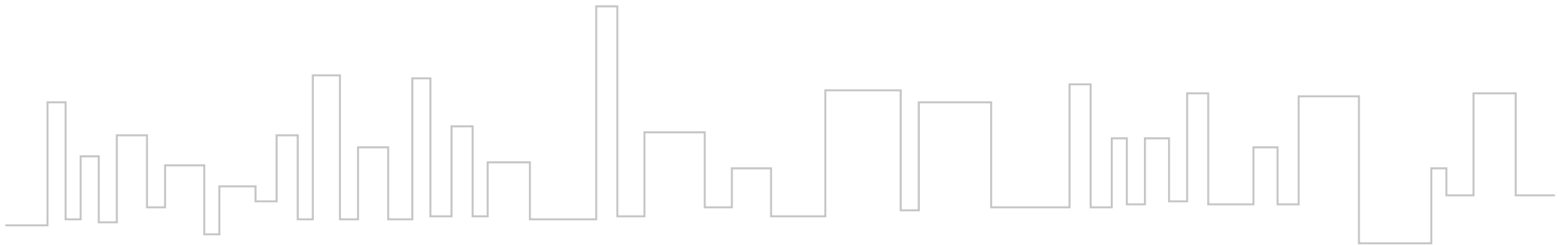
Methodology on How to design Hongkou Plots
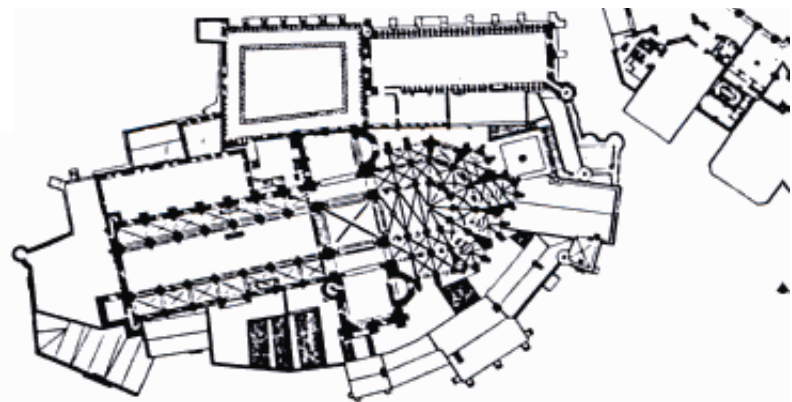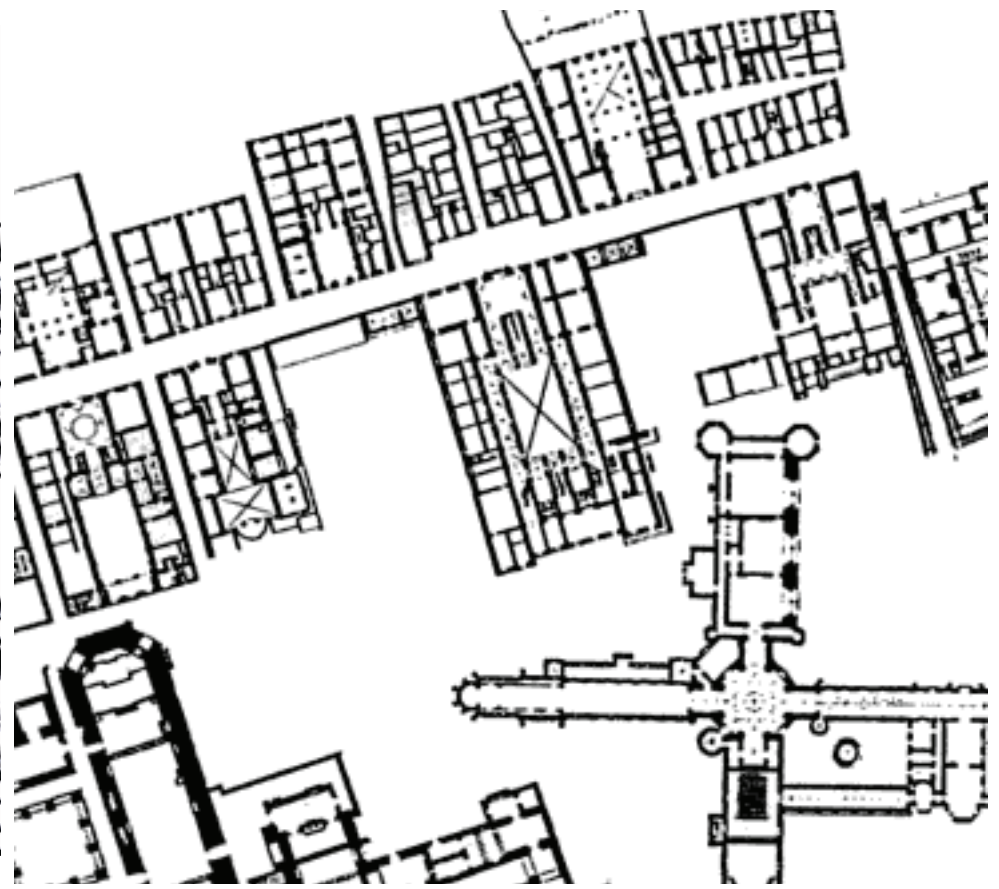
3. The manual
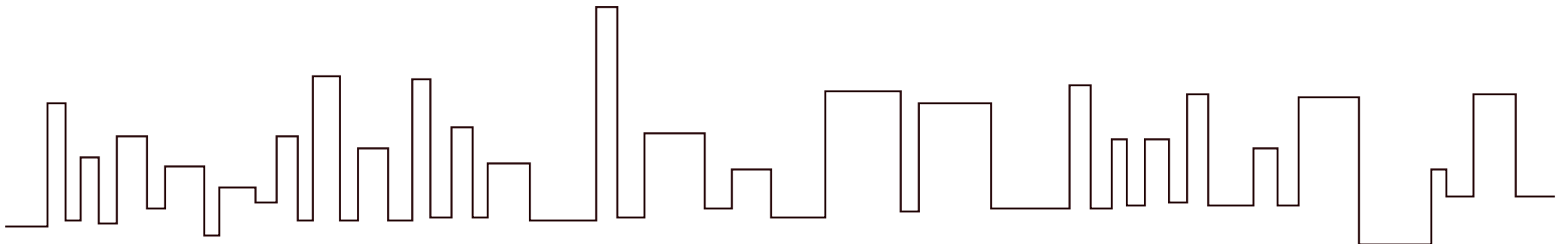
1. Study and understand the concept proposed by Prianesi and other authors focused on the topic of collage city.

2. Research about good quality open spaces in the world, (Piazzas, squares, voids)

3. Research on the theory of what a "collage city" is.

4. Study the different typologies of housing in China and other places in the world, contemporary and historical wise.

5. Make a collage with all the elements mentioned aboved

6. Draw the Noli maps, Positive and negative in order to understand the voids and open spaces

7. Get an ABSTRACT maquette and pieces in layers based on the research of the squares of the world

8. Get the pieces, think in collage wise, place them together KEEPING IN MIND THE VOIDS designed previously in the Noli map

9. Modify the edges of the pieces since they do not always create the best and convenient spaces.

10. Get a slab to give continuity to the project

11. Start placing buildings on top of the slab in and order that seems random but is based on the urban fabrics on the surrounding plots.

12. Keep in mind the visuals, one hour sun radiation rule and direct ventilation charactheristics

13. We are done!

3.1. Piranesi and collage city

Concepts of space   pointillism   collage   perception   city immage
surrealism philosophy   voids   Concepts of space   **pointillism**   col-
lage   perception   city immage   surrealism philosophy   voids   Con-
cepts of space   pointillism   collage   perception   city immage   sur-
realism philosophy   **voids**   Concepts of space   pointillism   collage
perception   city immage   surrealism philosophy   voids   Concepts of
space   pointillisn   collage   perception   city immage   surrealism phi-
losophy   voids   Concepts of space   pointillisn   collage   percep-
tion   city immage   surrealism philosophy   voids   Concepts of space
pointillisn   collage   perception   city immage   surrealism philosophy
voids   Concepts of space   pointillisn   collage   perception   city
immage   surrealism philosophy   voids   Concepts of space   pointil-
lisn   collage   perception   city immage   surrealism philosophy   voids
Concepts of space   pointillisn   collage   perception   city immage   sur-
realism philosophy   voids   Concepts of space   pointillisn   collage
perception   city immage   surrealism philosophy   voids   Concepts of
space   pointillisn   collage   perception   city immage   surrealism phi-
losophy   voids   Concepts of space   pointillisn   collage   percep-
tion   city immage   surrealism philosophy   voids   Concepts of space
pointillisn   collage   perception   city immage   surrealism philosophy
voids   Concepts of space   pointillisn   collage   perception   city
immage   surrealism philosophy   voids   Concepts of space   pointil-
lisn   collage   perception   city immage   surrealism philosophy   voids
Concepts of space   pointillisn   collage   perception   city immage   sur-
realism philosophy   voids   Concepts of space   pointillisn   collage
perception   city immage   surrealism philosophy   voids   Concepts of

The first approach for the architects is the definition of the filled space, the definition of the volume and that will define afterwards the void. Designing THE VOID is not something taken into consideration in the first steps of design, as it is stated by some of the definitions mentioned above it "contains no matter, it is empty, not occupied, unfilled, ineffective, useless".

In our case, we found the definiton of void played an important role. The study of different open spaces leads to the analize of how they could interact together, one after the other playing a succession of spaces, voids, constructed or solid elements.

"Places like parkin lot of a shopping mall in the periphery are widely held to be 'urban voids'. The urban void -such a far cry from the cherished ideal of the European city- Today nevertheless enjoys the special attention of progressive European architects and urban planners. The concept of VOID that circulates among these people, however, takes many different guises. A first group of architects and urban planners which includes Italians Bernardo Secchi and Stefano Boeri, uses the concept above all within a descriptive framework. Their aim is also to develop new ways of reading that are specifically tailor to the diffuse urban landscape sprawling over a vast territory and to the share of unbuilt space in this landscape. A second group, with Dutch designers like Rem Koolhaas for OMA and Adreaan Geuze for West 8, is especially sensitive to the POETRY OF THE VERNACULAR IN THE DISPERSED CITY. The void is to them a productive concept first and foremost which they use as a design INSTRUMENT to develop a contemporary idiom for urban space, and idiom Liane Lefaivre has labeled 'dirty realism'.

As it is mentioned in the previous paragraph taken from "The urban condition: space, community, and self in the contemporary metropolis By Ghent Urban Studies Team" the study of sucessful cases could lead to a logical answer proposed in contemporary way, as we intend to do.

The following samples were taken because of the speciality of conformation of the space, of the void, in order to create a collage that will act as a tool to establish a good definition of "emptiness".

Containing no matter; empty; Not occupied; unfilled; Completely lacking; devoid: void of understanding; Ineffective; useless; Having no legal force or validity; null: a contract rendered void; An empty space; An open space or a break in continuity; a gap.

3.2. Definition of voids

3.3. Def: Collage city
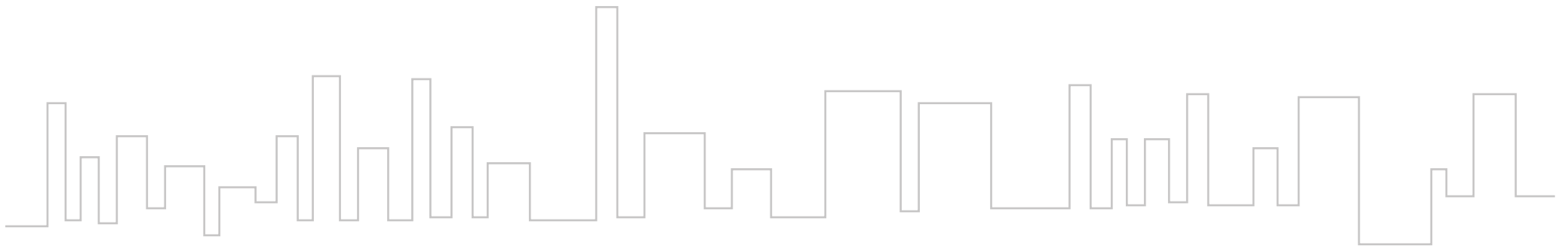
Collage, by direct definition is made from an assemblage of different forms, thus creating a new whole.

in the 1970s Colin Rowe focussed on developing an alternative method of urban design derived in part from the earlier work of Camillo Sitte but largely original, and based on **the making of cities through a process of collaged, superimposed pieces**; the ideal model for this pragmatic, anti-doctrinaire approach was the ruined villa of the Roman Emperor Hadrian at Tivoli, outside Rome.

His chief significance was as a teacher and writer on these subjects, which greatly influenced architectural thinking. His book Collage City (with Fred Koetter) is his theoretical treatise that sets out various analyses of urban form in a number of existing cities known to be aesthetically successful, examining their actually existing urban structure as found, revealing it to be the end product of a ceaseless process of fragmentation, the collision/superimposition/contamination of many diverse ideas imposed on it by successive generations, each with its own idea. In architecture his thinking paralleled his ideas about the city: he was nostalgic for nineteenth-century eclecticism, advocating that architecture in the modern age should abandon its purist abstration and allow itself to be influenced by influxes of historical references.

"With these two statements -one a commentary upon inhibition and the other a question as to the eternal source of all authority- it might be possible to construct a theory of society and even a theory of architecture but if modesty restrains the attempt, there are also pragmatic reasons which make the same insistence.

The city of modern architecture (it also may be called modern city) has not yet been built. In spite of all the good will and good intentions of its protagonist, it has remained either a project or an abortion and more, and more, there no longer appears to be any convincing reason to suppose that matters will ever be otherwise. For the constellation of attitudes and emotions which are gathered together under the general notion of modern architecture and which the overflow, in one form or another, into the inseparably related field of planning, begin -in the end- to seem altogether too contradictory, too confused, and too feebly unsophisticated to allow for any but the most minor productive result.

By one interpretation, modern architecture is a hard-headed and hard-nosed undertaking. There is a problem, a specific problem, and there is an obligation, an obligation to science, to solve it in all its particularity and so, while without bias and embarrassment, we proceed to scrutinize the facts, then, as we accept them, we simultaneously allow these hard empirical facts to dictate the solution. But, if such is one important and academically enshrined thesis, then, alongside it, there is to be recognized a no less respectable one: The proposition that modern architecture is the instrument of phylanthropy, liberalism, the 'larger hope' and the 'greater good'.

In other words, and right at the beginning, one is confronted with the simultaneous profession of two standards of value whoce compatibility is not evident. On the one hand, there is an expression of allegiance to the criteria of what though disguised as science is. after all, simply management; on the other handa devotion of ideals of what was a few years ago often spoken of as the counter culture-life, people, community and all the rest, and that this curious dualism causes so little surprise can only be attibuted to a determination not to observe the obvious". Colin Rowe in Collage city.

Research based on typologies of city squares and typologies of traditional residences developments in China
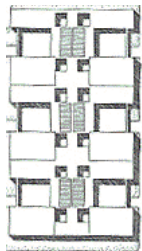
3.4. Voids & open spaces (Piazzas)
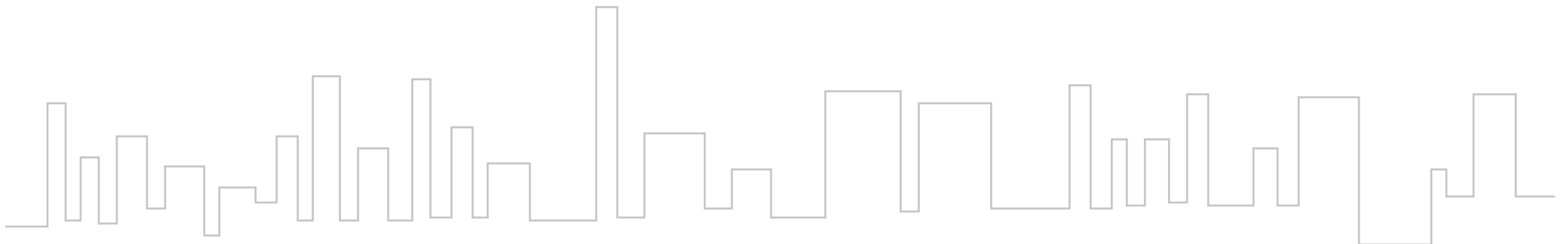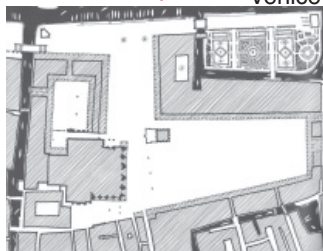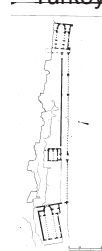
Courtyard housing

Piazza Ducale
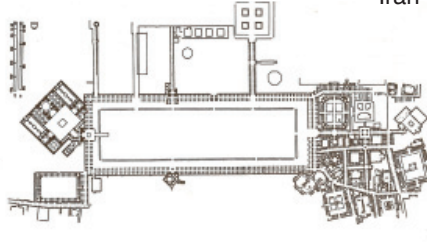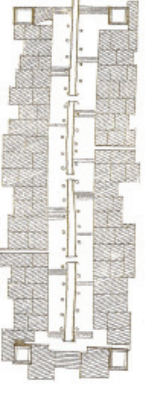Vigevano, Italy

Forum
Pompei

San Marcos
Venice

Alahan
Turkey

Housing typol-
ogy, Yazd

Nagshe jahan
Iran

Bazar street
Beijing

# 3.4.1 PIAZZA DUCALE-VIGEVANO

Dimensions of the piazza: 138x46 meters

Vigevano, a town located in the Province of Lombardy has a particular piazza designed in colaborations with Leonardo Da Vinci under the perfection of proportions and aesthetics and it is considered to be one of the jewels of the area. Ludovico Maria Sforza was the one who ordered the construction of it as it should be the entry hallway of the Castel, built in the adjacent plot. The piazza was originally built only on 3 sides of it to later be constructed the Cathedral of town under the name of Sant'Ambrogio).

