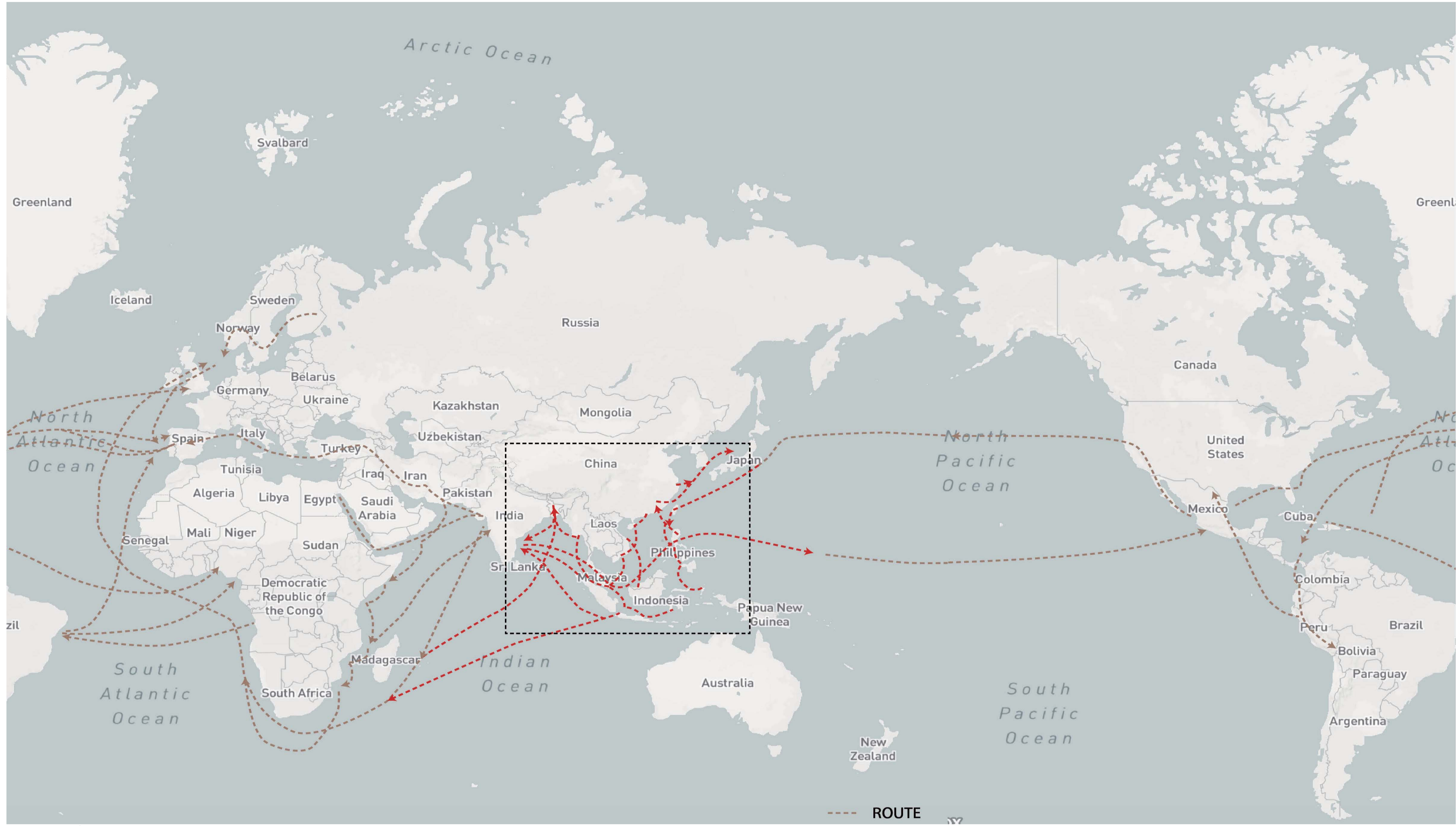


Abstract

The development and planning of a city should be closely related to the local context, such as history, geo-message, and custom. Therefore the city formation should be considered unique and characteristic. However, it can be seen that modern Chinese city is facing the homogenization problem. The model which is established by the homogenous grid and ruled by road system is widely spread over the nation, producing the repetitive block scene and architecture profile, demolishing the original system and cutting off the memory. Undoubtedly, this quick and 'efficient' development is opposite to the localization, threatens the local identity and sense of belonging. Thus an introspection is needed: Is it possible to provide a new way, or set a new model to handle the city planning with respecting the own characteristic? Our goal is setting the region JIAOMEI as a model, starting from the historical context research and finally reaching to a different answer.

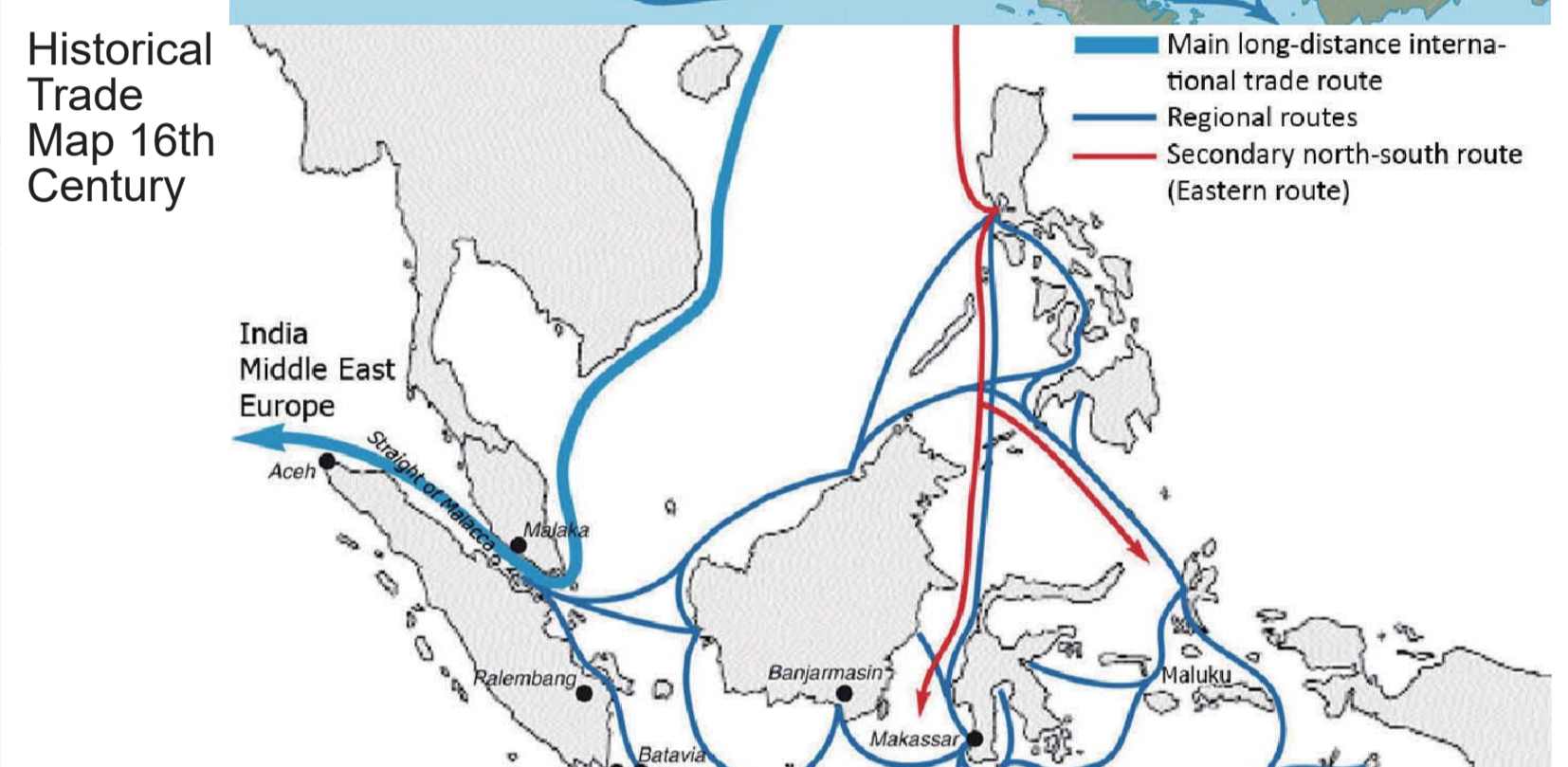
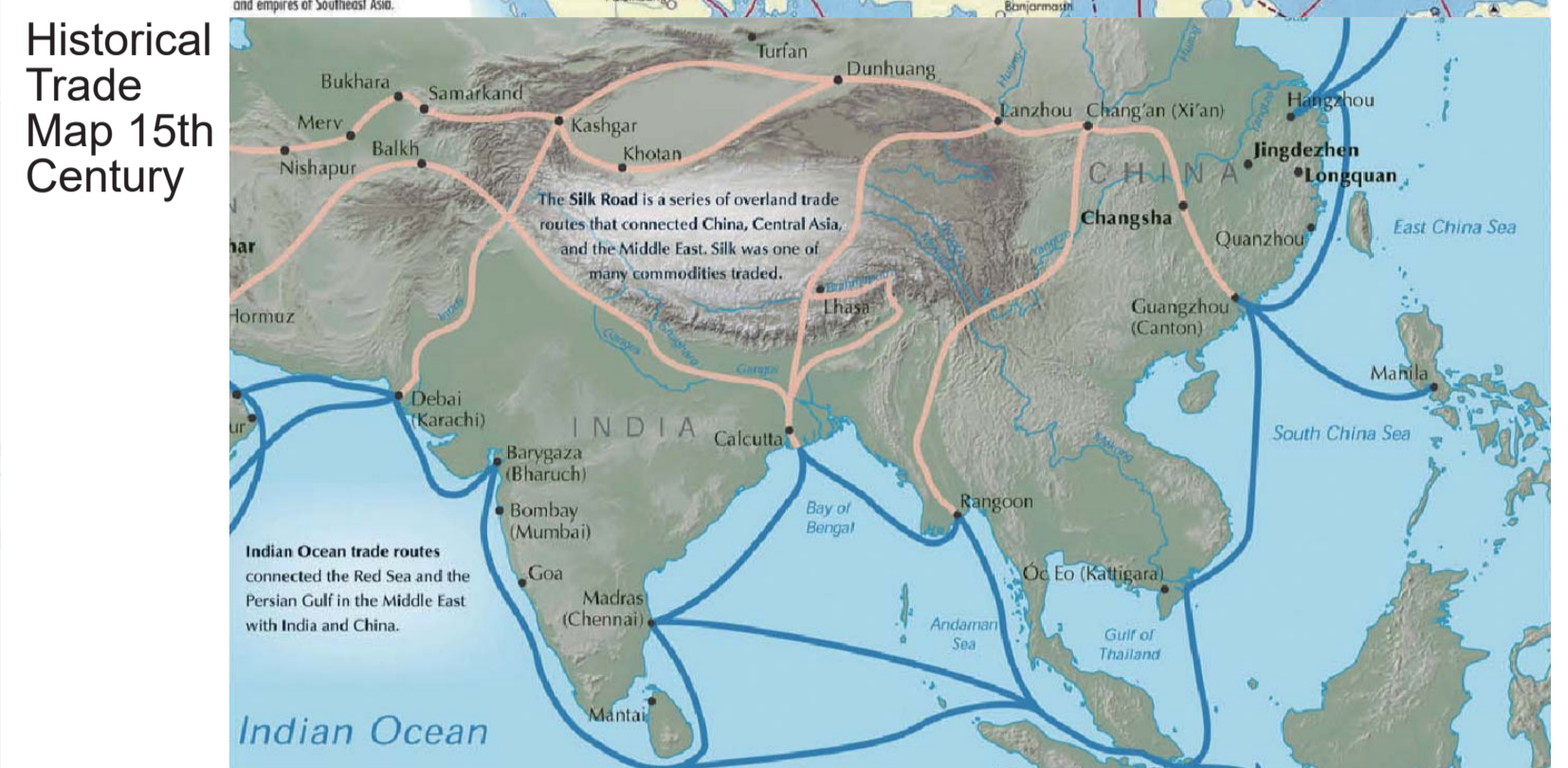
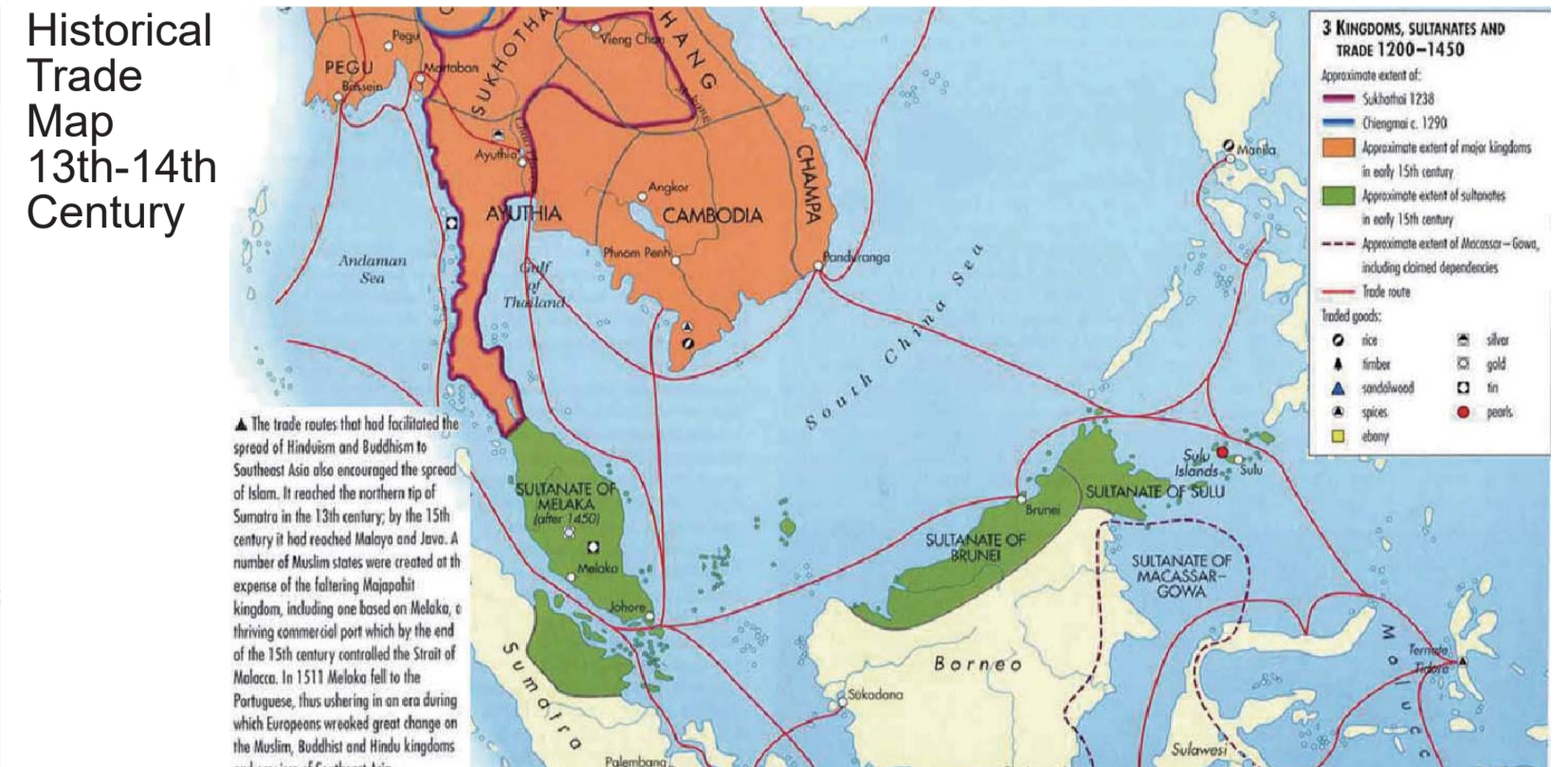


Maritime Silk Road or Maritime Silk Route refer to the maritime section of historic Silk Road that connects China to Southeast Asia, Indonesian archipelago, Indian subcontinent, Arabian peninsula, all the way to Egypt and finally Europe, that flourished between 2nd-century BCE to 15th-century CE.

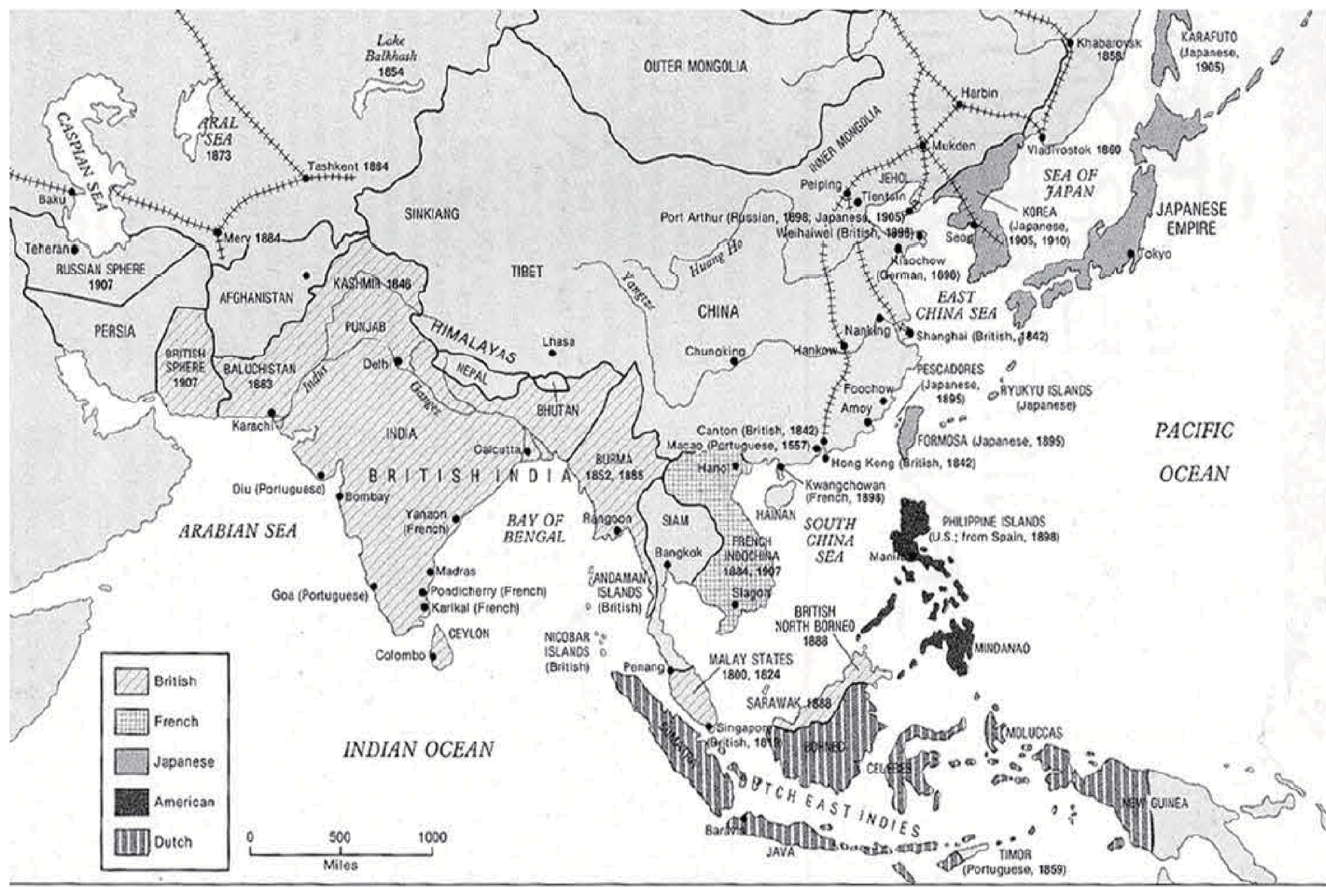
The trade route encompassed numbers of seas and ocean; including South China Sea, Strait of Malacca, Indian Ocean, Gulf of Bengal, Arabian Sea, Persian Gulf and the Red Sea. The maritime route overlaps with historic Southeast Asian maritime trade, Spice trade, Indian Ocean trade and after 8th century—the Arabian naval trade network. The network also extend eastward to East China Sea and Yellow Sea to connect China with Korean Peninsula and Japanese archipelago.

The Silk Road continued to focus on luxury items such as silk and other items whose weight to value ratio was low, In the post-classical age, however, the Silk Roads diffused important technologies such as paper-making and gunpower.

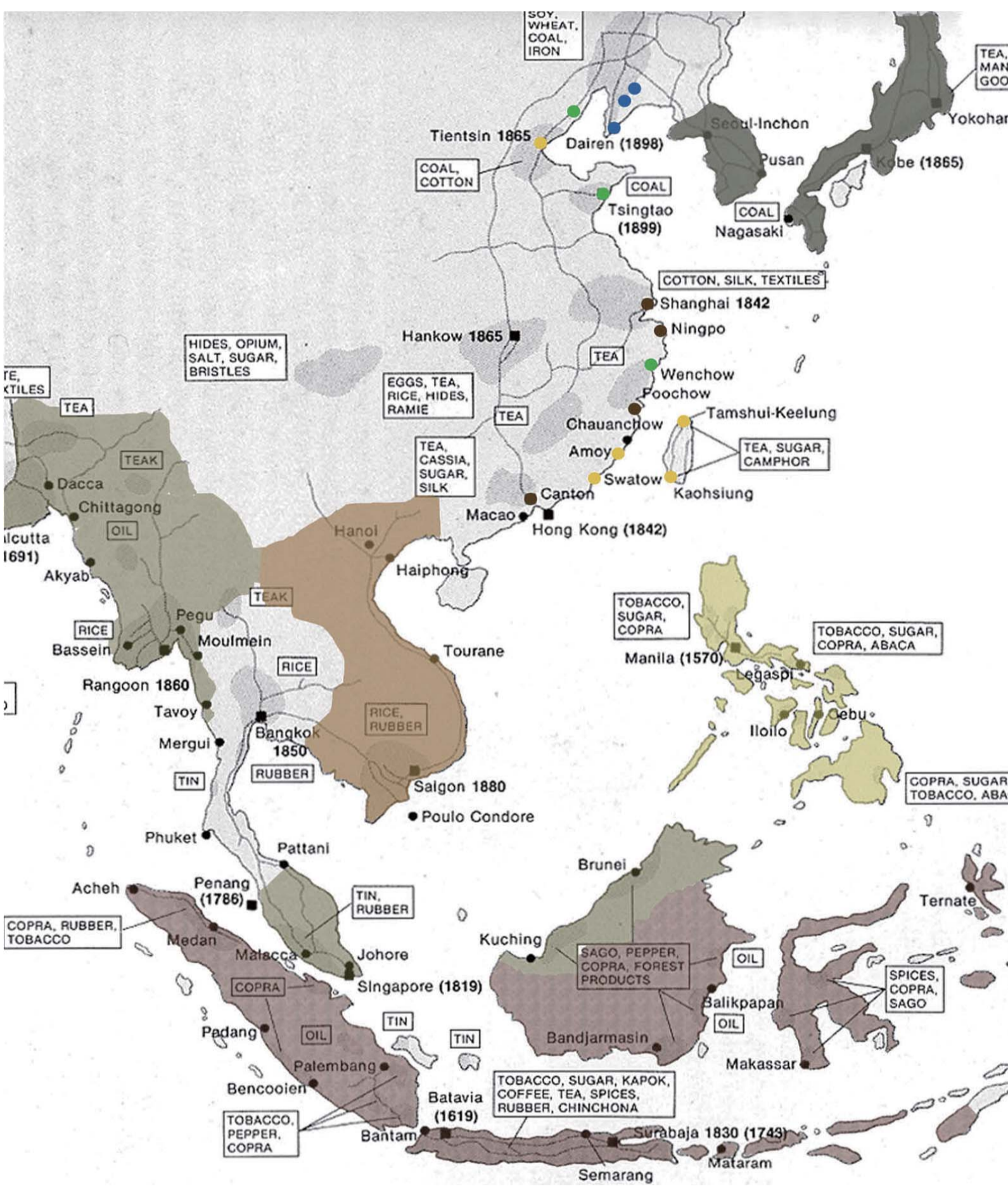
Maritime Silk Road is one of the most important international trade network, extended and join in the other 3 branch systems :Mediterranean network (600 B.C.E- 600 C.E), Trans-Saharan network (600C.E- 1450 C.E) and Indian ocean Network(600 B.C.E- 600 C.E).



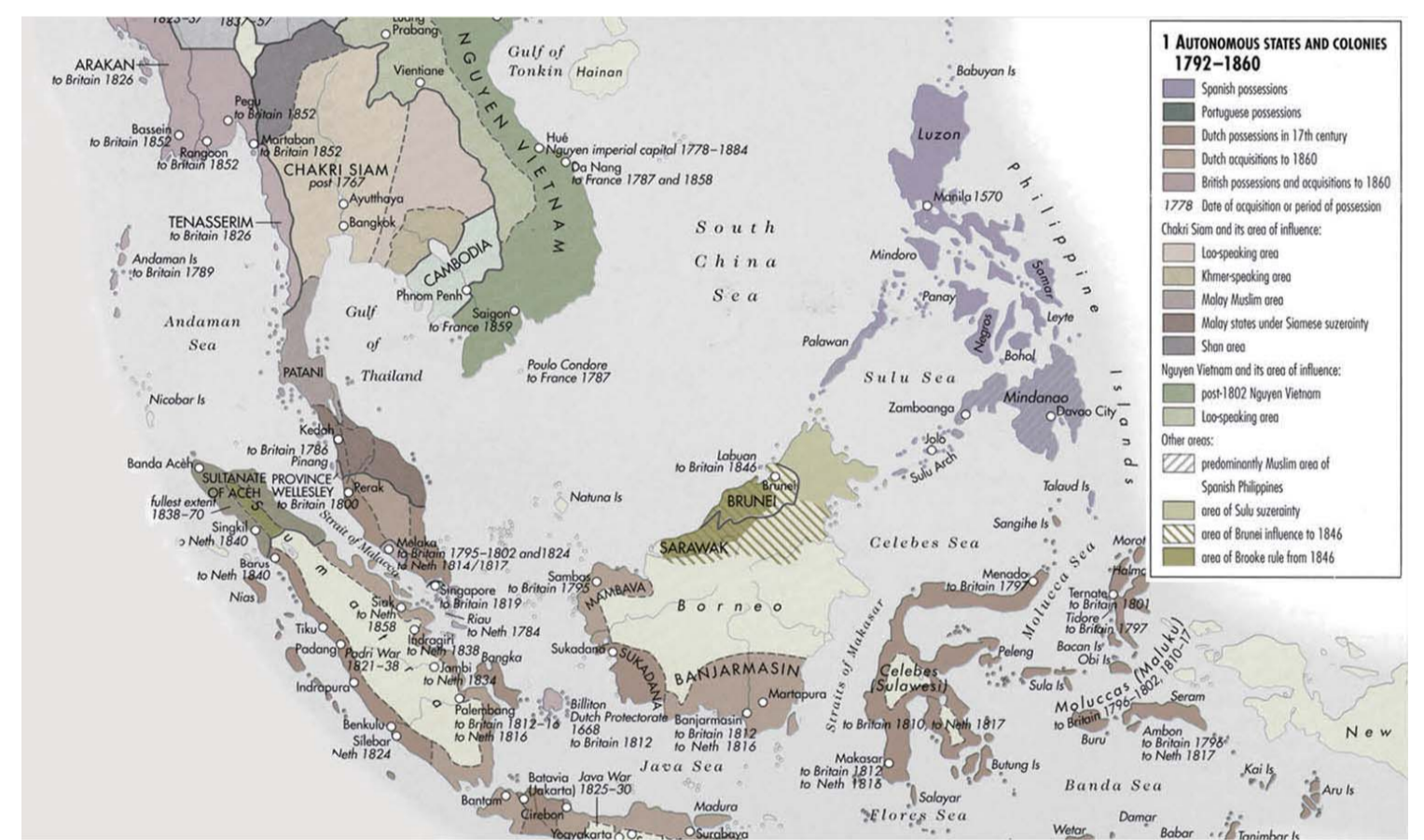
Asian Colonization Period Map



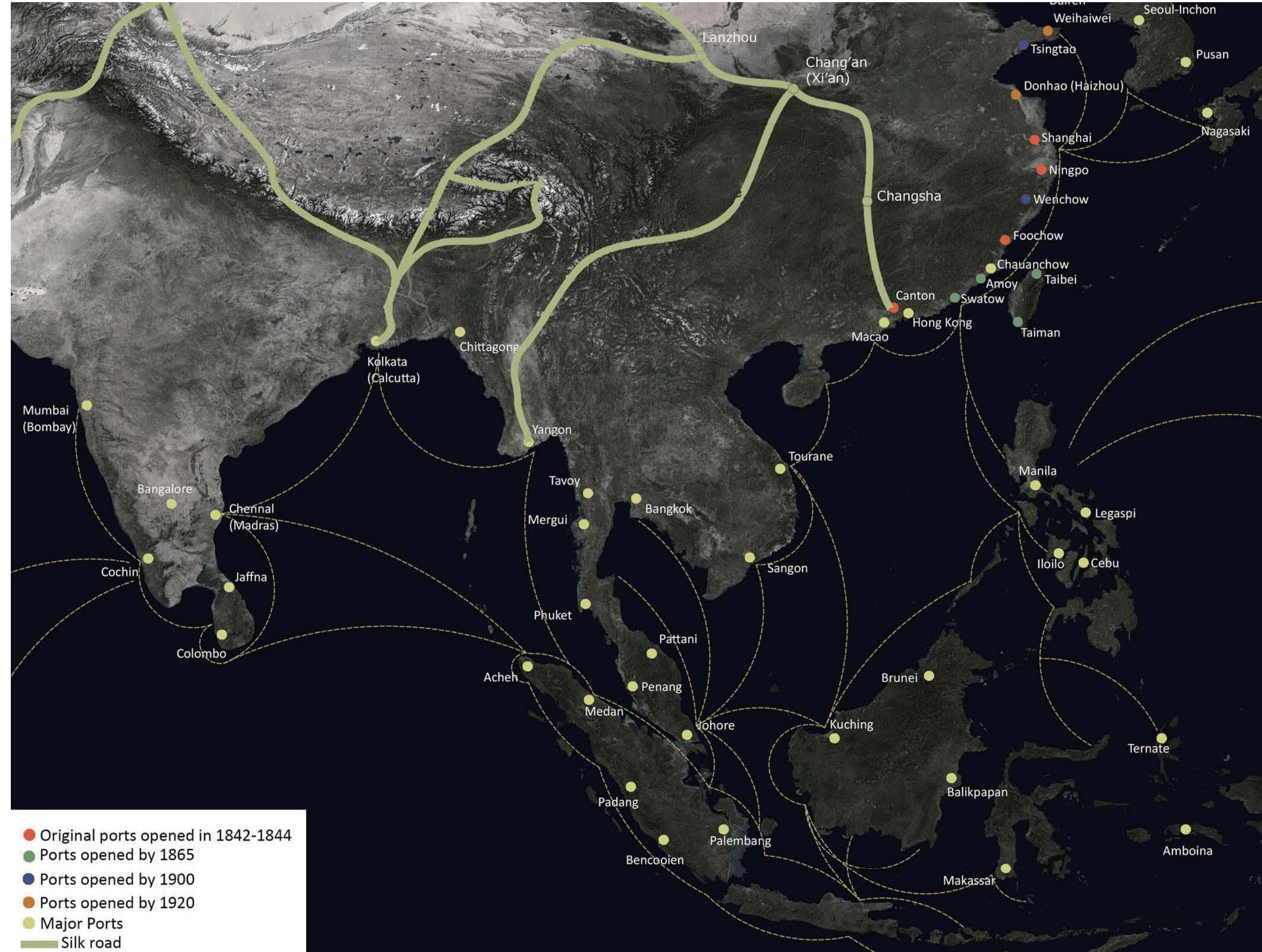
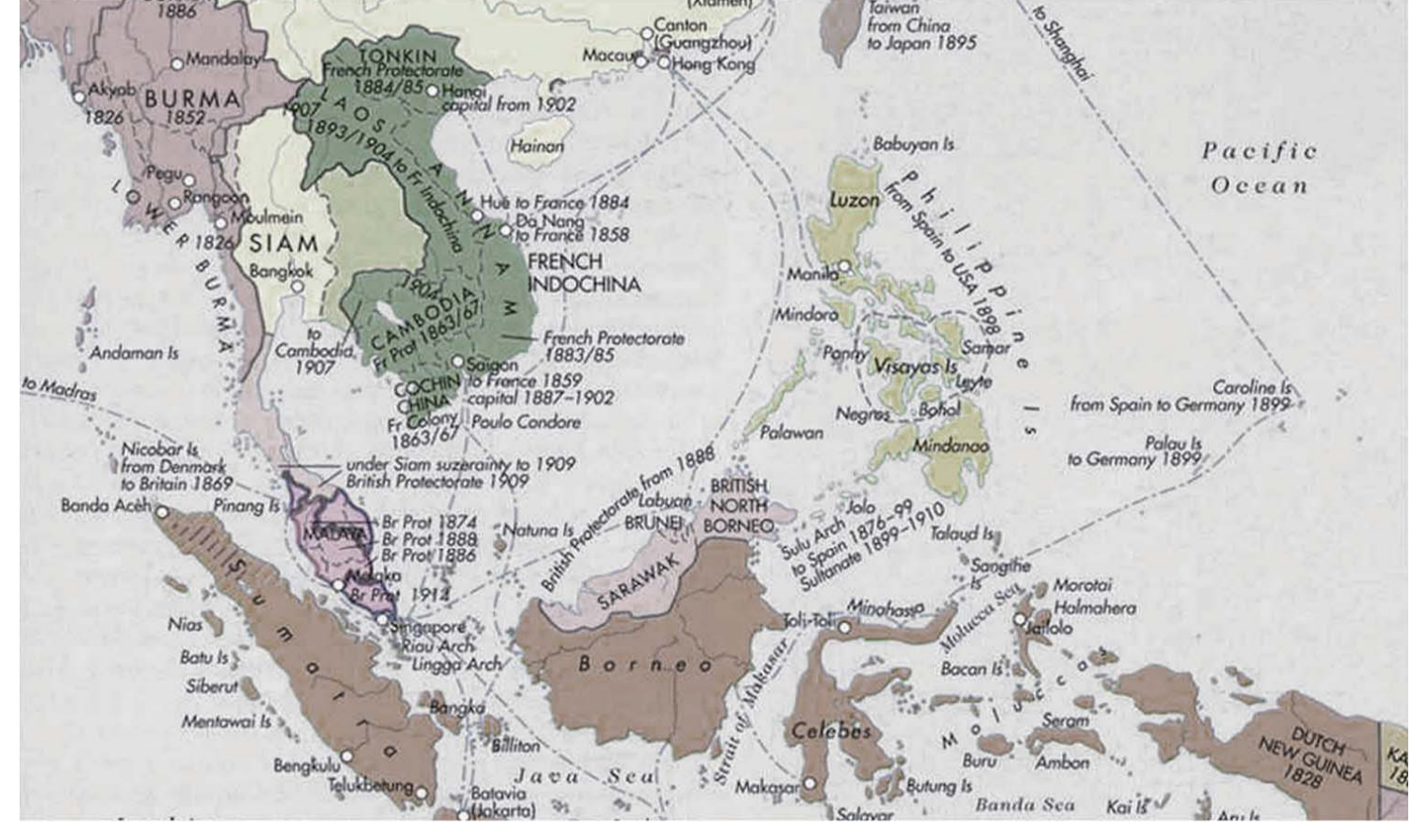
Colonization Period Trade map



States and Colonies 1792-1860



The High Colonial Age 1870-1914



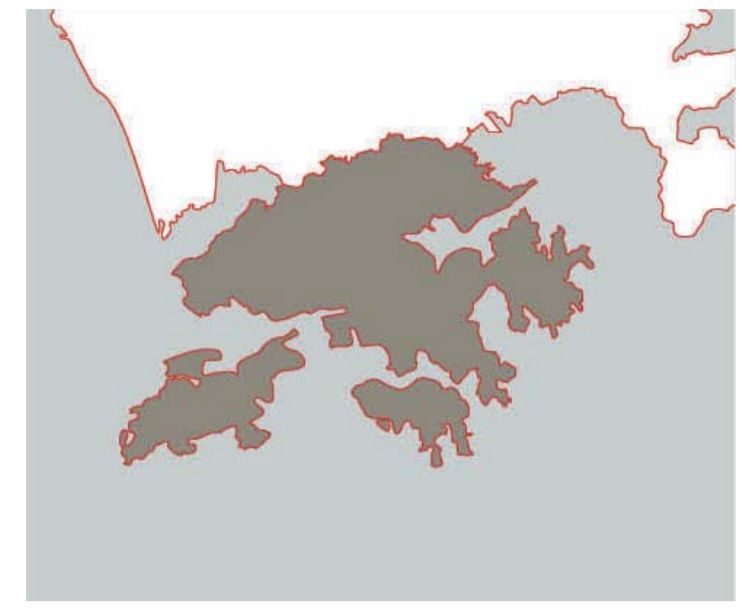
Treaty Ports Opening Timeline and Routes