The buildings, surrounding the square are homogeneous in composition, with elevations planned to be uniform arcades, based on Vitruvian principles of architectural history.

Originally, the area was characterized by a long street surrounded by buildings mostly with arcade configuration, including the Town Hall. The city expansion and the empowerment of the prestigious families gave as a result the planning either of this public space as well the Castle that is located in an elevated position and was accessed by means of a ramp or a very small stair steps that were located where nowadays there is located a tower that indicated the access to the Castle.

The modern form is the result of the intervention done in 1680, where the ramp was demolished and built a staircase and the missing part on the south and partly the west side.

The new facade (the side where is placed the Cathedral) was conceived concave which will serve the purpose to embrace the square, making it one of the most important points and highlights.
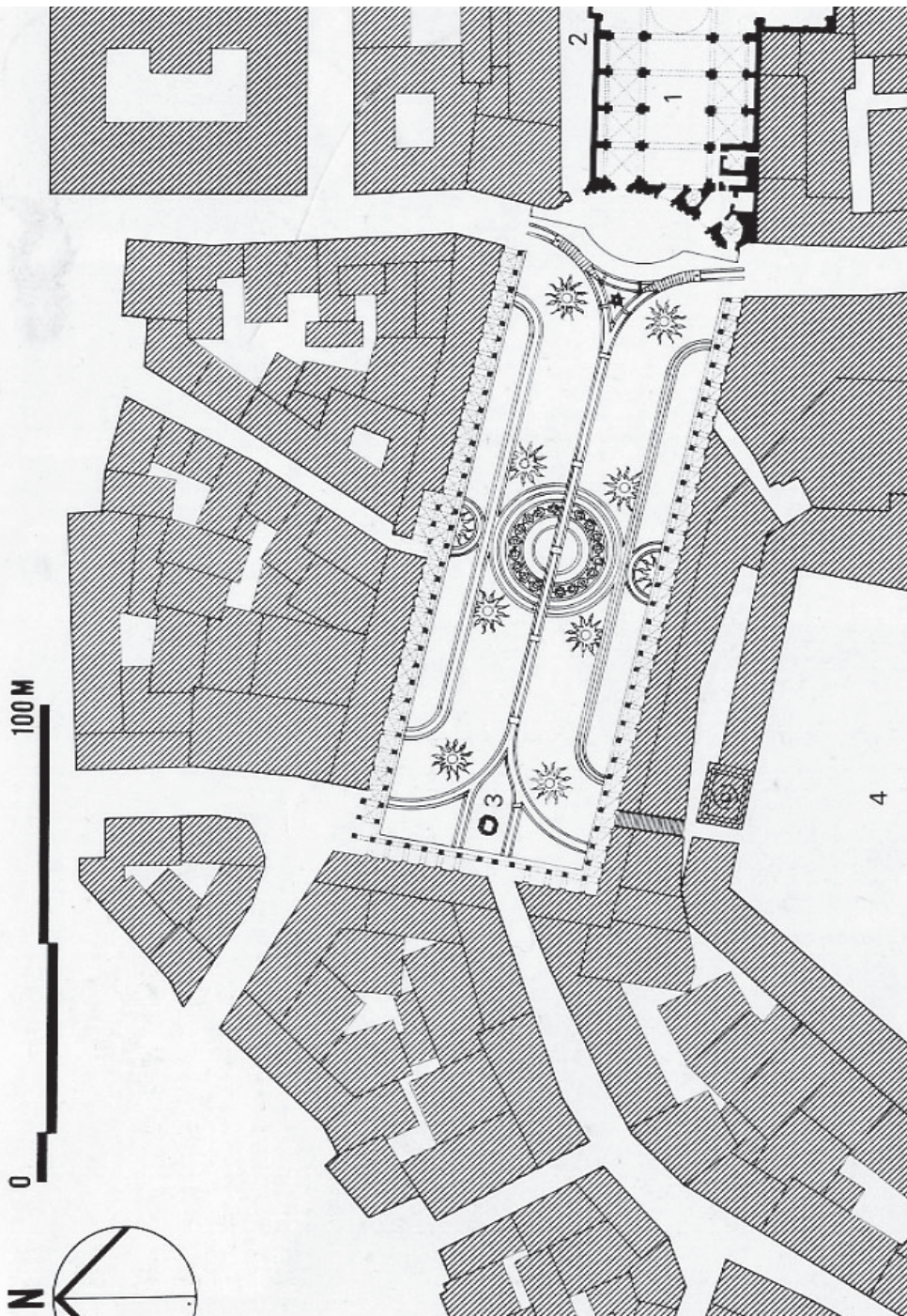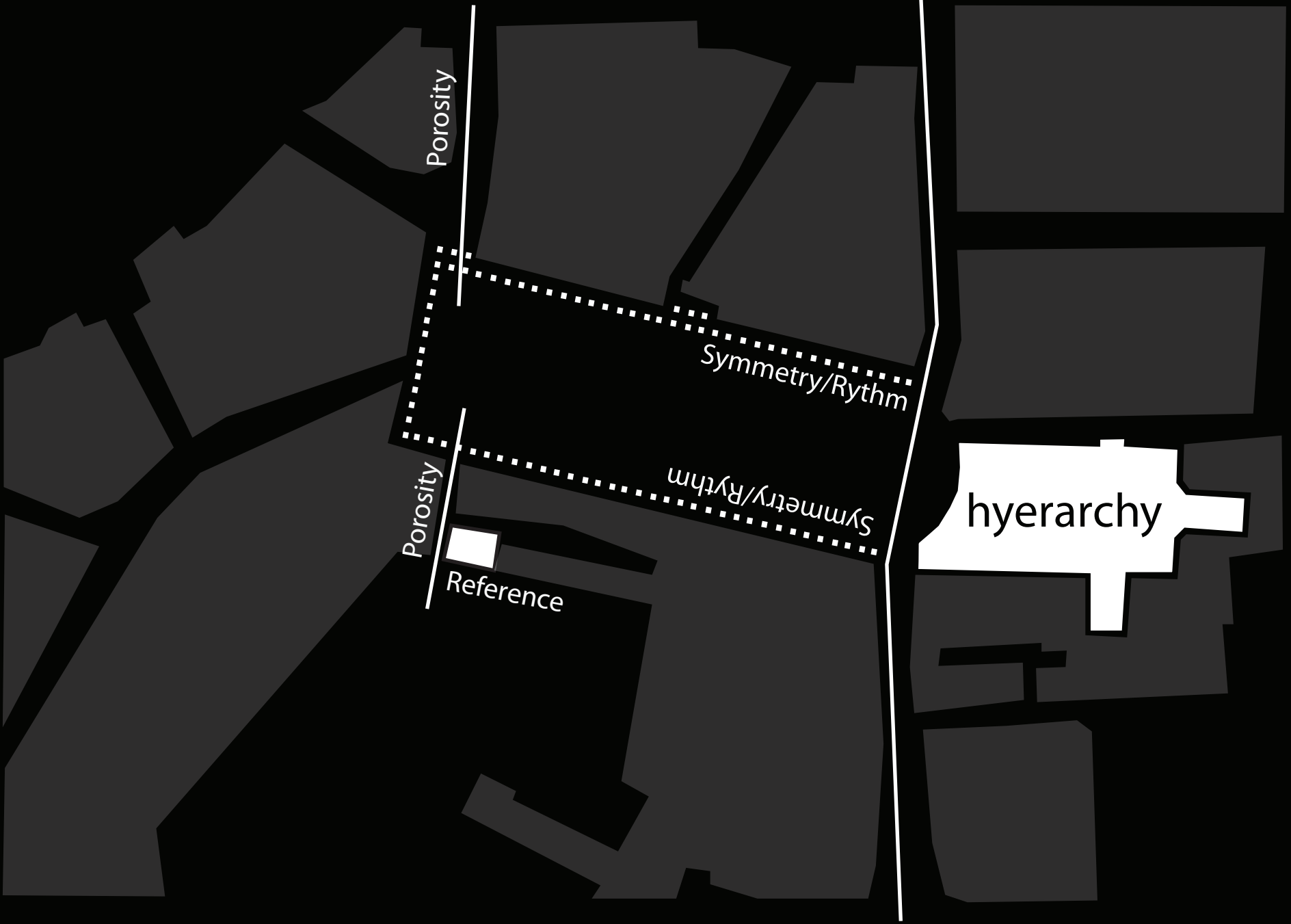
Continuity

Porosity

Symmetry/Rythm

Symmetry/Rythm

Porosity

Reference

hyerarchy

3.4.2 Greek Agora

Agora, a word originated from Assembly and reunion, is a term used and assigned to the old Greek City-States (Polis).

It can be described as an open space, known as the center of commerce (market), center of Culture and Politics of the social life of the Greeks.

Spatially is sourrounded by the most important buildings, either public or private and some of the buildings we found useful for the typology of use of the space and the historical connotation.

The Stoas, which are surrounded by columns generating perforations and porosity in the space, they were the center of knowledge, education and markets, making it an important element to highlight inside our concept and the project since we are analyzing its form but in relation with its function.

"Reunion" is a term designated to the old squares in the ancient Greece, an important place of discussion of ideas, thoughts, politics, health and other subjects concerning the society of the time.
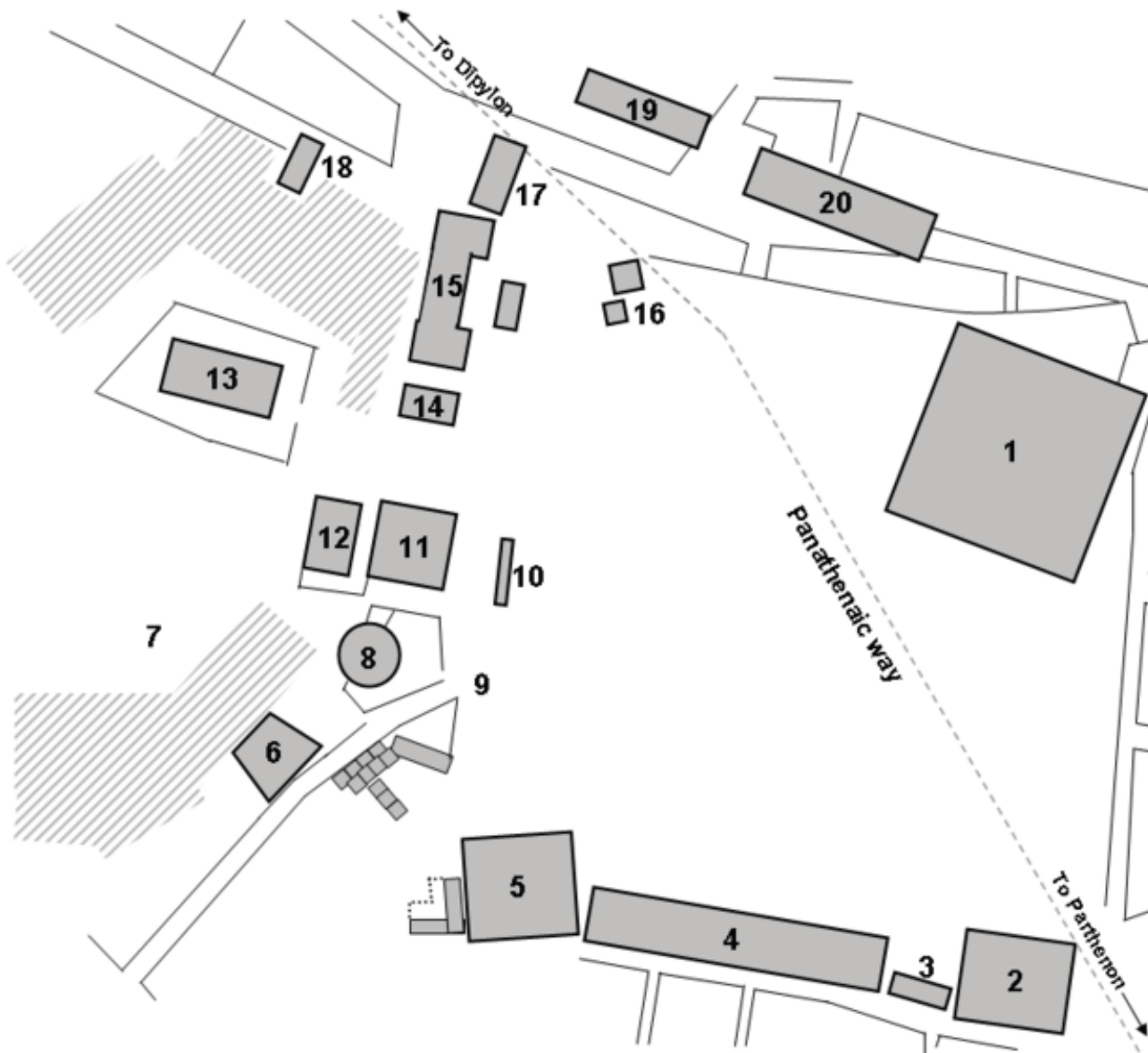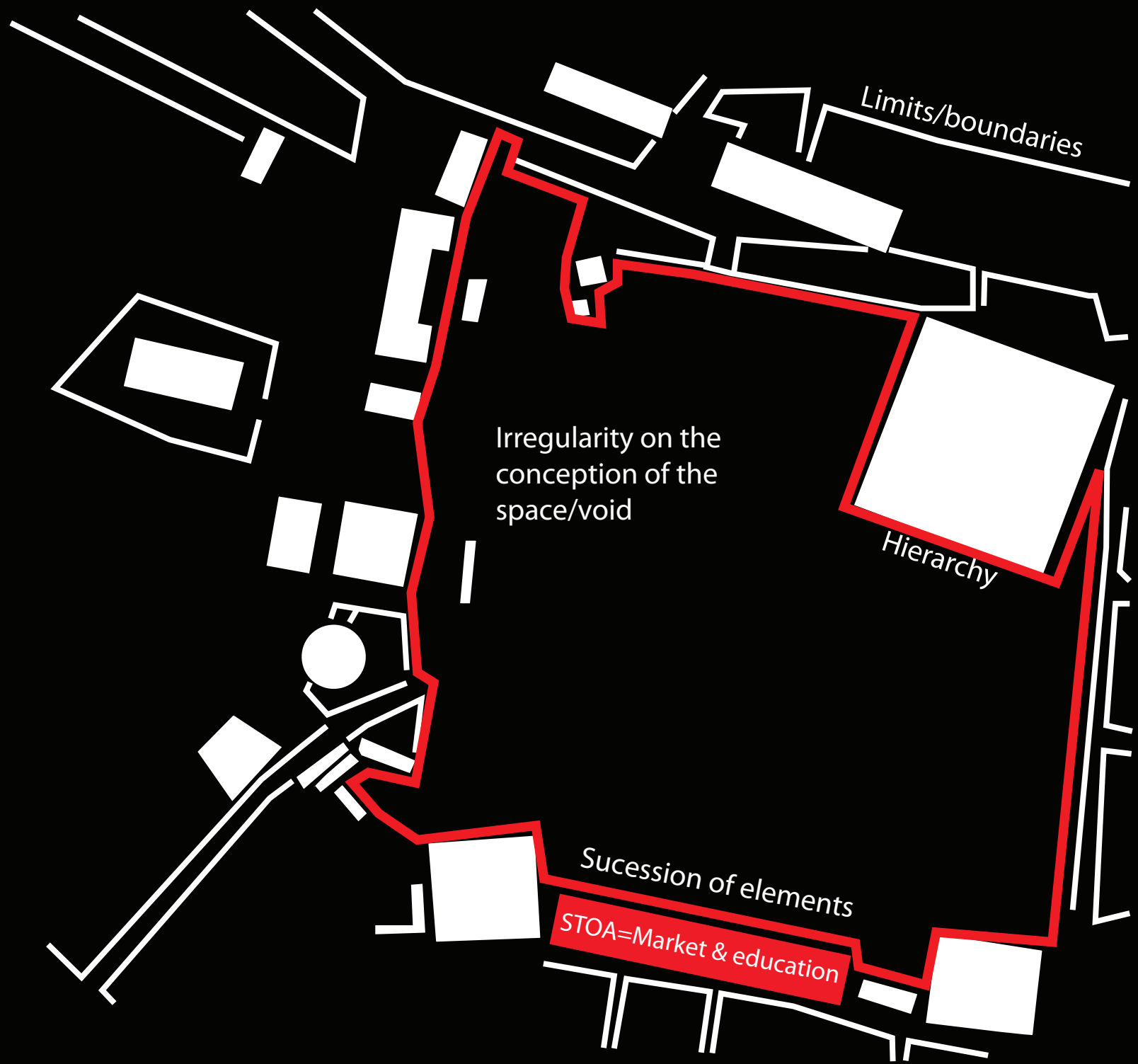
Limits/boundaries

Irregularity on the conception of the space/void

Hierarchy

Sucession of elements

STOA=Market & education

3.4.3 Forum in Pompey
**Dimensions: 145x38 meters**

The Forum, as well as has been described previously the Greek Agora, was the civic center of the city of Pompey, Italy. It was a **wide space, conceived in a rectangular way, surrounded on three of its sides by Columns and the other side by the Temple of Jupiter, with many more public buildings with high relevance around it.**

Paved in stone, on it the Statues lay conmemorating the most important moments of the Emperors, the member of their families or eventually some local citizens with certain extent of relevance.