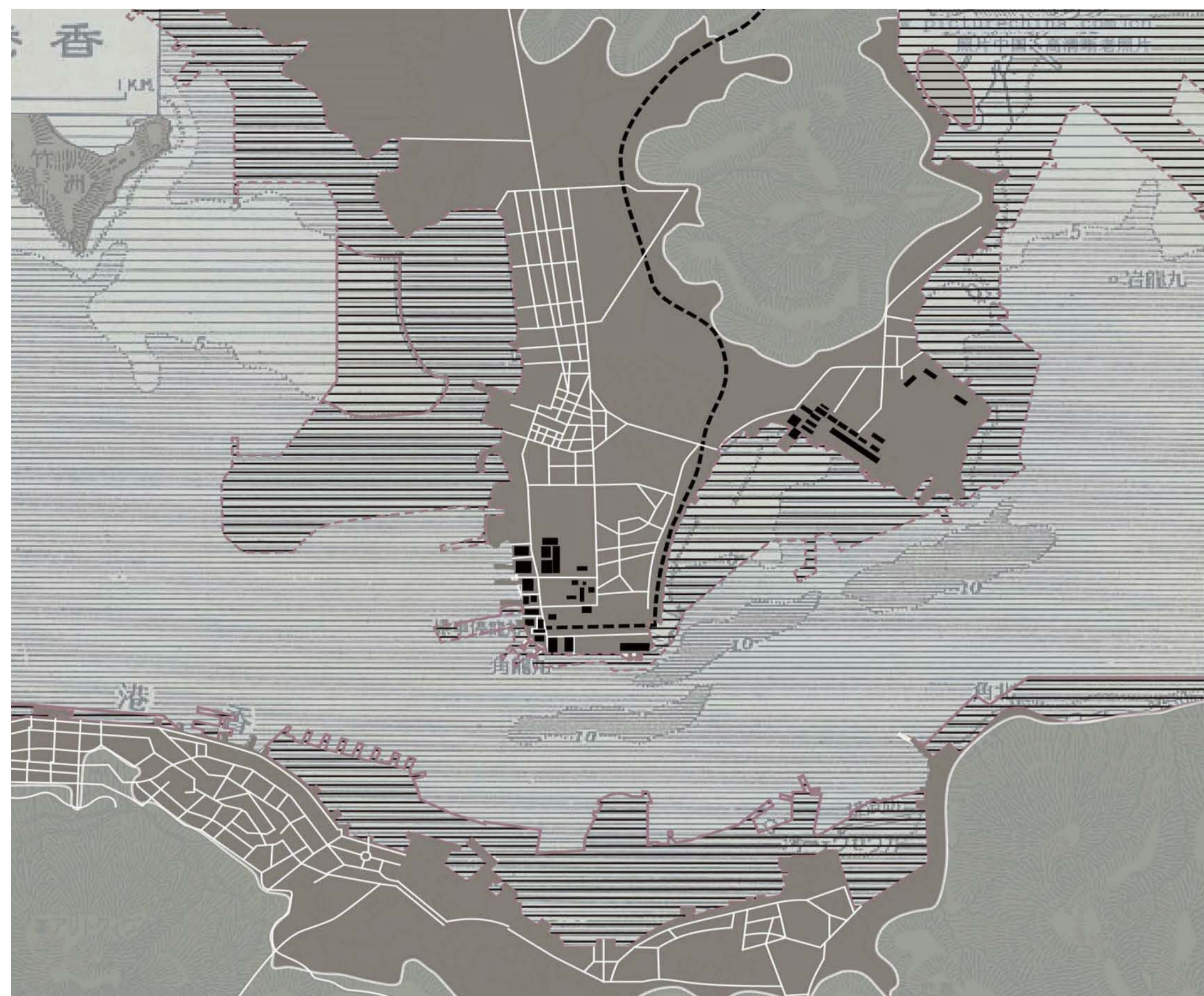
Treaty Ports and City Developments

Hong Kong 1866s-1920s

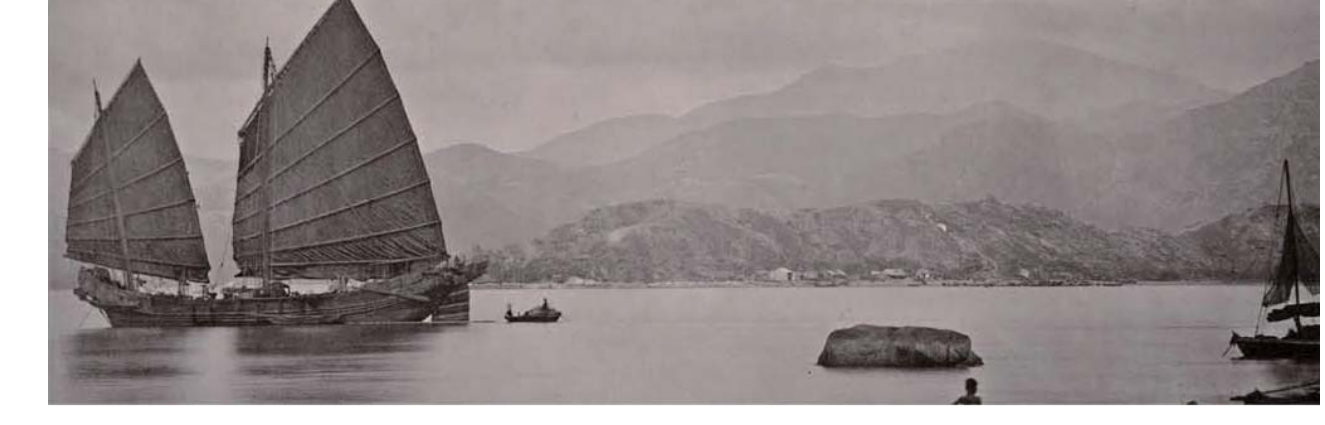


The map is aim to show the basic information of the harbour in Hong Kong in 1920s. we can see that the roads near to the coast were organized well, and the government took advantage all the coast line to use as the harbour which make Hong kong develop really fast.

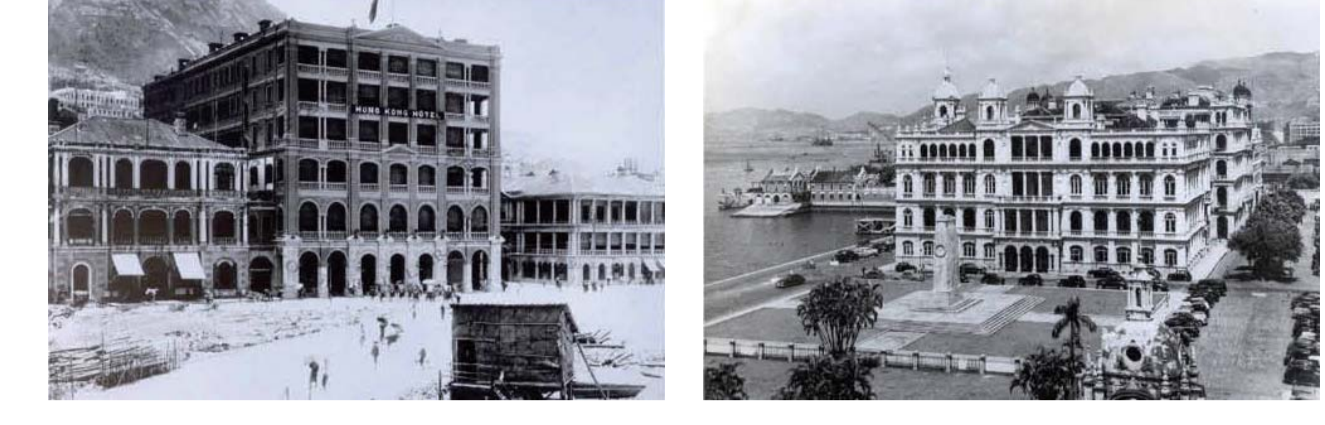
The red regions are the new developed area in Hong Kong, the lack of land in Hong Kong is a serious problem. So the government decide to "RECLAM ARECLAMARECLAMARECLAMARECLAMARECLAMARECLAMARECLAMARECLAMATIONIONION", the red things are the new coast line of Hong Kong.



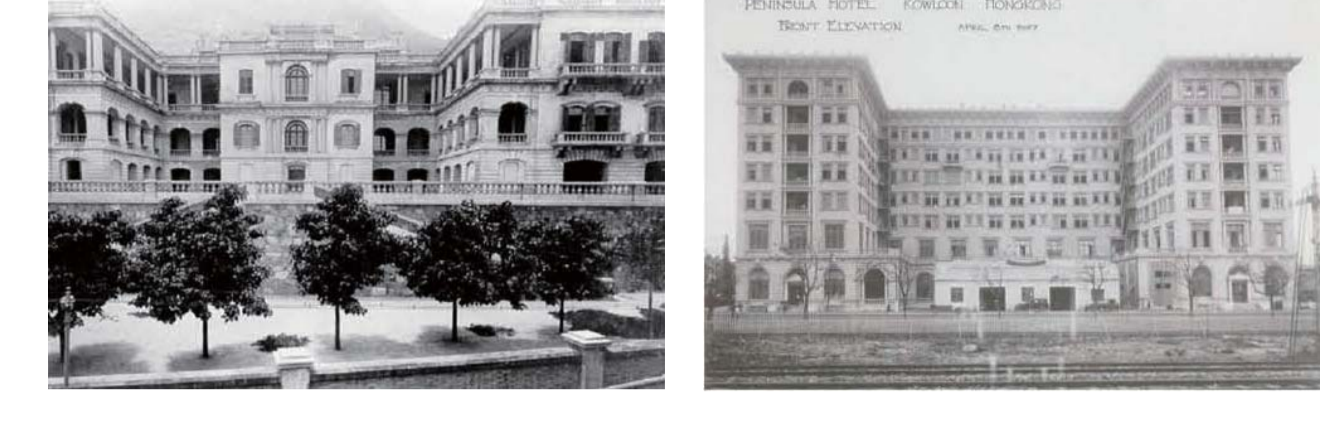
1866s



1890s



1900s



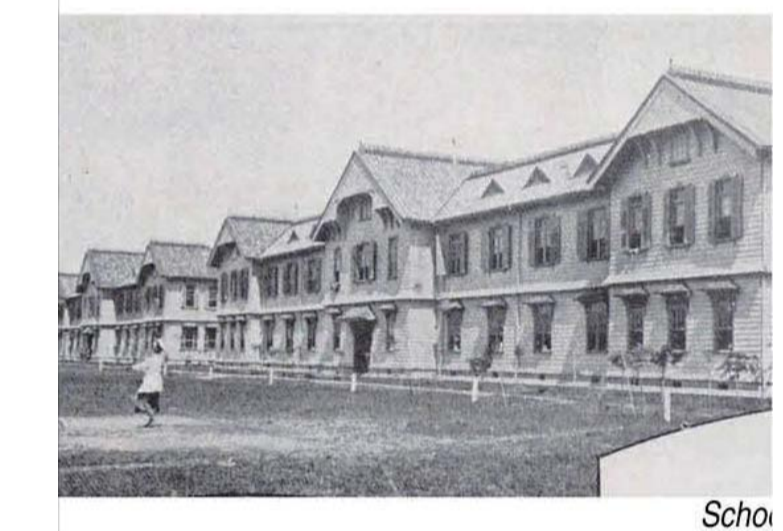
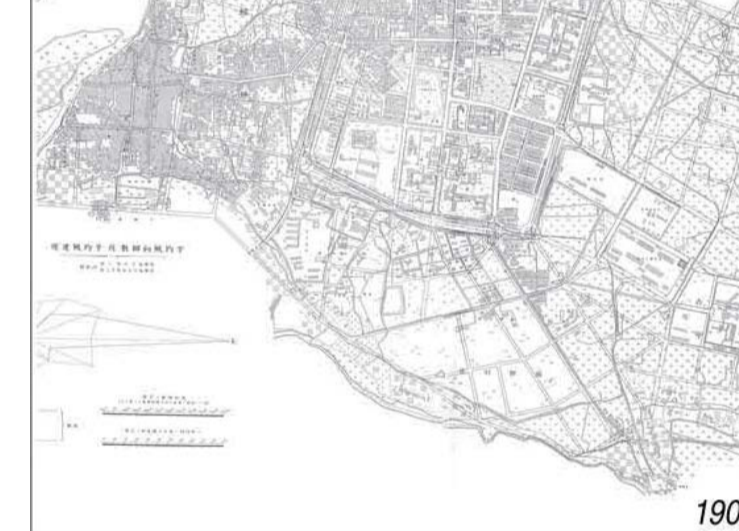
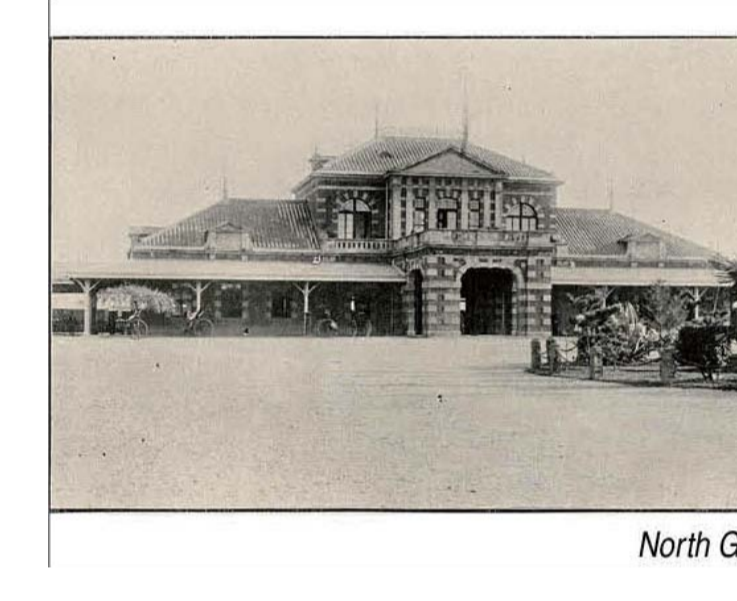
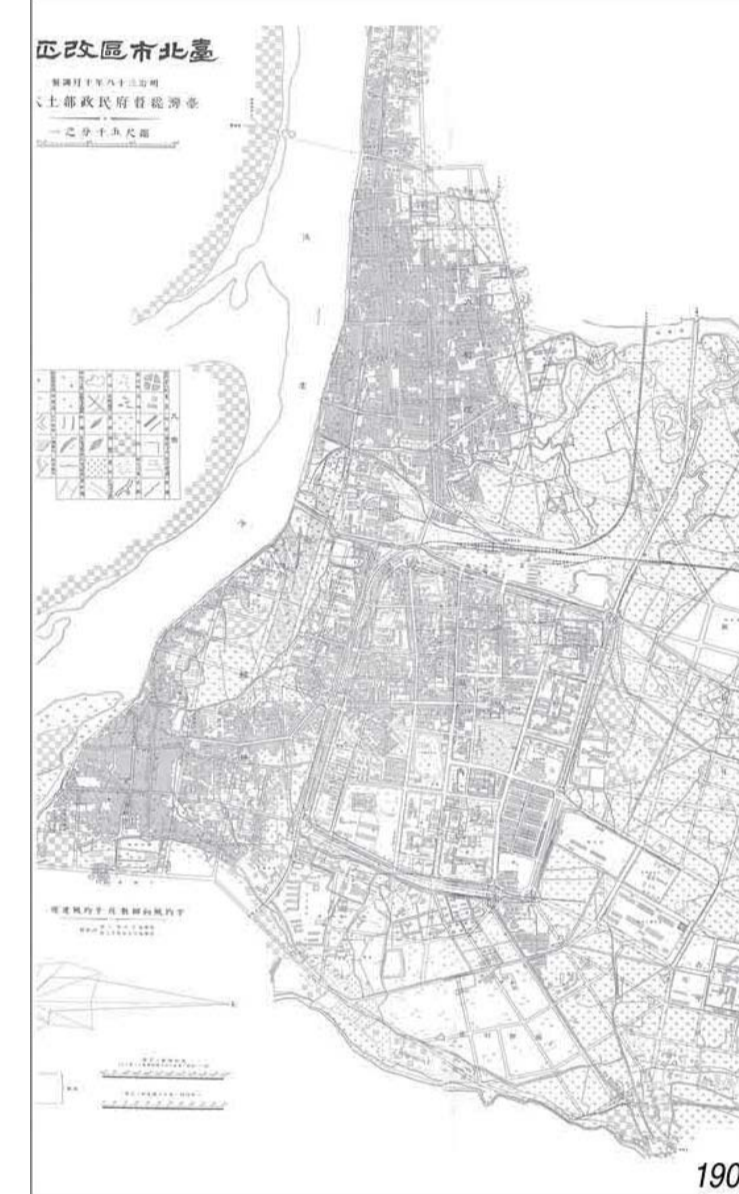
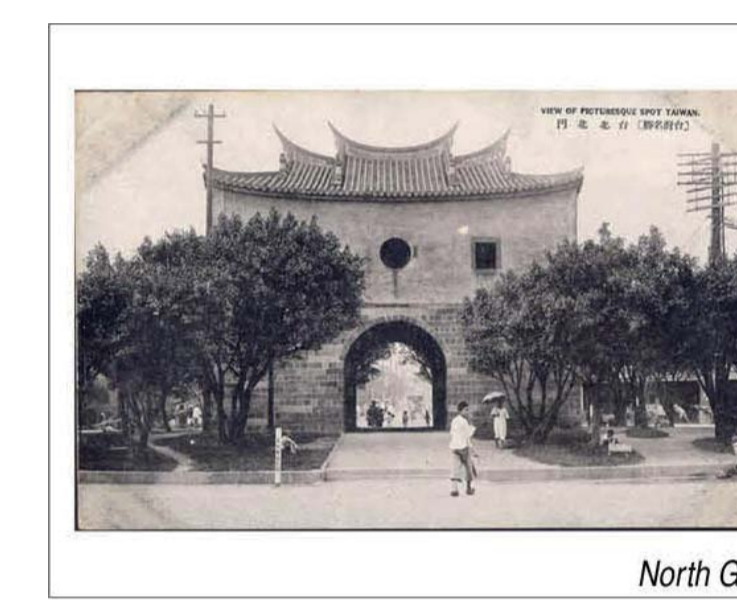
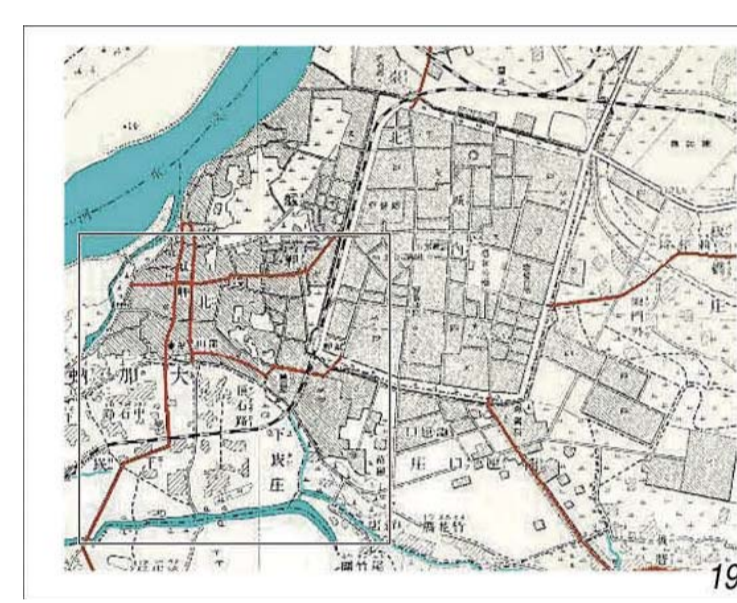
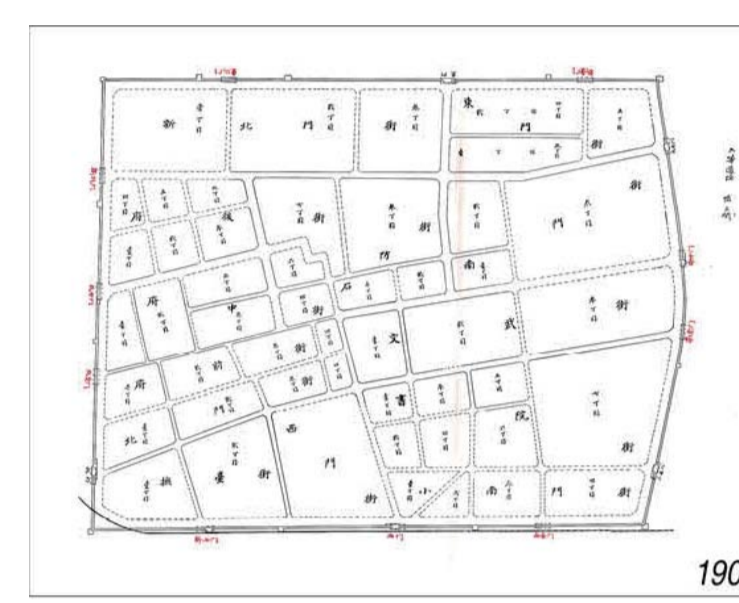
1920s



Taipei



The map shows the basic information of the main area of Taipei city at 1905. Taiwan became a colony of Imperial Japan. Taiwan's Japanese rulers embarked on an extensive program of advanced urban planning that featured extensive railroad links. A number of Taipei landmarks and cultural institutions date from this period

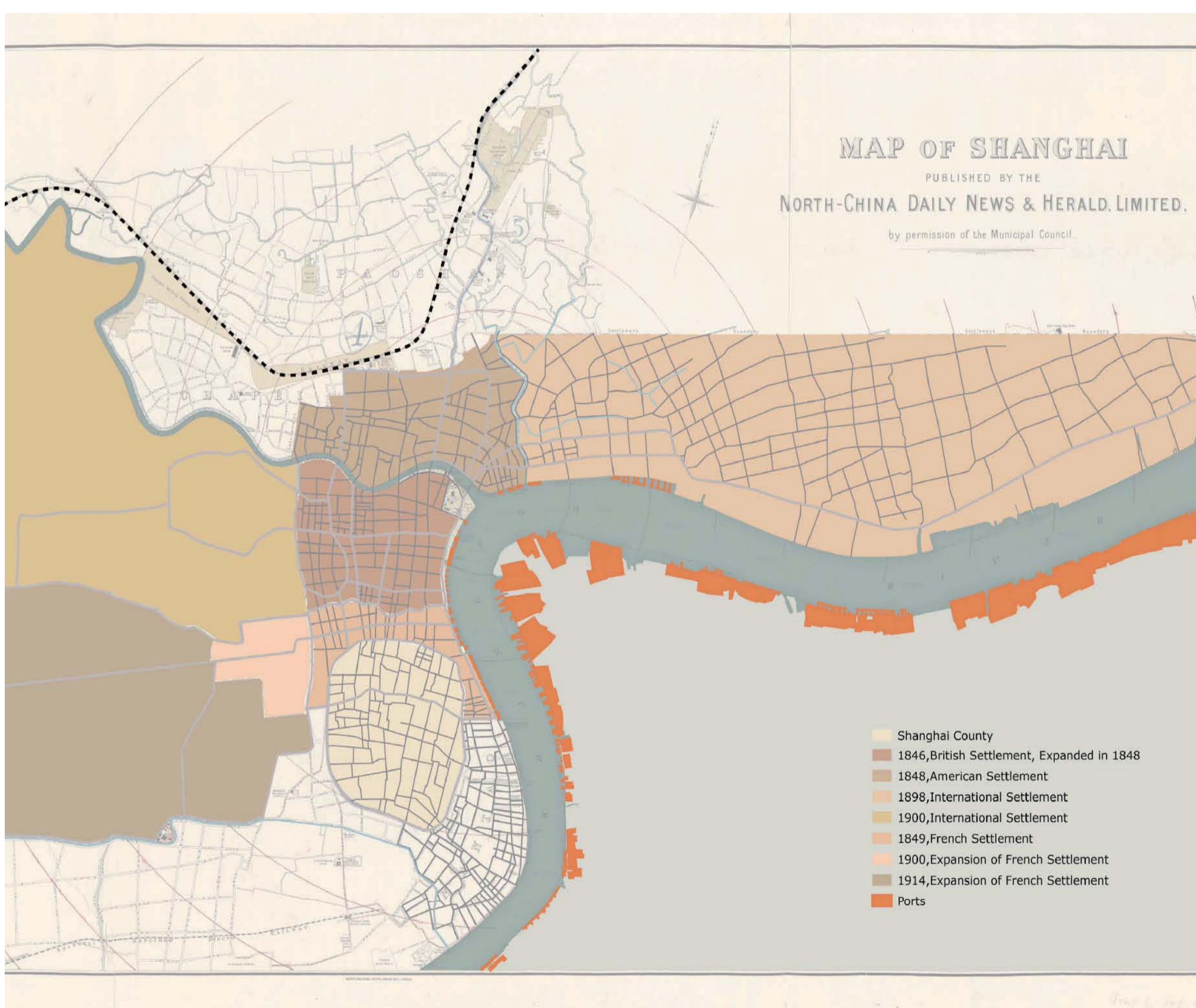


Shanghai 1840s-1900s

Before the 1840s, Shanghai was a small town, even not a city (the red square). The Bund, which later became the wharf, was just an area of unconstructed mud flat, with small rivers, tombs and broken houses along the Huangpu River. Because of the Treaty of Nanking 1842, the first unequal treaties, Shanghai with four other treaty ports were opened, and the development of Shanghai had just begun. Before long 23 foreign firms opened along the Huangpu River-the Bund.

The first construction climax was between 1840s and 1890s. International companies had branches here including Jardine Matheson & Co, Dent & Co, David Sasson and Sons Company, etc.

The second climax came in the late 1890s, when local and international capitals swarmed into Shanghai. During the period from 1900 to 1930, many architectural styles including eclecticism, classical, neo classical, took the place of old brick-wood buildings with new functions and higher quality.



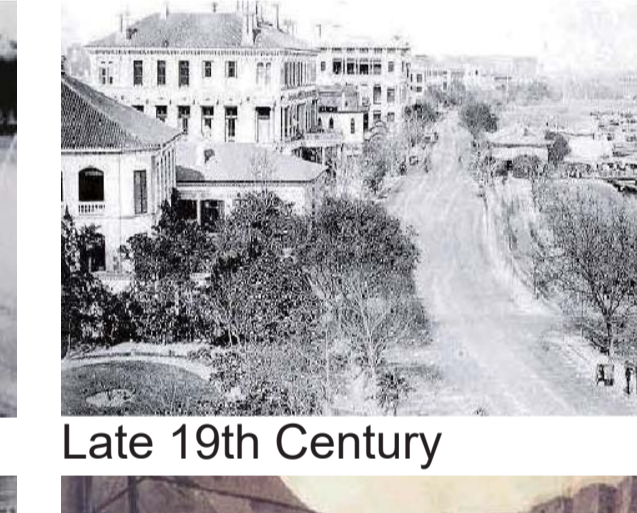
Shanghai County Before 1840



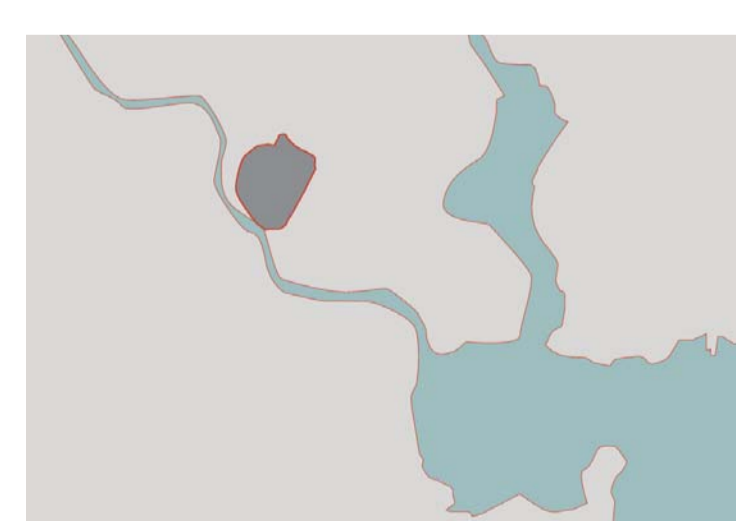
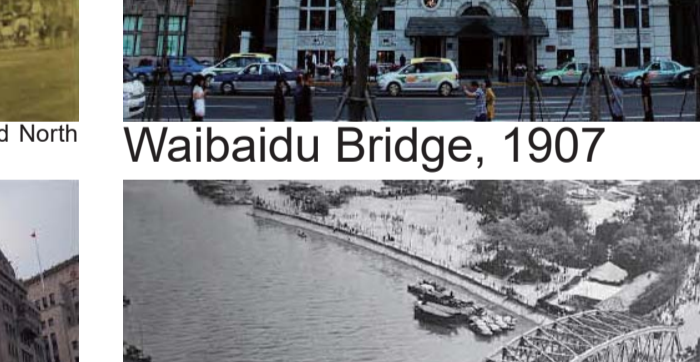
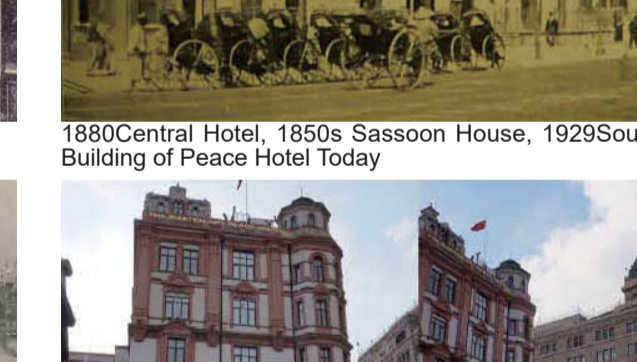
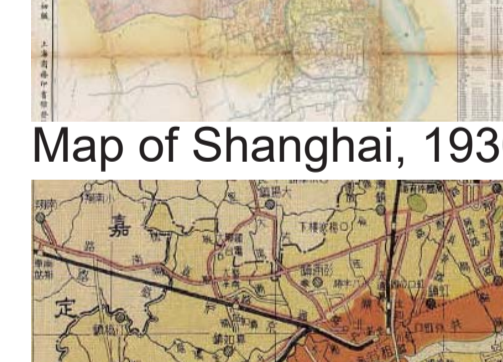
Before 1840



The Bund, Shanghai 1845



The Bund, Shanghai 1880



The Southern Tang (937-975), Quanzhou Port was nicknamed Erythrina Port.

Song Dynasty (1087) The 2nd year of Quanyou, Custom was set in Quanzhou, taked charge of overseas trade, bringing Quanzhou unprecedent prosperous.

In the early period of Ming dynasty, the municipality put a ban on maritime trade. This policy hugely weakened the status of Quanzhou Port.

During the year of Chenghua(1465- 1487), the Custom moved from Quanzhou to Fuzhou, the legal overseas trade qualification of Quanzhou canceled.



Zhongshan Road, 1948



Dongyue Hill, 1946



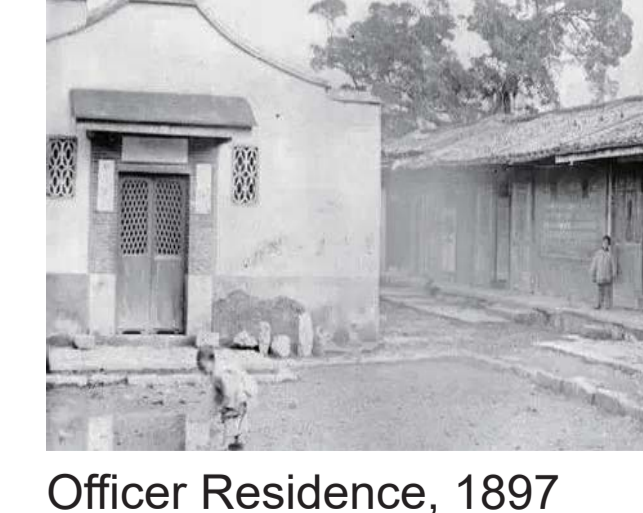
Huishi Hospital, 1934



The map is aimed to show the basic information of the harbour in Quanzhou in 1930s.



Civilian Residence, 1895



Temple, 1888



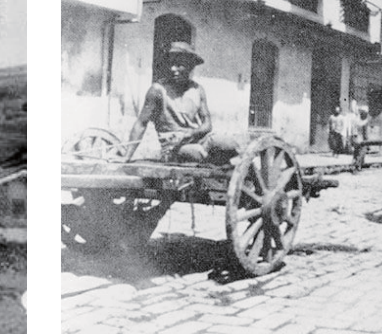
Bell Tower, 1930s



Officer Residence, 1897



Neighborhood, 1898





**THE HISTORICAL DEVELOPMENT OF YUEGANG PORT**

Yuegang Port is located in the estuary of Jiulong River, because of its like crescent moon named. Before the Ming Dynasty, the port is only a small fishing village. In 1453, Yuegang Port overseas trade gradually rise.

In 1567, the Ming government formally abolished the ban on the sea, then opened the Yuegang Port in Zhangzhou for foreign trade. On the status of the port received official confirmation, it became the only legal port of departure of Ming dynasty maritime trade. From the end of the fifteenth century to the mid-seventeenth century, with the development of China's east and west coastal foreign trade, Yuegang Port has the direct trade with Southeast Asia, the Indochina Peninsula and North Korea, Ryukyu, Japan and other 47 countries and regions, and use the Philippines as a transit point, trade with Europe and the United States. It occupies an important position in the history of foreign trade in China.

During the late Ming and early Qing dynasty, Zheng Chenggong, Zheng Jing fought and standoff with Qing army nearly forty years in the southern coast of Fujian. The war affected the Yuegang Port. In order to curb Zheng, the Qing government in the coastal performed the "relocation", and Zhangzhou port decline since then.

In the Qing Dynasty (1650-1661), Xiamen Port became the center of sea-lane to Taiwan, Japan, the Philippines and other areas in southeast Asia. In 1684, Xiamen set up customs, officially replaced overseas trade status of Yuegang Port. In 1727, the Qing Dynasty stipulated that all the ships abroad in Fujian, must be from Xiamen Port access. Xiamen Port became the main export of Fujian Province.



**THE MIGRATION ROUTES**

Yuegang Port and Taiwan have geography, blood, dialect and other natural history of deep roots. It is also Taiwan's politicians Wang Jinping, Lin Yang Gang's ancestral home.

After the prosperity of Yuegang Port(1453-1567), many Minnan merchants emigrated to foreign countries like Philippines.

Around 1622-1623, colonists from Netherlands occupied Penghu, kidnapped and sold Minnan people to Jawa.

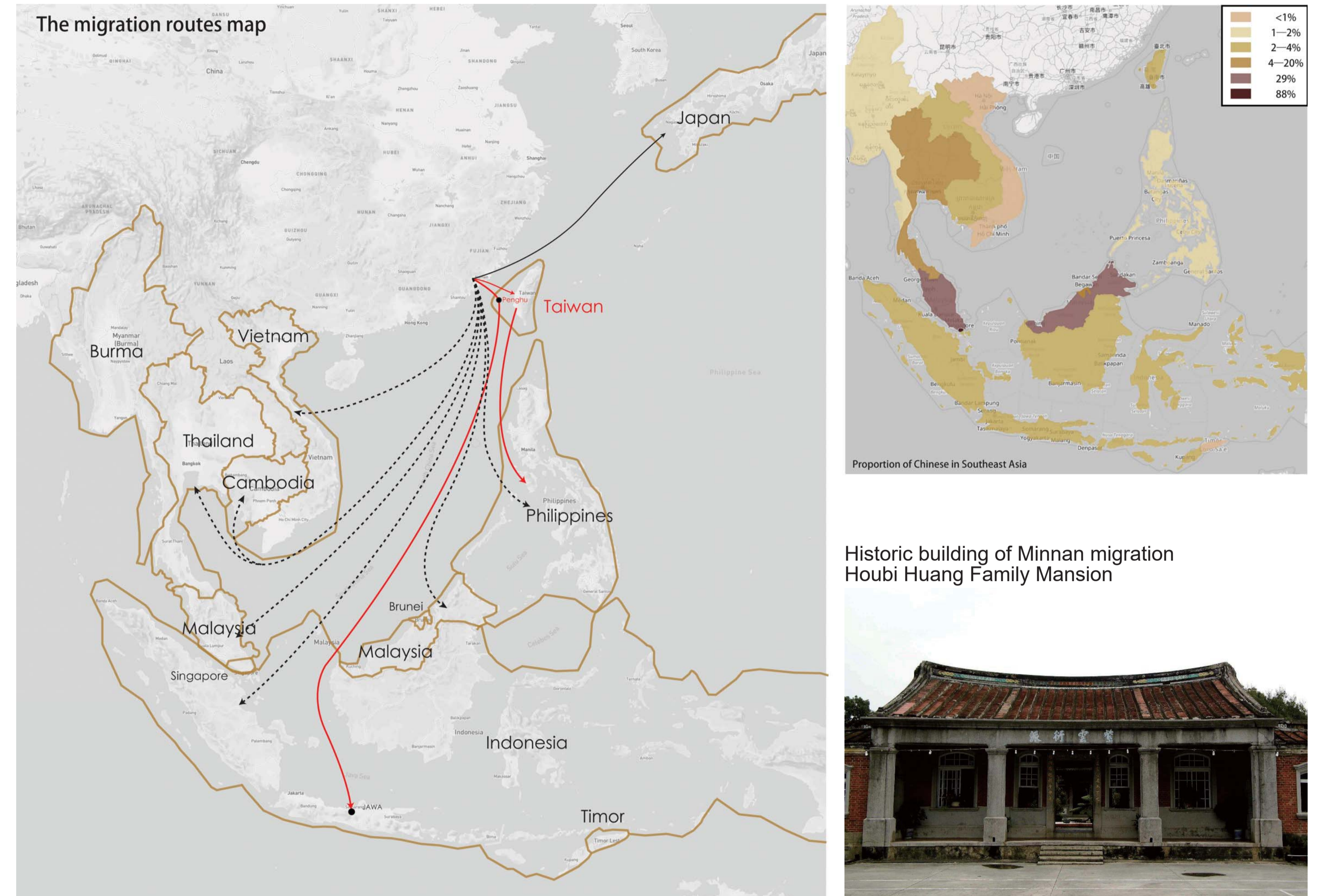
1661, Zheng Chenggong recovered Taiwan from Netherlands colonists. Since that Many Minnan people moved to Taiwan.