It was a typical action to see the vendors with the merchandise on tables around the place, where they were able to exhibit the products to the public, spatiallity speaking they were sitting next/under the arcades so the buyers will circulate around with good climate conditions.

Inside the Forum, there was not any possibility of entraces of carriages (Opposite of what we will be able to mention in other square).

As being a place for public use, the breaking news were published on it, as everyone gather frequently to understand the different sucesses of the time being.
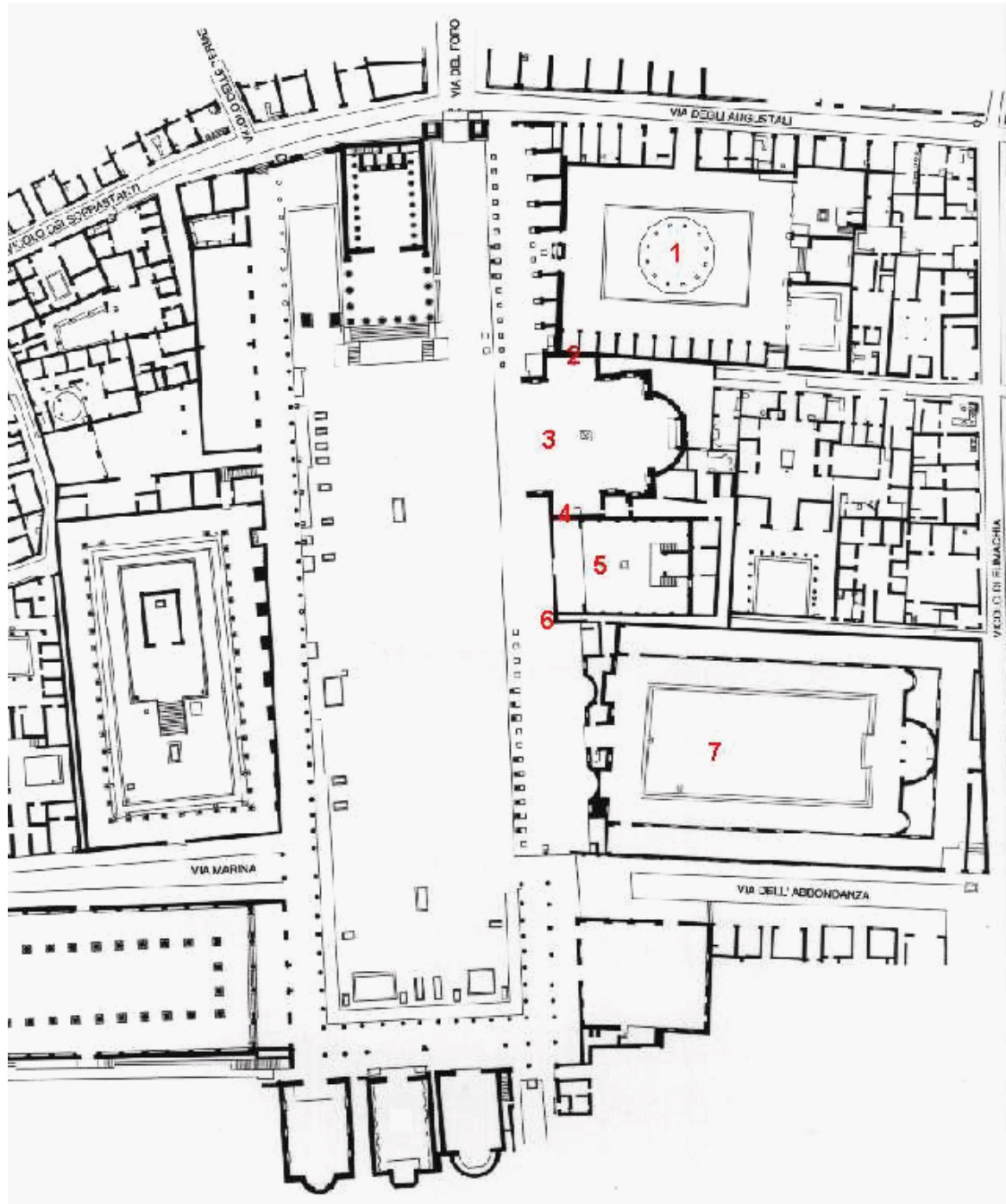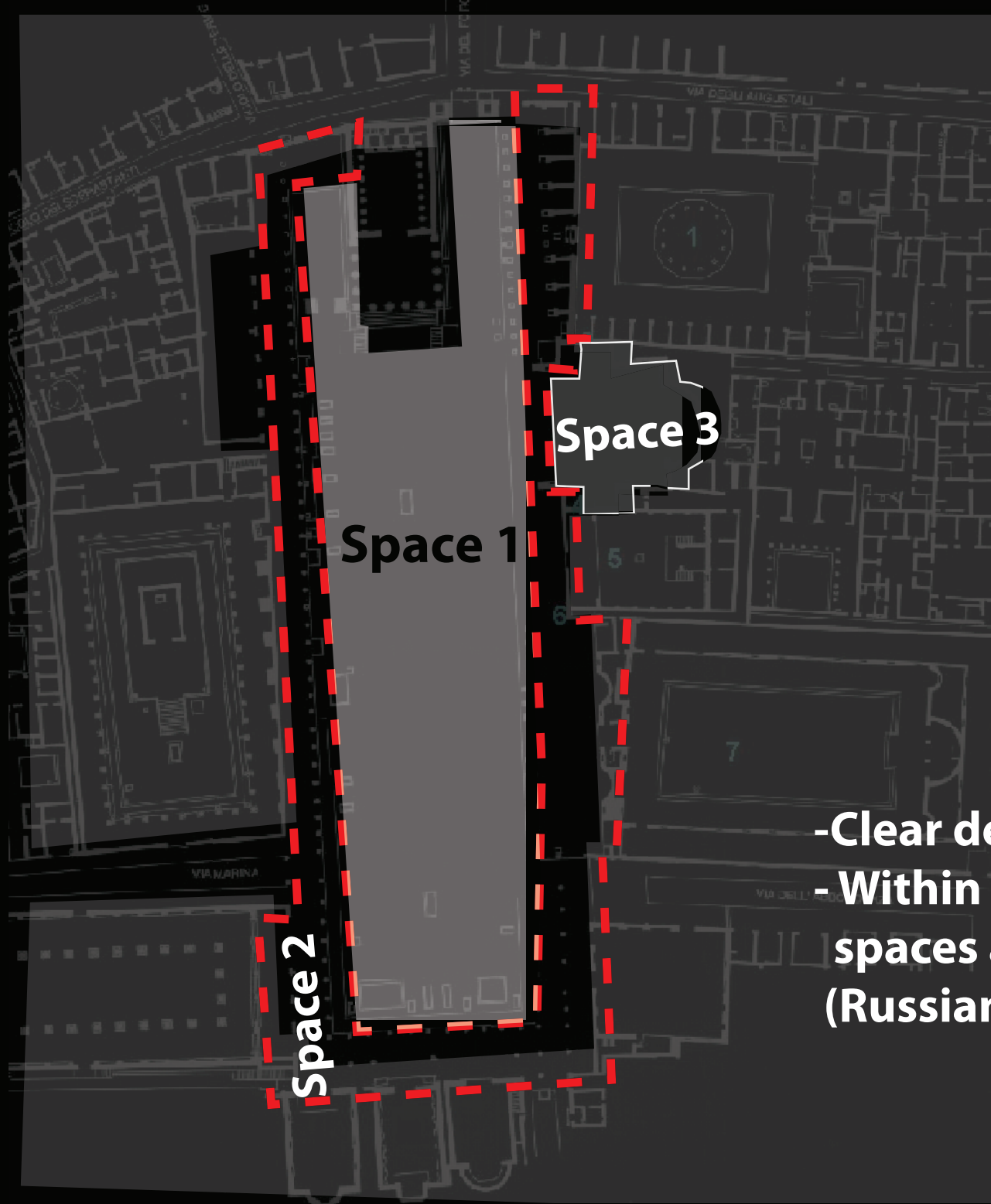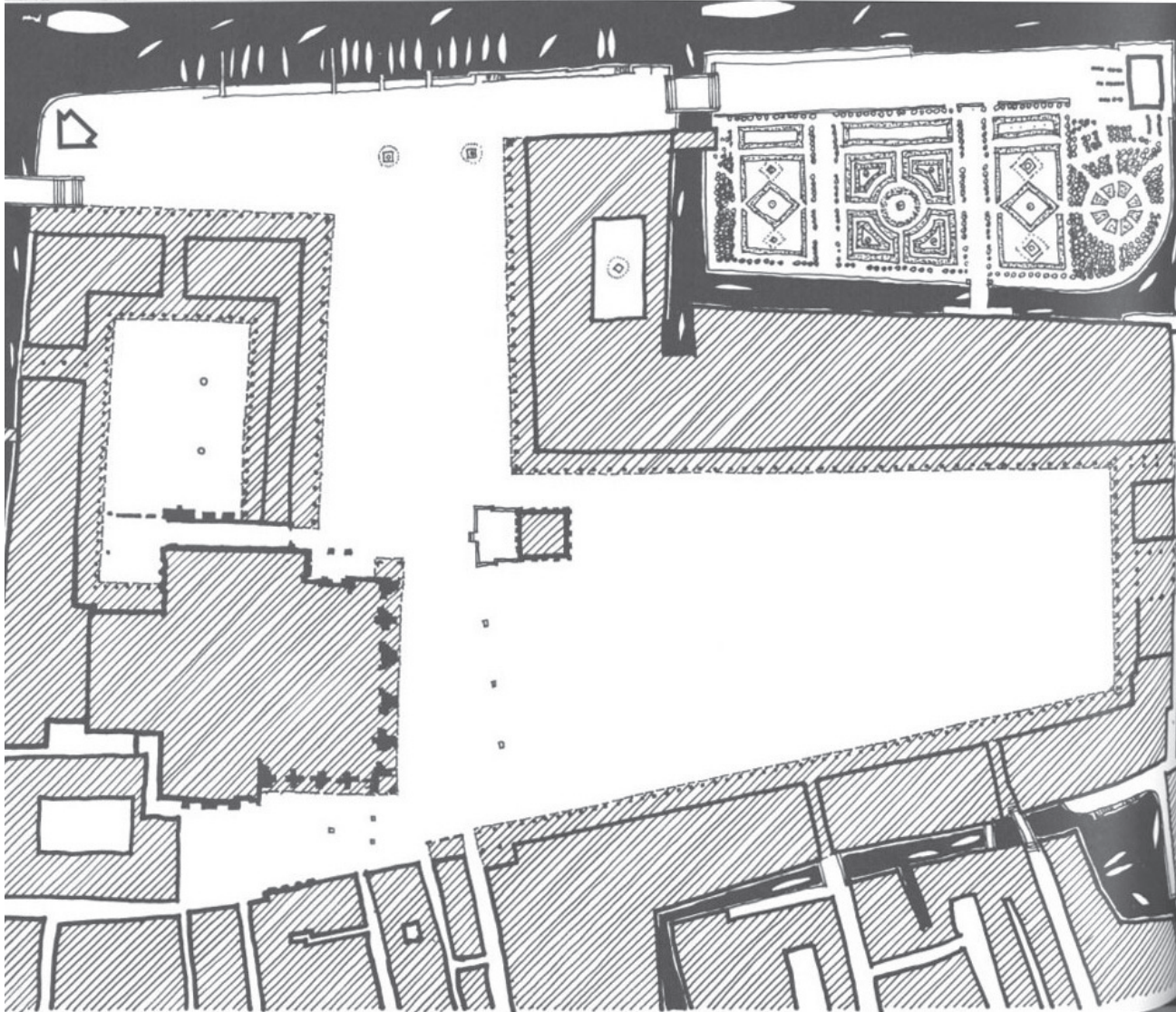
Space 3

Space 1

Space 2

-Clear definitions of limits
- Within one space, more
   spaces are conceived
   (Russian doll)

3.4.5 Piazza San Marco in Venice

The Piazza was originated in the 9th century as a small area in front of the original Basilica di San Marco. Previously the spatial configuration was different since it was conceived as one space with 4 sides, nowadays counts with an extension of spaces that were thought in order to meet different needs of the epoches.

It was enlarged to its present size and shape in 1177, when the Rio Batario, which had bounded it to the west, and a dock, which had isolated the Doge's Palace from the square, were filled in. The rearrangement was for the meeting of Pope Alexander III and the Emperor Frederick Barbarossa.

The Piazza has always been seen as the centre of Venice. It was the location of all the important offices of the Venetian state, and has been the seat of the archbishopric since the 19th century.

The piazza is in close relation to the use of the space and the iconicity of the buildings.

Library, Palace, Basilica, Clock tower, old Procuratie, Ala Napoleonica, new Procuratie, small square, big square.

Space 2
Opening that frames
the sea side
and its importance

RELEVANT USES ON SECOND FLOOR
commercial strip on ground floor

Clock tower, Hyerarchy. Serves a purpose, to frame
the space of piazzeta, located in a very strategic
point

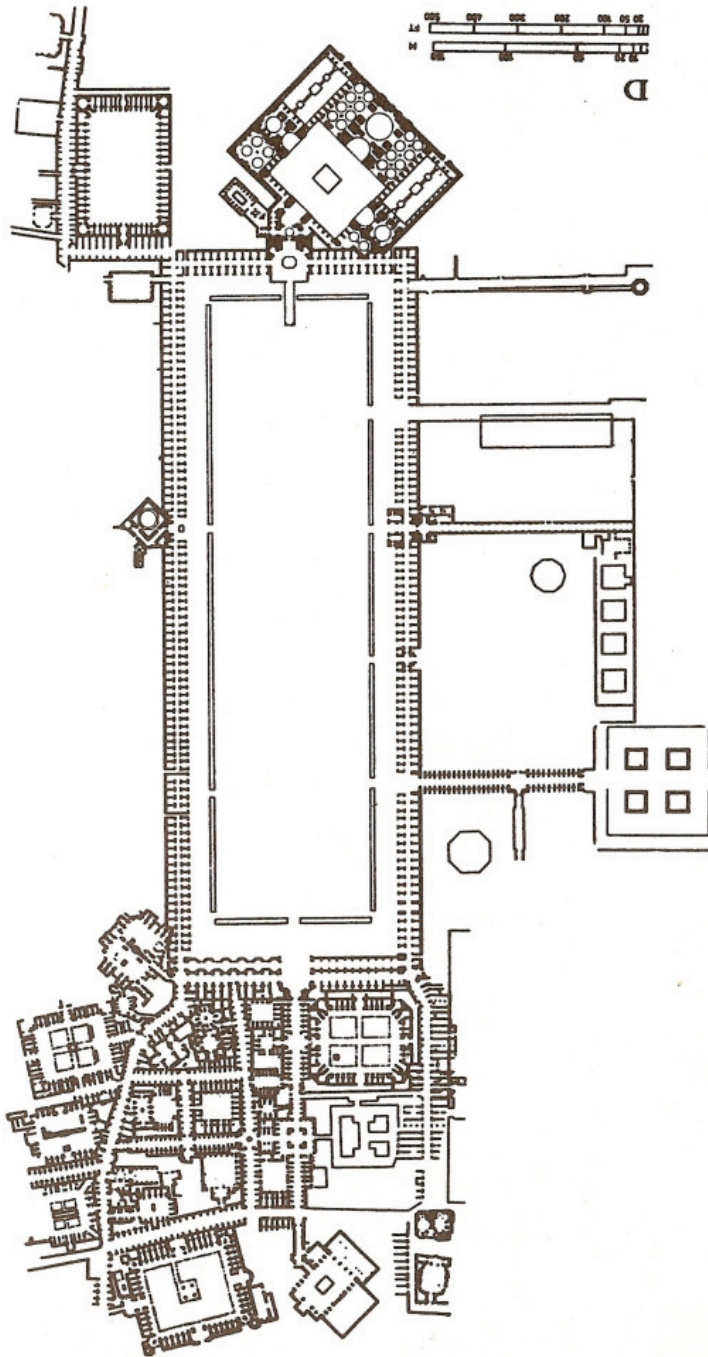commerce

Space 1
Relevant space

Hierarchical element

commercial strip on ground floor
RELEVANT USES ON SECOND FLOOR

Space 3
The foyer of San Marco

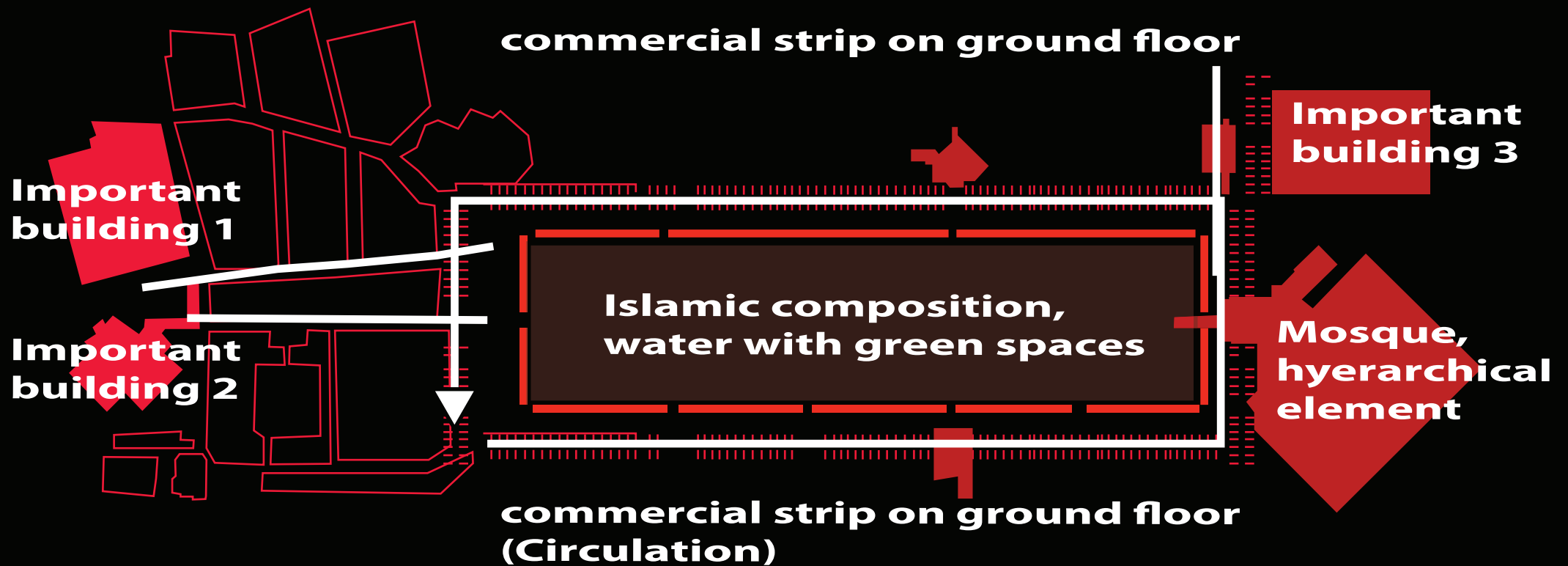# 3.4.6 Nagshe jahan
Dimensions: 150x500 meters

officially known as Imam Square, formerly known as Shah Square, is a square situated at the center of Isfahan city, Iran.

Its size is monumental, and lovely buildings set around it. The length of this great square, which is actually rectangular, is 500 meters from north to south, and its width about 150 meters from east to west. It was laid out and beautified in the reign of Shah Abbas the Great, at the beginning of the seventeenth century. From that time until sixty years ago the square presented a very different aspect from the square to day.

The whole area of the square within the limits of the water channels round it was quite level, while to the north and south stood two goal posts for the game of polo. Those two goals posts are still in position but replanning with large pool in the center, and lower beds round has transformed the square and given it a completely new look. Most of the buildings round are two-storied and the alcoves simply decorated.

To the south of Maidan can be seen the great pile of Abbasi Jami (Masjid-e-Shah) - the Royal Mosque a vista of blue, - to the east is Sheikh Lutf Allah Mosque quite unequaled - to the west the royal palace of Shah Abbas the Great, Ali Qapo and to the north the Qaysariyeh gateway leading to the Royal Bazaar.

The most noteworthy feature of the square is the way in which in sunshine and shade and the varying lights of the day, the whole wonderful expanse takes on a hundred different aspects each more attractive and lovely. If, as some foreign travelers have said, (Isfahan is the heart of the Orient), then Meydan-e-Emam is certainly the heart of Isfahan

commercial strip on ground floor

Important building 3

Important building 1

Islamic composition, water with green spaces

Important building 2

Mosque, hyerarchical element

commercial strip on ground floor (Circulation)

The important buildings are not located directly on the square, but aside of them where straight lines connect directly to the main void

3.4.7 Beijing Market
Dimensions: Variable

This spontaneous market came into being in 1992 as a **road-side market**. Serves the purpose of trade in folk antiques and handiwork grew, it has been a large antique and handiwork market spreading folk culture in 2002.

The market is divided into five parts:
1. Buddhism Statues Area. in the western part of the market, it is an open-air area where large stone sculptures are sold out of trucks.
2. Antique Furniture Area. besides Buddhism Statues Area, two-storied building that houses traditional furniture and Cultural Revolution articles.
3. High-rank Antique Store Area. more exquisite and more expensive handicrafts were sold in the small indoor stores.
4. Books and Scrolls Area. a narrow lane in the south where secondhand books and ancient scrolls are sold.
5. Middle Area. a semi-covered area that forms the main part of the market. This is open only at the weekends.
Middle Area has four zones:
Zone One. a dizzying array of Chinese paintings, calligraphic works as well as beads and jade.
Zone Two. beads, bronze vessels, ceramic vases and small wooden furniture.
Zone Three. Chinese ethnic minority arts and crafts, trinkets, antiques and apparel. Many of these traders are from Tibet.
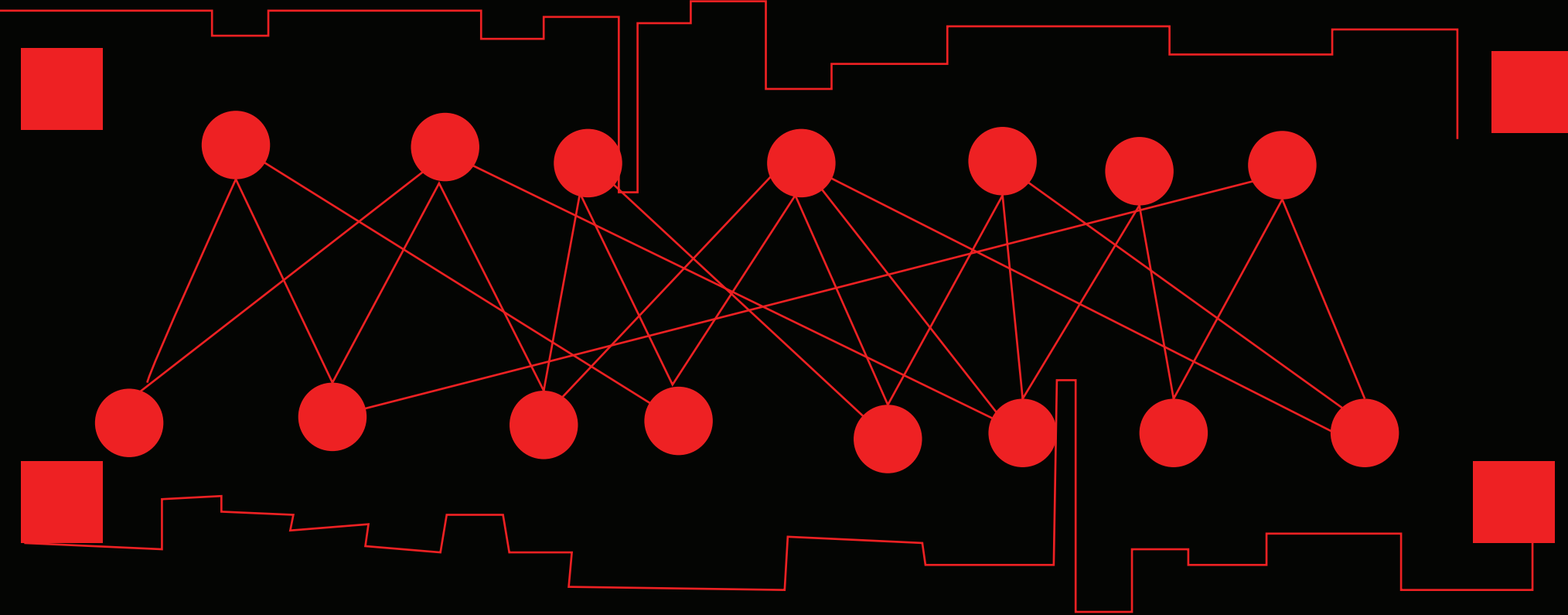Zone Four. Chinese ceramics.

The fact that it has 5 chambers or types of spaces gives a different idea of circulation, that at some point is linear but later becomes a net of displacements within the visitors .
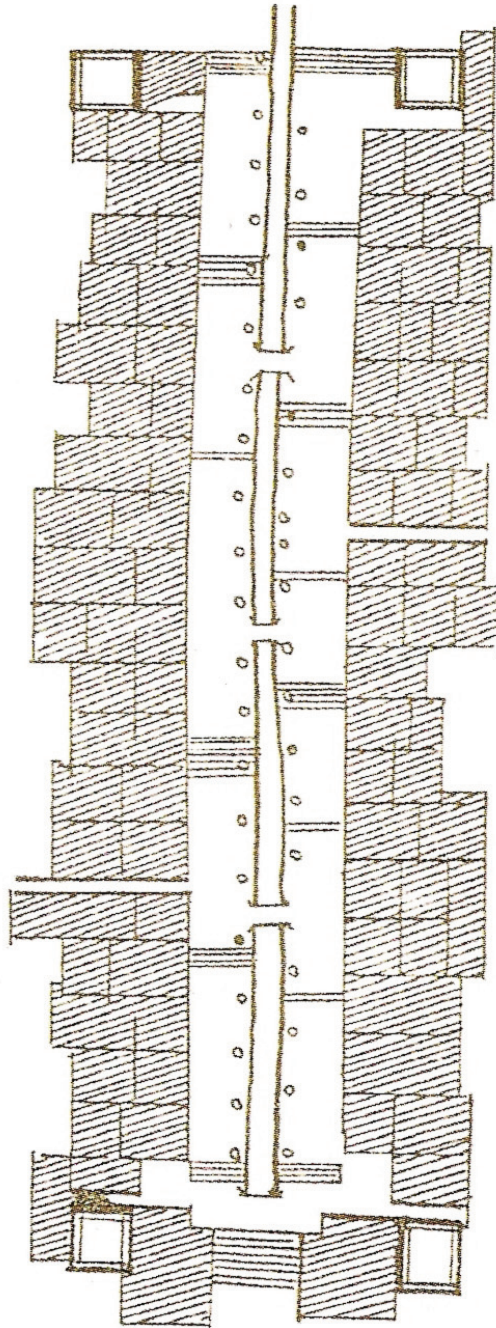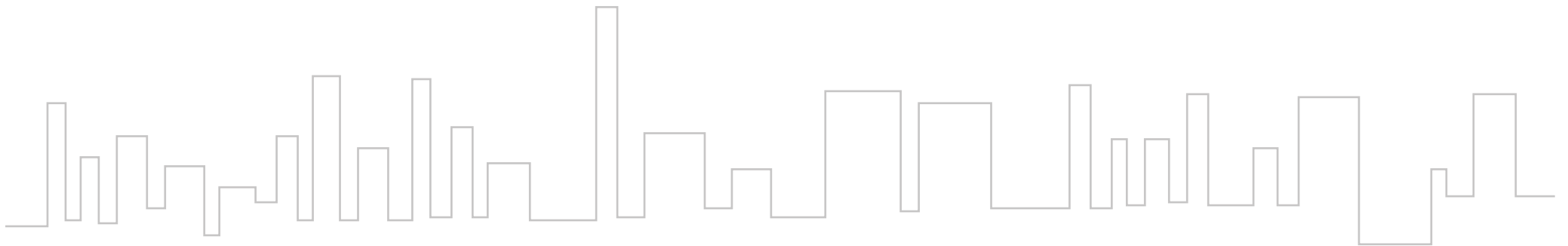
Porosity of edges
Direct street contact

Determining the Axes

Fluxes of people according to the points of interets

3.5. Research on housing typologies

TYPOLOGIES

outskirts of shanghai today

shoe-box SUBURBS

Lilong - Shikumen

Courtyard clusters Garden dwellings

HIGH RISE RESIDENTIAL

Ctrl C + Ctrl V new workers villa

TWO CATEGORIES OF MODERN CITIES: Review the development of modern cities all over the world, one can find out that they fall into the following two categories. The first category is the progressively formed cities, of which the internal social and economic transformation reshape the civic structure and gradually leads to the functional change of the city. The second category is the explosive (eruptive) cities, of which the external forces drive the cities' function to change in a short period. Shanghai is one of the second category of cities. It did not naturally and progressively grow from a traditional Chinese city, but was built on foreign concessions and geared by foreign forces. Within one century, from a small fishing town it came up to be the biggest modern city in China.

STREET PATTERN OF SHANGHAI: Shanghai's commercial prosperity brought about further expansion of foreign concessions. Unlike other Chinese port cities such as Guangzhou and Tianjing, where the foreign concessions only occupied a small portion in the old city and located far from downtown, the concessions in Shanghai were overwhelming in size and formed the core urban area in the city. Also differed significantly from other port cities, Shanghai's concessions enjoyed complete administrative-autonomy. Chinese government can hardly interrupt any of their internal affairs. Therefore, foreign system, from political policies to economic measures, from urban planning strategies to construction technology, were given a free and full play here.

Streets were 6.6 m to 8 m wide, at 35 m to 45 m intervals. Chinese traditional pattern of street network, in which roads strictly complied with the four orientations - the south, north, east and west- and intersected perpendicularly, was somehow respected but not exactly followed. Though most of the streets were basically directed from south to north or from the east to west, there was no single major road that was perfectly straight and thus the street pattern derived was somehow crooked and spontaneous. The outcome was random but organic. This was in reference to the

Int:Typologies of density

A sample of different typologies of density present in the city of Shanghai and so me other contexts (taken as reference for the future development), they have been identified by city observation method and reccurent presence in the city.

existing numerous free-running water-ways of the delta which were taken into consideration when new roads were to be formed.

Shanghai's street network was also lack of a well-formed grid system. The pattern of two series of parallel streets crossing at right angles to form a pattern of equally-sized square blocks dominating urban fabric of the Old City of Beijing, is not found here. The organic street pattern and the inconsistent grid system resulted in urban blocks varying in sizes and shapes.

However, there were still some urban characteristics which can be identified:
1). The street pattern of Shanghai is a variation or twisted one of traditional checker-board pattern. The urban grid system is a mixed patch of several of different types. The street pattern in the original concessions was comparatively regular and standardized, with a recognizable pattern of gridiron system. The street pattern in later developed areas seemed more random and casual, each area may be associated with a different grid system.

2). All streets and roads seemed to start off from the place of the earlier concessions- the area around the Bund, and radiate to the west, north and the south. The city grid in earlier concessions is much denser, and gradually decreased its density in the outer districts. This character once again demonstrated the decisive position of the earlier concessions in the process of urban development. It is predictable that the earlier concessions have become today's Central Business District of Shanghai, because most of the financial and commercial institutions were built around these areas.

3). Finally, the overall organic pattern of street network associated with its mixed patch of city grid system, is unique to the city of Shanghai, differing from other traditional cities

Two factors had an impact in shaping this street pattern and grid system. One is that the natural geographic conditions of this densely-navigated-water-town was such that it was hard to bring up a clear-cut traditional checker-board pattern of street network. The other one is the subdivision of foreign concessions and assignment of their development to different private owners and developers is hard to come up with a standardized or uniformed pattern of city grid. These foreign developers came to Shanghai to exploit a quick and short fortune, bearing no long-term prospect plan in management and civic plan. The foreign governments had done little to coordinate and bring up all the parts.

To further explain, Shanghai was divided into three different zones politically at that time - the International Settlement (owned by the English and the Americans), the French Concession, and the Chinese Old Town. Each of them had its own government, maintaining an independent administration, and applying separate strategies in city planning. As Brian G. Martin wrote about: "Modern Shanghai was not a single city, but three different cities." The existence of the three, and their individual administrative-autonomy, caused out-of-balance and non-integrity in the whole city's development. In the city's planning, though there were orders in small patches, but the ensemble lacked a carefully designed master-plan. This situation was a particular product of that semi-colonial and semi-feudal society. However, it was this densely-intersected and crookedly-composed pattern of street-network, combining with the water-ways, that formed a dynamic circulation system conveying the commercial and trade activities of this city.