1683, military of Qing occupied Taiwan, many Minnan officers and soldiers from Ming escaped to Philippines. During the war between Zheng Chenggong and Qing, many Minnan refugees immigrated to south-east Asia, some ship owners and sailors moved to Nagasaki and Kagoshima(Japan).

1683-1893 the immigrants from Minnan to Taiwan continued rising.

On the eve of first opium war (1840-1842), Minnan immigrants expanded in Indonesia Philippines and Malay peninsula.

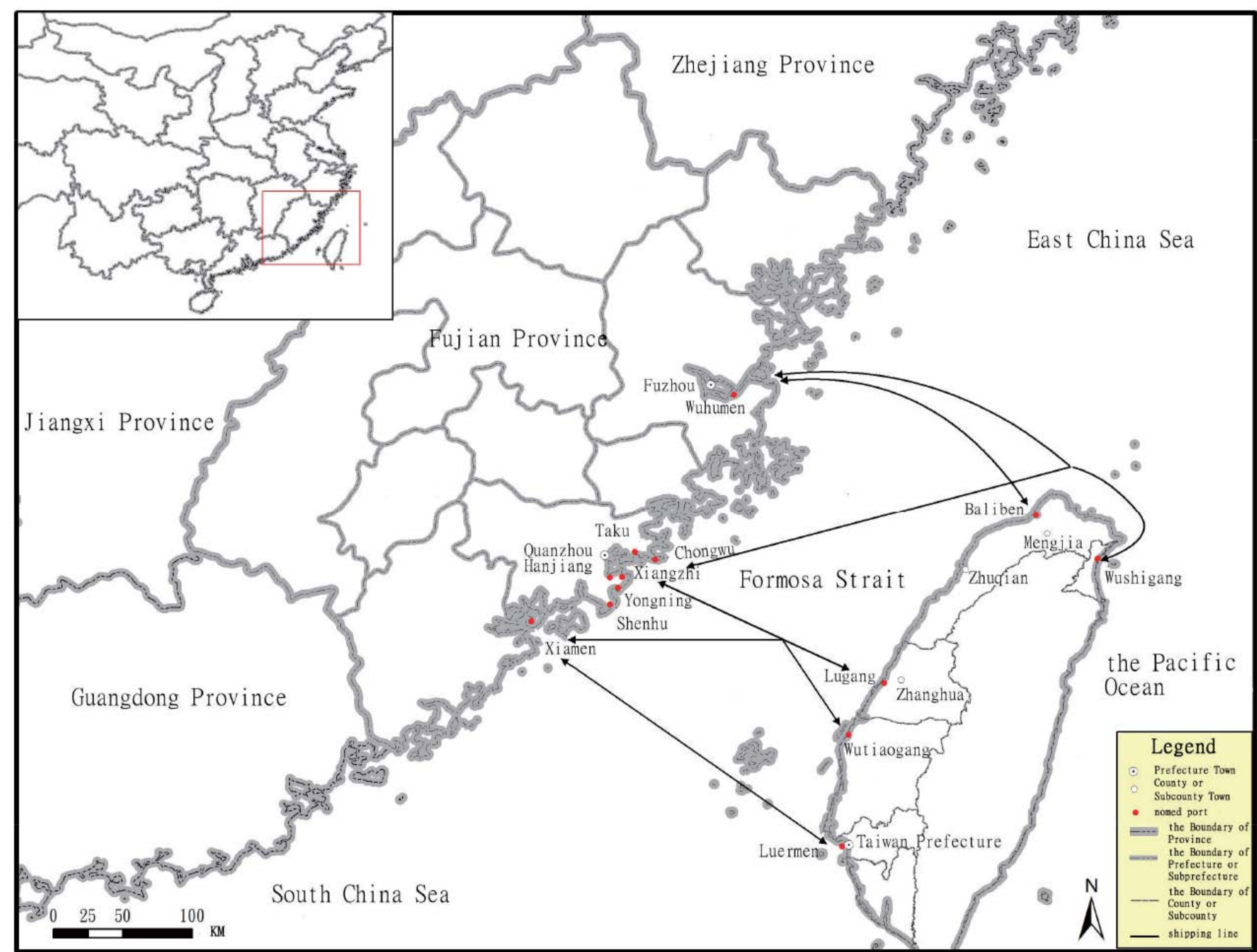
After that, the immigration from Minnan to south-east Asia kept expanding, the destination include North Borneo, Thailand, Cambodia and Vietnam.



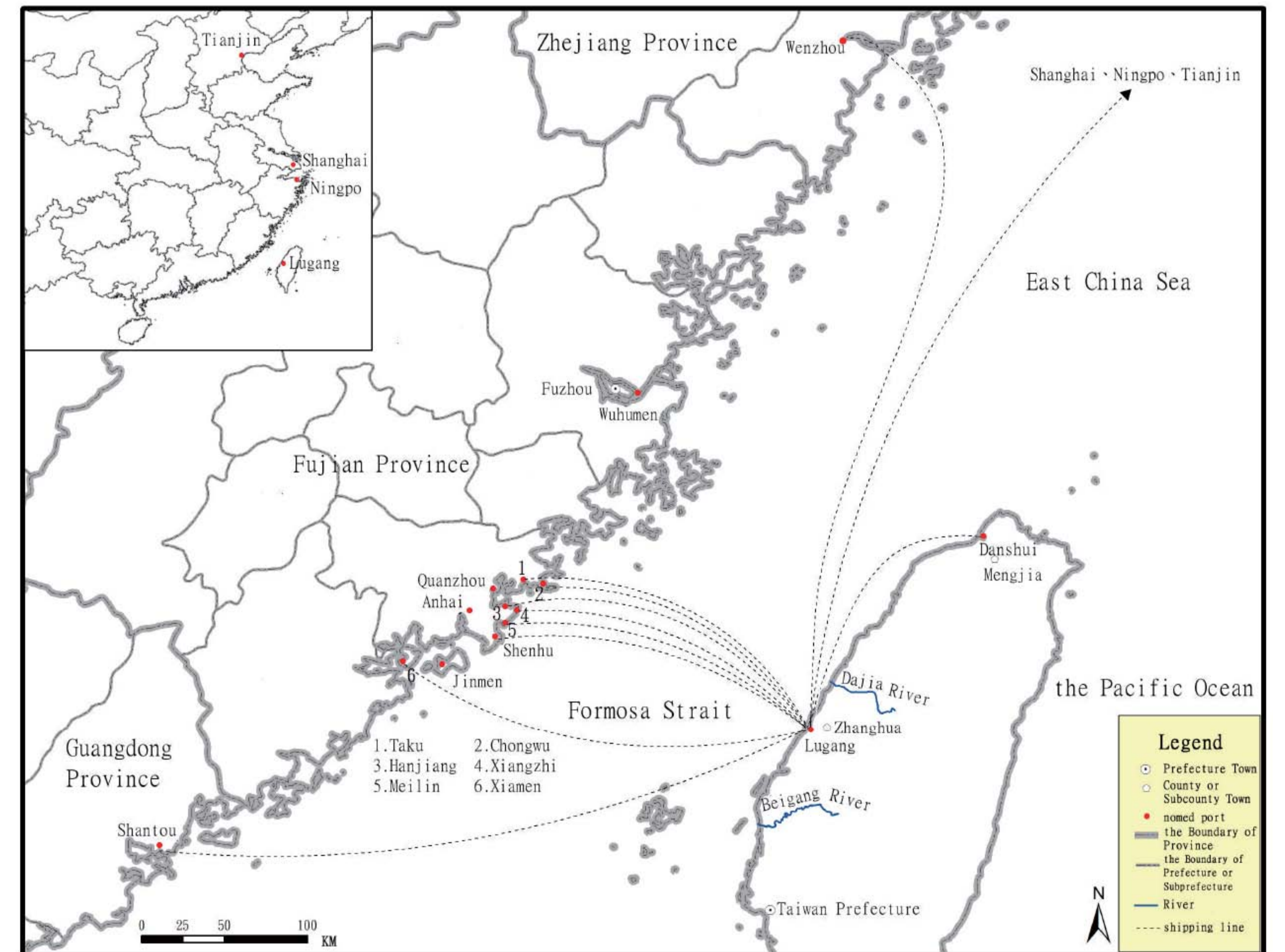
Taiwan fell under Qing rule in 1683, and for ease of governance, the match official ports policy was implemented between Luermen (hereafter Anping from 1830) of Tainan, the then capital city also known and Xiamen in Fujian Province. That is to say, Xiamen became Taiwan's sole gateway for external trade and the only window to the outer business world. Goods imported into and exported from all coastal ports had to go through Luermen. On the other hand, the match official ports policy helped establish trade between Taiwan and Fujian district.

Instead of Luermen acting as the only port for external trade, there were three more match official ports engaged in direct trade with Fujian. Needless to say, the trade volume of Luermen suffered severely. The decline of Luermen was countered by the rise of two other ports and their commercial and trade centers in early nineteenth century. In chronological order of their development, these three port cities were Fucheng (Tainan), Lugang and Mengjia (Wanhua District, Taipei). They were distributed respectively in southern, central and northern Taiwan.

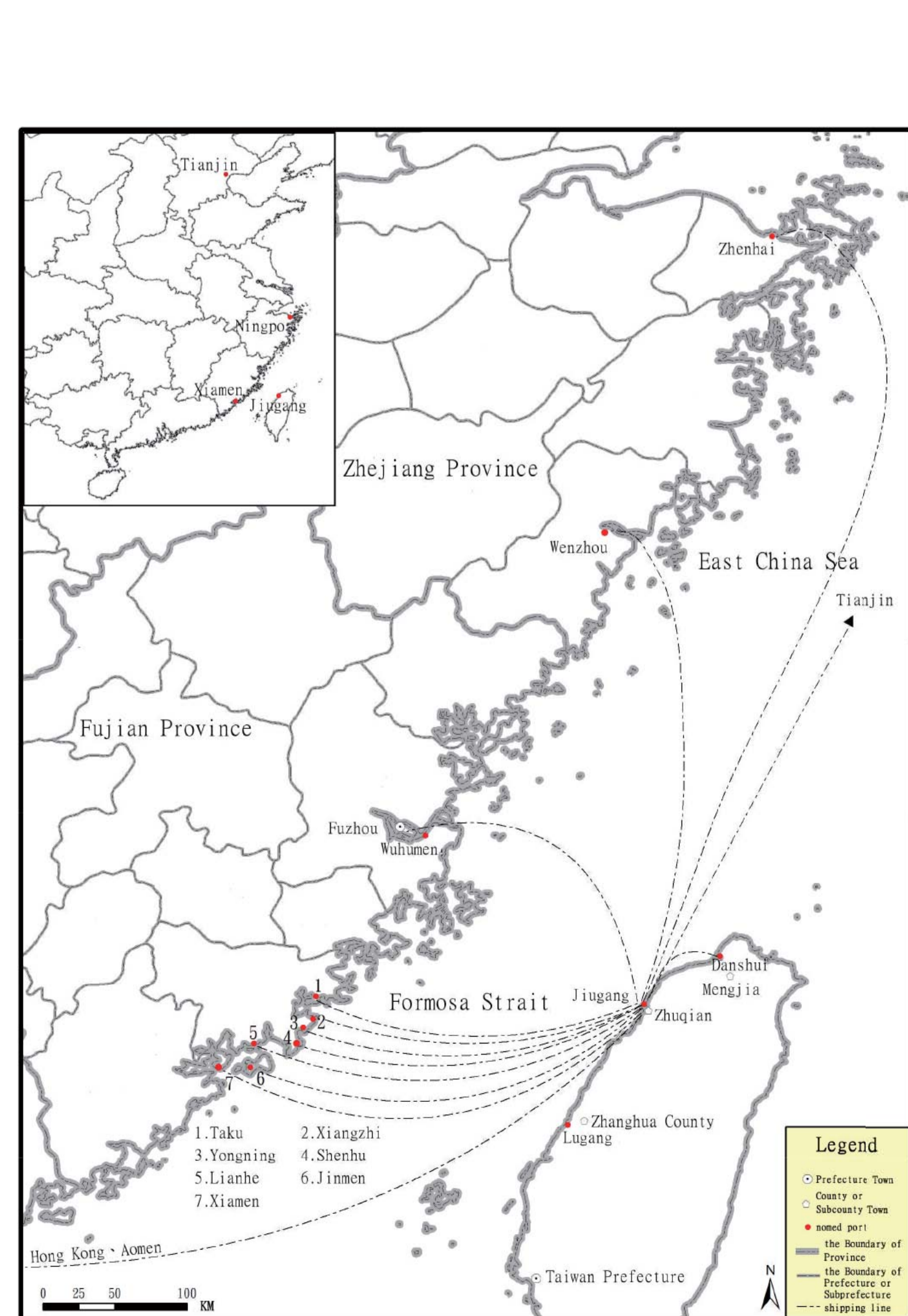
The Trade Network of Taiwan and Fujian by the Match Official Ports in mid-Qing Dynasty



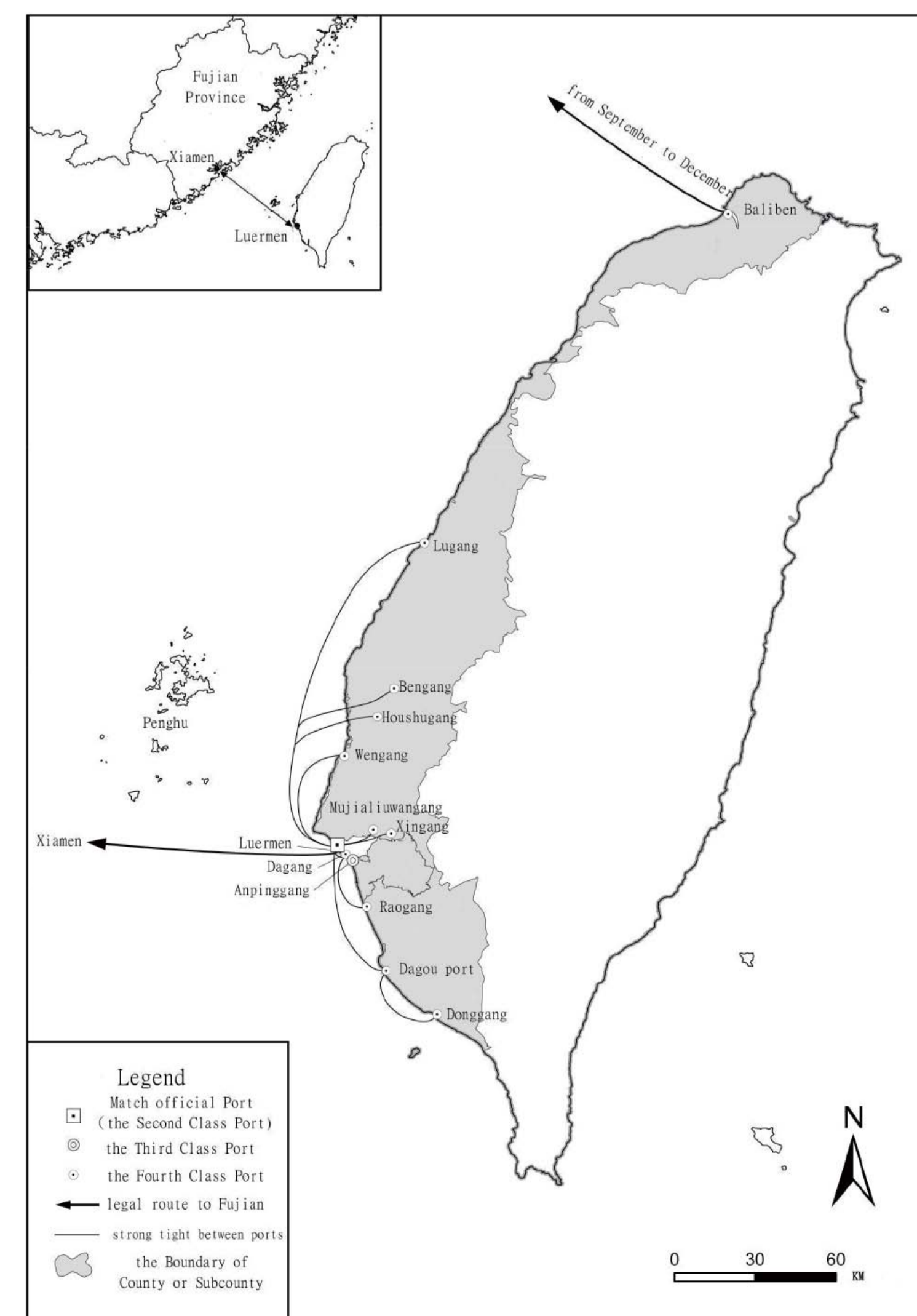
The Trade Network of Lukang in nineteenth Century



The Trade Network of Zhuqian in nineteenth Century



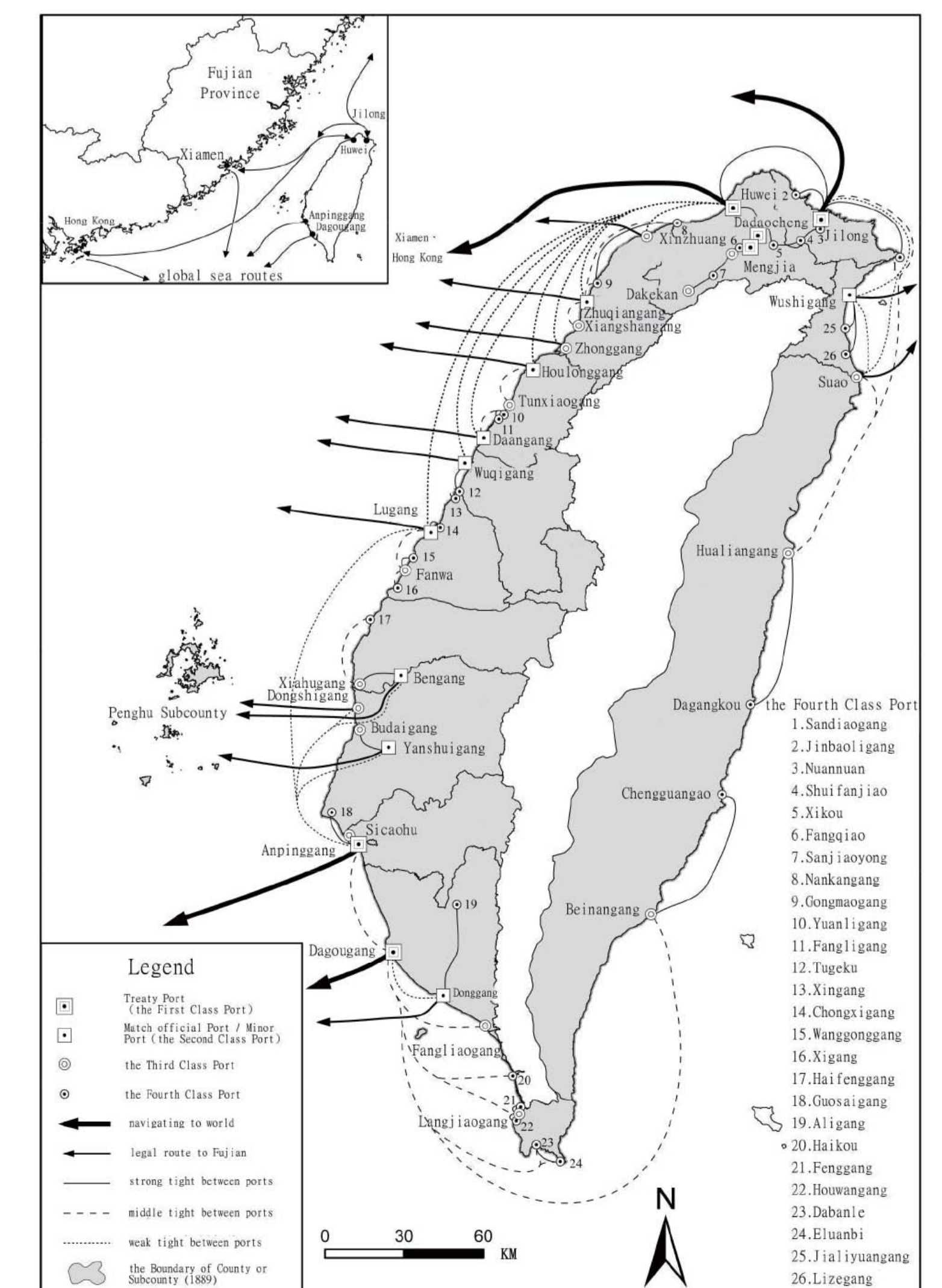
The Trade Pattern of Taiwan Ports from 1784 to 1830



The Trade Pattern of Taiwan Ports from 1683 to 1710

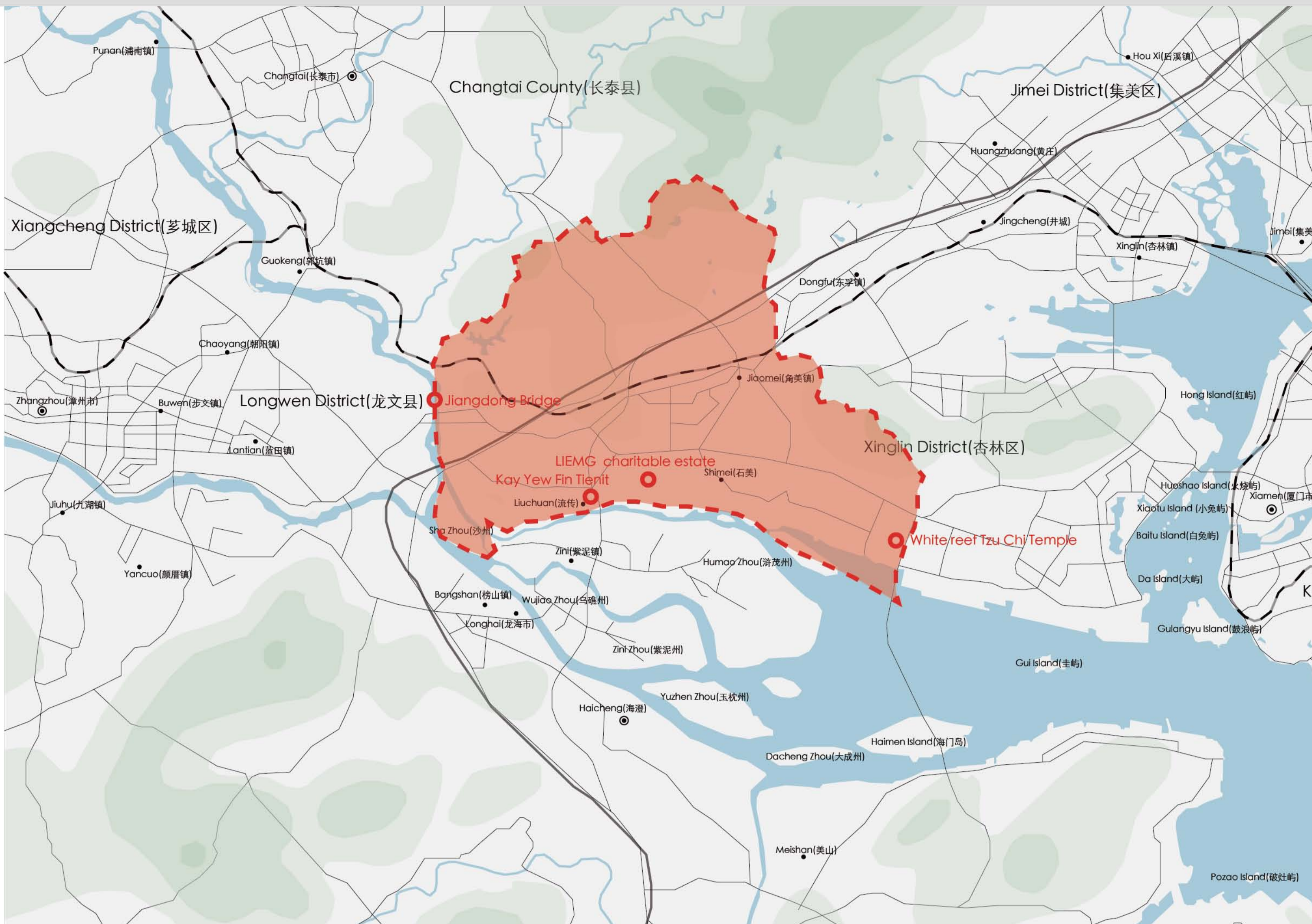


The trade Pattern of Taiwan Port Cities form 1870 to 1895





## 2.3 Taiwanese Investment Zone and Xia-Zhang-Quan urban integration



### THE TRANSFER STATION OF FUJIAN AND TAIWAN

Penghu County is Taiwan's outlying islands, located in the Taiwan Strait, and the Penghu waterway across the sea with Taiwan's main island. Penghu County is made up of the Penghu Islands. Due to the excellent geographical position, Penghu has good harbour and it has been the transit point of the Taiwan Strait since ancient times. Penghu Islands are the hub of the Taiwan Strait, which is known as the "Southeast Key" in the eastern part of Asia. The history of Penghu can be traced back to the Qin and Han dynasties. On the spread of culture, penghu has an indelible role. Later, with the development of navigation technology, Penghu has gradually become the springboard of traffic on both sides of the Taiwan strait. In the administrative center of Penghu County, Magong town, there are commercial ports, fishing ports and military ports, and here is a collection point for all kinds of vessels in the Taiwan Strait.

The trade Pattern of Taiwan Port Cities form 1870 to 1895

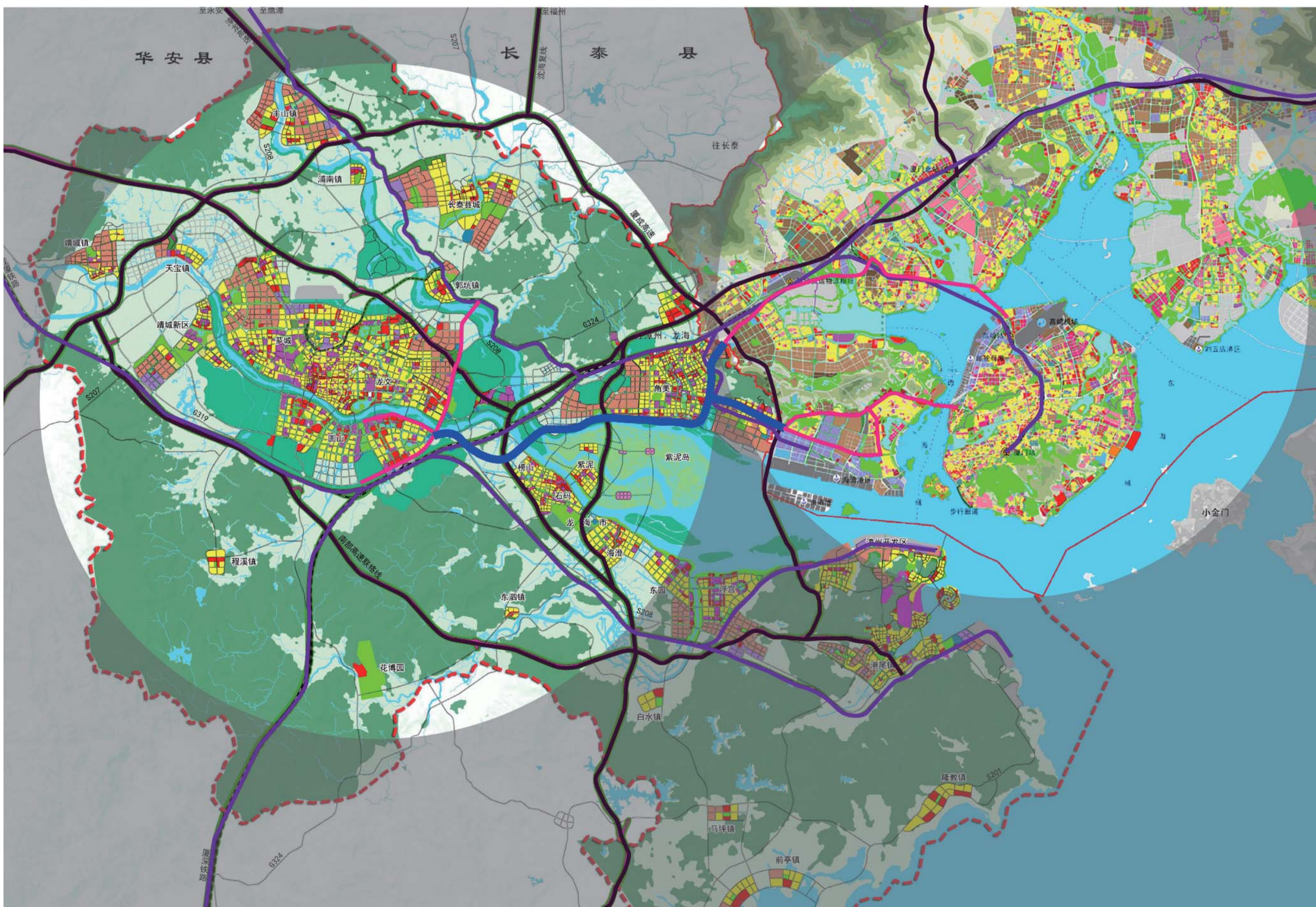


The trade Pattern of Taiwan Port Cities form 1870 to 1895

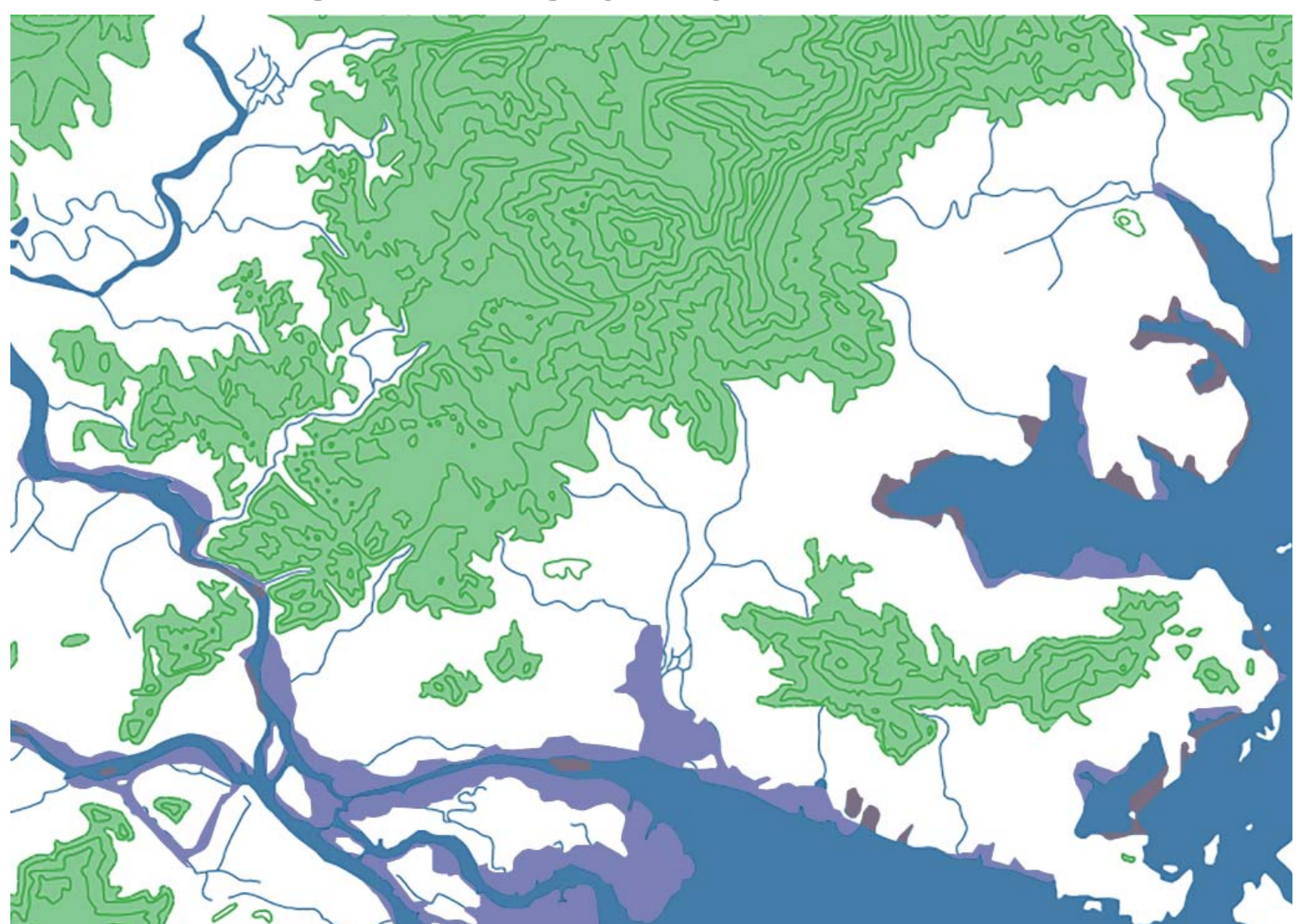


Jiaomei Region belongs to the Zhangzhou Taiwanese Investment Zone, which ranks the first among six state-level Taiwanese investment zones. Apart from the cultural bond, the reason why this zone is so valued is highly connected with a giant regional planning—Amoy (Xiamen) Zhangzhou Quanzhou City. The union of Xiamen Zhangzhou and Quanzhou is called the "Minnan (south Fujian) Golden Triangle" because of their similar language, culture, customs and closed economic contacts, personnel exchanges. In order to strengthen this union, this program will create a Batch of urban-integration traffic projects. And Xia-Zhang city highway, the most important part of the urban-integration between Xiamen and Zhangzhou, is located in Jiaomei region.

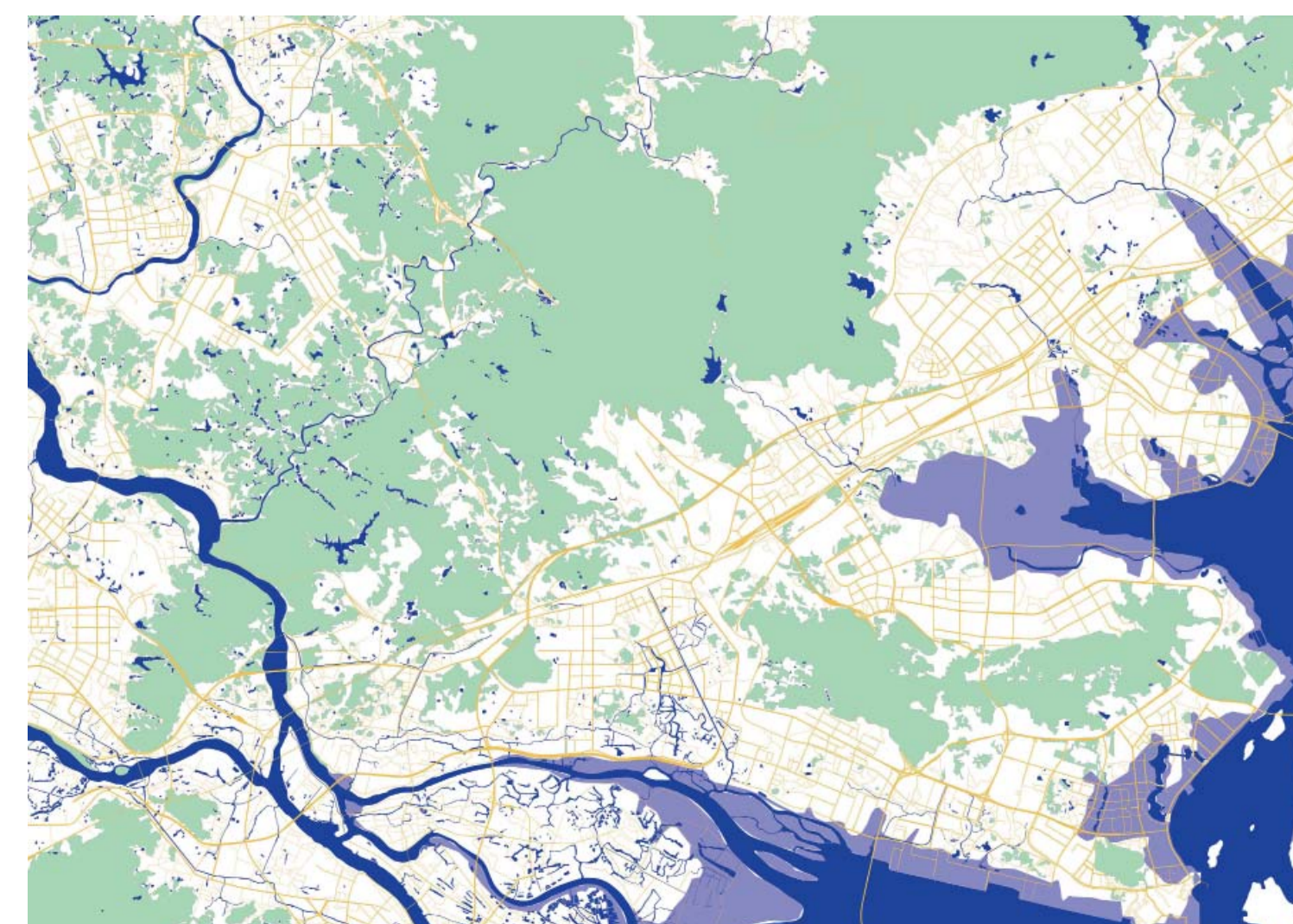
Tongcheng highway between Xiamen and Zhangzhou



Coastline change from Ming dynasty to 1950



Coastline change from 1950 to 2017



Jiangdong Bridge, located in Jiulong River in Fujian Province, in the west side of Jiaomei Town in Zhangzhou Taiwanese investment area. Jiangdong Bridge is one of the ancient ten famous bridge, was listed as the world's largest stone bridge.