European context
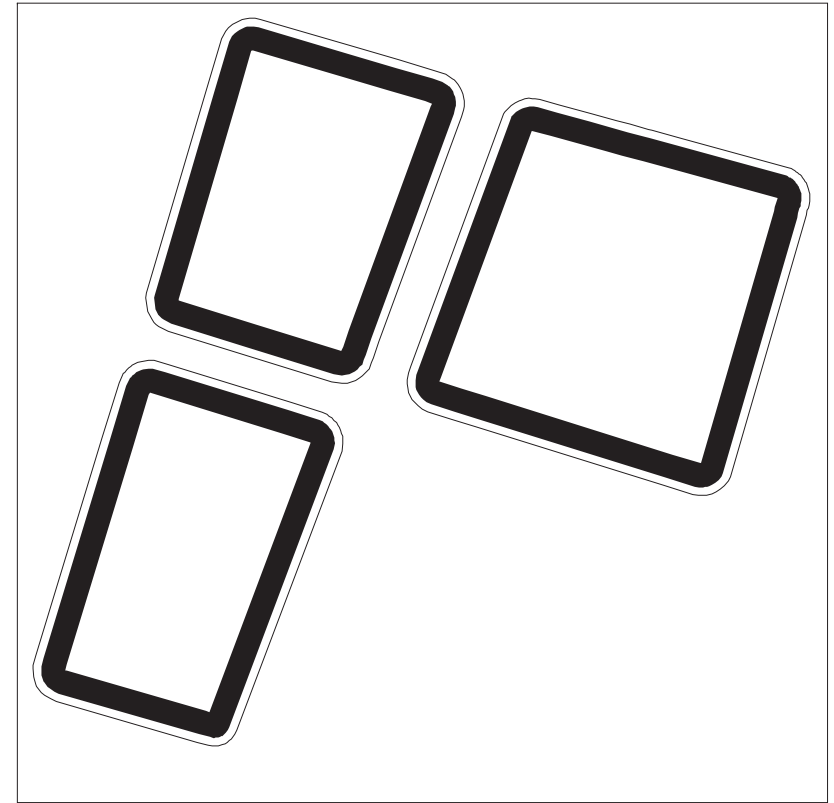
This typology consists on a bounding perimeter of mixed-used functions , with the characteristic of low-rise and high density solution, it maximizes the amount of sun available for the whole plot but some of the interior space of these elements isn't used as its best in this typologies. Some of them can be accessed from the alleys but not the main streets with high traffic of people and vehicles, since those faces of the plot are the most exposed in visibility being convenient for the commerce of the area, those areas can't be wasted in access for the inner part of the plots.

The scheme preserves the idea of entering the houses through alleys and courtyards but in these cases the internal part is only used for the green, which in a project of high density as it is this one is not the best solution to provide the right FAR development.

Shanghai, Xuhui district
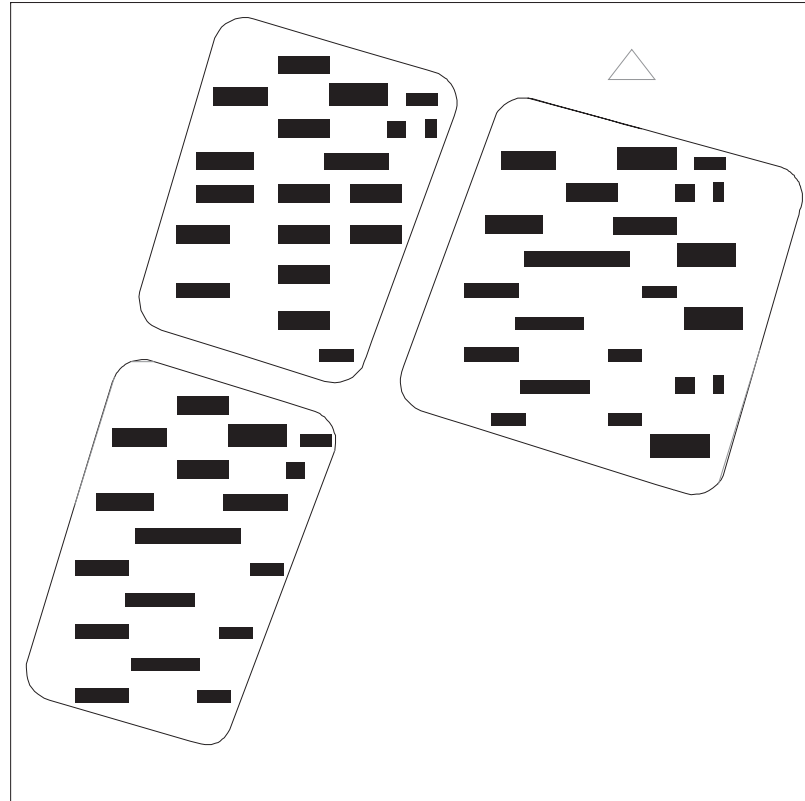
This typology is based on the 1930's International style which identified, categorized and expanded upon character-istics common to Modernism. As a result, the focus was more on the stylistic aspects of Modernism. They identified three different principles: the expression of mass rather than volumen, symmetry rather than balance and the expulsion of applied ornaments and the orientation of the buildings mainly to the north in order to obtain the best climate conditions for the interiors. Because of the main principles of economy, orientation, massiveness among others, this was a typology very easy and accesible during the period of the communism, when the repetition of the volumes was not optional but had to be applied, then it became a very common typology in different parts of the city. We describe it as a "shoe-box" because of the linearity of the composition and its mass-production.

(second half of 1900)

3.5.2 Shoe-box - North oriented tower

Shanghai
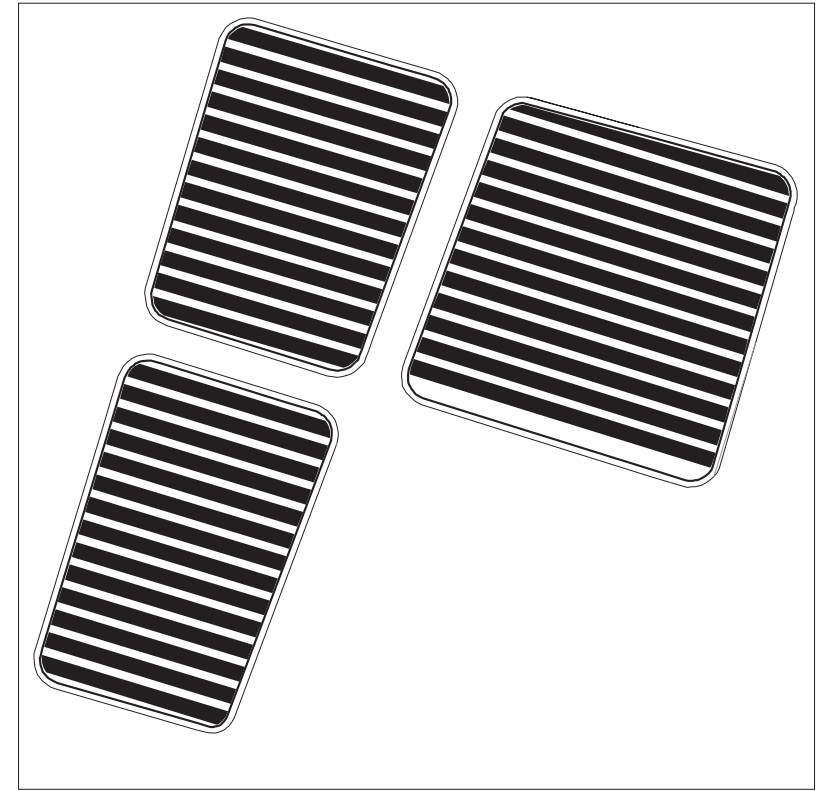
Li" means communities, "Long" means lanes. Simply put, lilong housing, is a type of lane-and-community based urban dwelling form.

The site of a lilong generally has one or two sides bordered by urban commercial streets, and the rest of shores given to other developments but enclosed by walls. Every lilong consists of housing and commercial units. The housing units, tightly attached in rows, except the later variation of Garden or Apartment lilong house models, are evenly aligned and distributed inside of the site in a Western row-housing pattern. Commercial units, in a similar layouts as housing's, occupy all street-front lots. The housing units are accessible from internal circulation lanes, and the commercial units are accessible from external commercial streets

3.5.3 Lilong / Shikumen
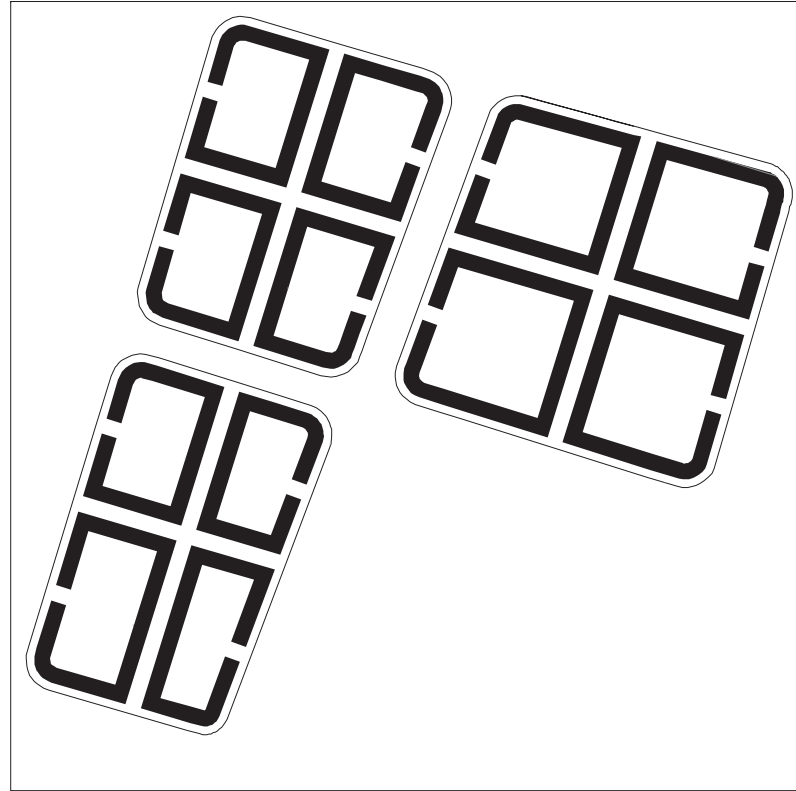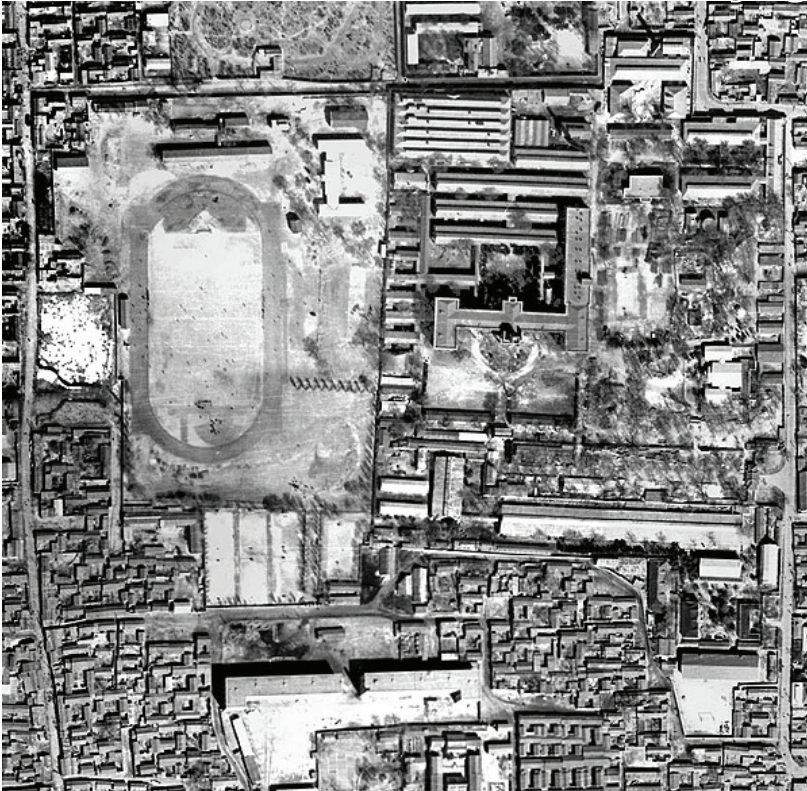
Beijing

Beijing hutongs, It is in the gray-tiled deep lanes that families play, travel, buy goods, gossip and connect lanes or alleys formed by lines of si-heyuan (a compound with houses around a courtyard) where old Beijing residents live. The typologies is a residence very popular in China, but most common in Beijing. There are three kinds of Siheyuan, small, medium and big and they could be a 36-meter-wide road was called a stan-dard street, a 18-meter-wide one was a small street and a 9-meter-wide lane.

The name literally means a courtyard house, a house enclosed by four walls, called a quadrangle. The Siheyuan building was the basic sys-tem of the building for housing, palaces, temples, and government offices. For small and simple Siheyuan, the main gate is open to the south; the main rooms in the north for grandparents are facing south; the corner rooms for grandchildren; the west rooms and east rooms are for son. daughters; the rooms by the main gate facing north are used as the living room or studio. For medium and big courtyard houses, there are more than one yard, two, three or even more yards with lots of rooms for some high ranking officials or rich merchants. The layout of a typical court-yard is actually a vivid showcase of traditional Chinese morality. Why such a layout?

3.5.4 Hutong, a historical typology

Singapore
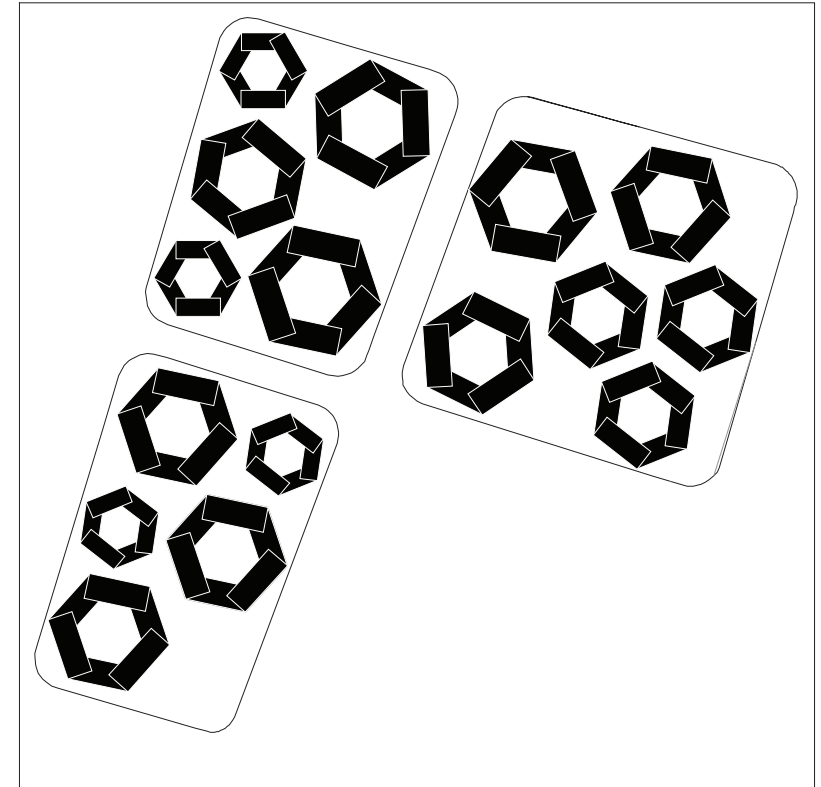
A new residential typology which brakes the vertical skyline of Singapore making a more expansive and interconnected approach to living through communal spaces which are integrated into its lush surrounding greenbelt. The volumes are stacked in a hexagonal arrangement to form eight large open and permeable courtyards, allowing light and air to flow through the architecture and surrounding landscape.

The stacked-up volumes are taken into consideration due to the presence of a similar concept in our plots, one way of seeing wheater they work or not.

3.5.5.The interlace complex, OMA
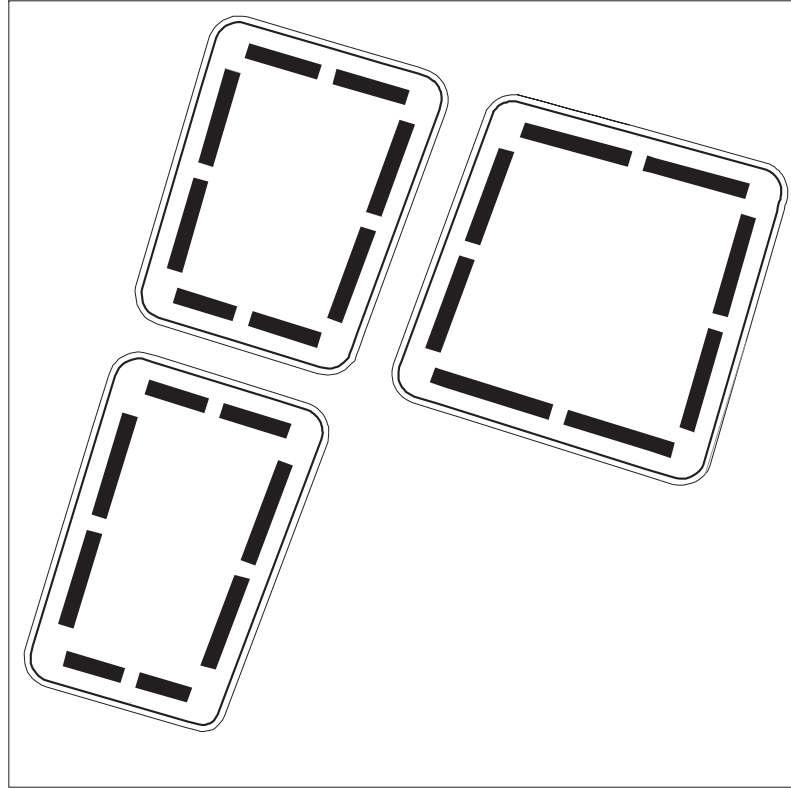
Shanghai

This typology is described as an enclave of residences, a pocket of cloned houses, manicured lawns and pruned shrubbery. Outside of Shanghai, The sprawling suburban communities is partitioned into carefully policed quarters — Lakeside Villa, Modern Villa, Jade Forest Garden - each with its own set of uniform security guards, club houses, shuttle buses and fabricated watering holes.

The idea of demarcating boundaries around prestigious living quarters is nothing new; but in their contemporary form, gated communities are a relatively recent global trend, and over the past two decades, the upper crusts in regions like North and South America, Africa and the Middle East have increasingly chosen to enclose themselves in security housing compounds.

3.5.6 Gated communities

The rise of urban exclusion in Shanghai
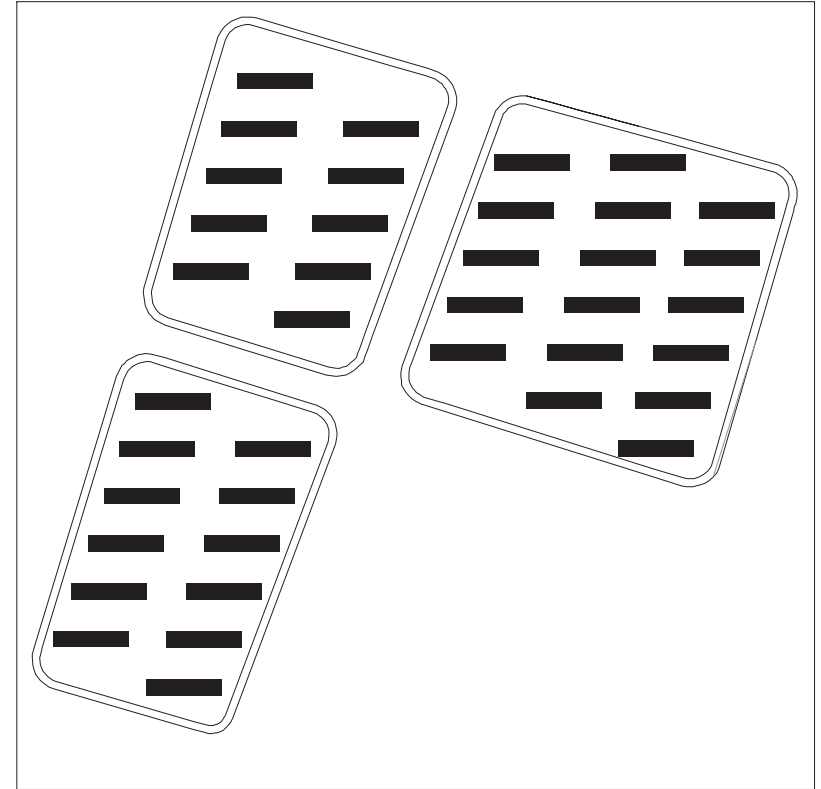
Shanghai

The massiveness of really unproportioned buildings compared to human scale should be significant to be included as one of the most recurrent typologies of housing in the city of Shanghai. It becomes normal to find residential housing in apartment buildings that are over 35 floors tall, surrounded by gates to give better conditions of inhabitability since they will find services that only people living at the internal part will be able to use.   It does not exist a proportion with the human being as they feel as giants walls in the street panorama, with a homogeneus repetition of elements followed one by one another time yet another.

Massive vertical housing - a repetition

3.5.7 Ctrl C + Ctrl V
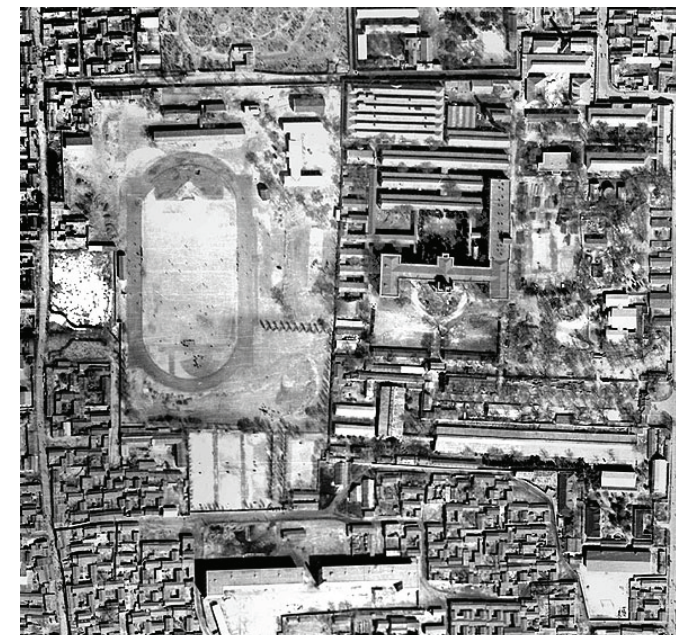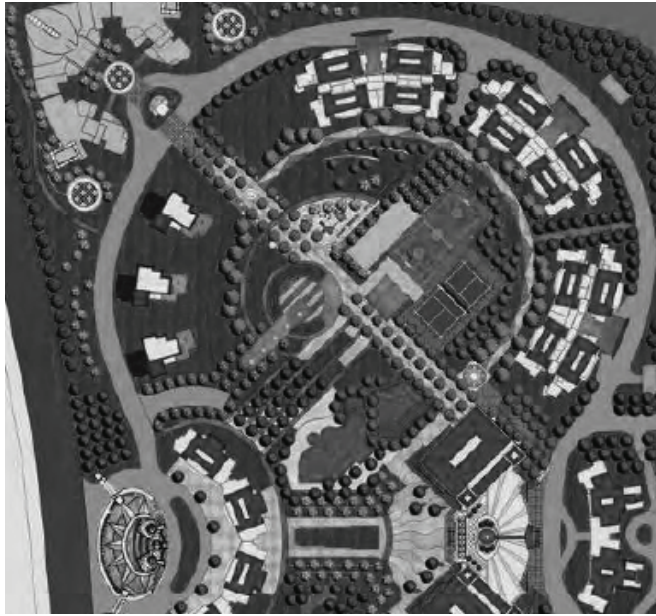
3.6. Developing the Collage
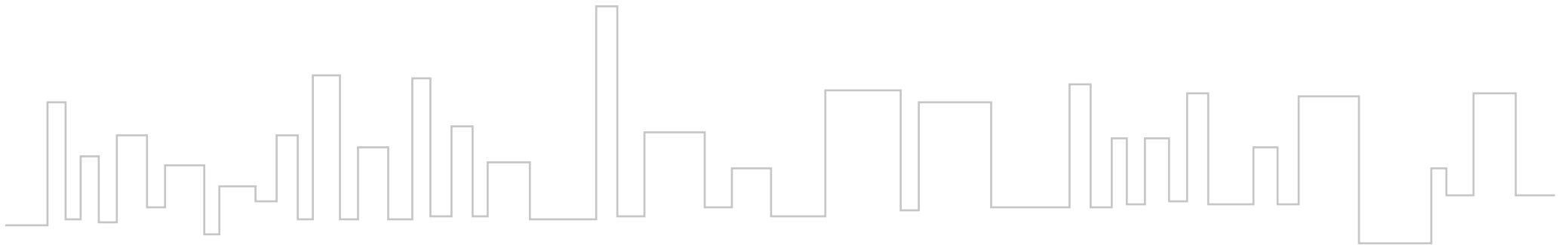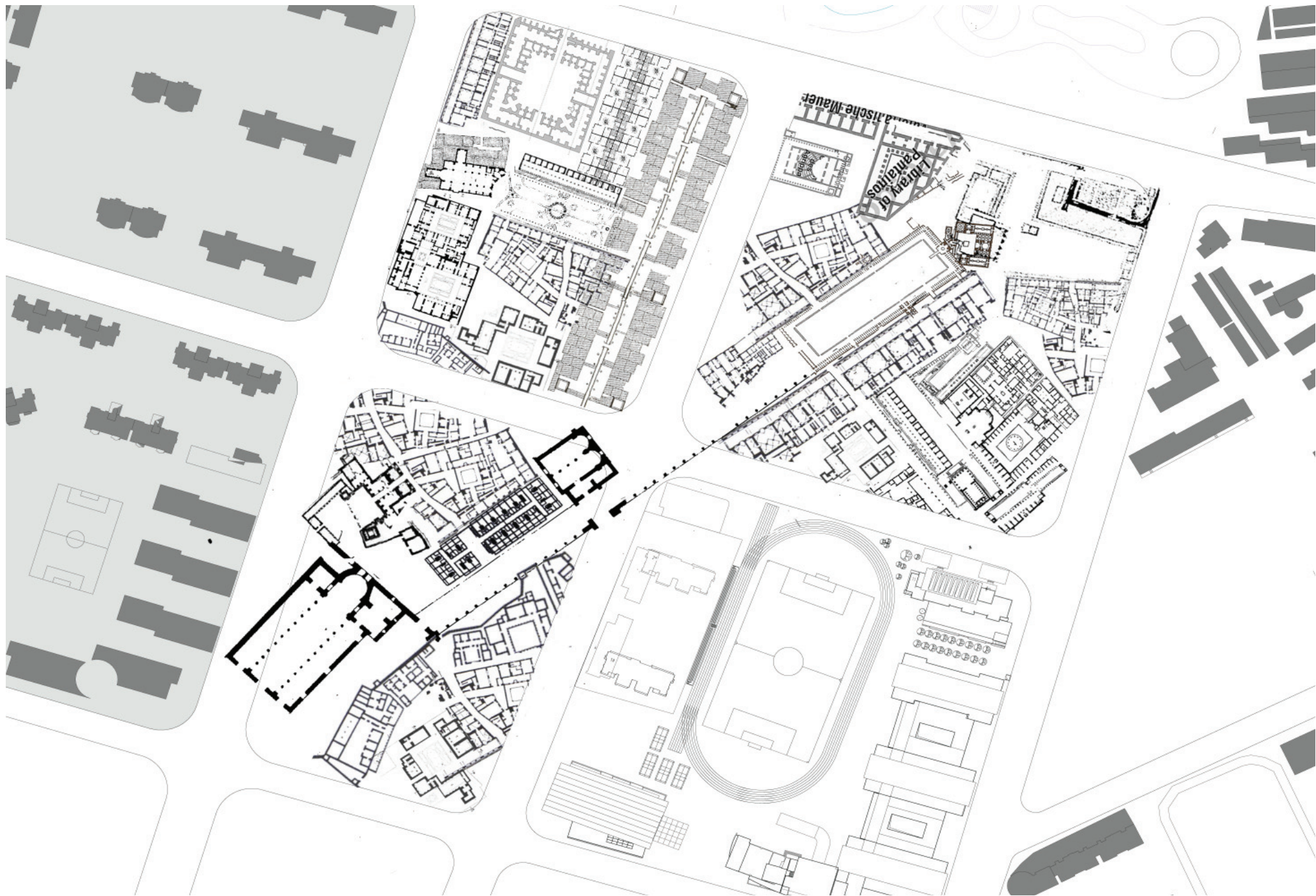
Library of
Pantainos

Historische Mauer
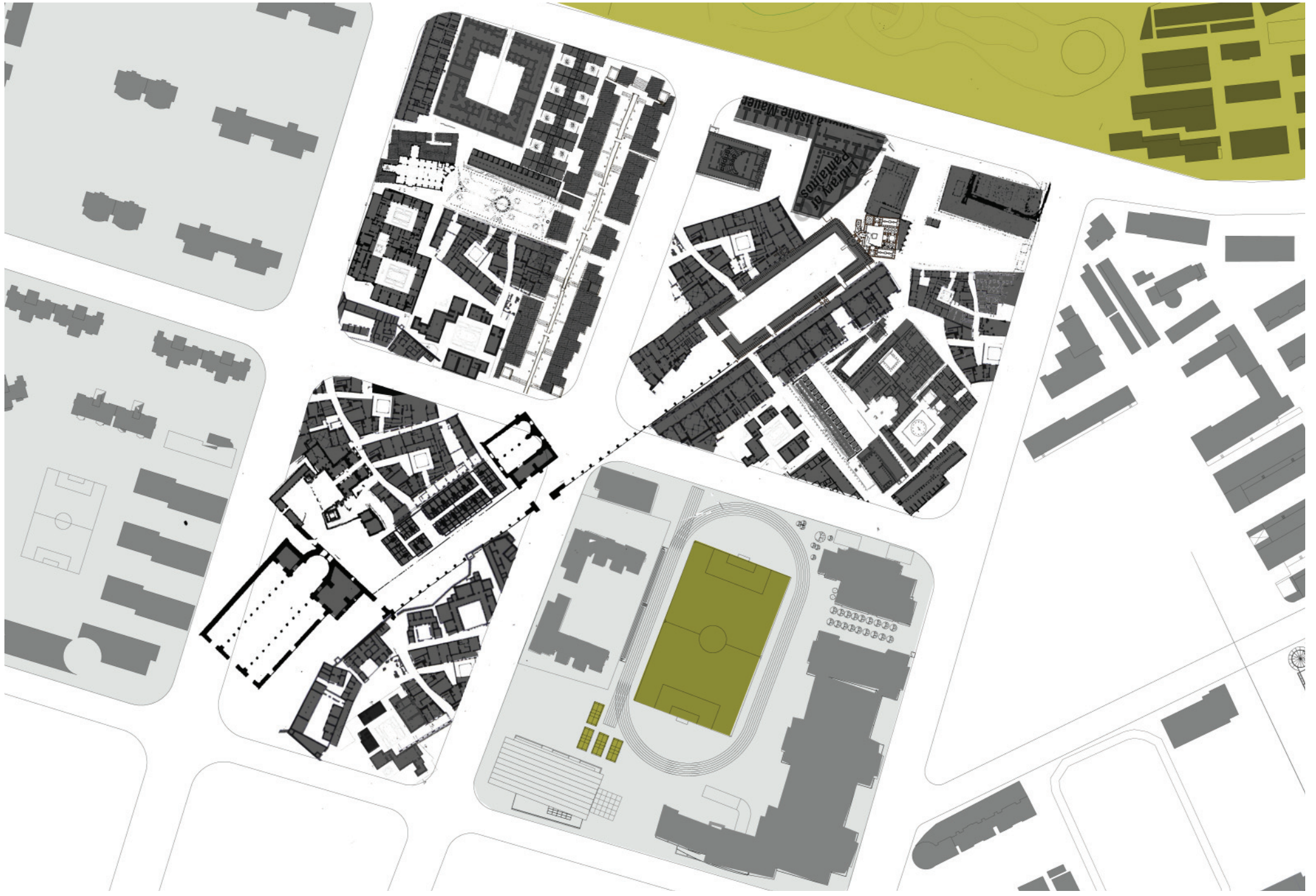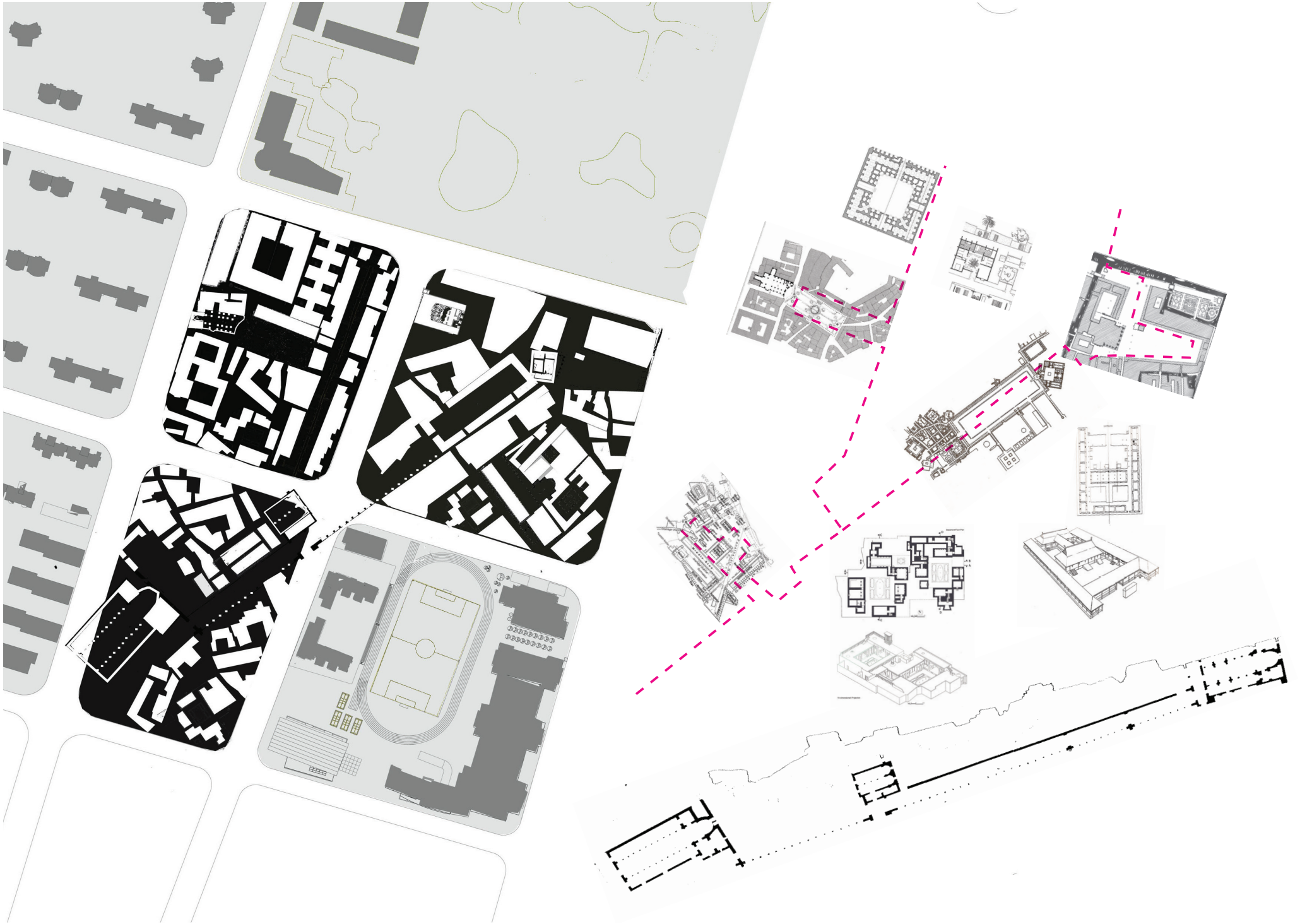
3.7. And its Noli