Lin's Charitable Estate, covers an area of more than 4500 square meters, 99 houses, construction area of 2,500 square meters, brick and wood structure, hanging hill, courtyard structure. It was one of the famous charities of Fujian Province at that time.



White reef Tzu Chi Temple is the essence of Minnan cultural landscape, is witnessing a connected by Taiwan and China. It was built in AD 1036, and it's the world's first Tzu Chi ancestral palace, the first ancestral temple.

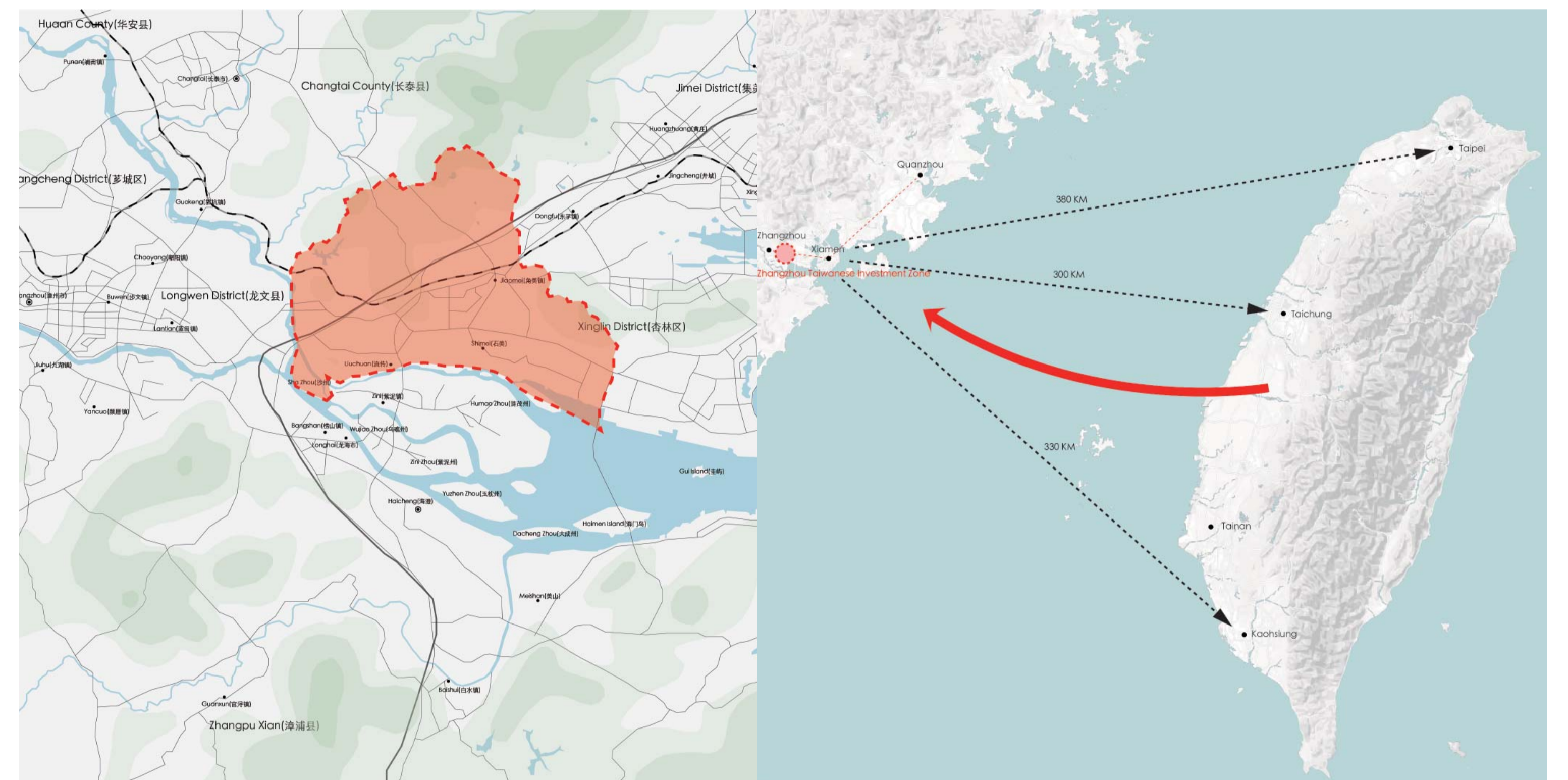


Kay Yew Fin Tien is the earliest post office in Chinese history. This building is the witness of the history of the hometown of overseas Chinese, but also the development of China's postal finance and the product of overseas Chinese history.

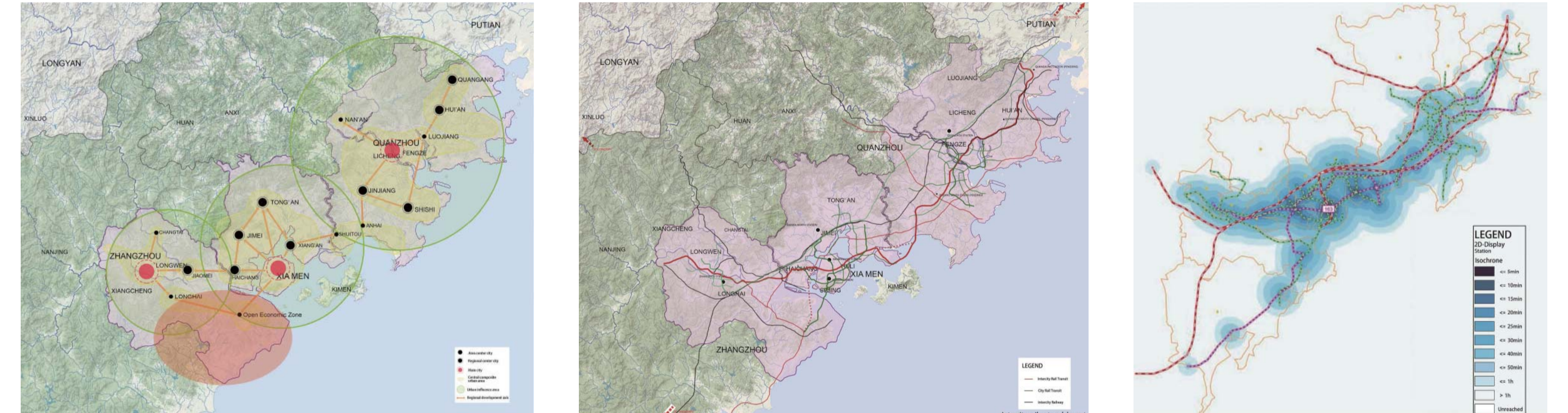


### THE DEVELOPMENT OF CONTEMPORARY YUEGANG PORT (TAIWANESE INVESTMENT ZONE)

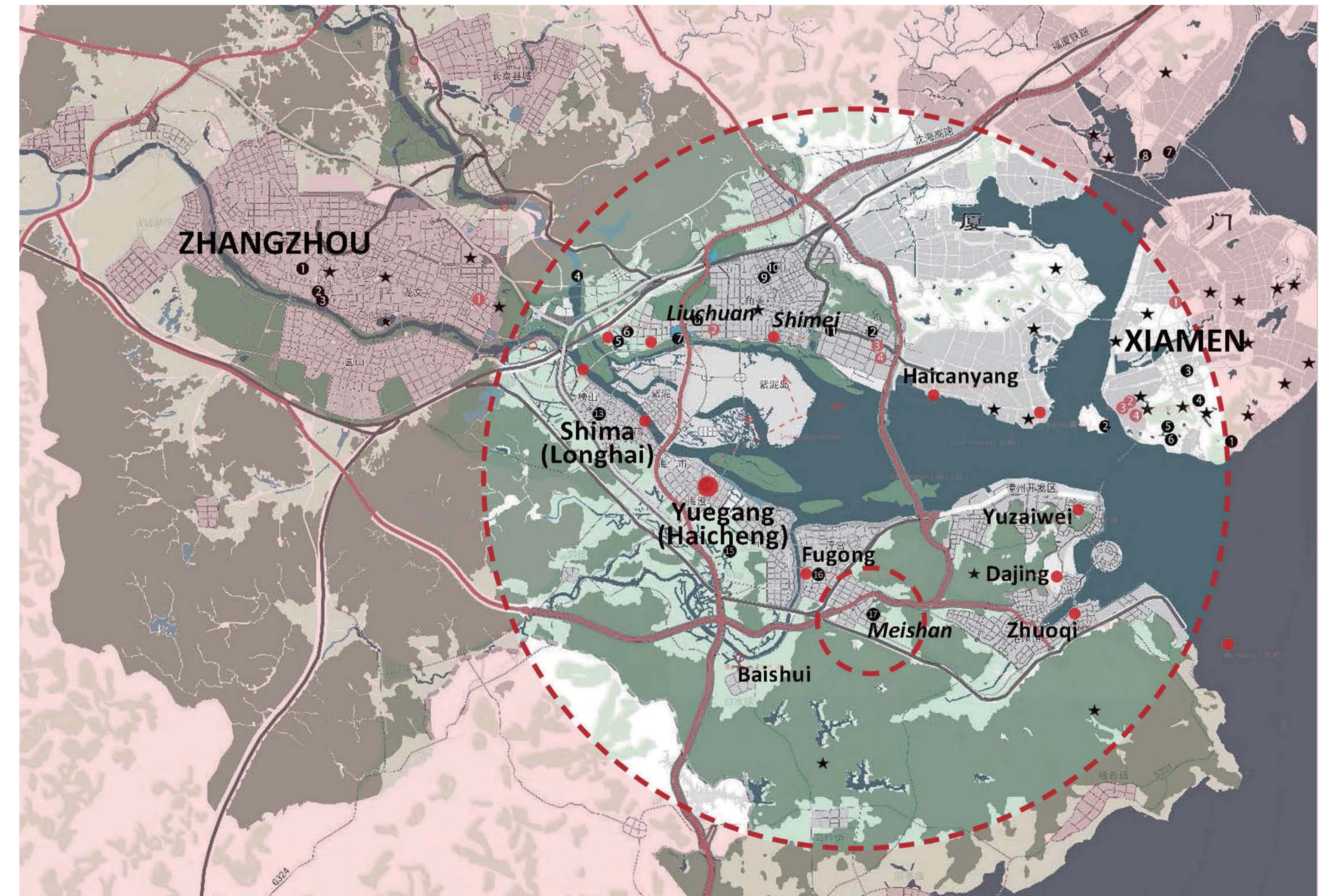
The history of Fujian and Taiwan's trade is very close, the main trade lines have three: Fuzhou - Monga, Quanzhou - Lugang, Zhangzhou - Fucheng. In order to facilitate the development of Taiwan enterprises in the mainland, Zhangzhou Taiwanese investment zone was established in 2012. The total area is 163 square kilometers. It is located in the Jiulong River estuary, is about 300 km away from Taipei, Taichung and Kaohsiung; 15 km away from Xiamen Island. It is an important part of the "half an hour economic circle" and the construction of the bay city and also an important node of the "Maritime Silk Road". Formosa Plastics, Uni-President, Taishan, Tsann Kuen, Changchun Chemical and Fu Zhen six enterprise groups from Taiwan are well developed in this area. Taiwan-funded enterprises to become an important support for regional economic development.



Urban Integration of Xiamen, Zhangzhou and Quanzhou in Fujian Province



Jiulong river delta alliance



Spatial network in 1950



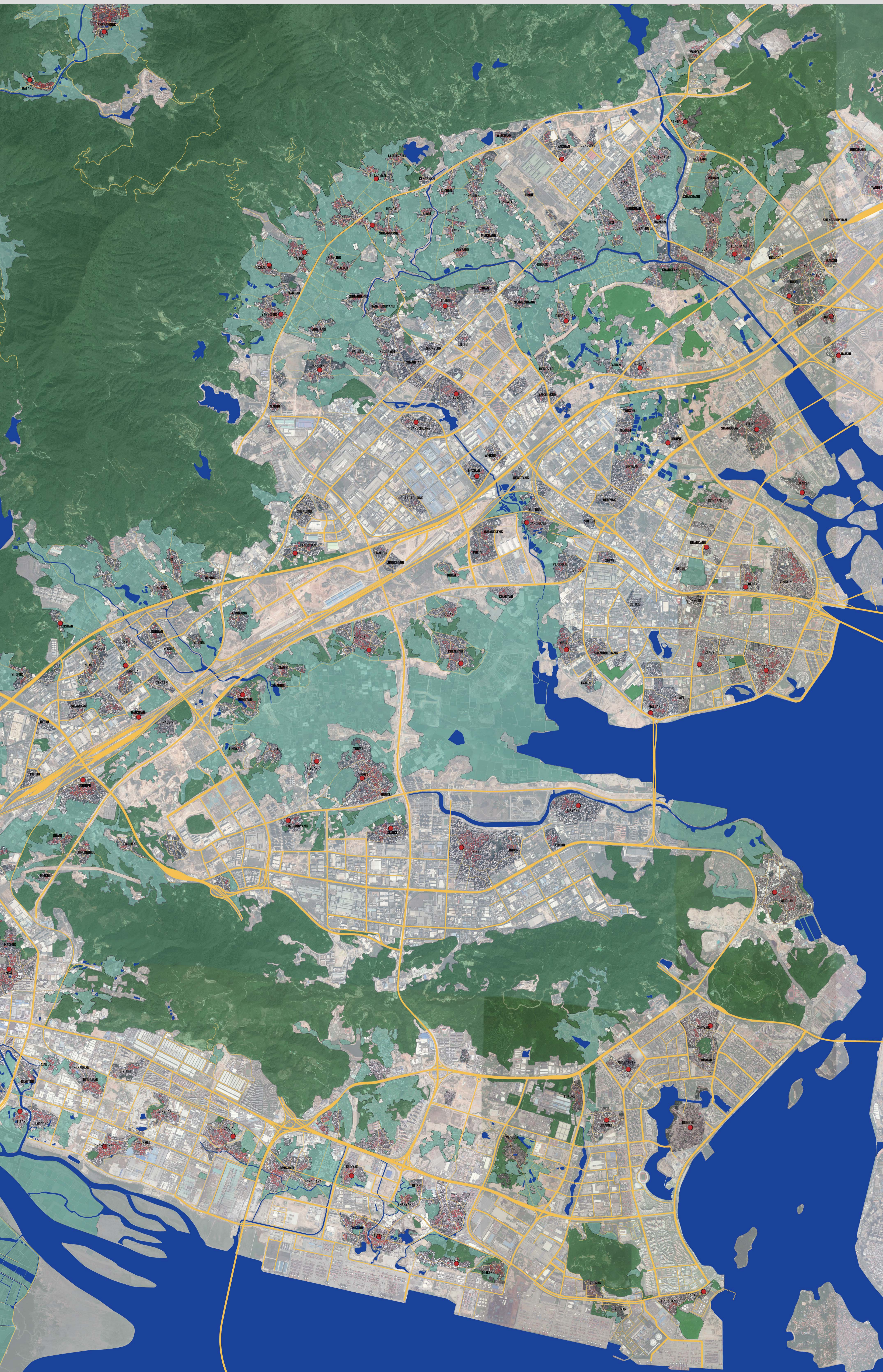
Spatial network in 2017











**Spatial features in 2017**

From this map, we can clearly figure out the different characters in the north bank, the traditional village agglomerations mainly located in south-west and north-east parts, which distributed randomly along the coastline and inner canals, surrounded by the farmland. This water-resource-attachment system is obvious and can be considered as a classic type of village forming in the Jiulong river delta. By comparing the map in 1950, we can ensure that majority of the village pieces still remain till today, however, each piece is already facing the modern urbanization corrosion; some villages break into several parts or just remain a little pieces. Most of the old road in 1950 cannot be seen anymore. And natural geography textures in the middle part nearly disappear. Except Zini Island, the original space texture totally covered by the modern grid system, which makes a texture fraction between past and present.

-  Woodlands
-  Farmlands
-  Settlements until the Reform age
-  Settlements after the Reform age
-  Village Name
-  Important Village in the Past (possible temple located)
-  Traditional building agglomeration
-  Urban road network
-  Water system







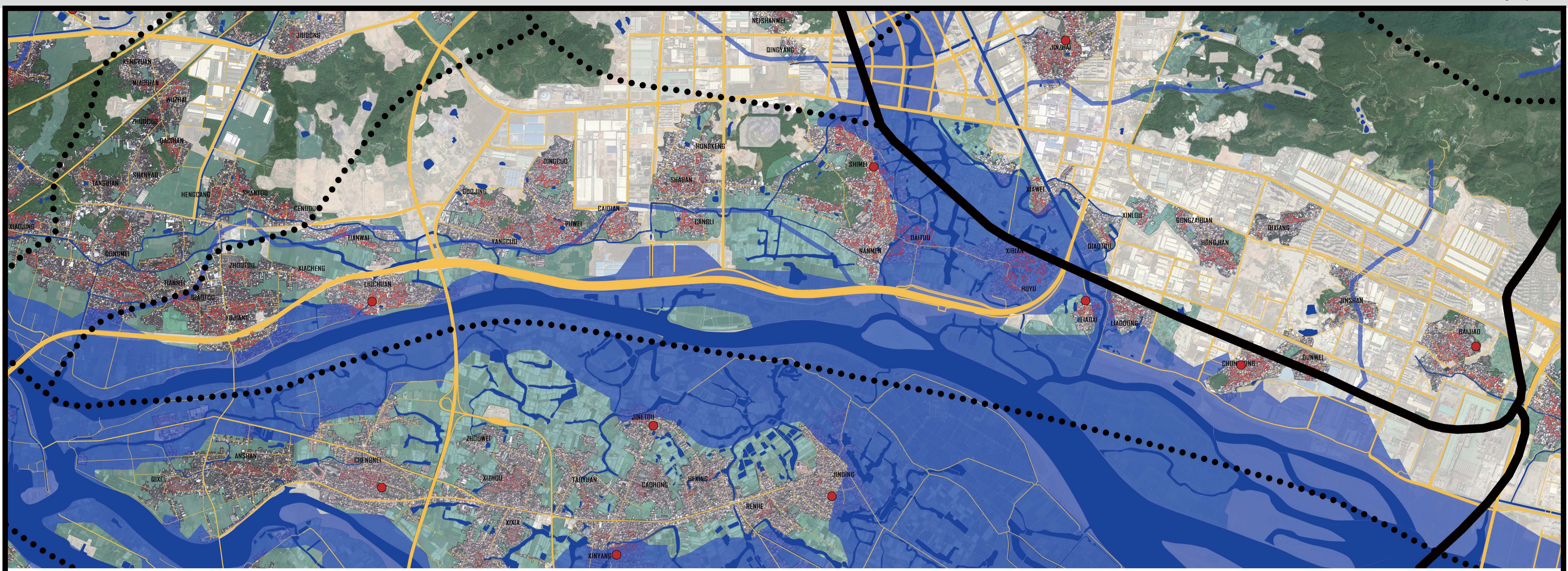


Administration divisions in Ming dynasty

According to the book Ritual Alliances of the Putian Plain, we try to recover the space texture of Ming dynasty on the frame of 2017 map. Through this map, we can finally ensure the water-resource-attachment mode was common used in the north bank. Overall, the county and Li (sub-administration level in Ming dynasty) divisions were implemented based on the water basin and ridge line, which boundary fully accommodates the local geographic factors. Specifically, each Li region contains a certain number of families (normally 110 families) and 2 or 3 temples that used to worship the land God. Thus we can see that tens of alliances follow the similar arrangement principle but eventually create a vivid 'site plan'.

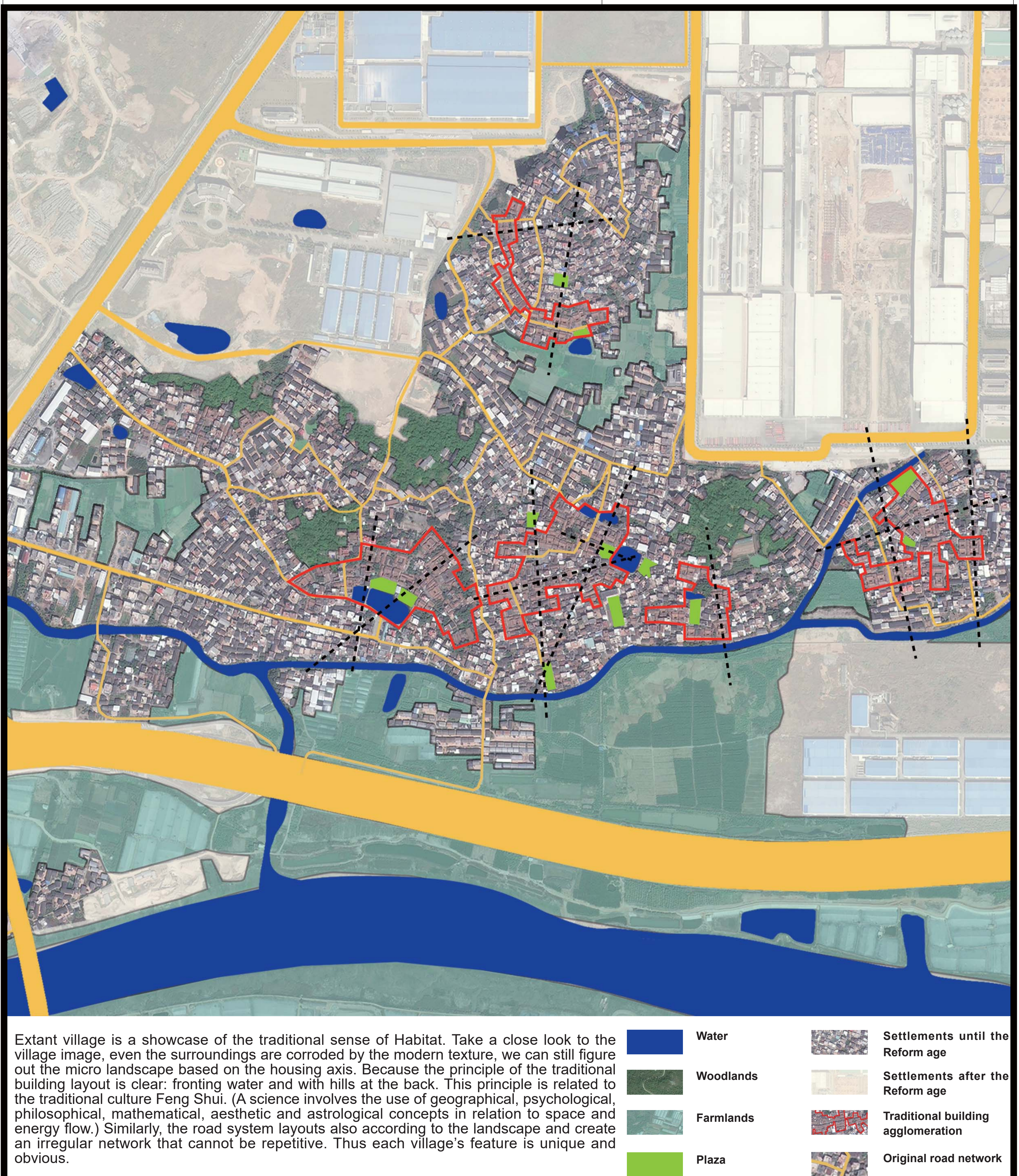
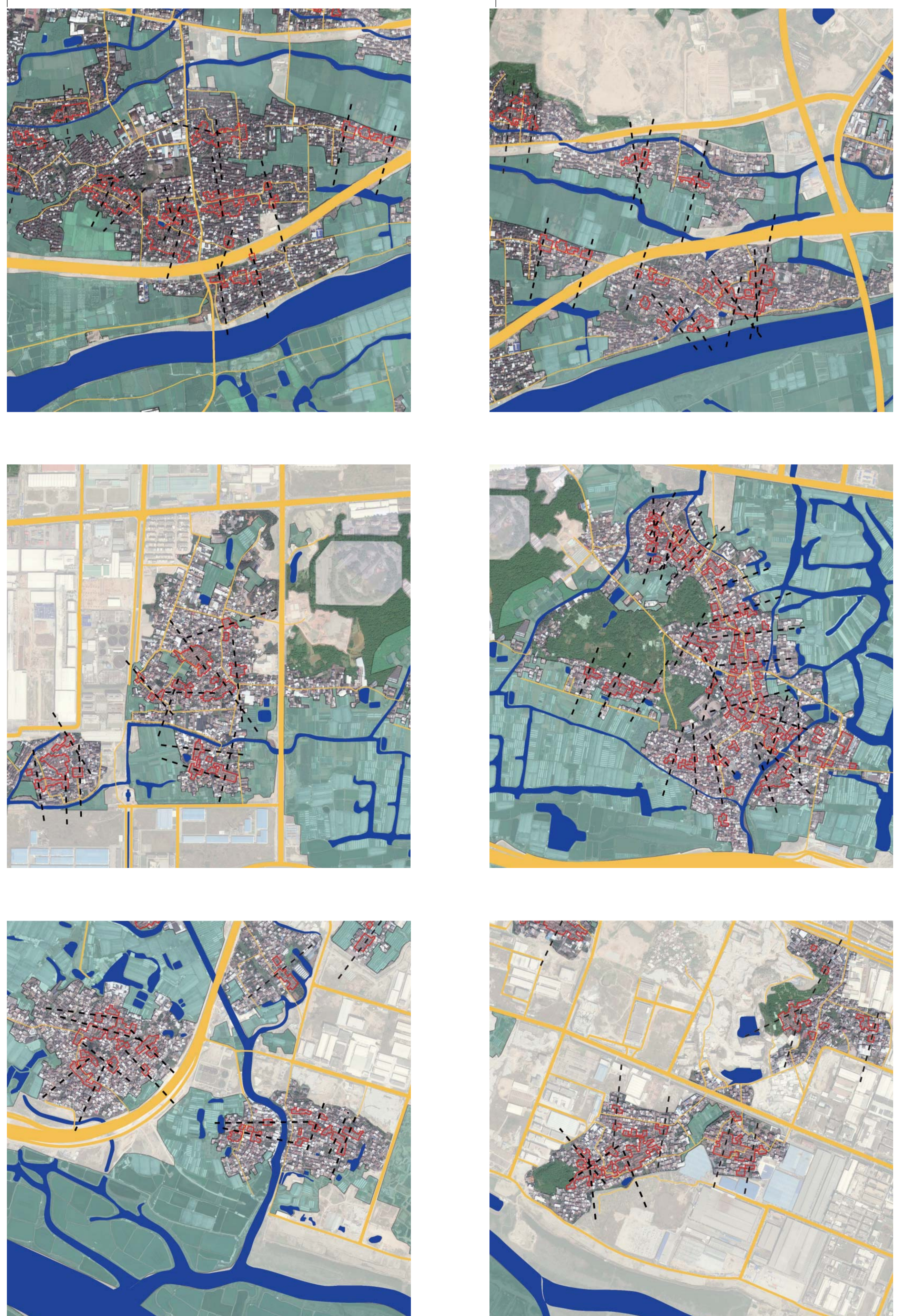
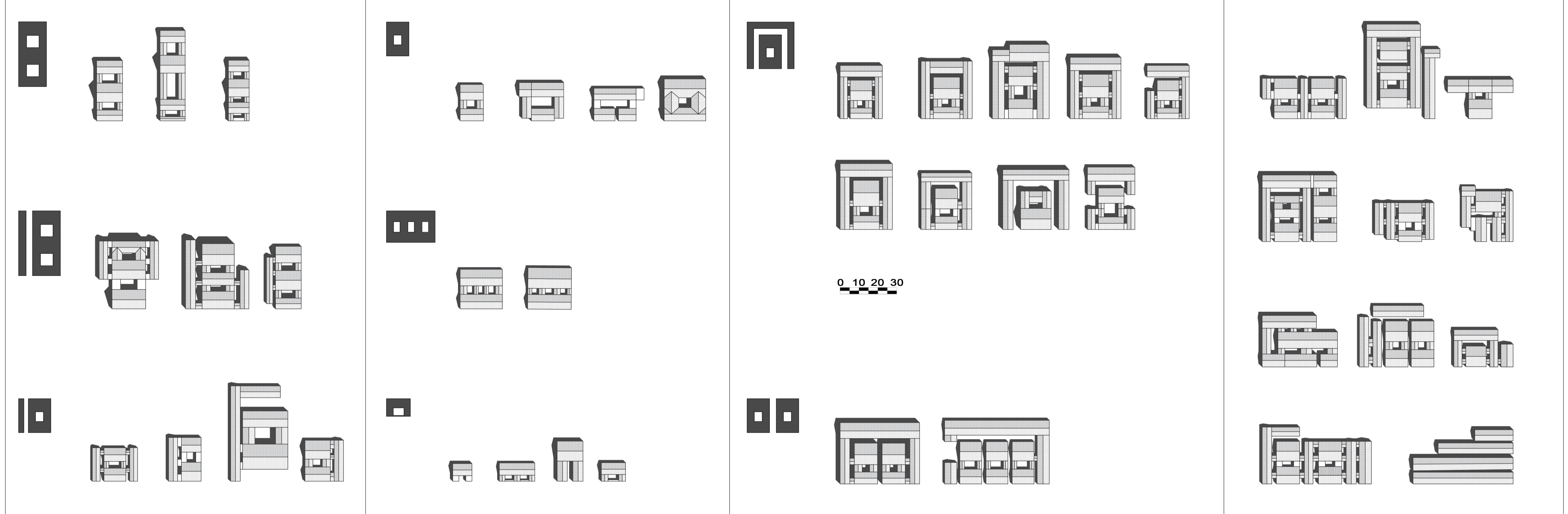
- Woodlands
- Farmlands
- Settlements until the Reform age
- Settlements after the Reform age
- Village Name
- Important Village in the Past (possible temple located)
- Traditional building agglomeration
- Reclaimed land after Ming dynasty
- Canals in Ming dynasty
- County division boundary
- Li division boundary (main canal basin)





In Ming dynasty, Shimei port is the most important river port in Jiulong north bank. It flourished with the development of Yuegang port and became one of the twelve market town in Longhai county. In the end of Qing dynasty, it was the major gate for overseas Chinese leaving and entering the country. Today's Shimei village is combined by 3 sub-villages Shimei, Nanmen and Daitou. The original water area transfers to farmland. However, the ancient canal which connect Shimei port with the westside still exist in the same position. As the gate of the north bank, Shimei area has huge historical and cultural value.

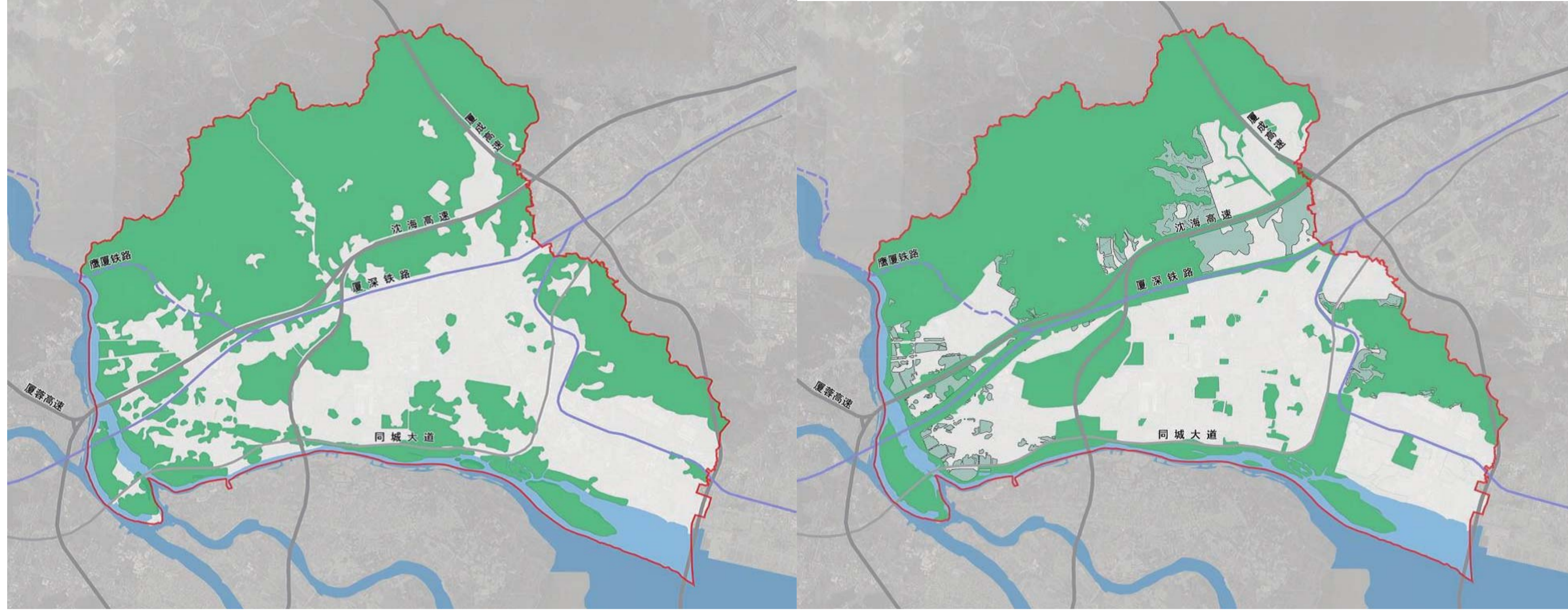
Minnan traditional building is presented as a typical courtyard form. Each single part can be considered as a basic housing 'Cuo'. According to the residence scale, it will add 'Luo'---a big house part serving for host and worship activity in the vertical direction and 'Hucuo'---a side housing serving for the offspring or other relatives in the horizontal direction. Thus a large family's Cuo could be very complex. But we can still figure out its forming mainly follows some certain types.



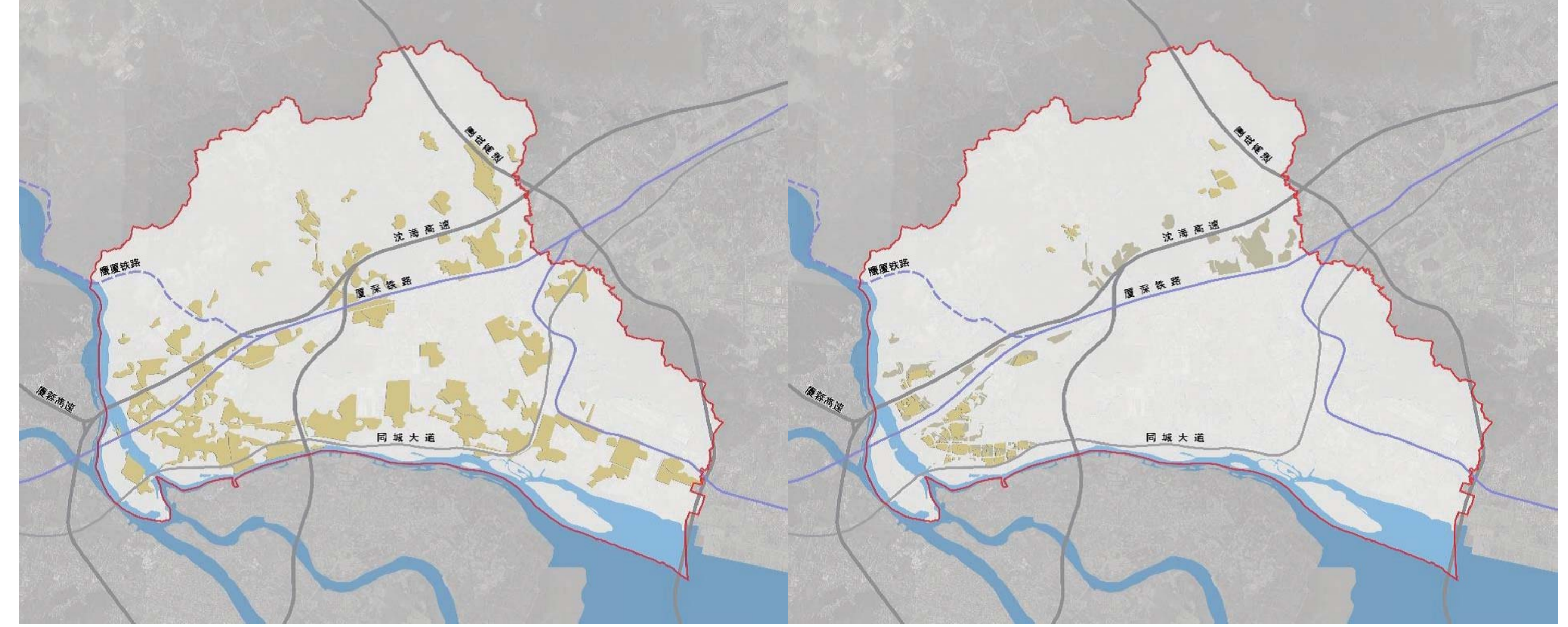
Extant village is a showcase of the traditional sense of Habitat. Take a close look to the village image, even the surroundings are corroded by the modern texture, we can still figure out the micro landscape based on the housing axis. Because the principle of the traditional building layout is clear: fronting water and with hills at the back. This principle is related to the traditional culture Feng Shui. (A science involves the use of geographical, psychological, philosophical, mathematical, aesthetic and astrological concepts in relation to space and energy flow.) Similarly, the road system layouts also according to the landscape and create an irregular network that cannot be repetitive. Thus each village's feature is unique and obvious.



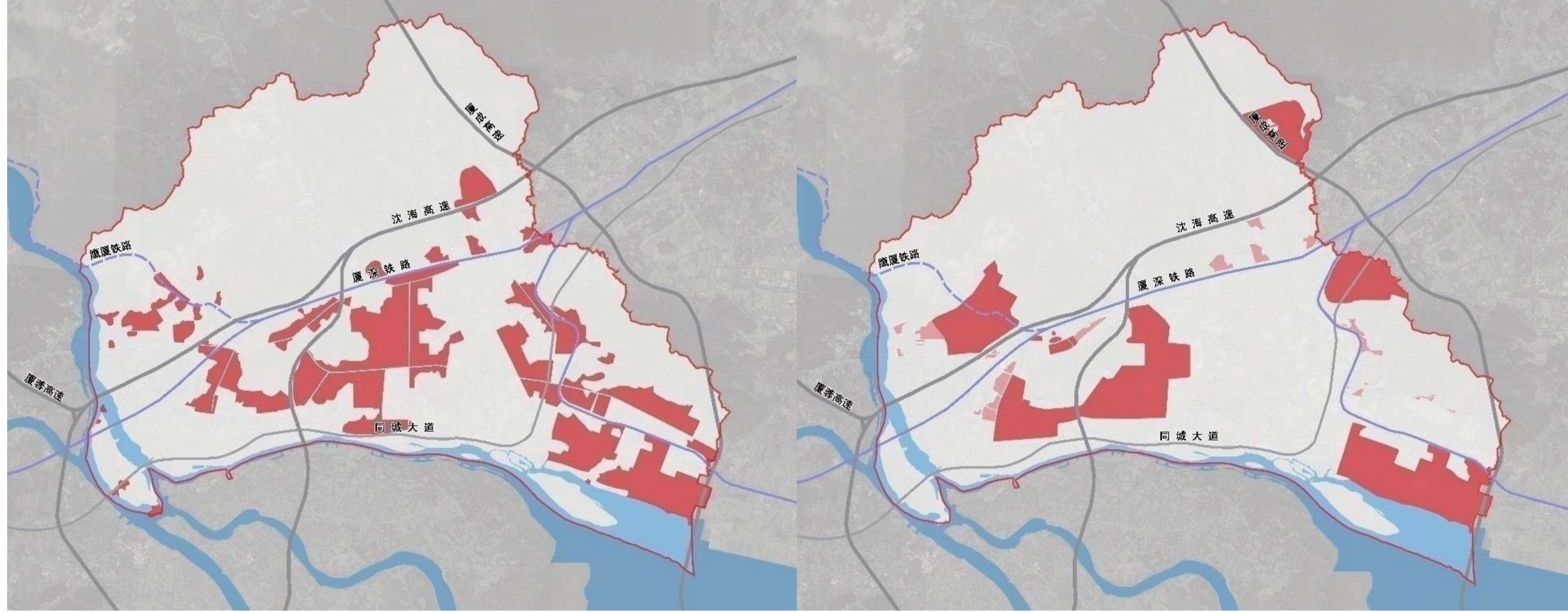
Analysis of Ecological Spatial Evolution



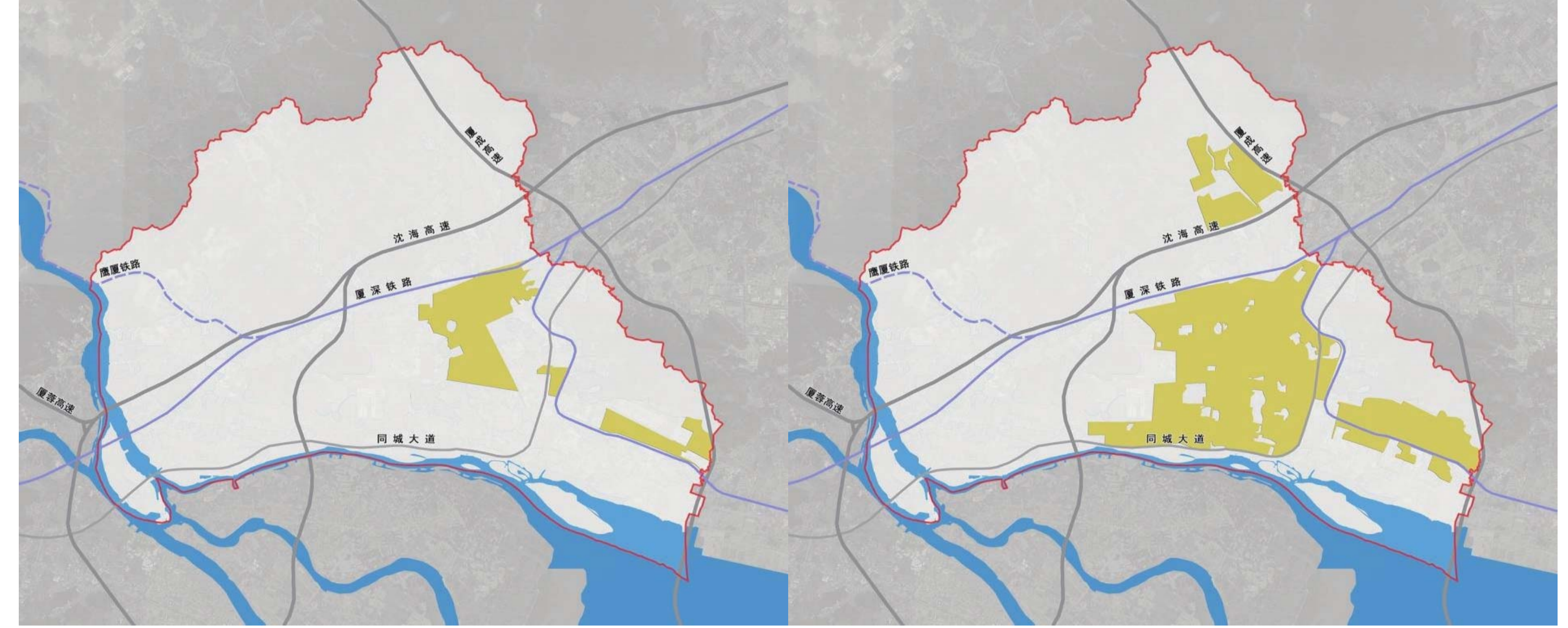
Analysis of Village Spatial Evolution



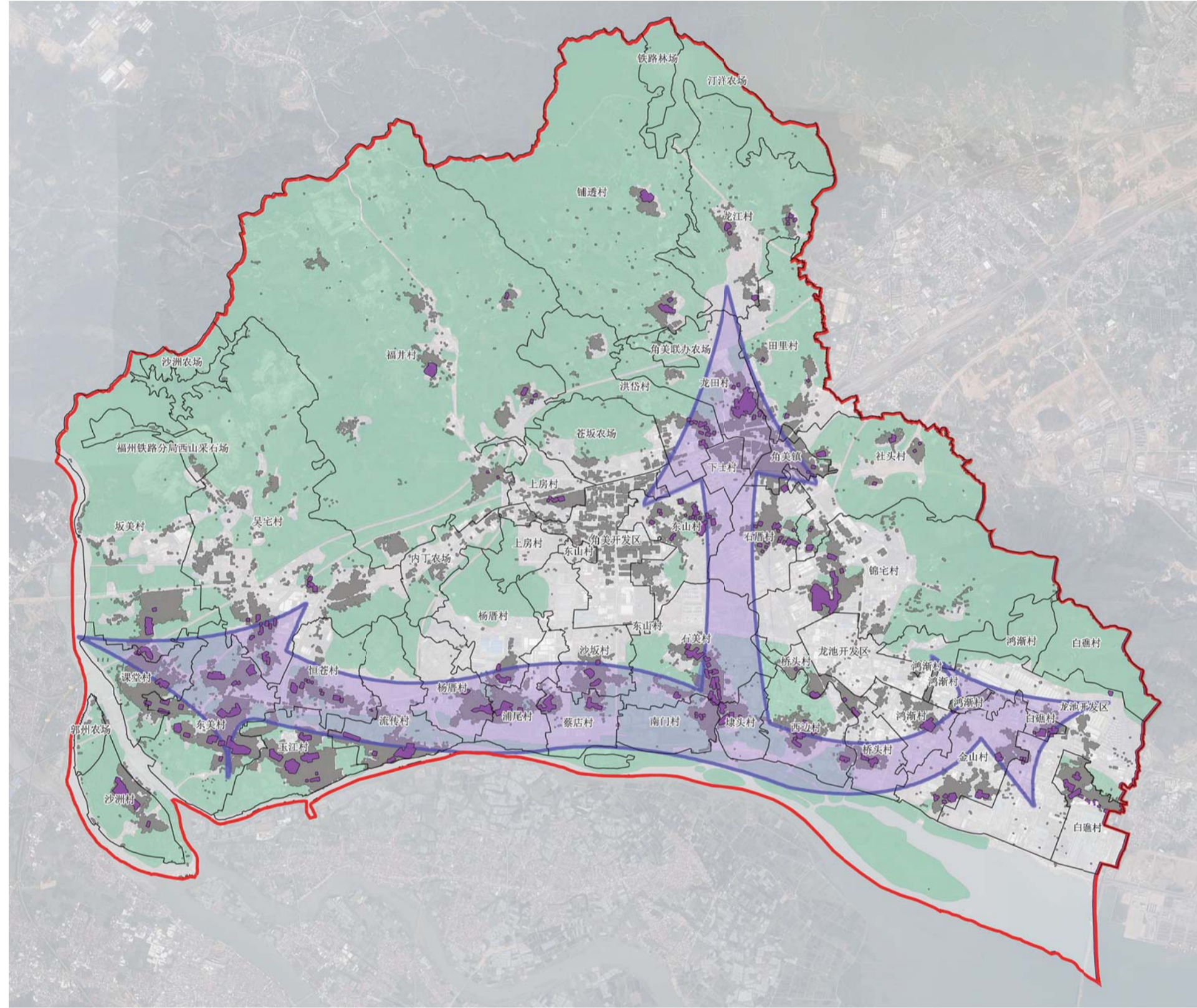
Analysis of Production Spatial Evolution



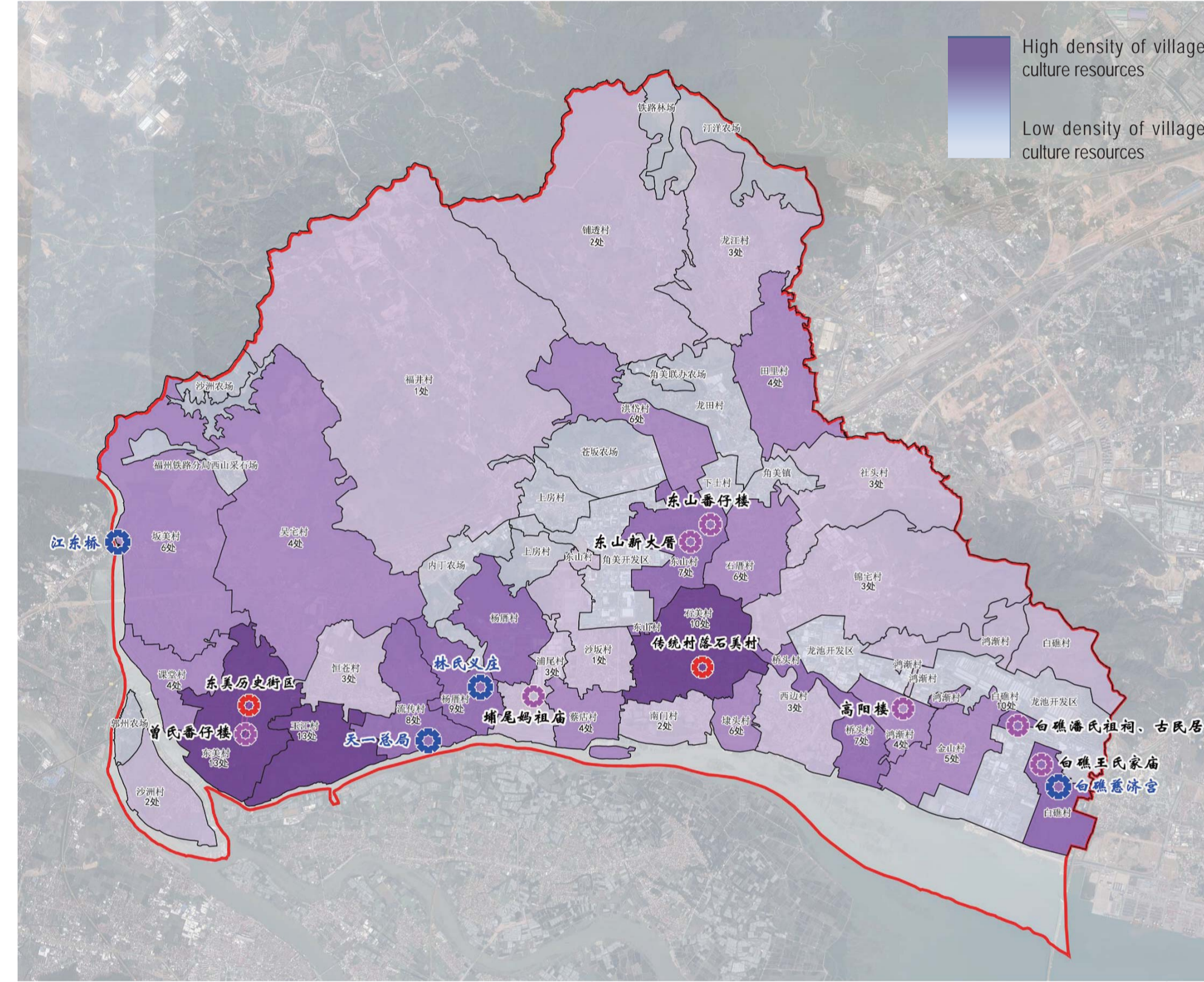
Analysis of living Spatial Evolution



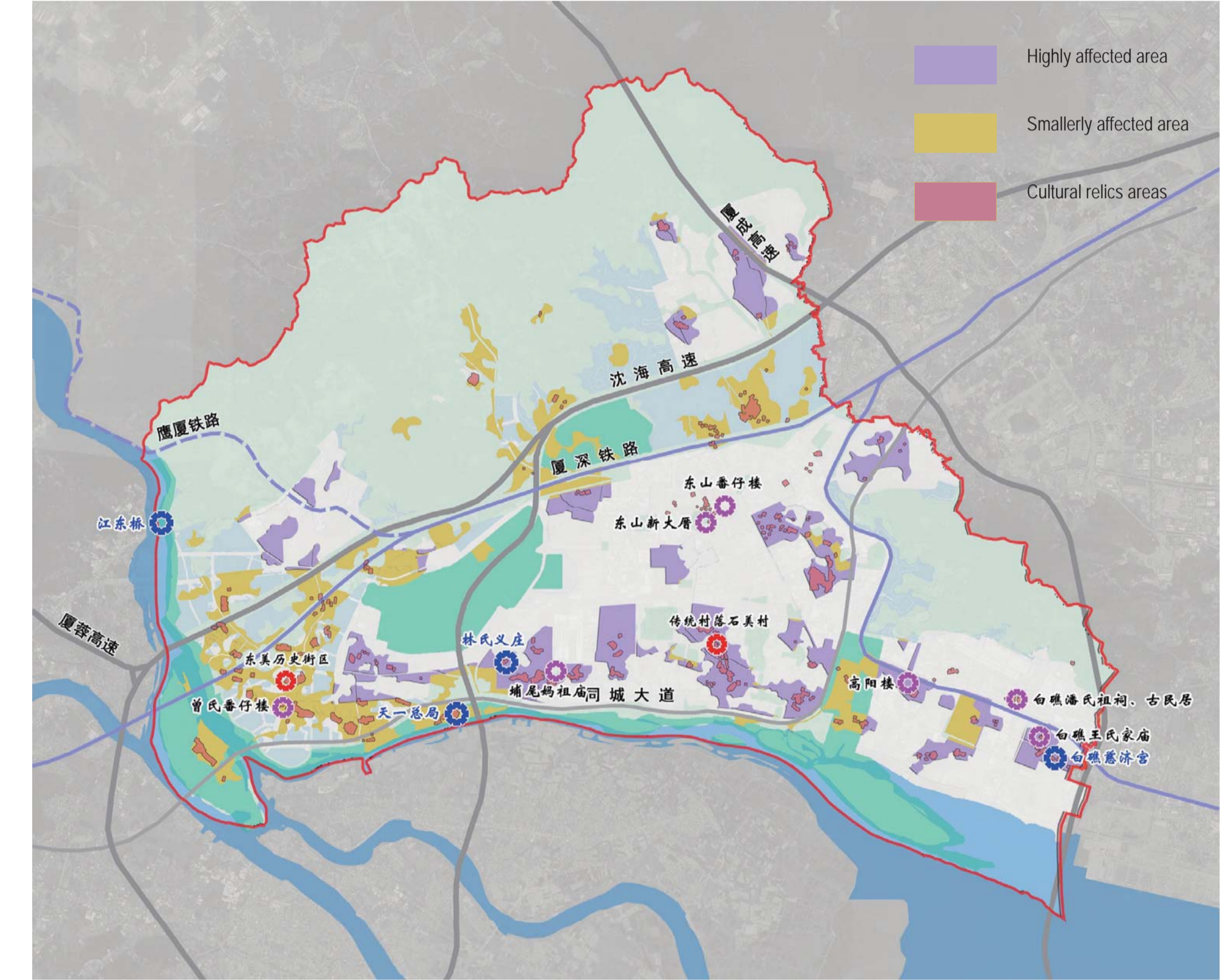
'One horizontal and one vertical, along the river through the city' distribution structure



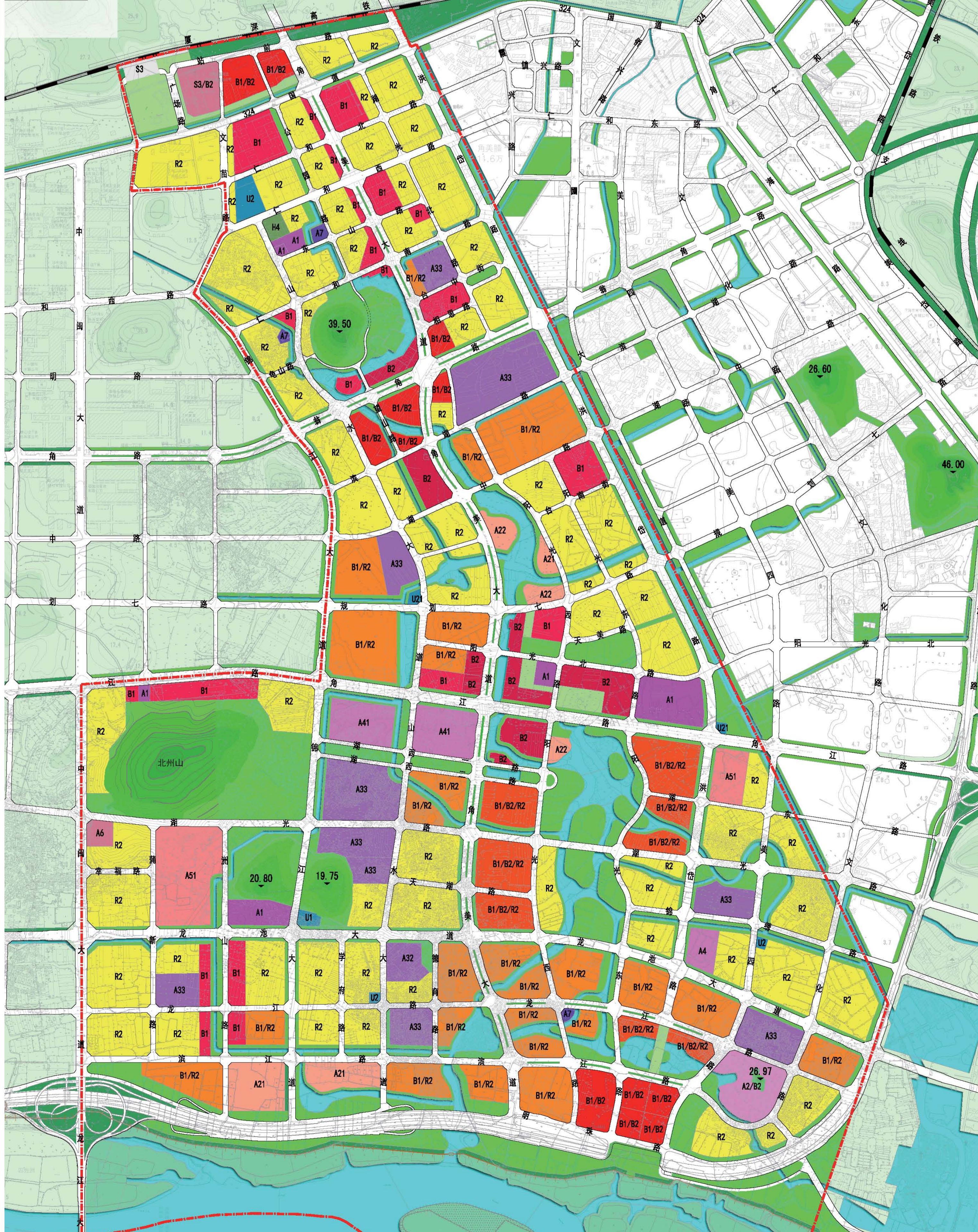
Cultural resources distribution density analysis



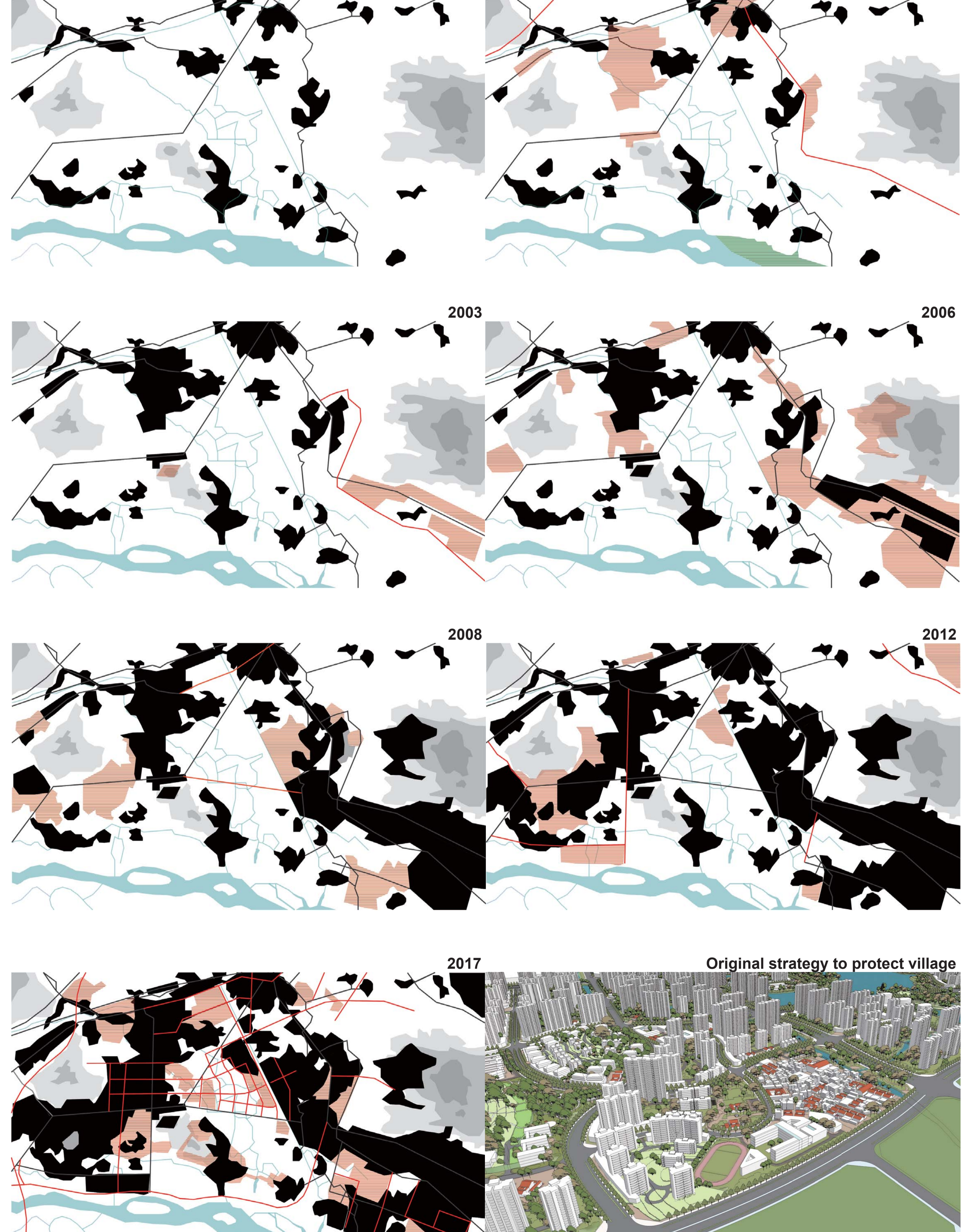
Classification of the modern space impact on the cultural resources



Original government planning



The spatial evolution process in Jiamei region



Original strategy to protect village







From the previous spatial study, we find a paradox between the government future planning and the actual operation in Jiaomei region. The production space even corrodes the "horizontal belt along Jiuolong river" and threatens the existence of the ancient cannal and the old city agglomeration. In order to recall the memory of the prosperous Jiuolong river bank, our advice is fully maintaining the west-east cannal and all the original villages along this belt, in the meanwhile, respecting the surrounded features not using modern grid to barbarously cut the region.

For the certain design part, we finally choose Shimei area as our project site. It is the most complete and valuable extant area along north bank but it is facing the same problem that would be covering by modern grid due to the government planning.



1 ensure the range of the traditional village alliance

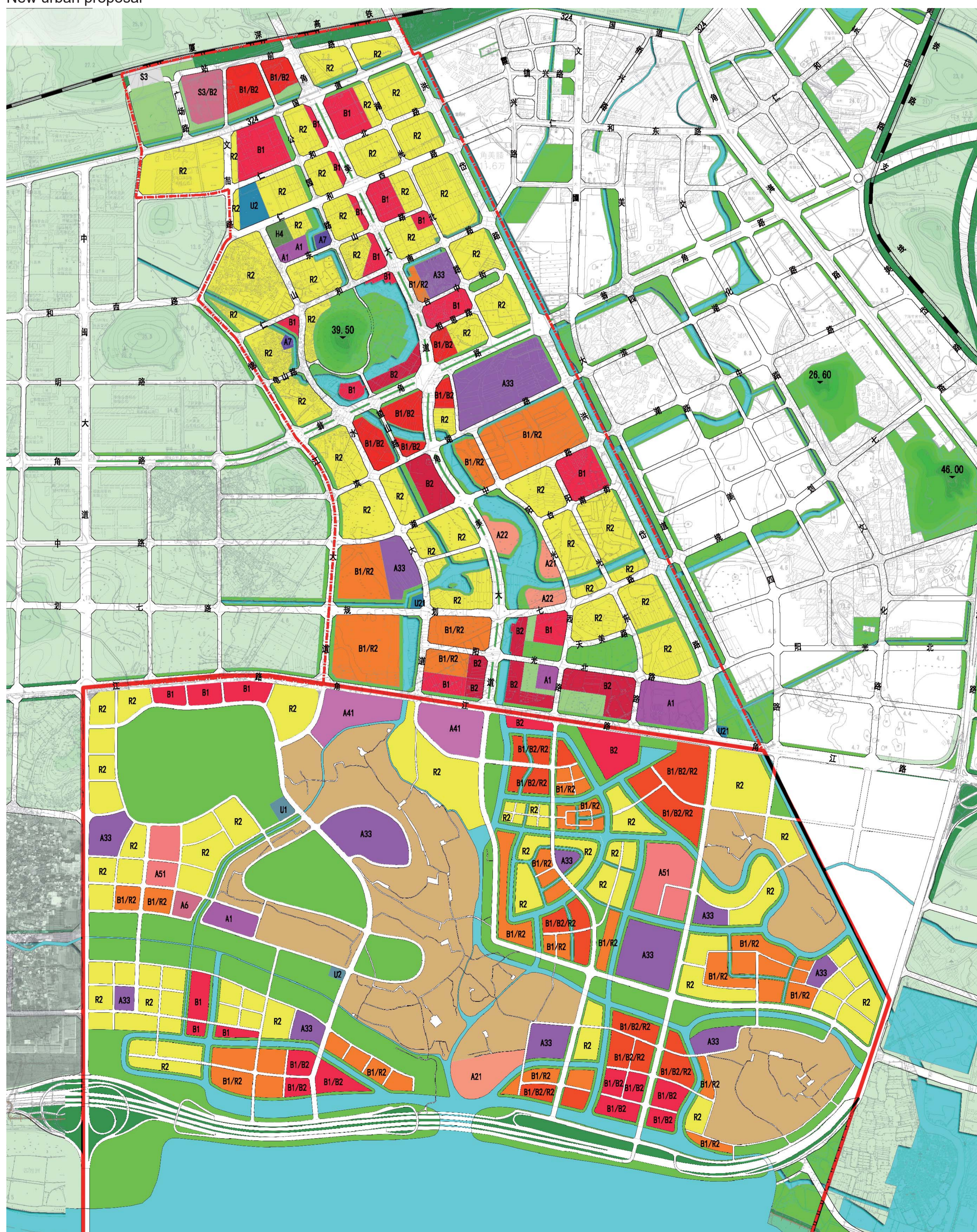
2 set the green belt along the canal and hill part, divide the area characters into 'land' part and 'water' part.

3 Modify the main avenues which connect to Xia-Zhang city highway (vertical direction), cancel the major west to east avenues in order to save the village context.

4 Set new water transportation system based on the original canal network. Using water as the framework instead of road and create island feature.

5 Fill the rest part with road network, shorten the width of road from 6-8 lane to 2-4 lane and the scale of block from Side length 200m to 50-100m.