Purpose: To design the VOID
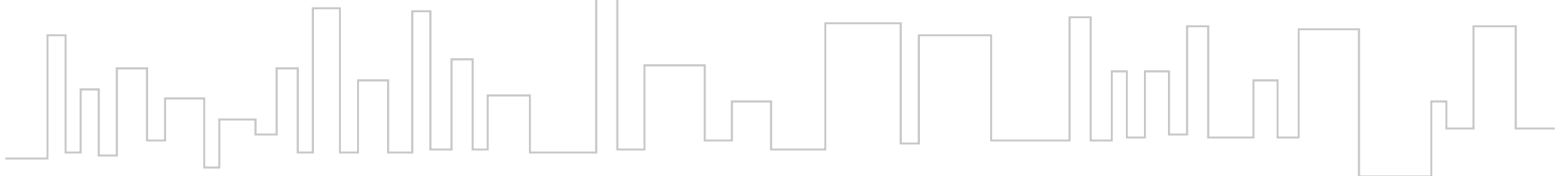
In the architectural history of world great cities, main public squares have been referred to as important elements of urban design. These often magnificent squares have generally been built with a view to the over all design of the surrounding buildings and monuments. They also serve as the most open and accessible part of the city and are utilized according to the cultural needs and traditional values of the nation. Great Iranian cities have also been marked by the presence of this distinct urban feature. It was particularly during the Safavid period in the 16th and 17th centuries that constructing great public squares became an important part of royal projects for urban development. Indeed, Safavid architectural legacy can be deemed as the most lasting and historically significant achievements of the period.

In the capital, as well as other major cities, the main town square was often part of the royal quarters and an integral element of the urban planning and development. These main squares functioned as the staging ground for many of the royal ceremonies and feasts, sports competitions, including horse racing, polo matches, and arching. In time, religious rites, fireworks, and food fairs were held in these squares. Furthermore, these expanded squared became the staging grounds for military parades and maneuvers that had traditionally been conducted in the outskirts of the city.
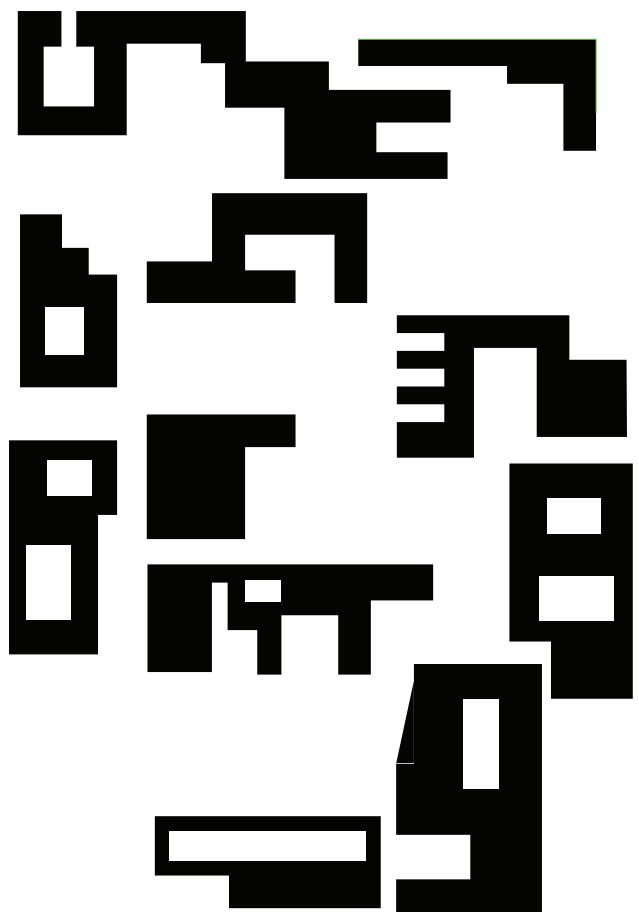
Naqsh-e Jahan square in Isfahan is a unique architectural masterpiece and has been considered as such by European travelers. These travelers have also referred extensively to other such historic sites in other major Iranian cities of this period, including Meydan-e Shah and Meydan-e Asb in Qazvin.

3.8.Definition of our public space
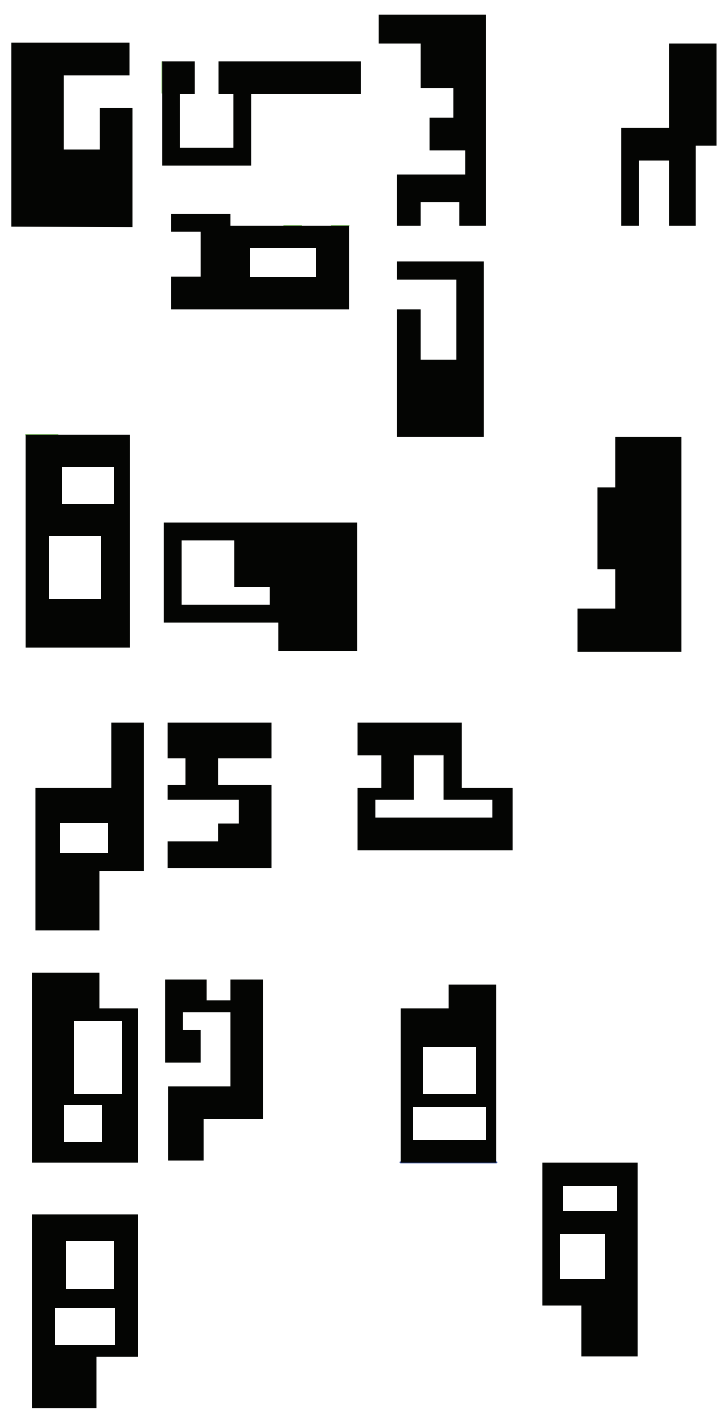
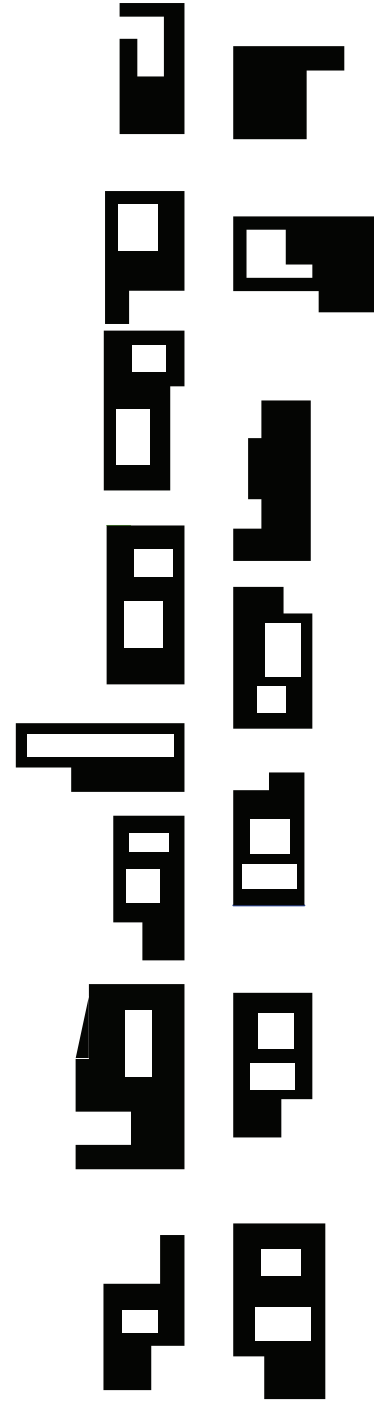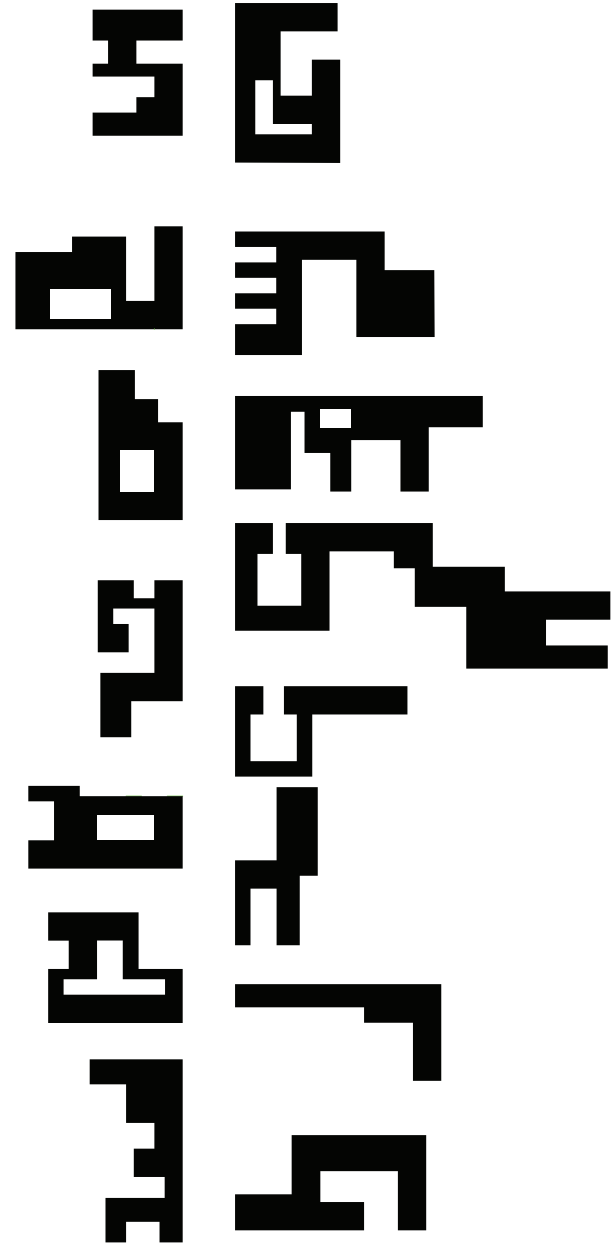# 3.9. Get ABSTRACTION of VOIDS
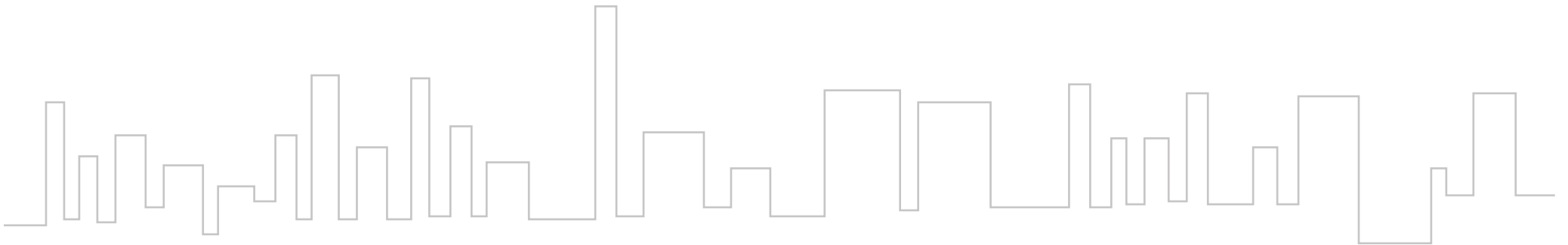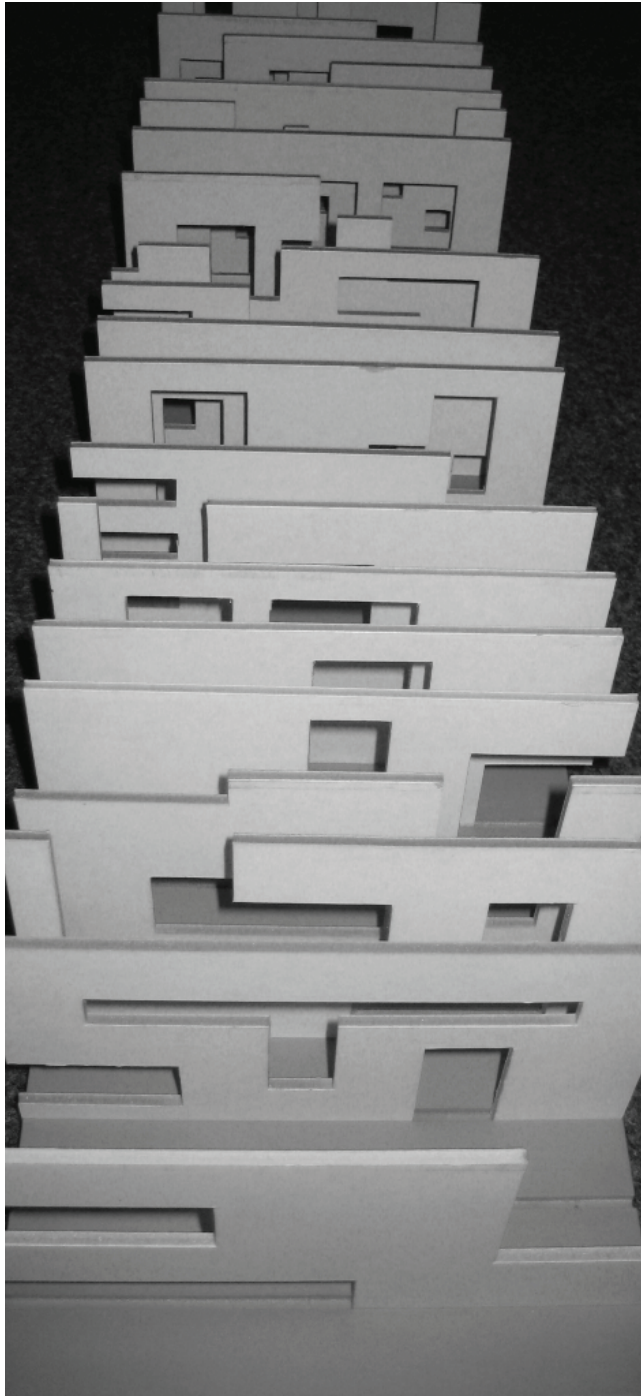
Plot A

Plot B

Plot C

They allow porosity

They allow DENSITY Straight lines, doesn't allow limits

Getting the **ABSTRACTION OF VOIDS** (meaning with that the piazzas and their conformation) gave us an exploratory phase of basic forms that helped us as a **TOOL** to give different conformation of spaces as stated before on the collage of different typologies of open space.