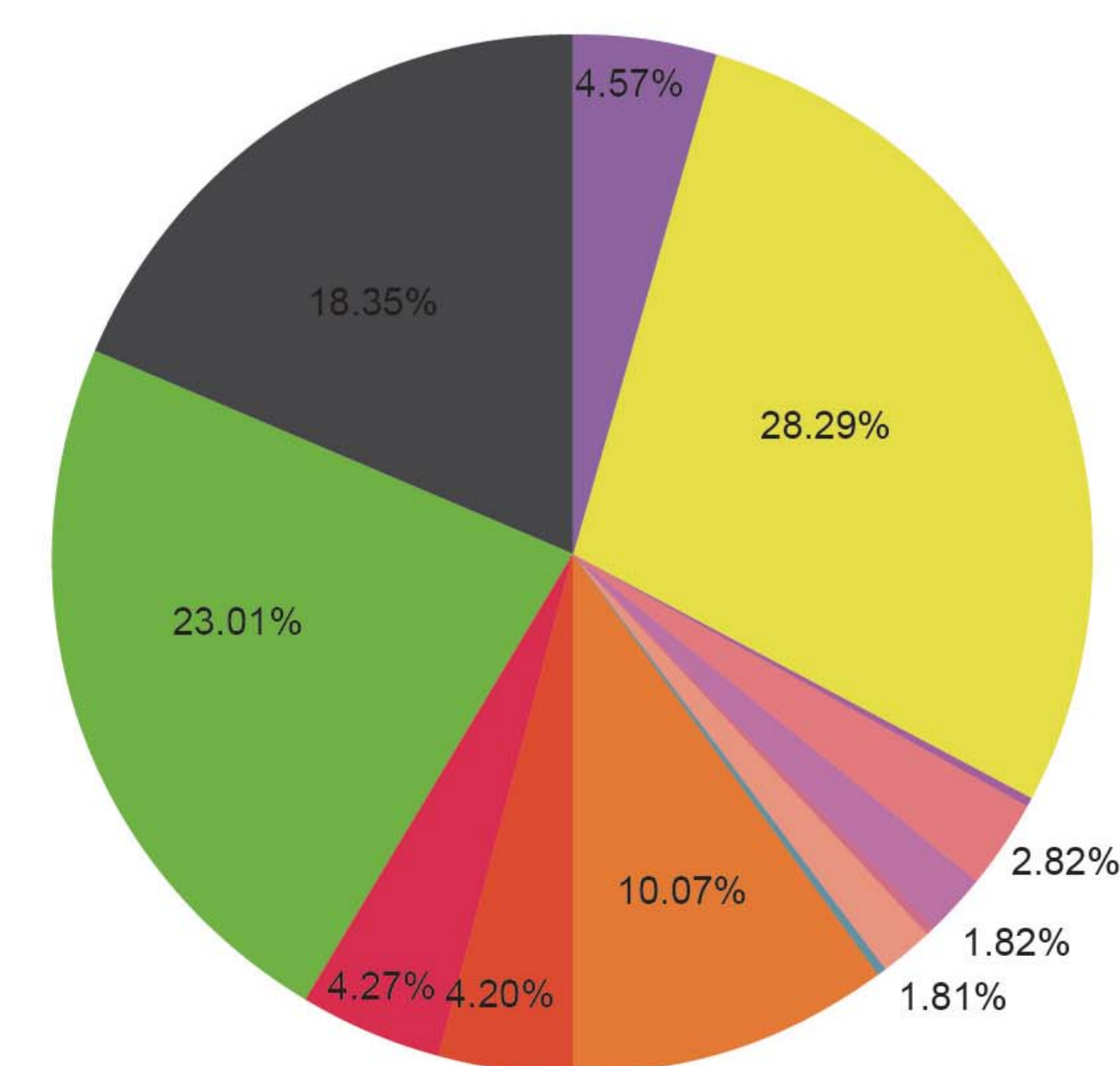
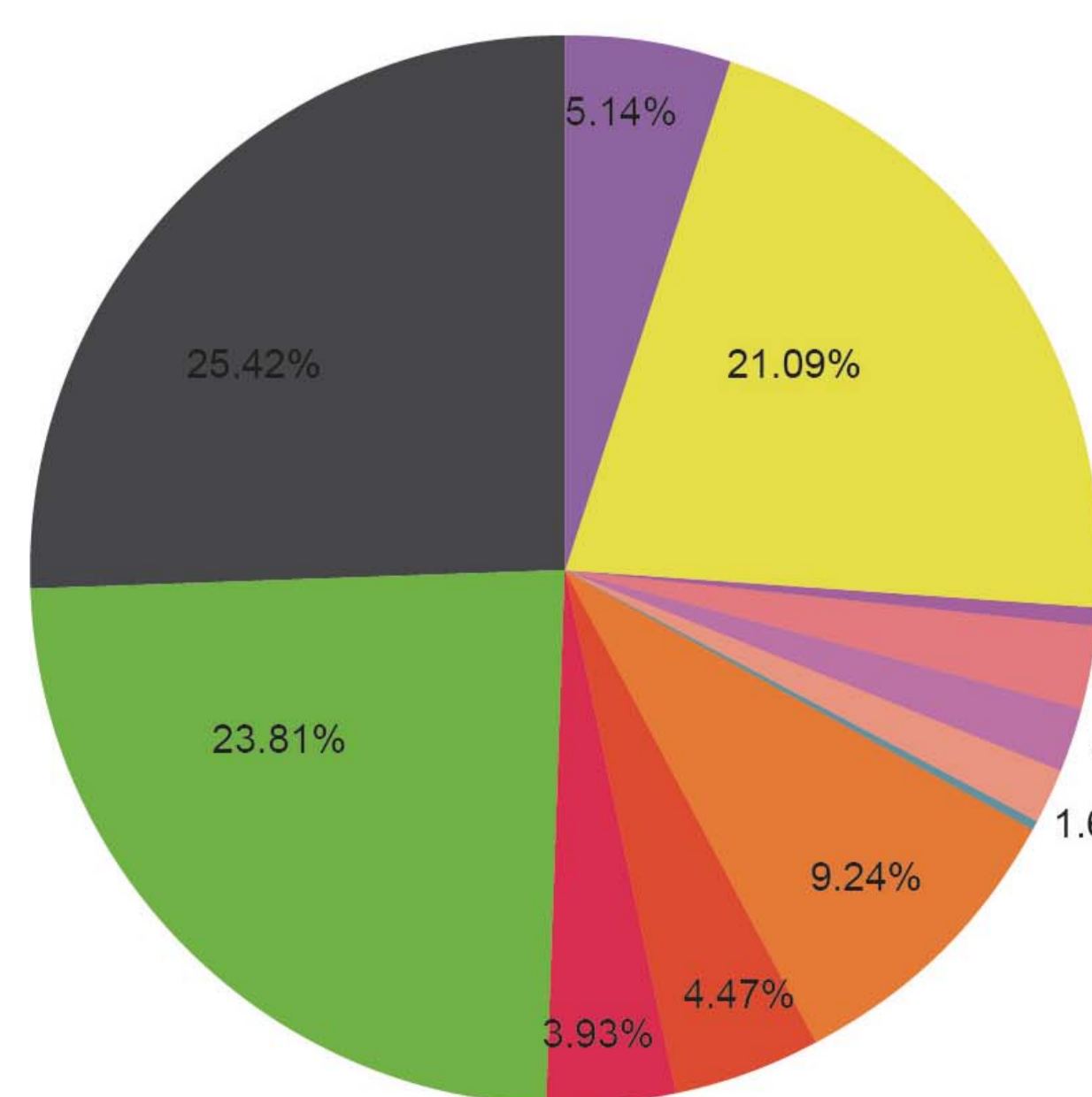
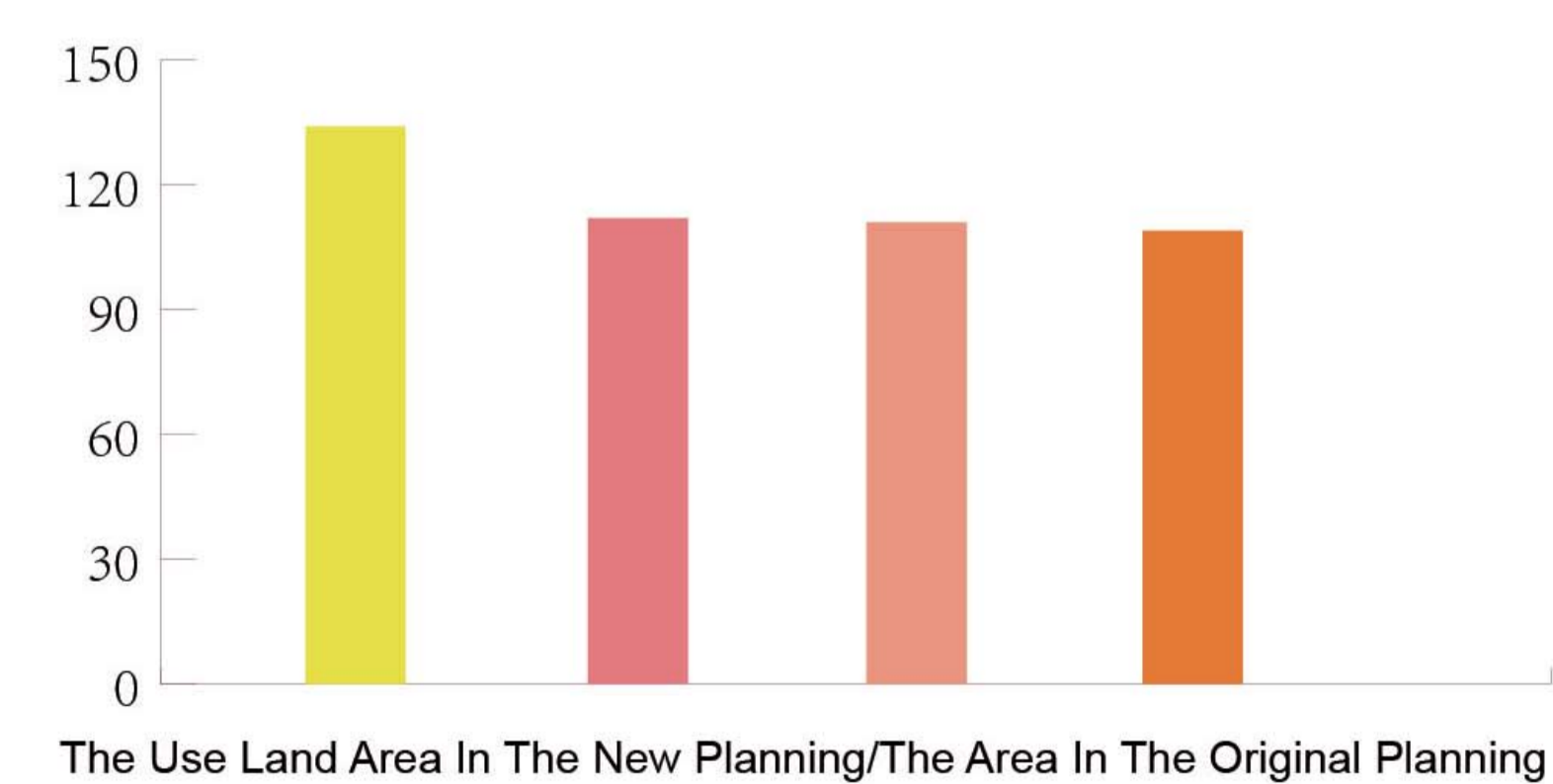
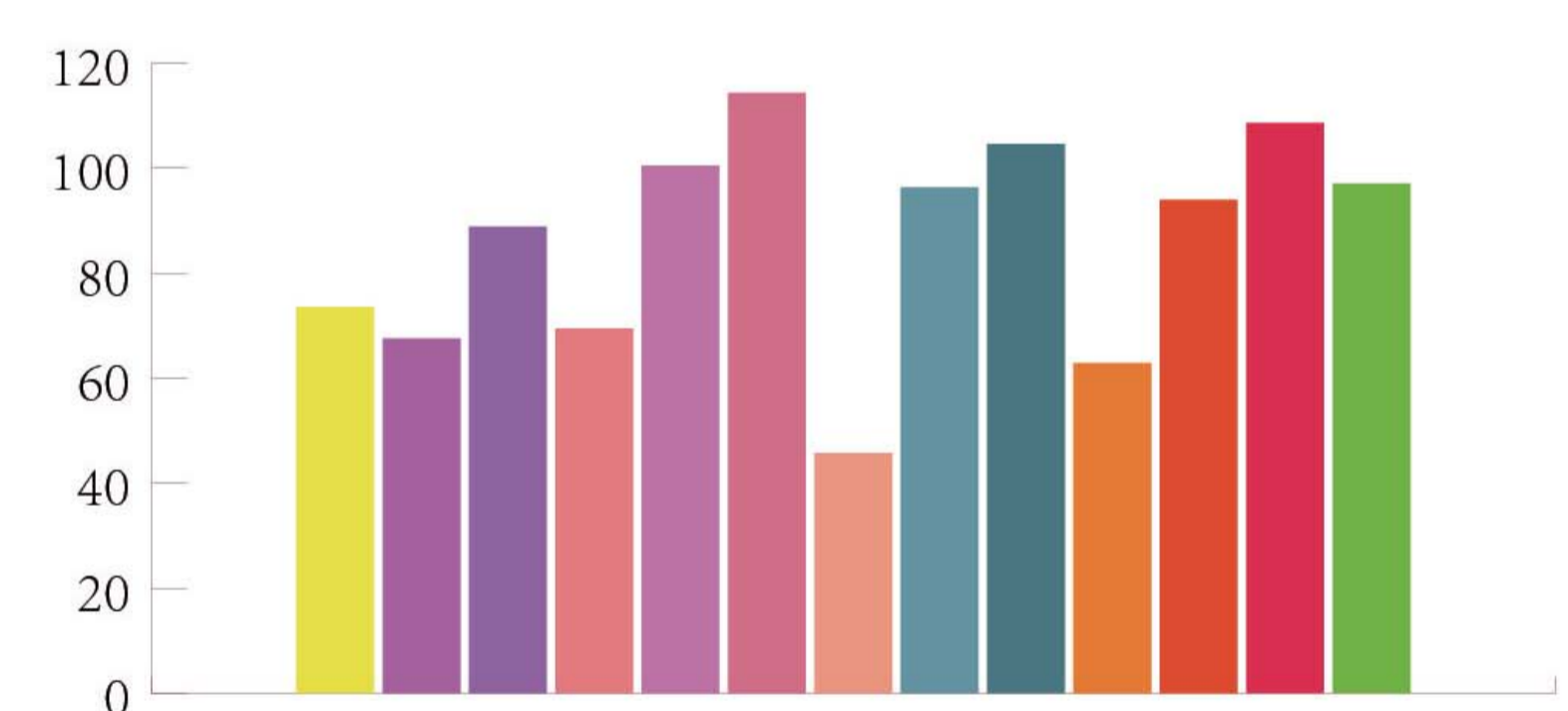
New urban proposal



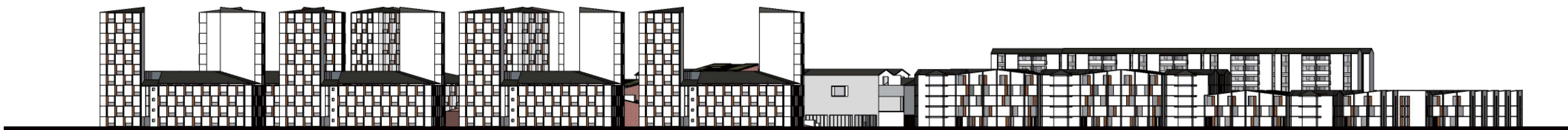
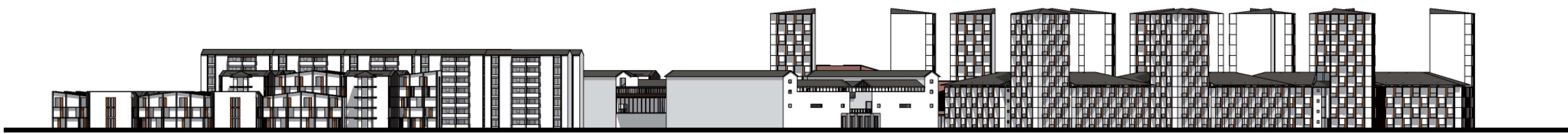
Site Total Area: 6279665 m<sup>2</sup>  
 Original planning construction area: 3187643 m<sup>2</sup>  
 New planning construction area: 2478617 m<sup>2</sup>  
 Preserving area: 1336744 m<sup>2</sup>

In the future, the village area can be mixed use and re-developed with Residential/Commercial/Cultural/-Medical Treatment Hood.

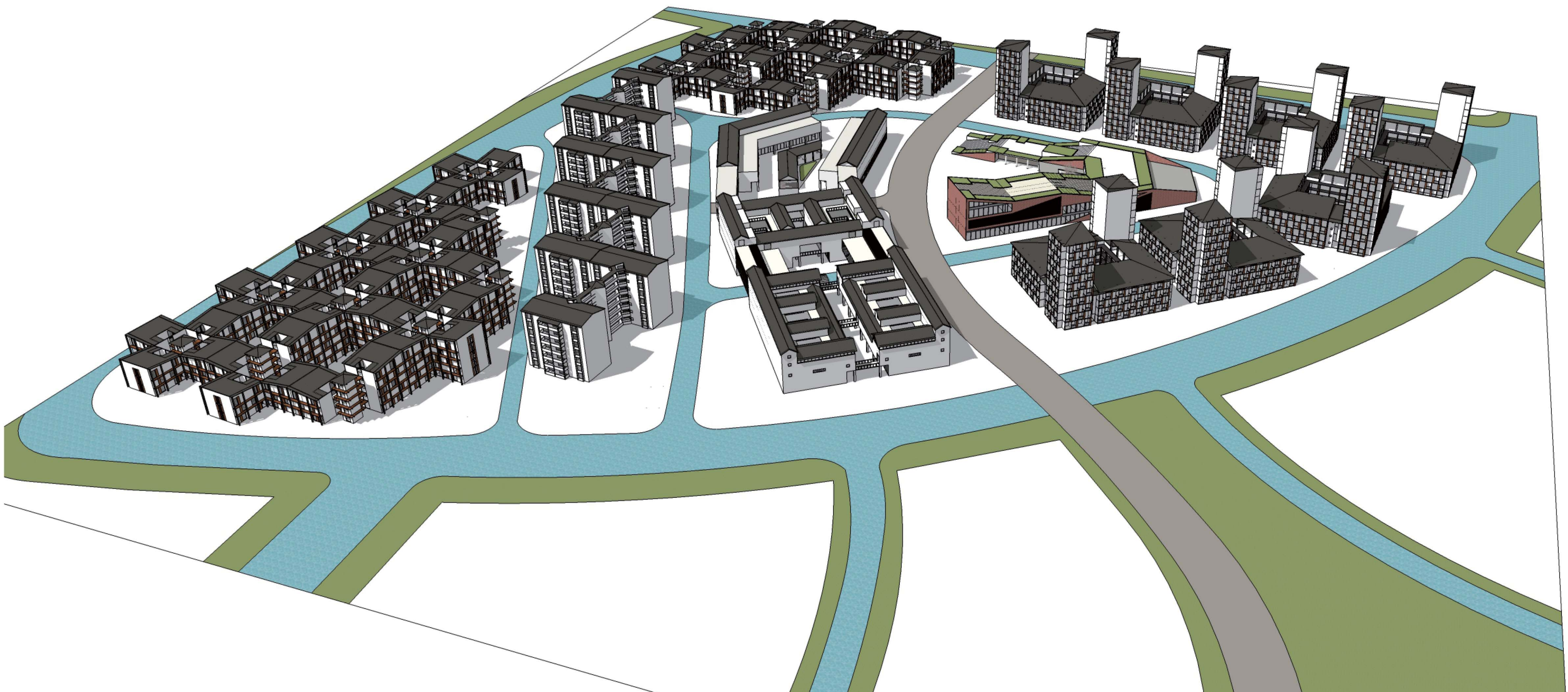
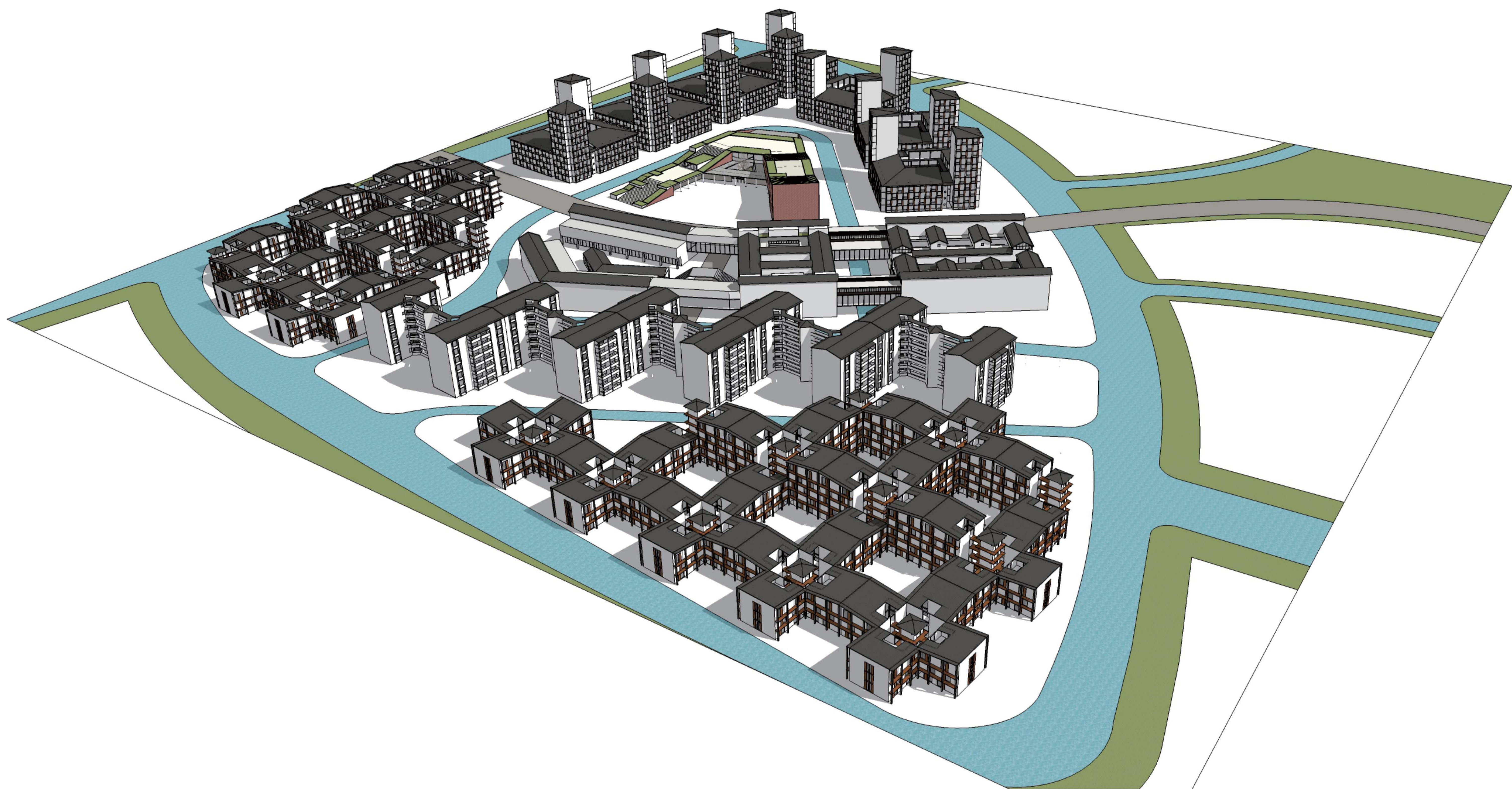
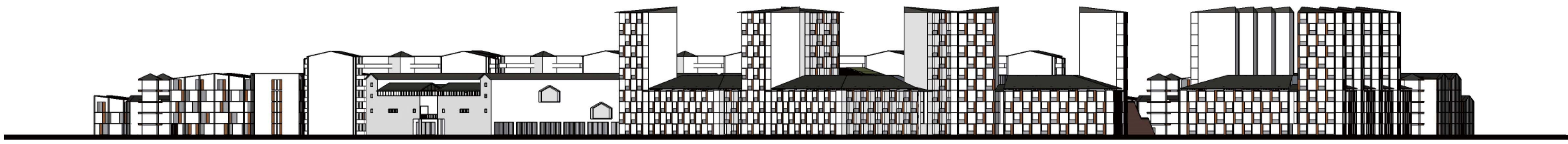
- GreenLand
- Commercial Land
- Commercial/Business/Residential Land
- Residential/Commercial Land
- Environment Maintenance Facility Land
- City Supply Land
- Cultural Facility Land
- Social Welfare Facility Land
- Sport Land
- Health Services Land
- School Land
- Administrative Land
- Residential Land
- Other



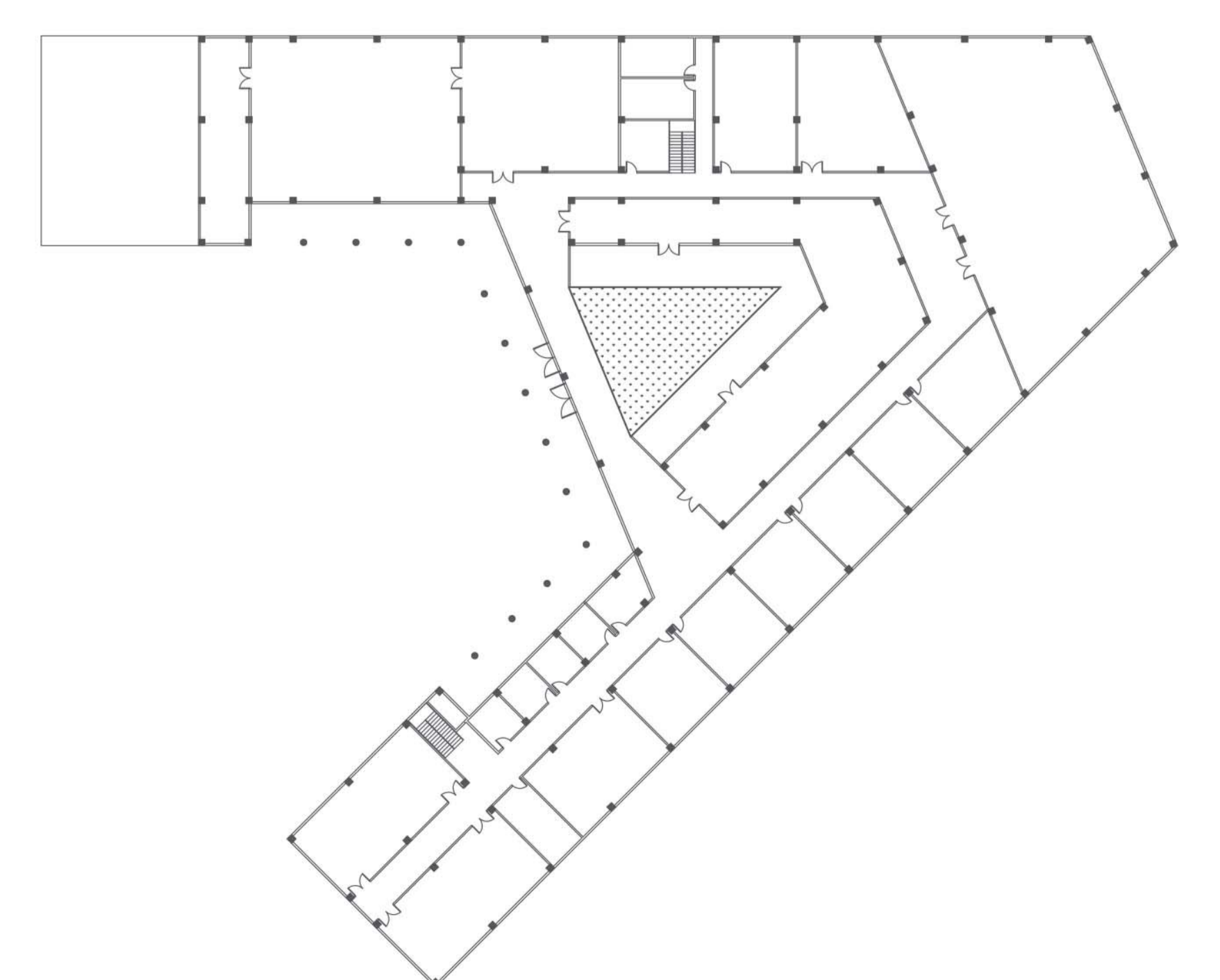
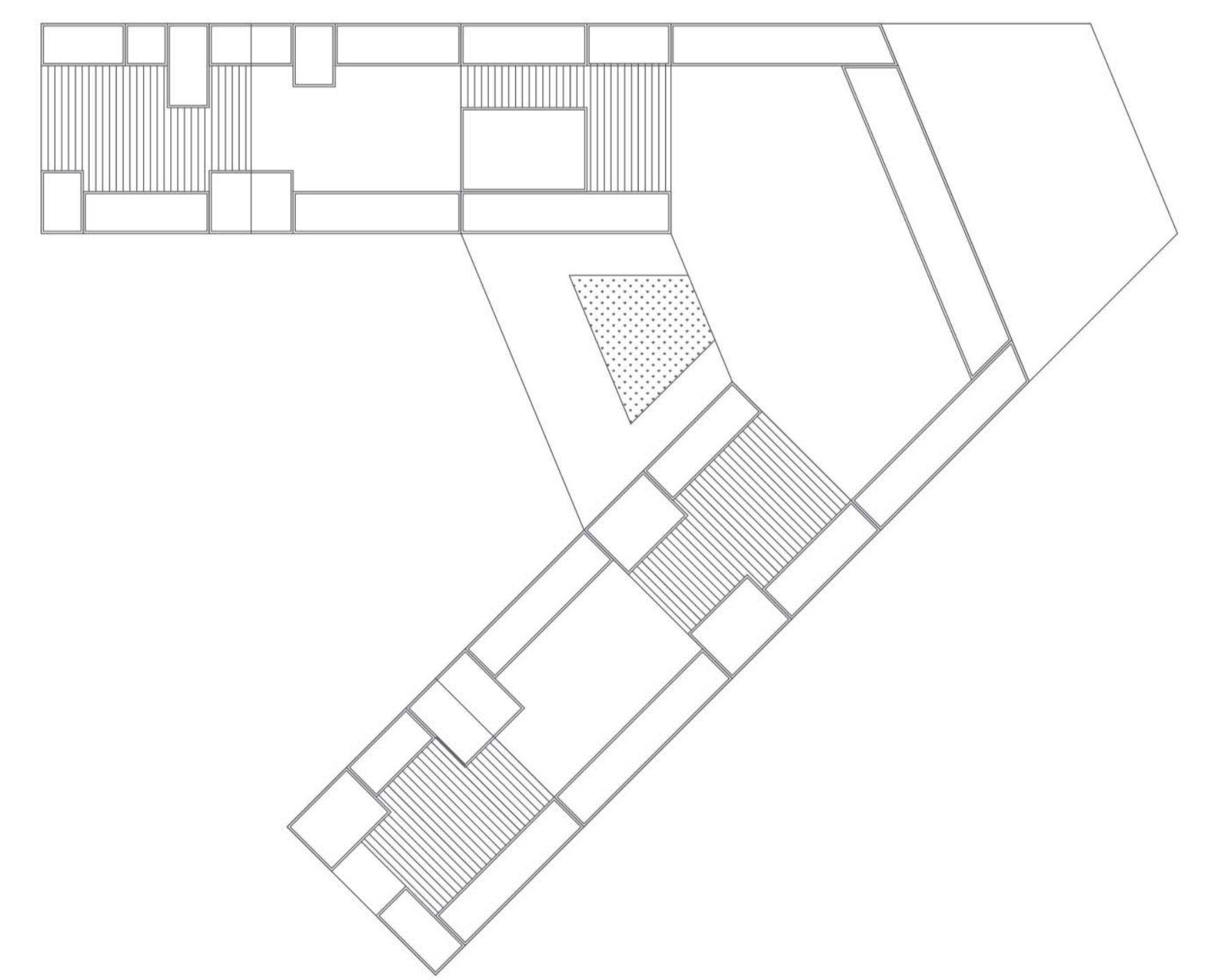
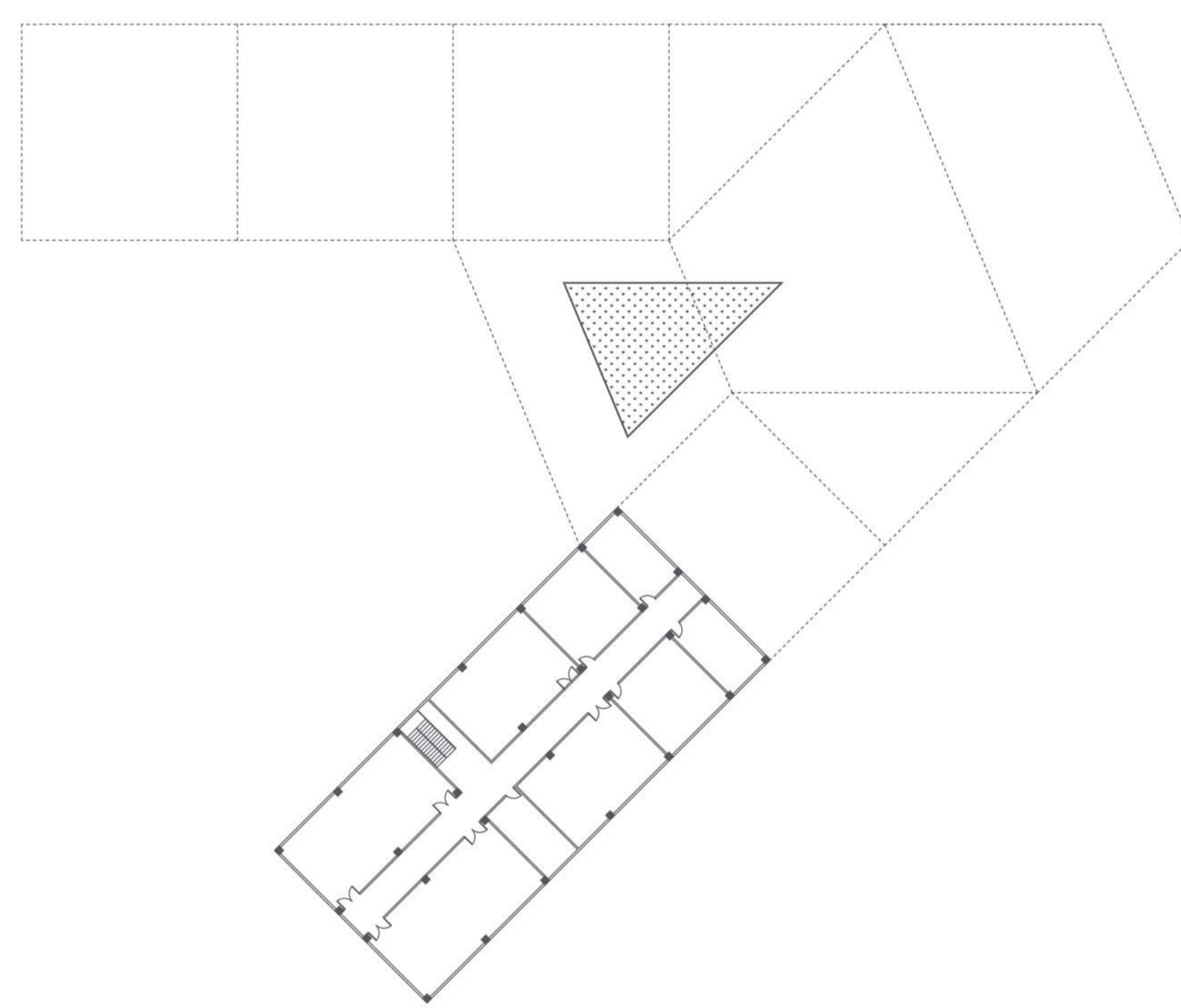
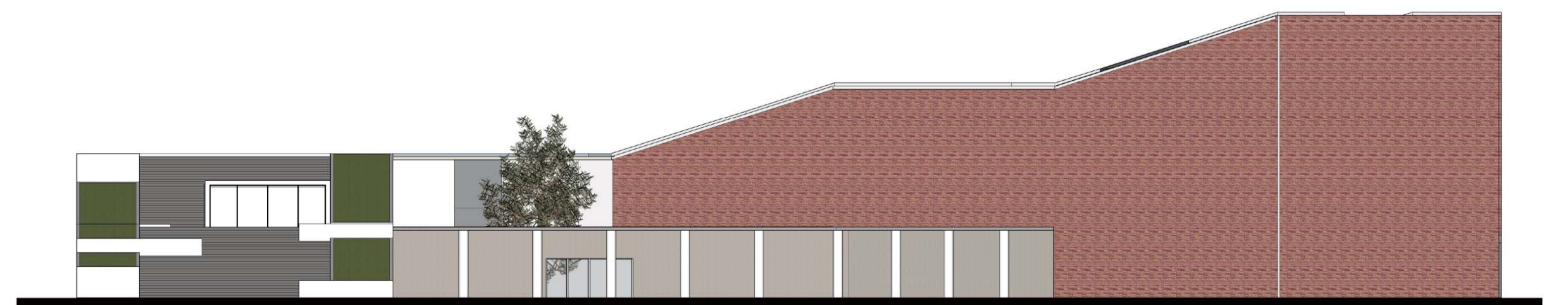
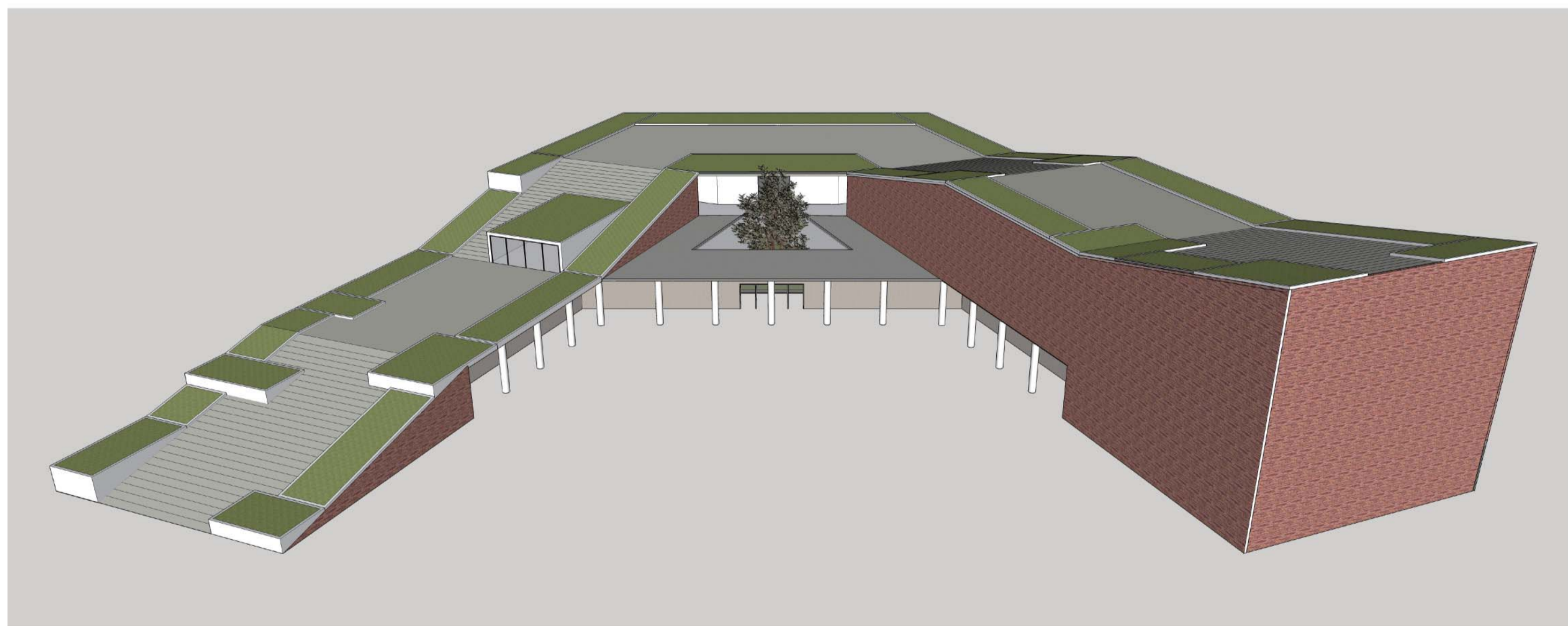
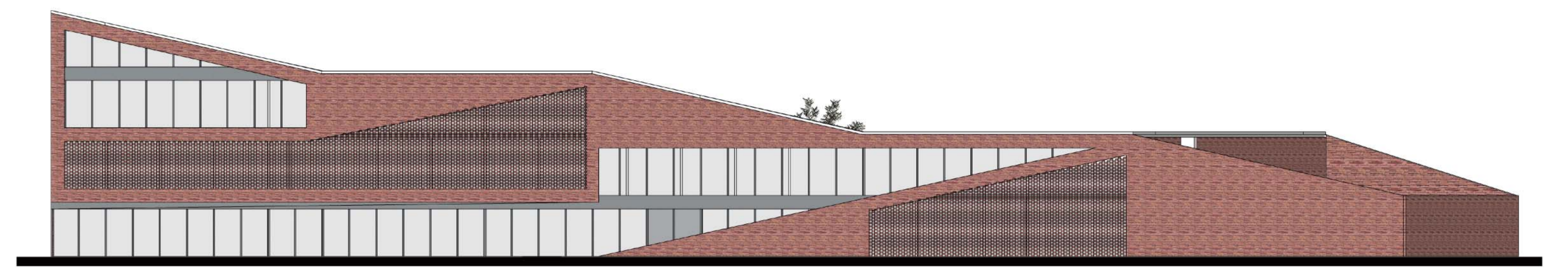
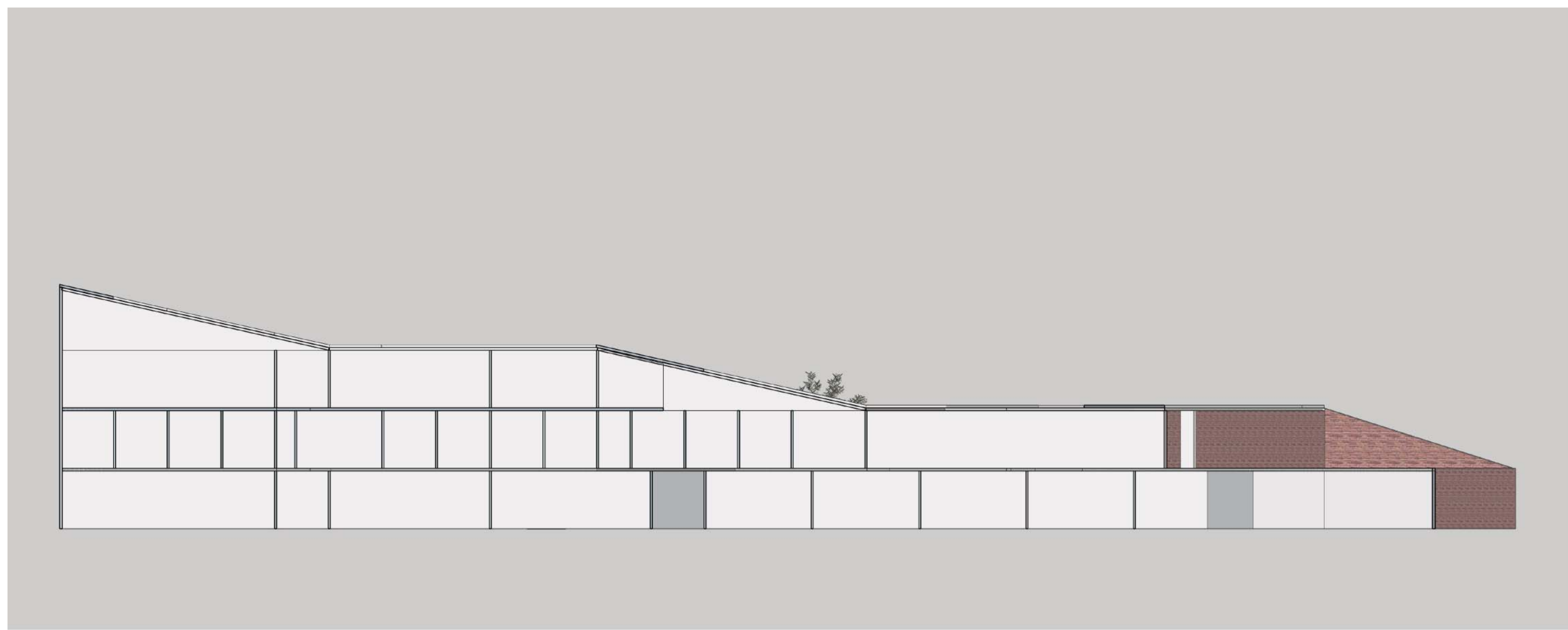




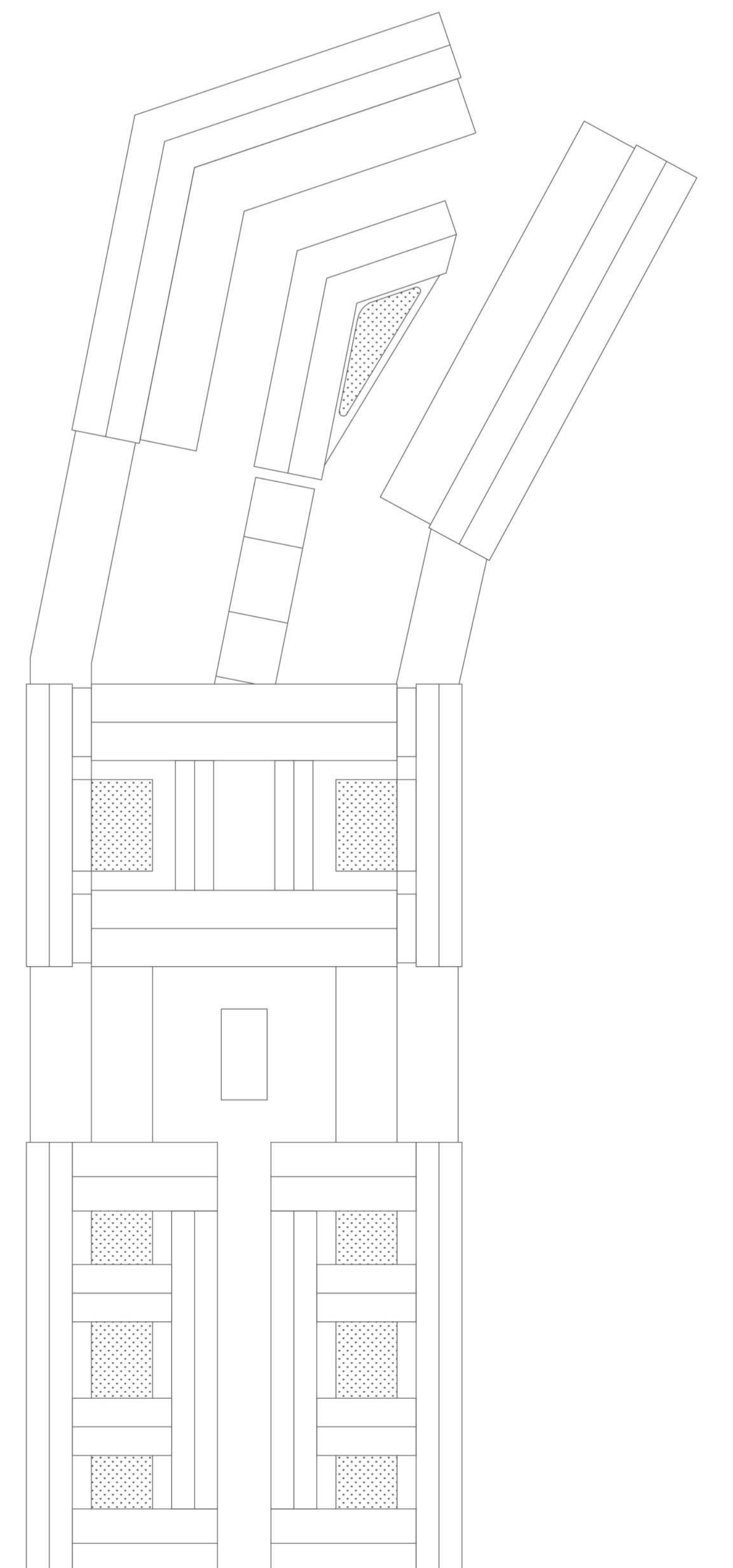
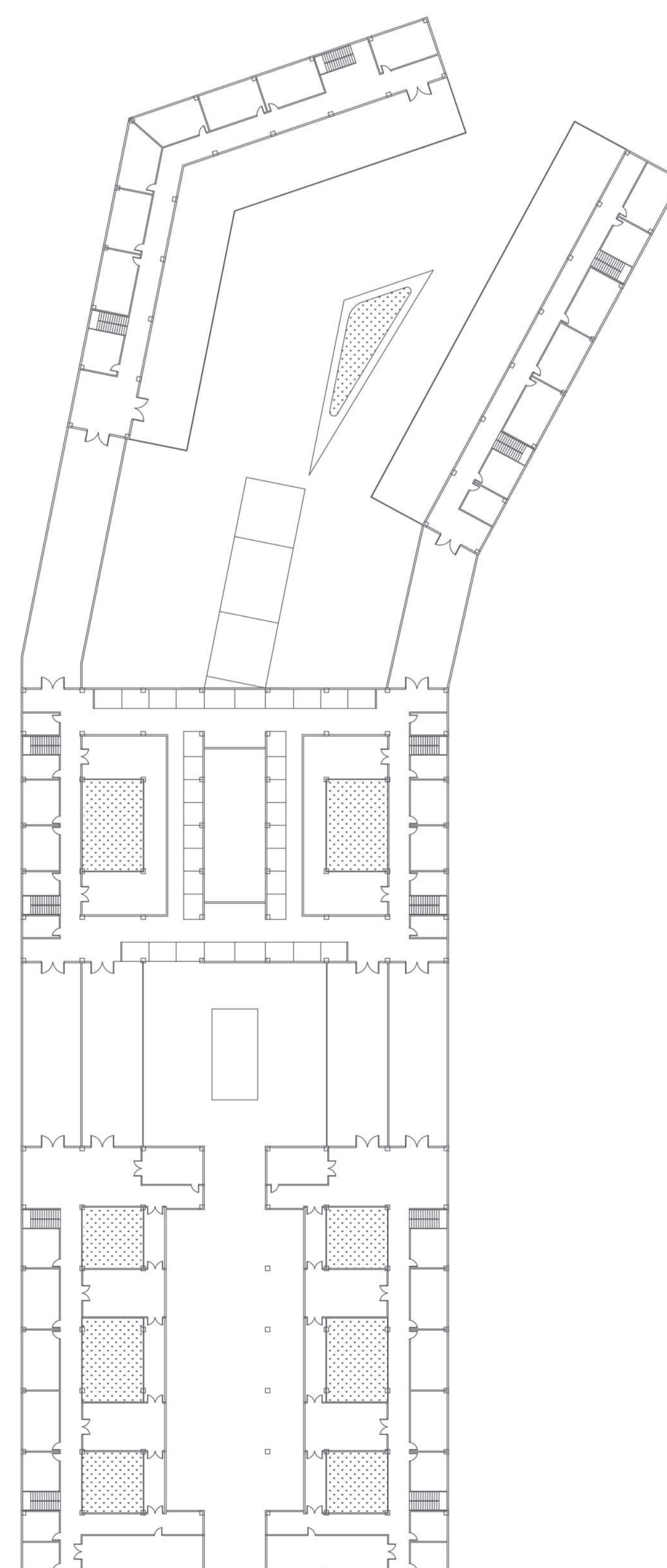
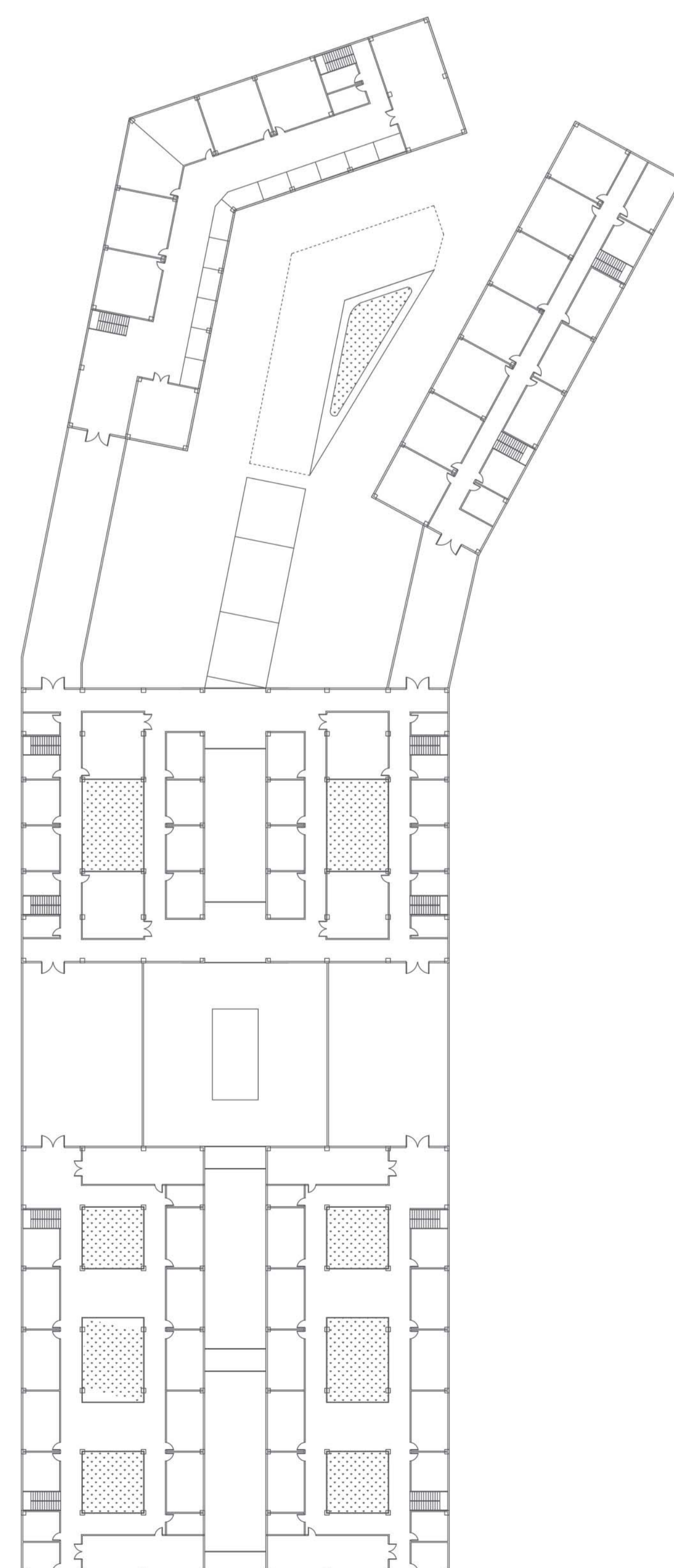
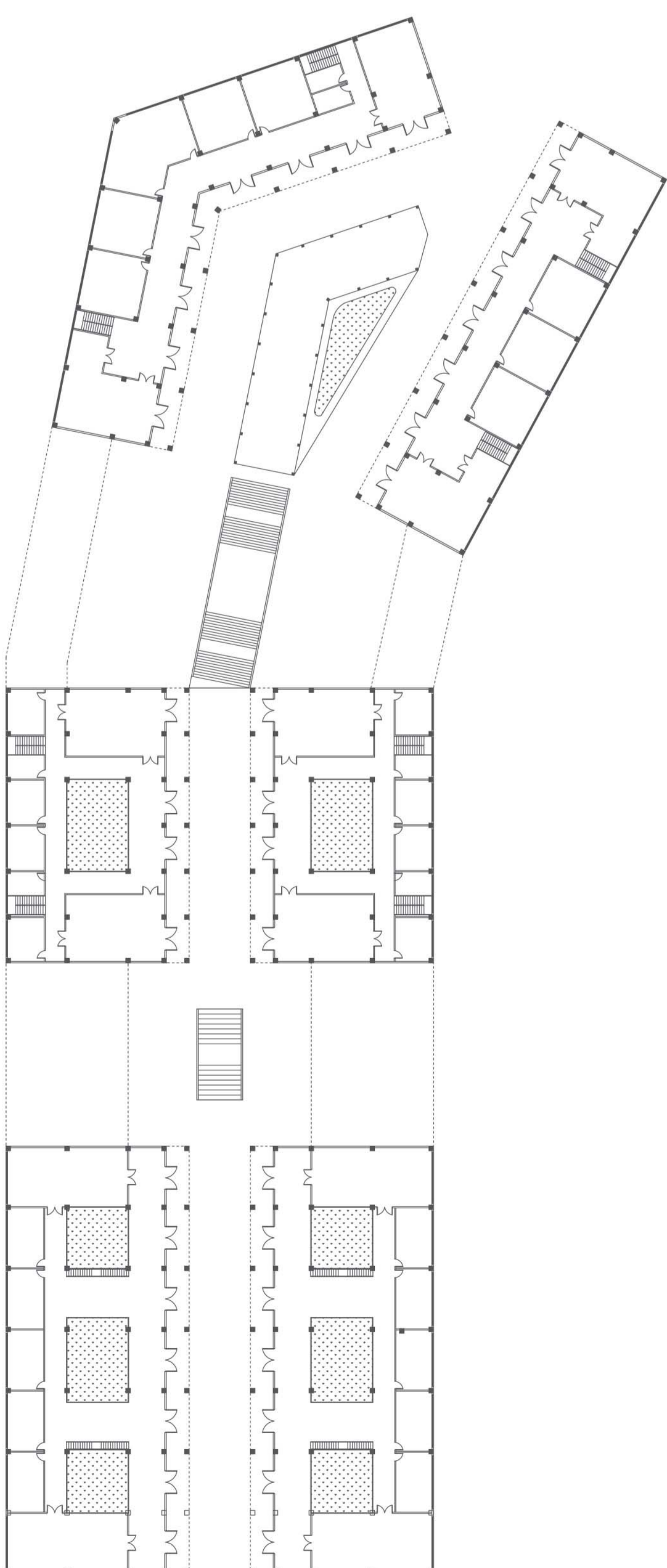
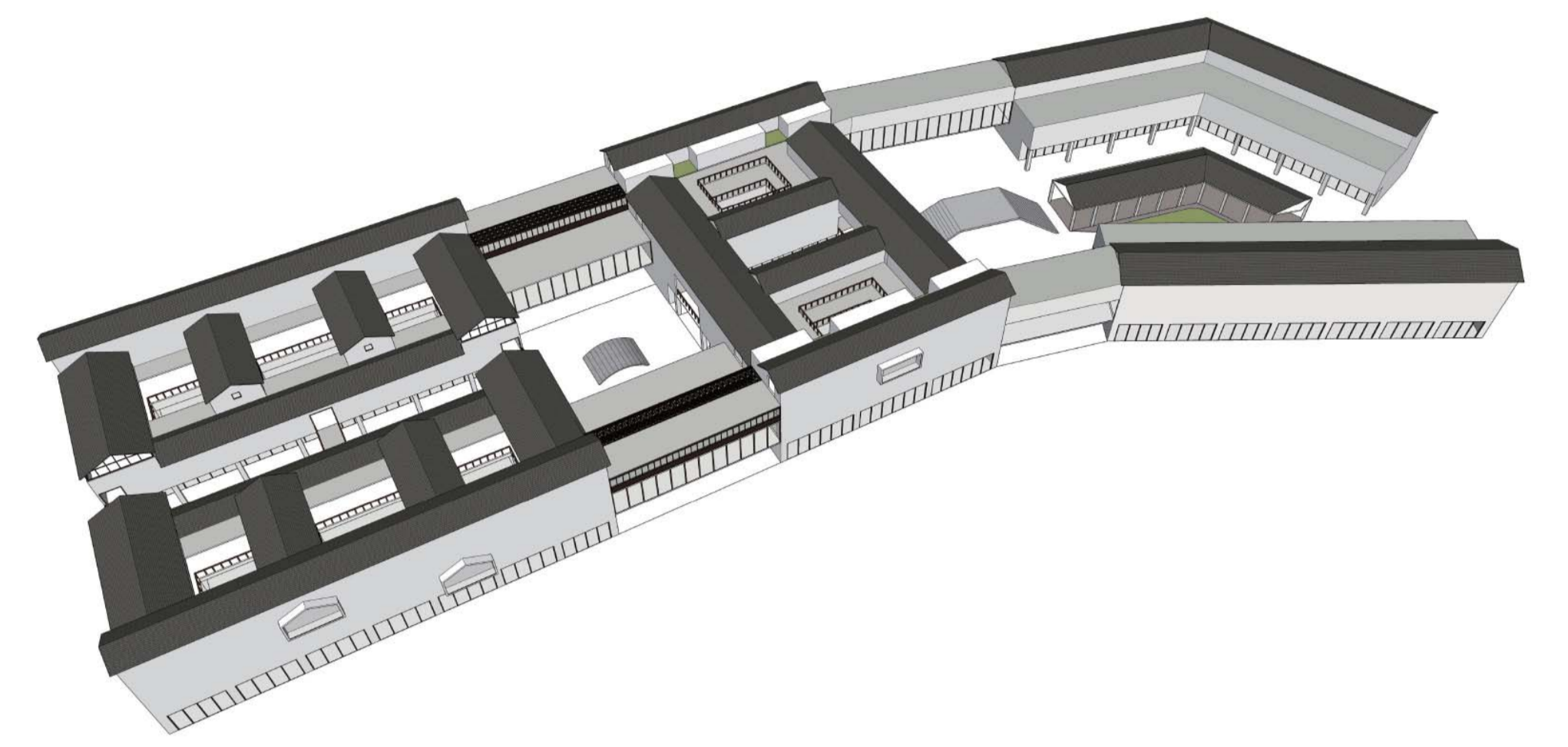
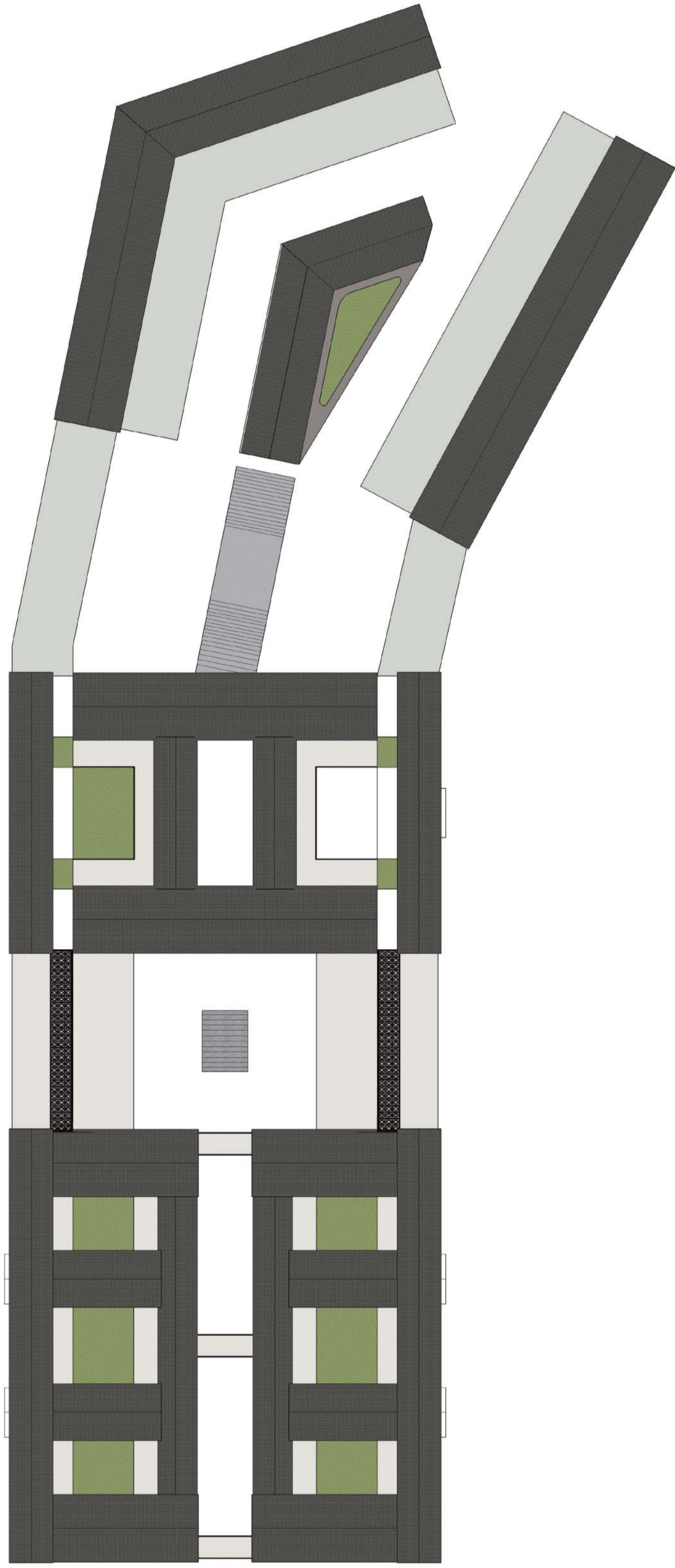
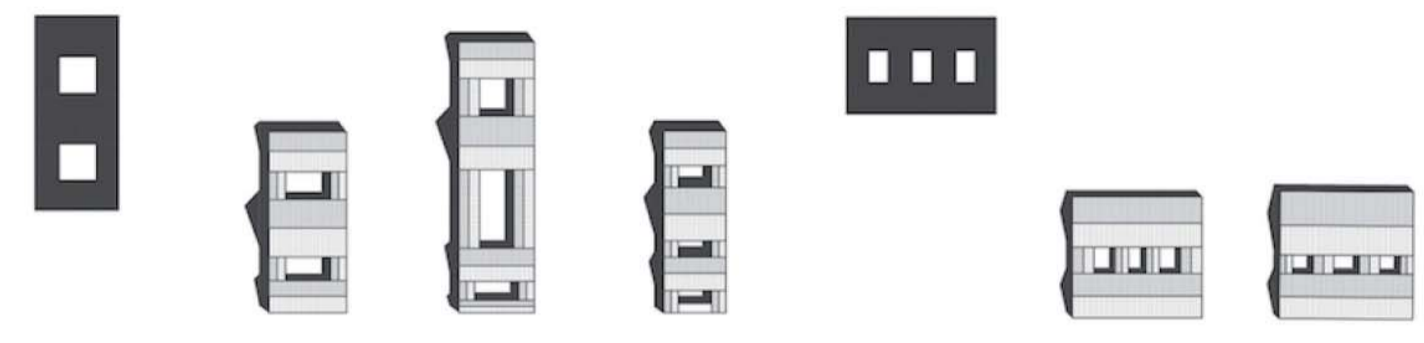
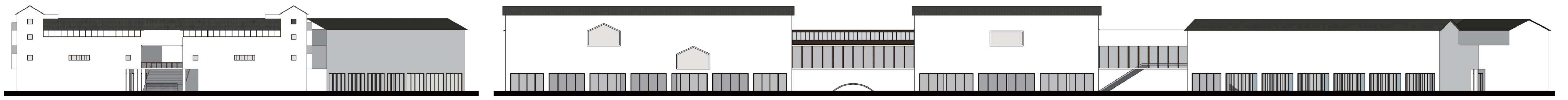




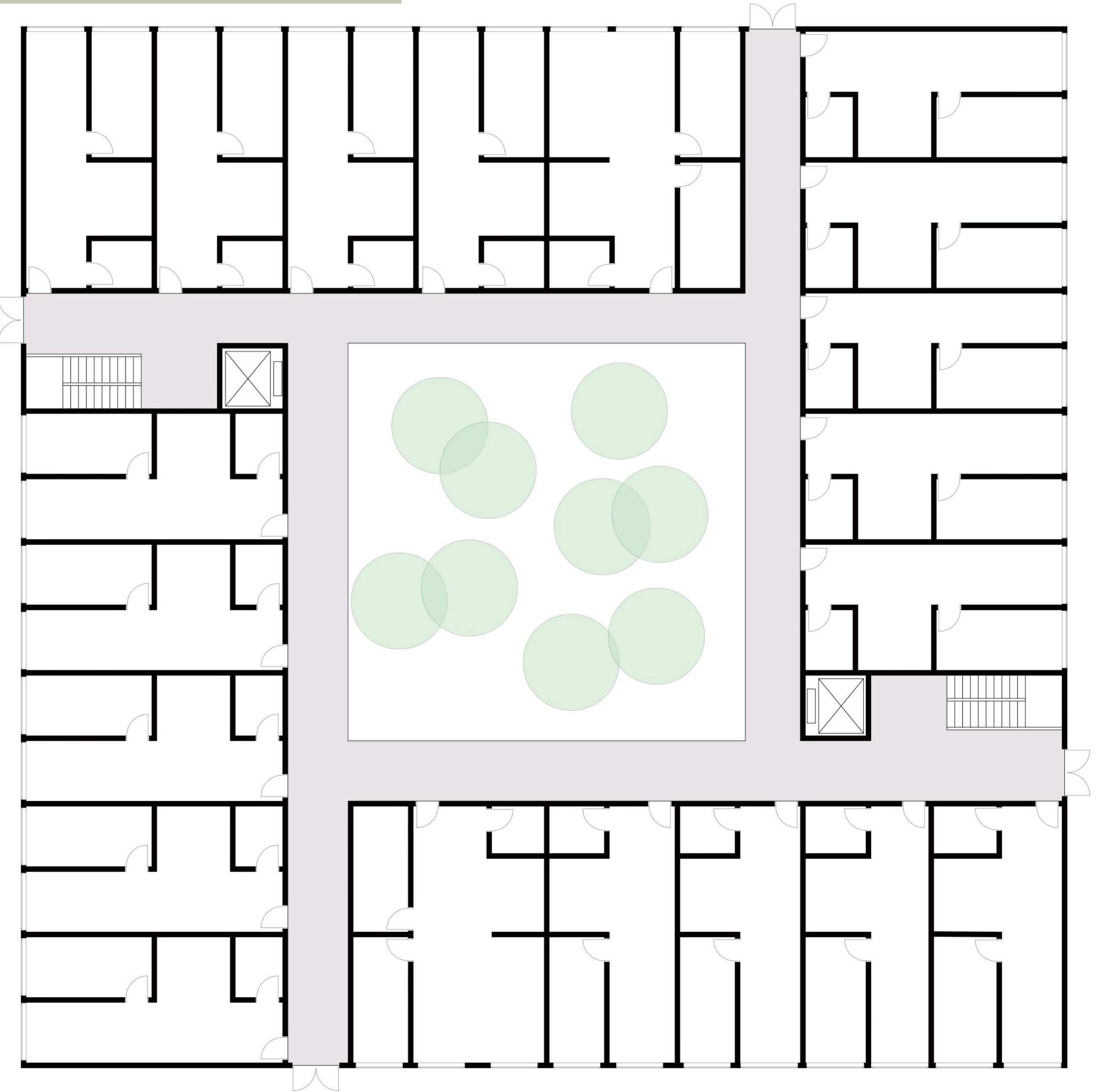
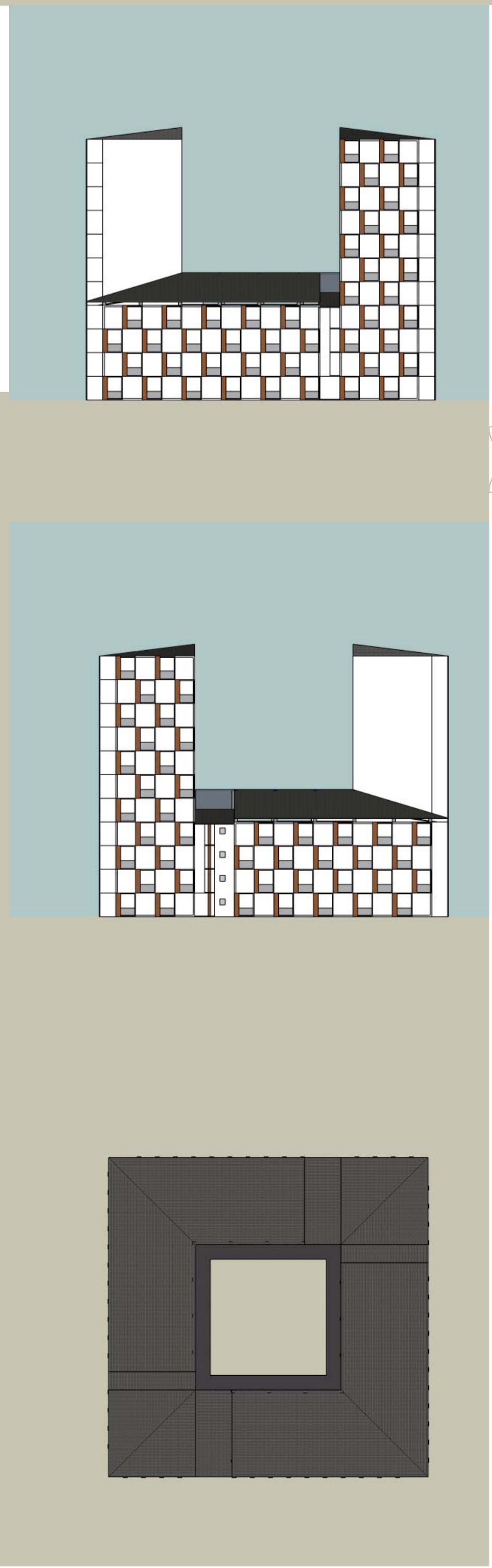
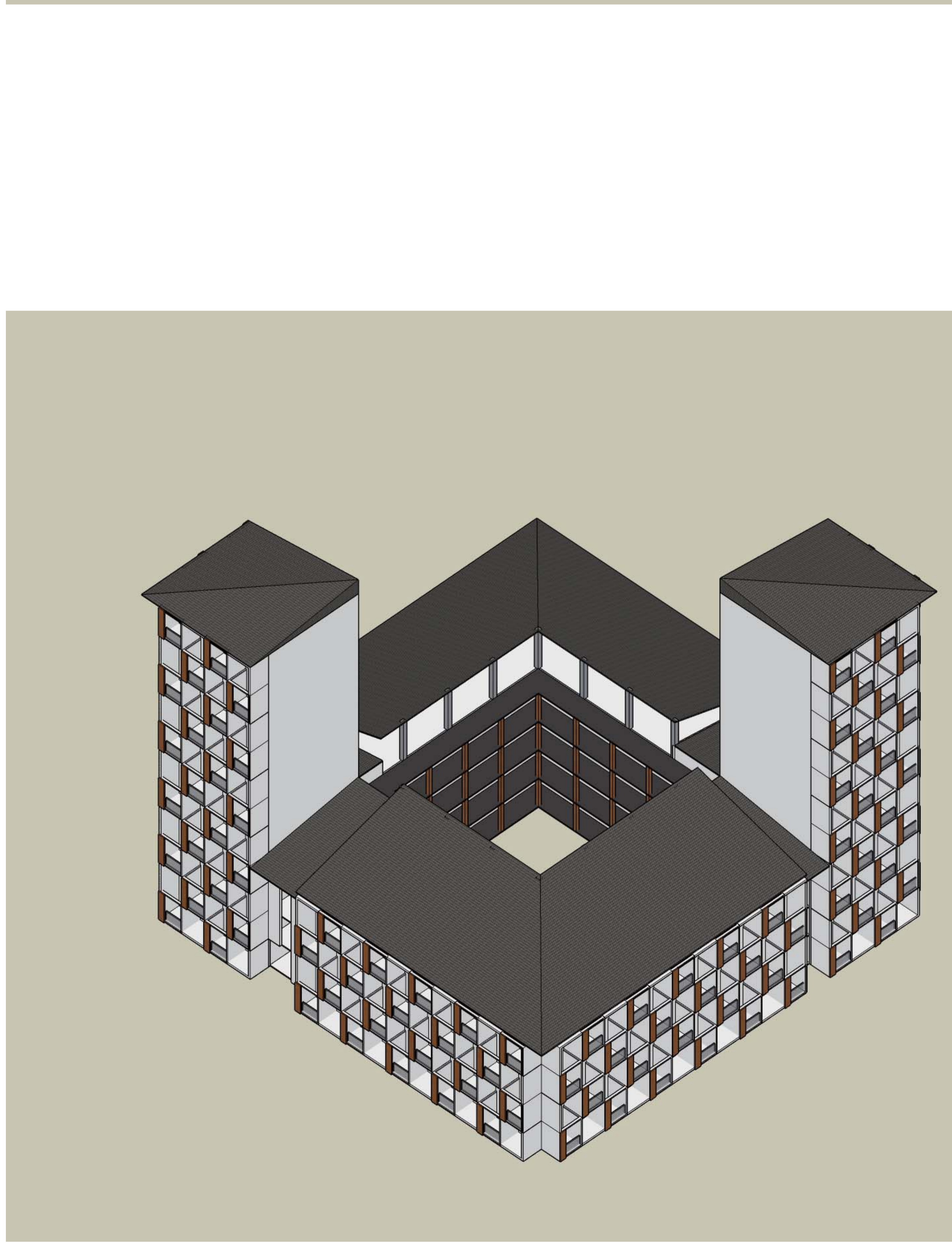
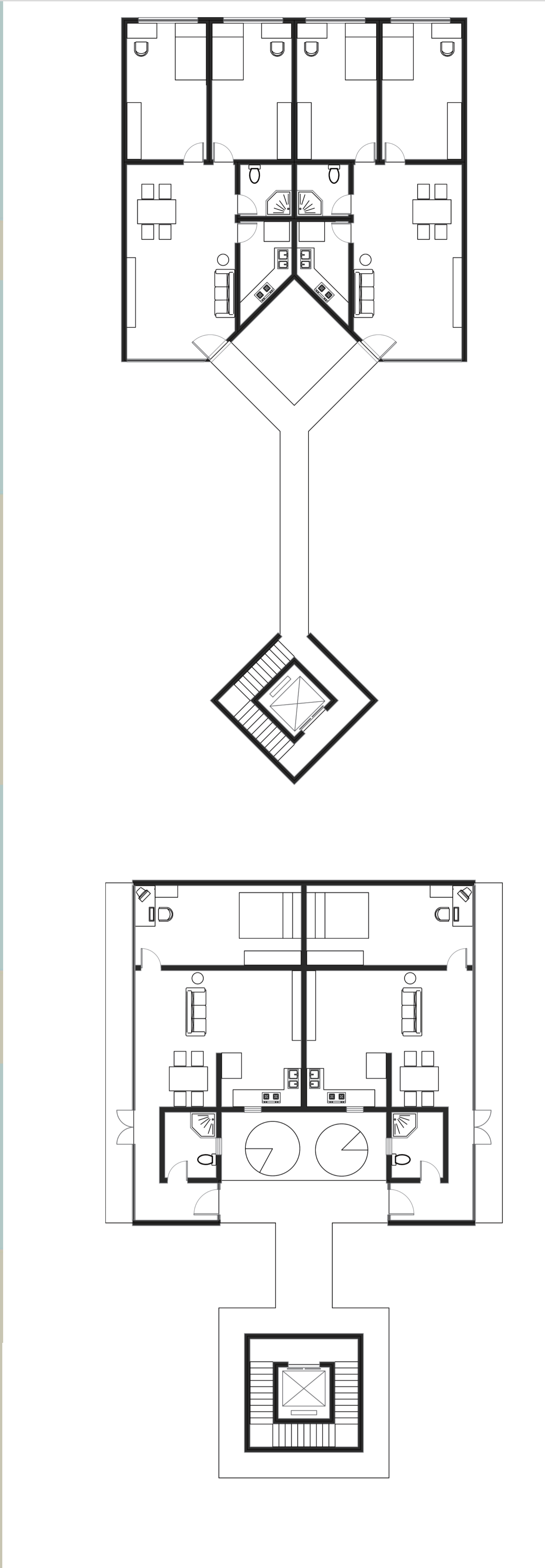
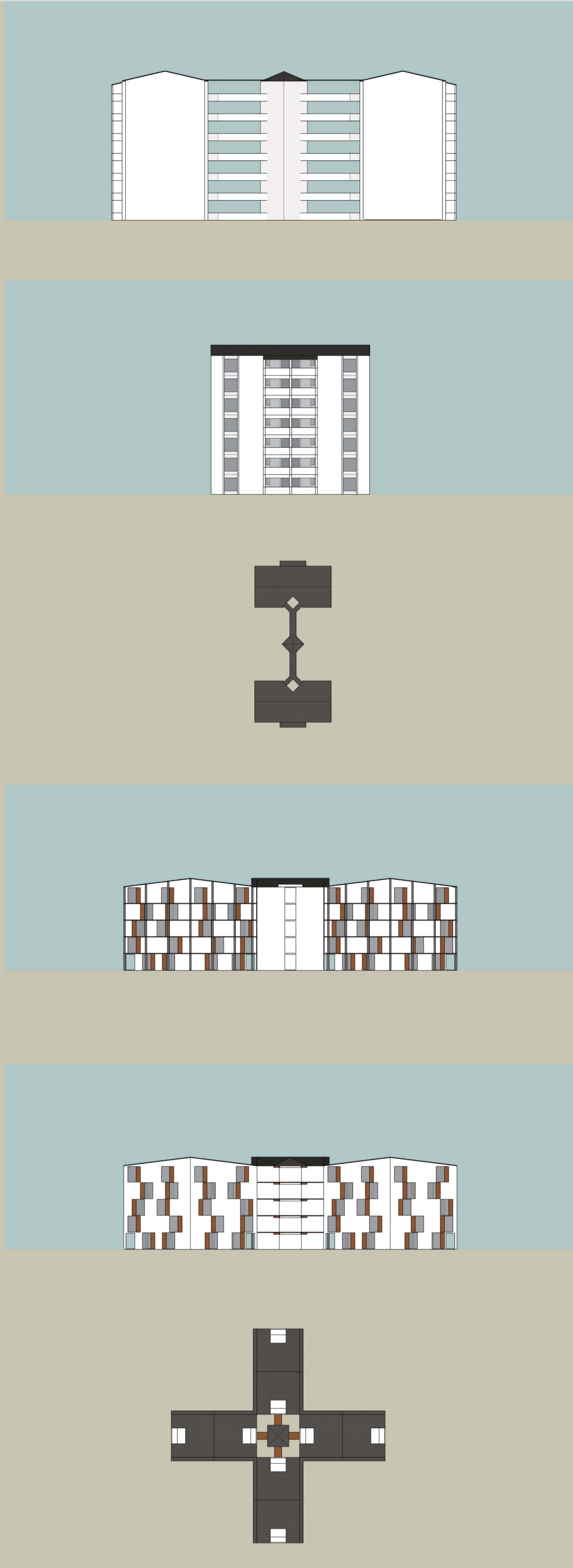
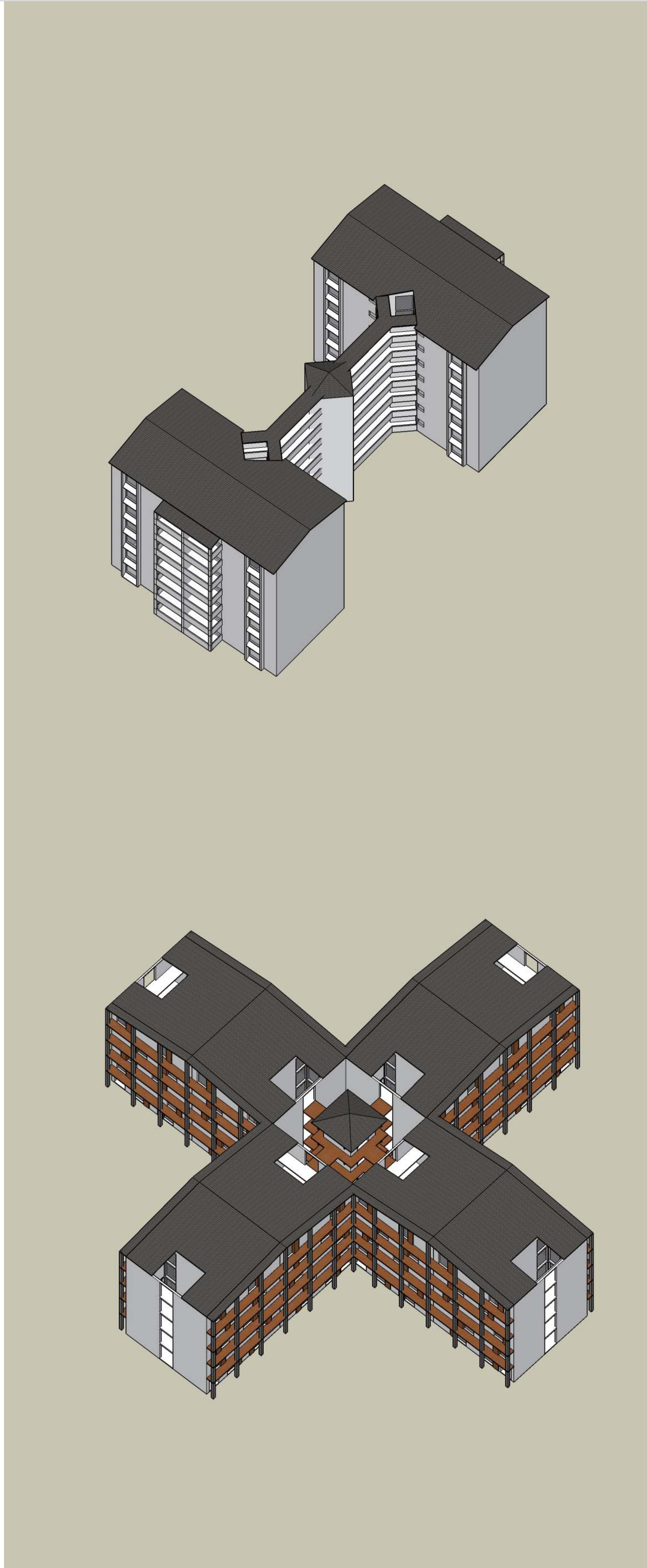