The idea of these pieces comes as the sucession of spaces, voids, solids, empty, that can be recreated in different layers such as the vertical and horizontal way.

WHY THE SHAPES?

That has been so far the most common question for us, where do the shapes come from? well, they do come from Imagination and a hint of idea of the spaces chosen by us and already explained on beforehand. They are the abstraction of the voids, their limits, their hyerarchies, that putting them together gives as a result a collage of pieces that were an interpretation made by us.

strategy

Water links for livability

Lines of composition = continuity of urban fabric

Collage of city typologies

The water is highly present in the city of Shanghai, from the intersection of the Yangtze to the the crossing of the huangpu river that eventually could give enormous advantages in urban landscape matters, from its use to the combination with the green in order to mitigate the massiveness of concrete all spread around the city.

In 1985 the conferences began to take place about the importance of making the cities more "**livable**". The architectural conferences focused attention on the importance of making cities livable for children first, the need for public transit, bicycle lanes, and ***traffic calmed streets, for human scale architecture, mixed use urban fabric*** and creating public places where people could gather for farmers markets, festivals, outdoor cafes and community social life.

The mission of building more livable cities lie behind the following concepts:

Rebuild community by replacing sprawl with compact, human scale urban fabric.

Recognize and combat the negative impact of our built environment on physical, social and mental health.

Adopt planning and urban design decisions that will make our cities more livable for children and the elderly.

Emphasize ethical land use patterns to reduce extreme economic disparities.

Strengthen compact urban neighborhoods to maintain diversity of ethnic and cultural identity.

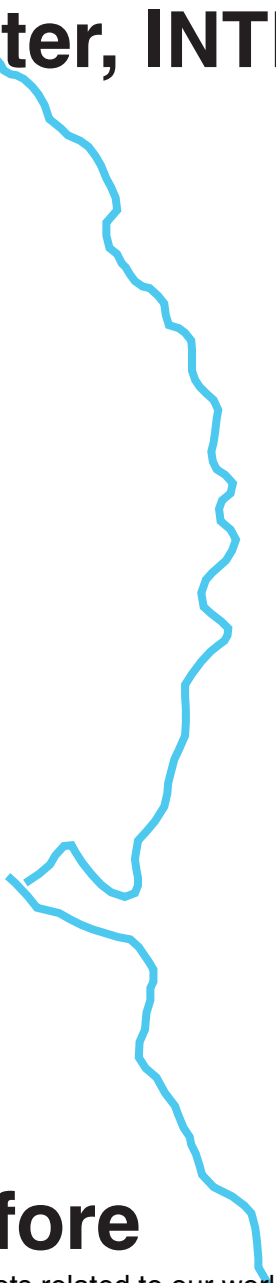Build multifunctional town squares that can regenerate civic engagement and democratic participation.

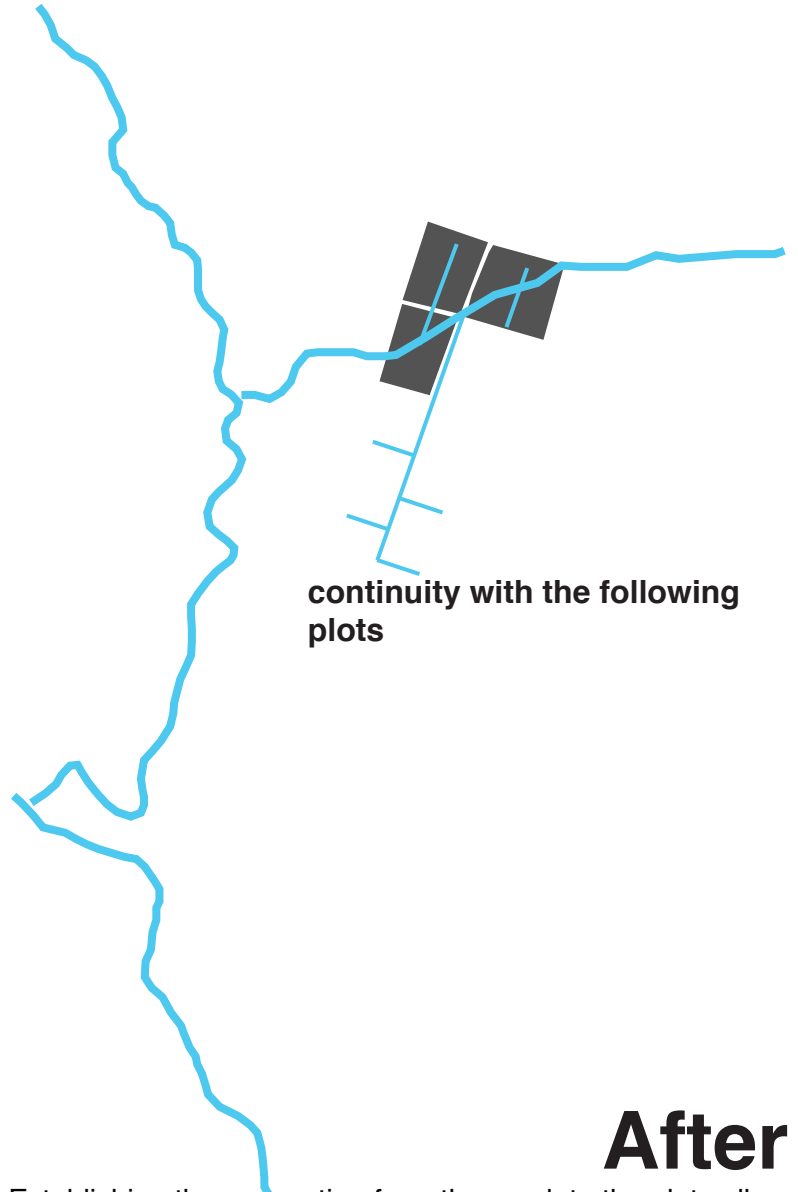# 4.1.Urban Strategy
Linking water
scale 1:10.000

Water, INTEGRATOR ELEMENT OF THE COMPOSITION

continuity with the following plots

Before

The 3 plots related to our work are completely detached fom any concrete urban structure,

After

Establishing the connection from the creek to the plots allows its adaptation of something from the city that later on gives the opportunity to link the plot to the following ones and establish a net of small channels all around the area/district

4.2. To follow the urban fabrics

on the development of the groundfloor
based on surroundings

We have adopted the process to follow the urban fabrics that are projected from the neighboring plots as a point of reference and linking to the ground floor with what is already existing in the area.

This has been done in order to give the possibility to have an established order of ground composition that is eventually following something from the surroundings, making it easier to link it with the adjacent plots, and to think about the opening and enclosrues.

One of the biggest disadvantages this can have is the constant change the land suffers in the city of Shanghai, each other 6 months entire areas can have a new full planning, hence some of this lines of composition will be lost

# 4.3. Stacked-up volumes in a sucession of courtyards

Why? Because of its linearity of composition and especially the tradition among the city immage

Why Courtyards? Because of its composition could be reinterpretated and they have good elements to take for intimacy, privacy and landscape
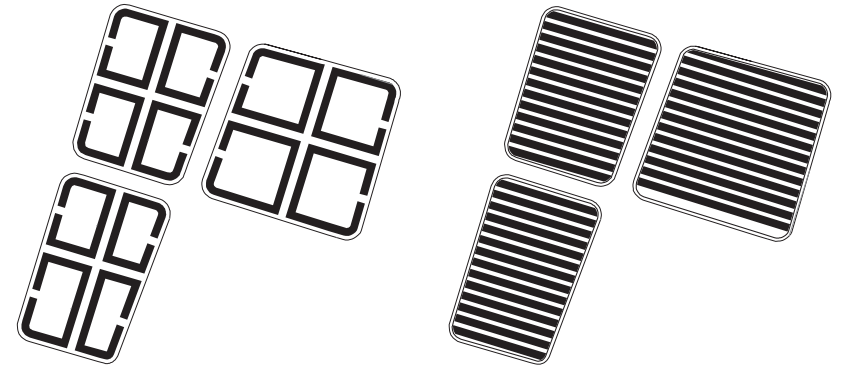

Stacked up volumes
Summatory for two elements

Lilongs and courtyards are the most frequent typlogies present in the city and as well they are the most traditional. In order to give some innovation to the plots our aim is not to follow the same patterns but give them a re-interpretation throught the study of other typologies. The intimacy, privacy and the potential landscape that the courtyard give are necessary qualities in the thought of the spaces in the city, they frame activities but also we keep in mind that the void is as well an space that has to be configurated and its well done through this typology. on the other hand, the linearity of the volumes is the one that gives the conformation of the courtyards, through the alligments of stacked up volumes that as well is a new typology studied previously, but handled in a very different way as proposed by OMA.
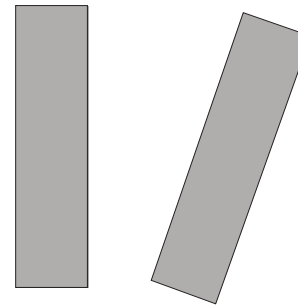
Entrance/
Exit

Courtyard | Courtyard

Courtyard | Courtyard

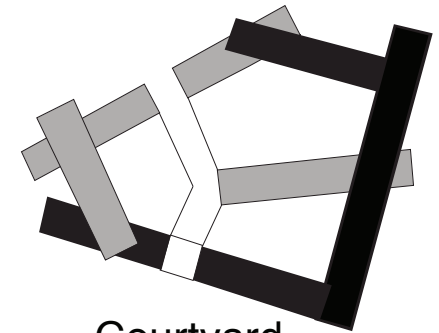Courtyard | Courtyard

Entrance/
Exit
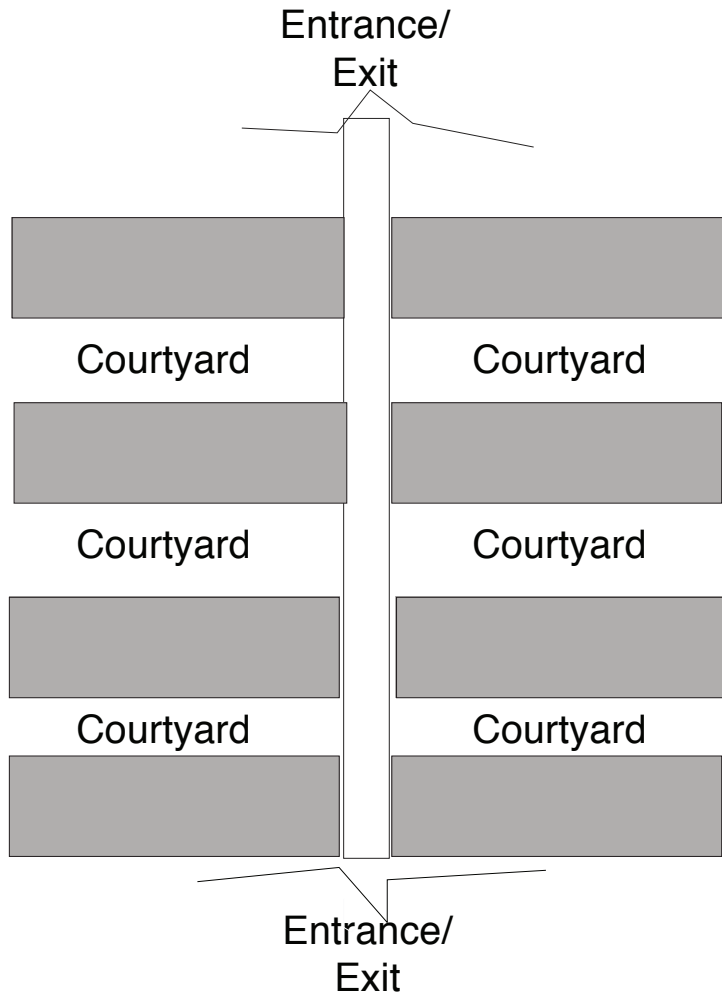
GENERIC ELEMENTS

Linear
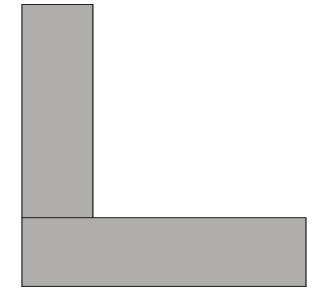
Enclosed

Corridor

Courtyard
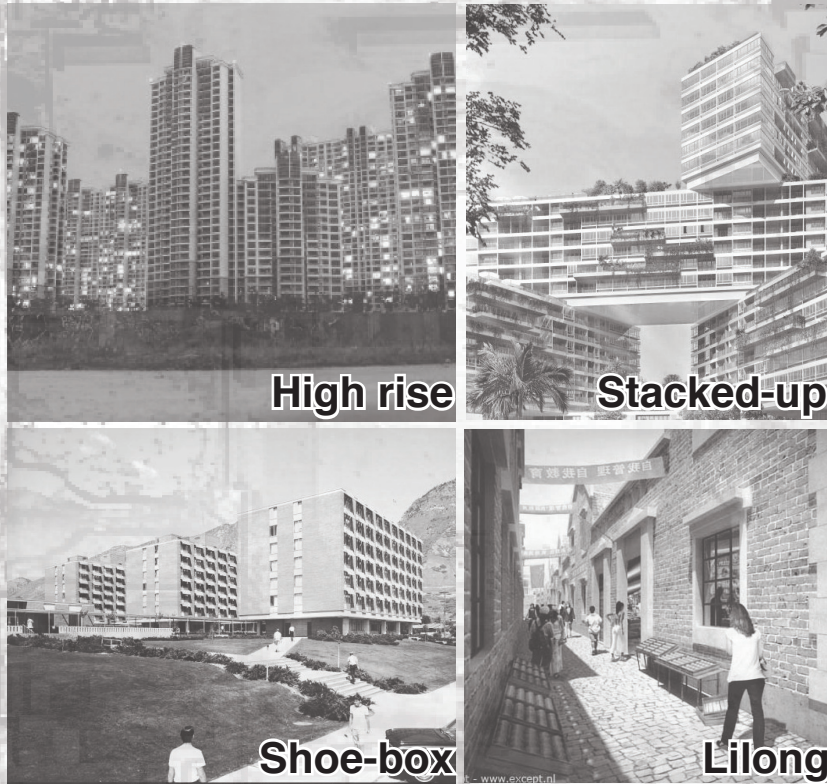
Linearity of the volumes

Linear volumes resembling the linearity of chinese lilong housing gives the possibility to organize spaces that aren't exactly linear and at the same time enclosed.

There are clear linear elements in the composition, having different angularities and be able to desing the VOIDS instead of the FILLED, since the voids at are understood as filled.

4.4. Collage of city immages based on typologies of density

High rise

Stacked-up

Shoe-box

Lilong

High Rise — stacked up volumes own typology — Shoe-Box

High Rise — stacked up volumes own typology — High Rise

stacked up volumes own typology

High Rise — stacked up volumes own typology

Water, livable pathway — High Rise

Shoe-Box — stacked up volumes own typology

The reinterpretation of existing typologies in the city gives as a result the thought of new ones, and they have been picked mostly throught the observational analysis of the most recurrent ones.

Since the Stacked-up volumes, our own, is a complex typology, there are some residual spaces that we wanted to gather with new elements that could satisfy the needs of different target groups of people, having a COLLAGE of them as we call this point, but mostly based on density since research lead us in that direction

Typology, which purpose will it serve?

Housing
Hotel

High rise

Housing

Stacked-up

Low rise housing with a mix of services

Shoe-box

Commerce and services on ground floor

Lilong

t - www.except.nl

We kept in mind:

THE BLOCK - THE STREET - THE BUILDING
THE NEIGHBORHOOD - THE DISTRICT - THE CORRIDOR
THE METROPOLIS - THE CITY - THE TOWN
SOCIAL EQUITY
HOUSING AS A PLACE TO LIVE/SHARE
THE RELATIONSHIP BETWEEN INSIDE/OUTSIDE