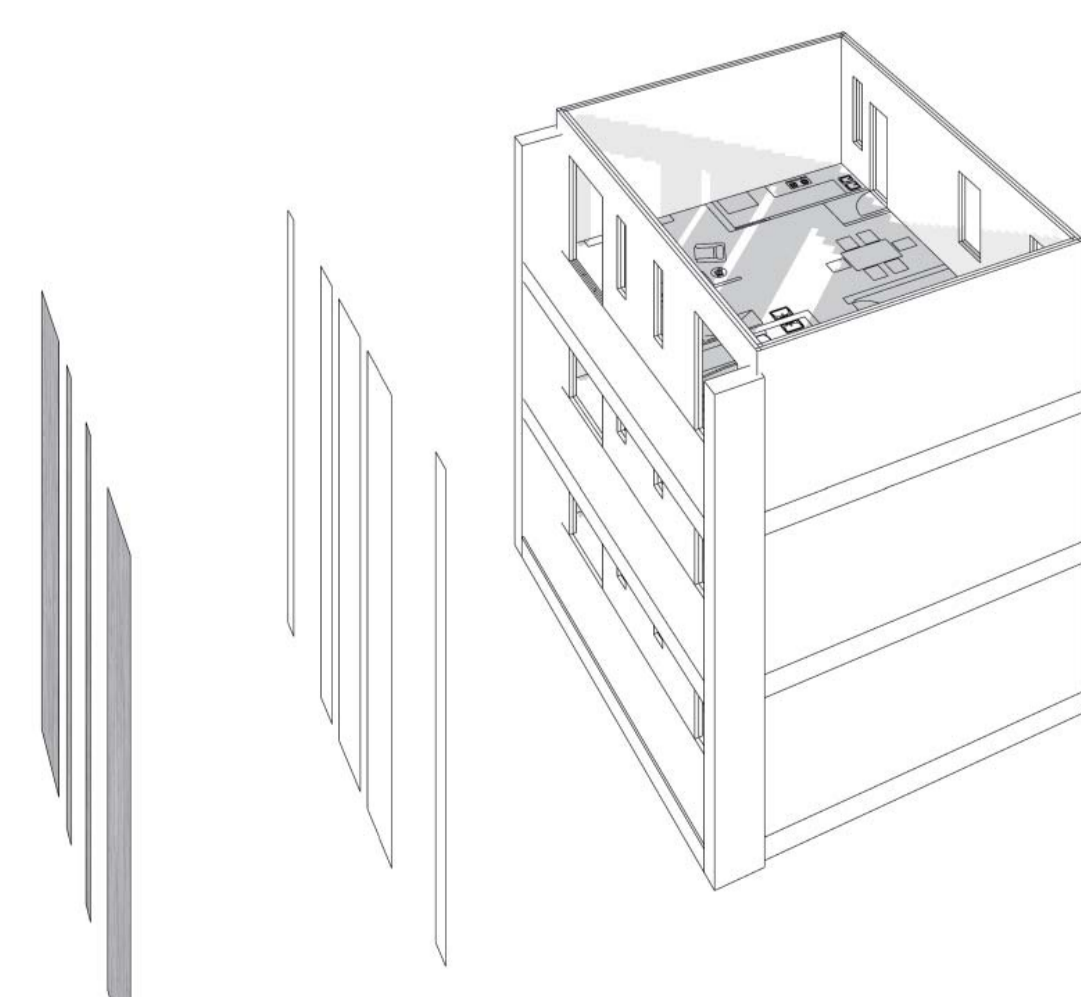
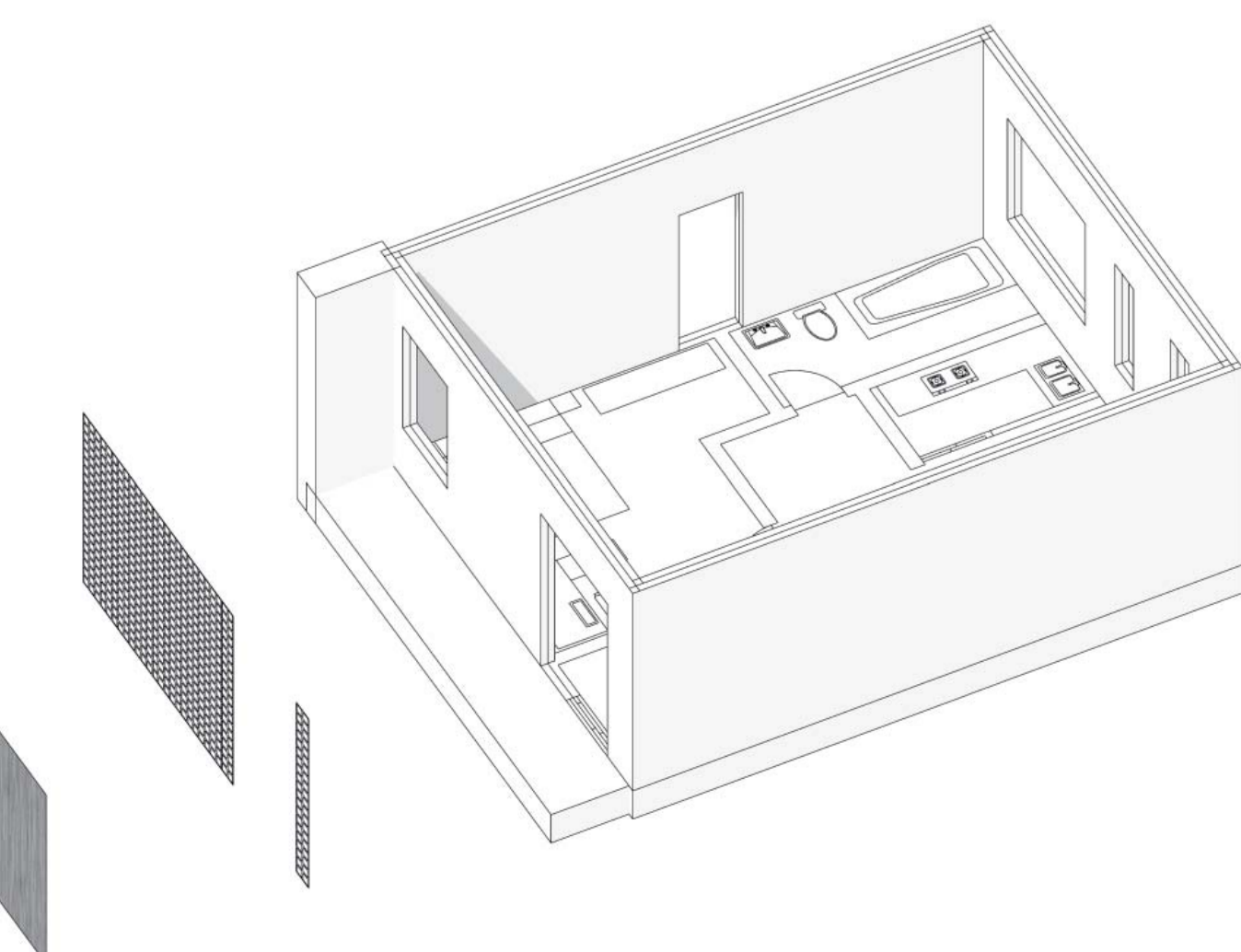
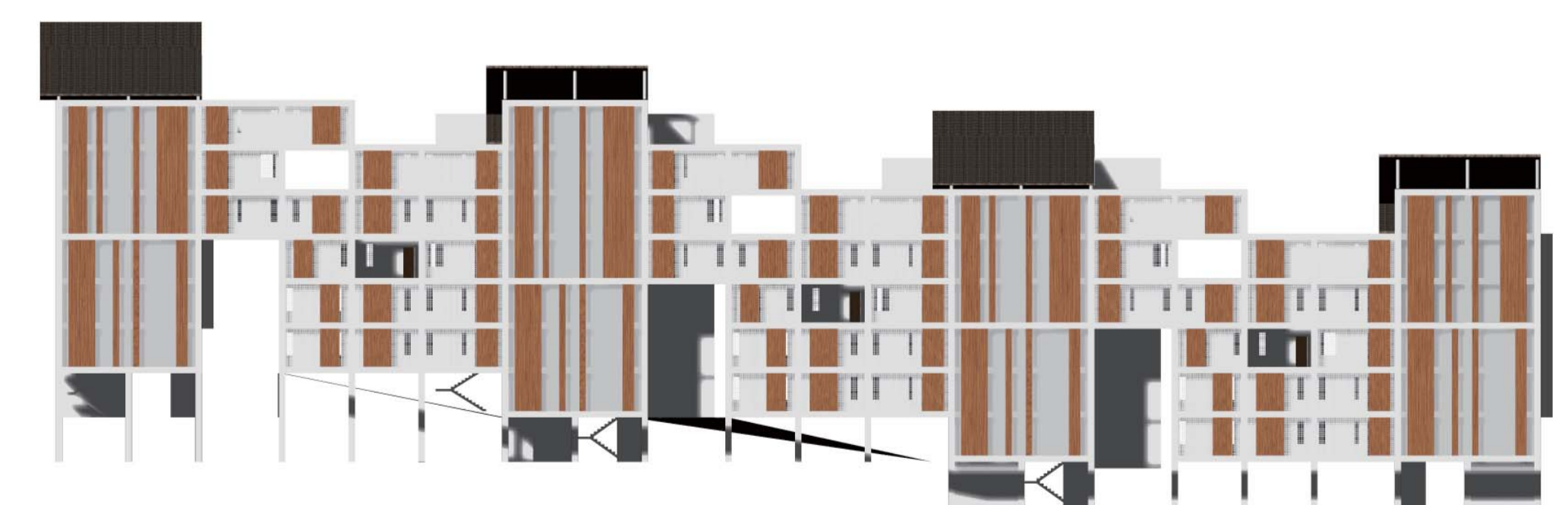
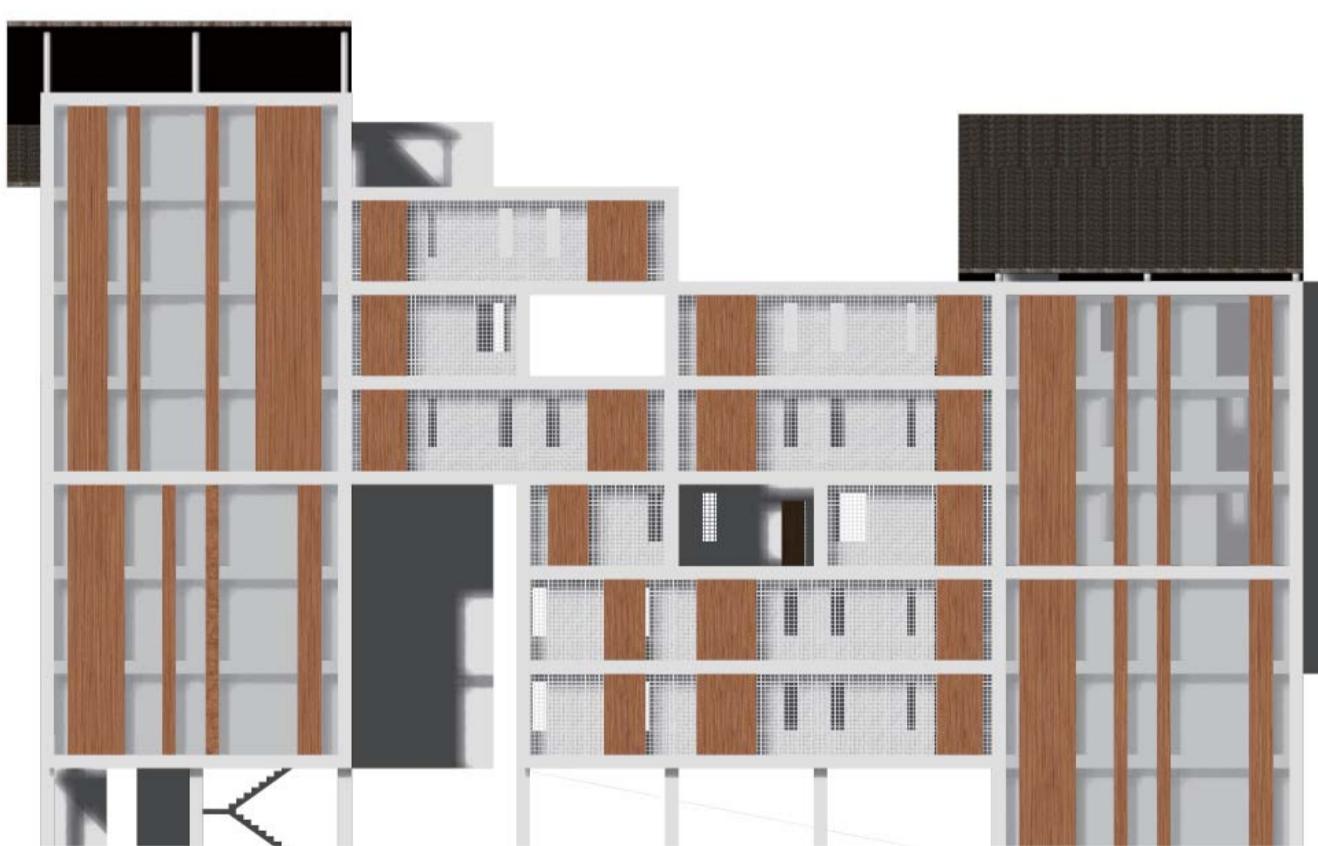
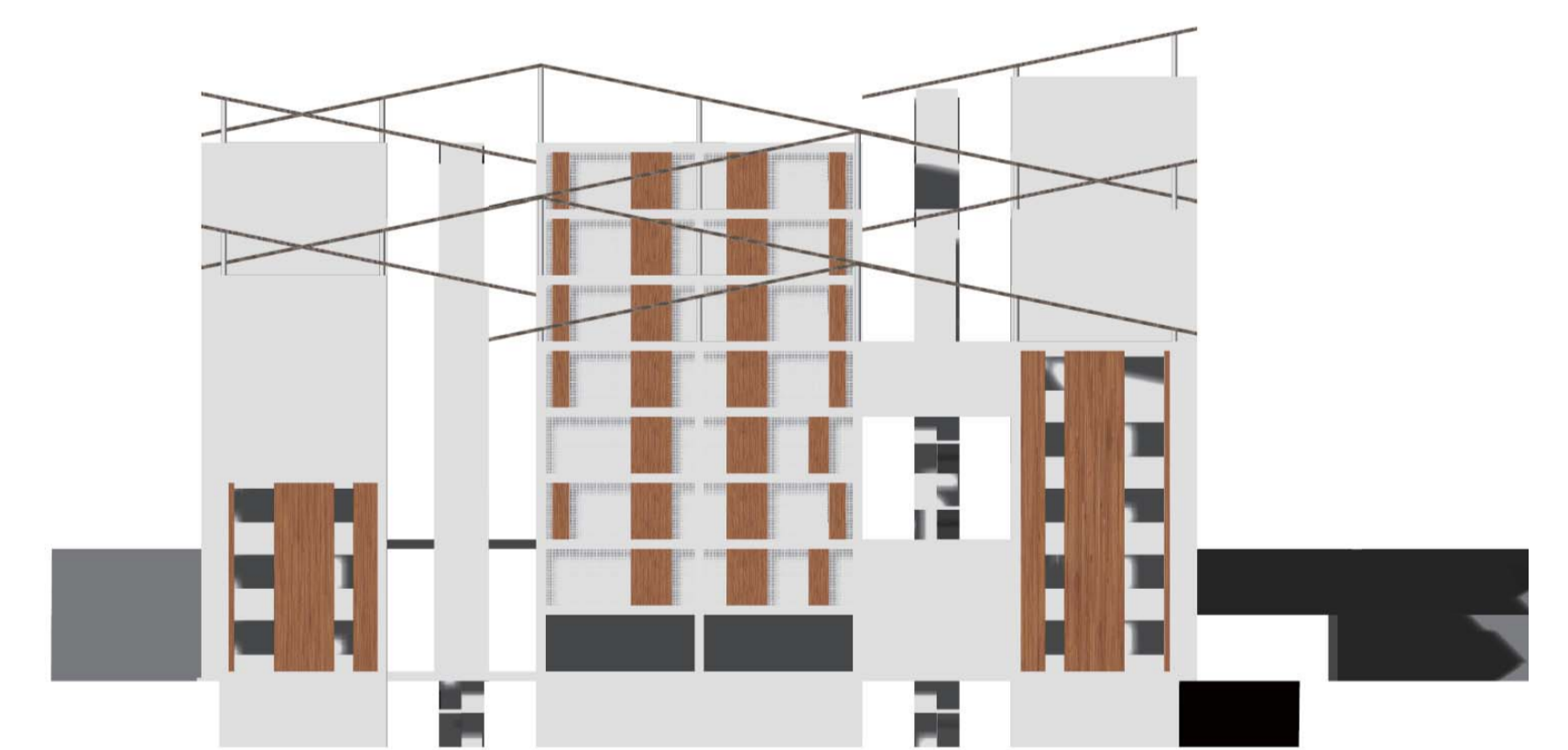
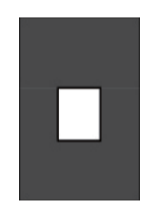


Reflection of the wrong copycat example, introduce the courtyard model and abstract the traditional roof type into a geometry vision. (With diagram)





Rendering perspective view

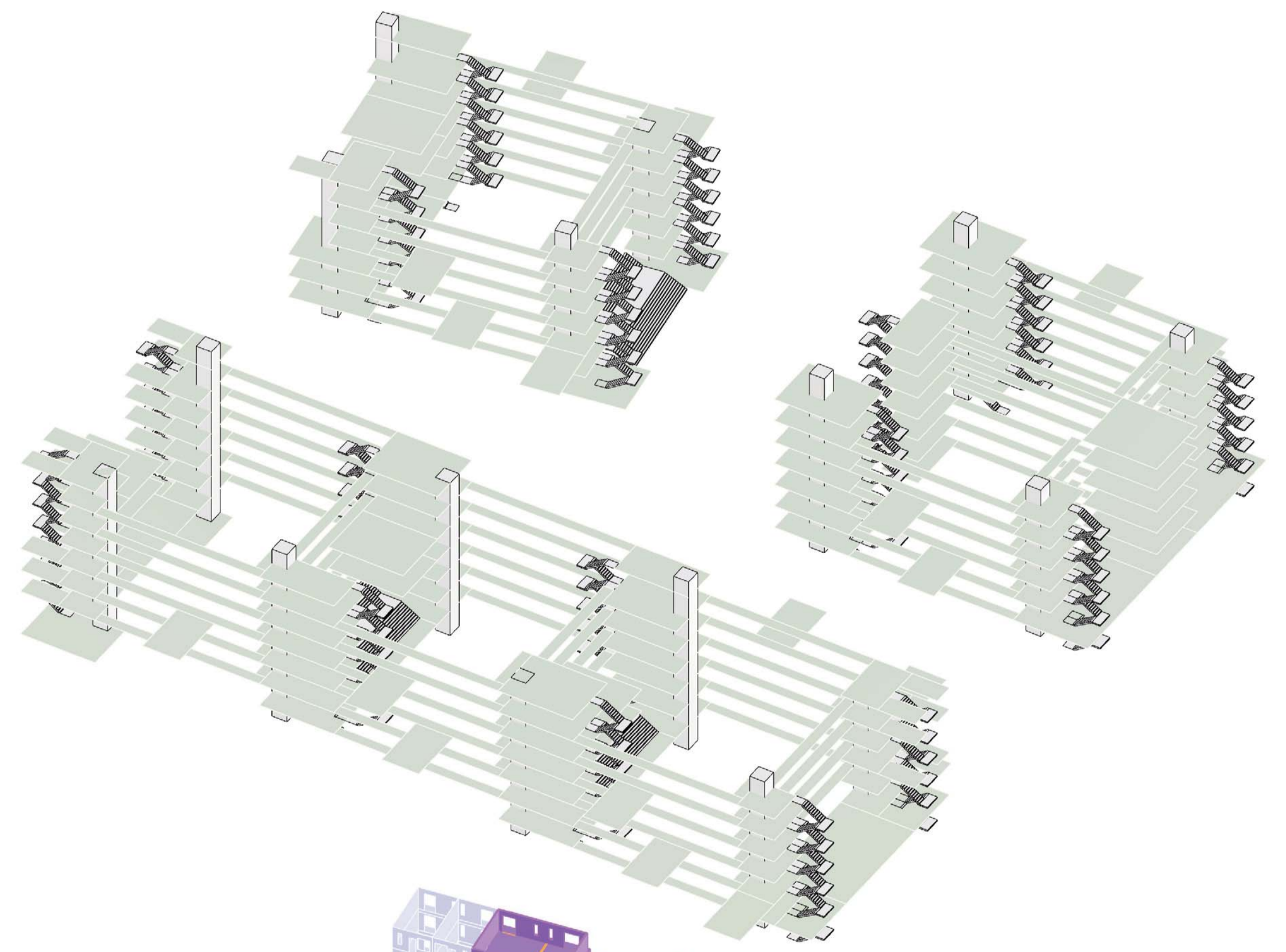
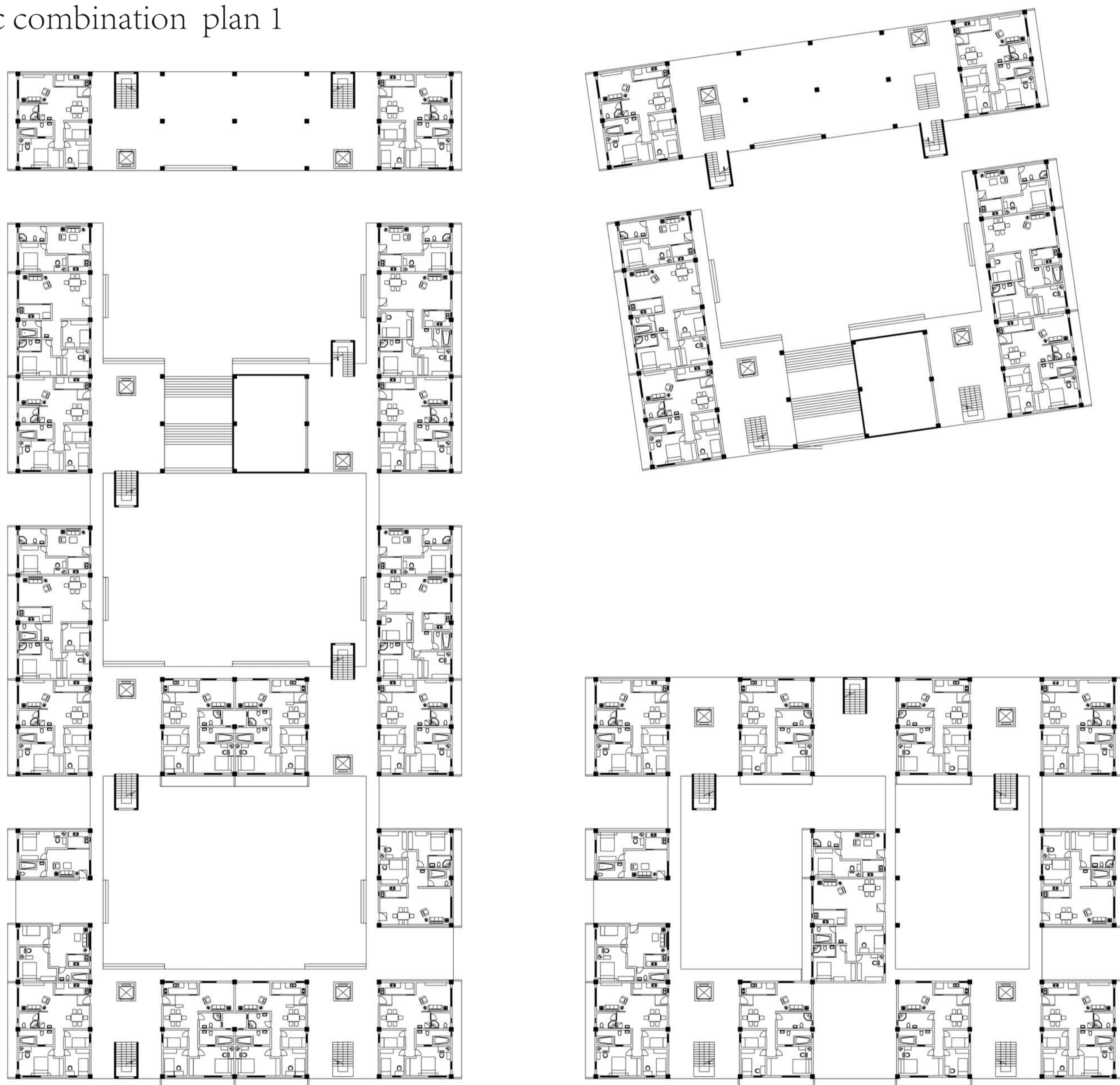




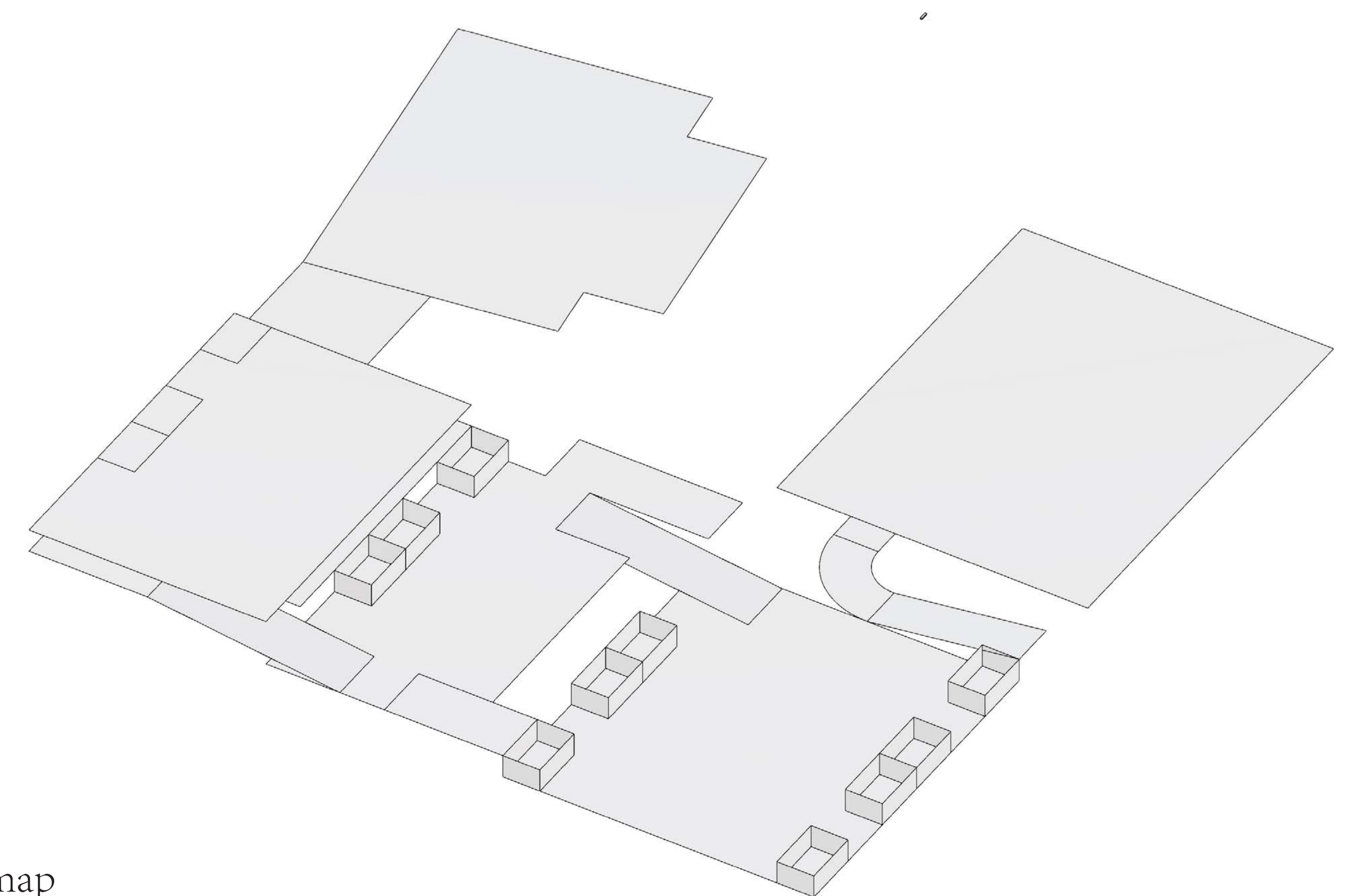
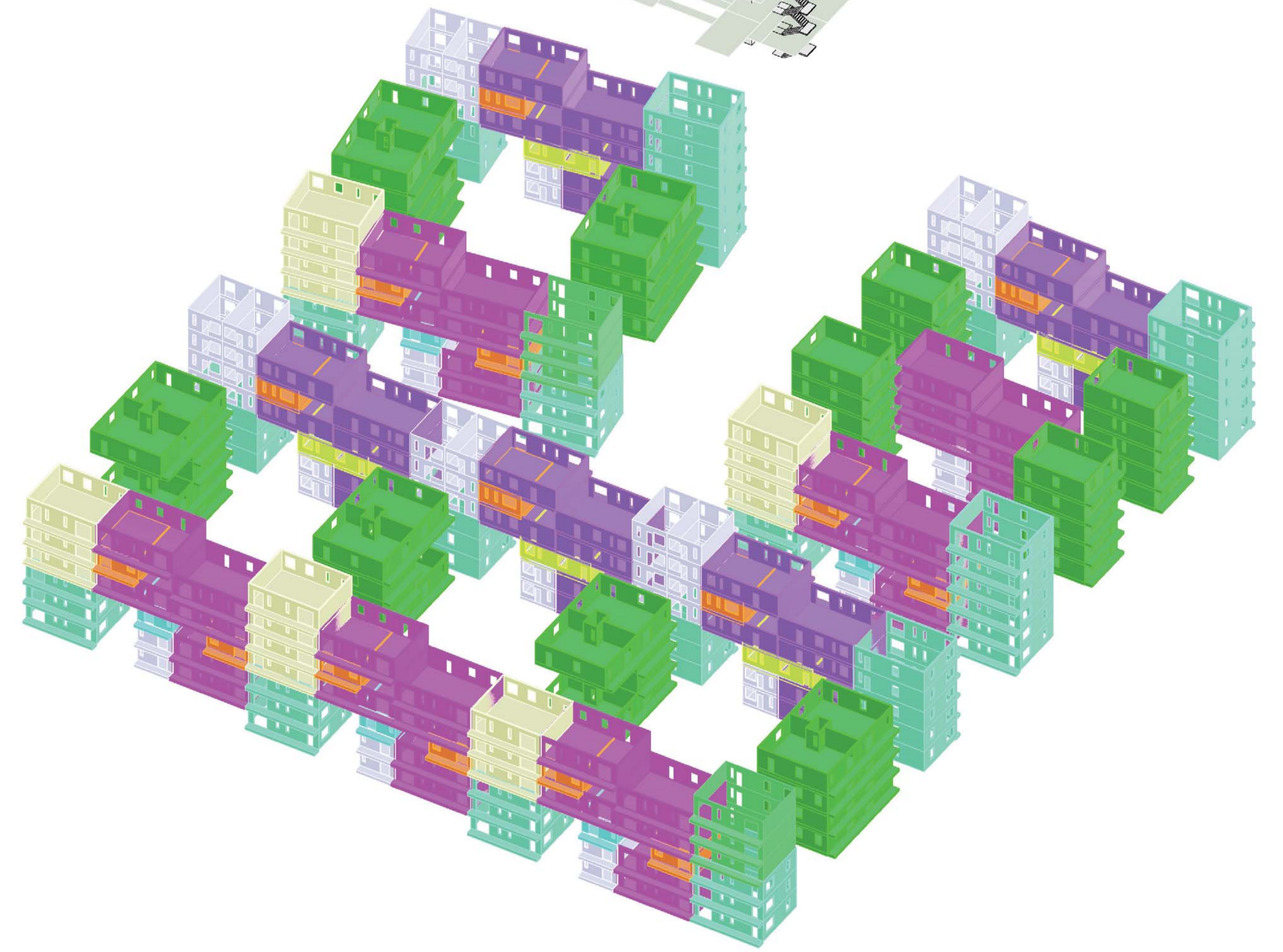


Basic house plan(type indicated by colors)

Basic combination plan 1



Basic combination plan 2



Explosion map



Perspective view from east elevation



Section view from east elevation 1



Section view from east elevation 2

