Towards a Livable City for Elderlies

Designing new urban strategies to integrate neighborhood-based services systems with historical area fabric in Changsha, China.

Wanting Meng

Delft University of Technology | Faculty of Architecture and the Built Environment | MSc Urbanism
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Source: South China Morning Post
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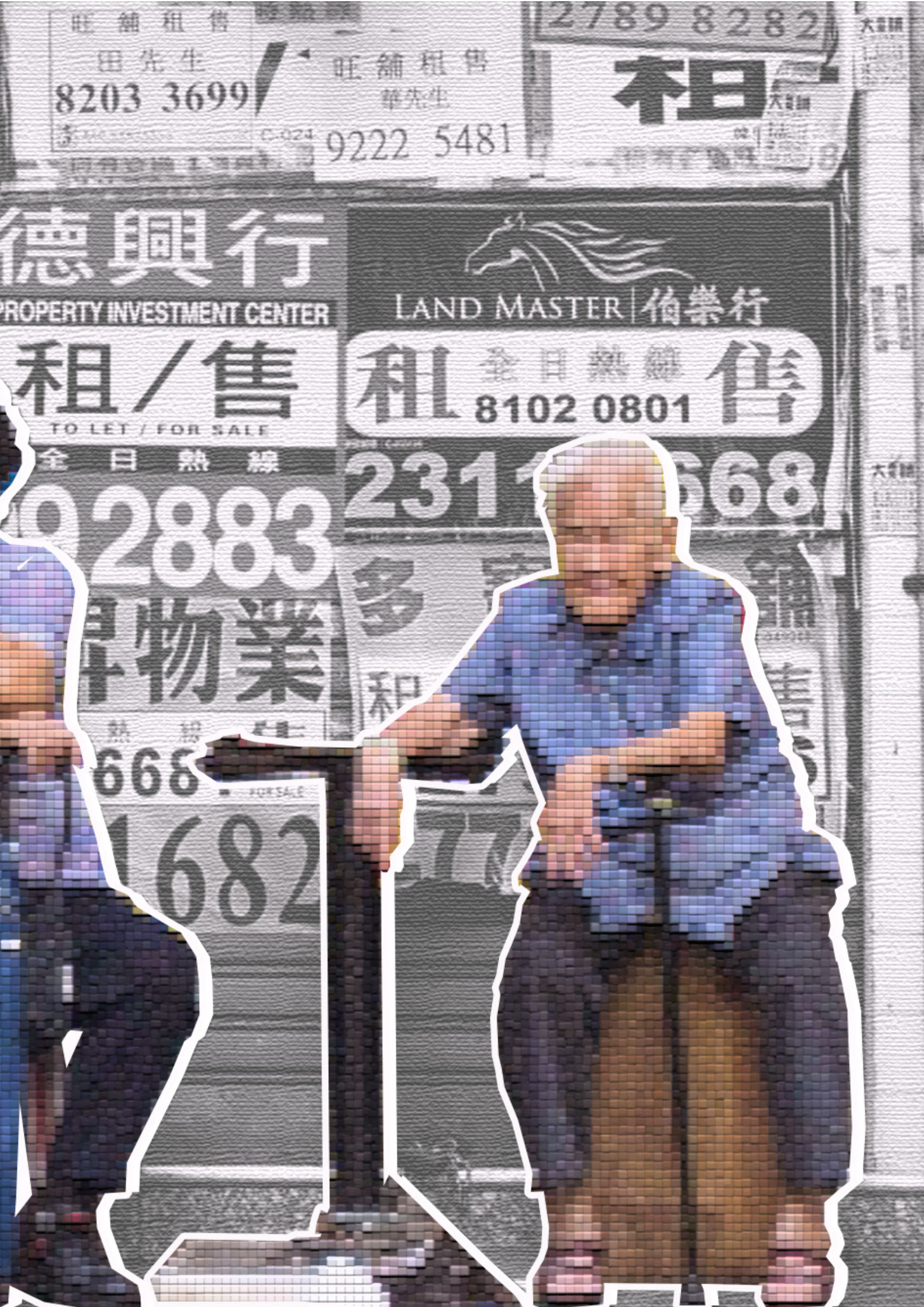
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Master Thesis
Towards a Livable City for Elderlies
--Designing new urban strategies to integrate neighborhood-based services systems with historical area fabric in Changsha, China.

Key Words
Transforming Chinese cities, neighborhood services systems for the elderlies, first-tier city, historic area, livable city, bottom-up intergrated system design, Changsha

Mentor Team
Dr. L. Qu
L.Qu@tudelft.nl
Department of Urbanism, Delft University of Technology

Dipl.ing. B. Hausleitner
B.Hausleitner@tudelft.nl
Department of Urbanism, Delft University of Technology

Author
Wanting Meng
mengwantingecho@gmail.com
4697820

Research Studio
Complex Cities
Department of Urbanism
Faculty of Architecture and the Built Environment
Delft University of Technology
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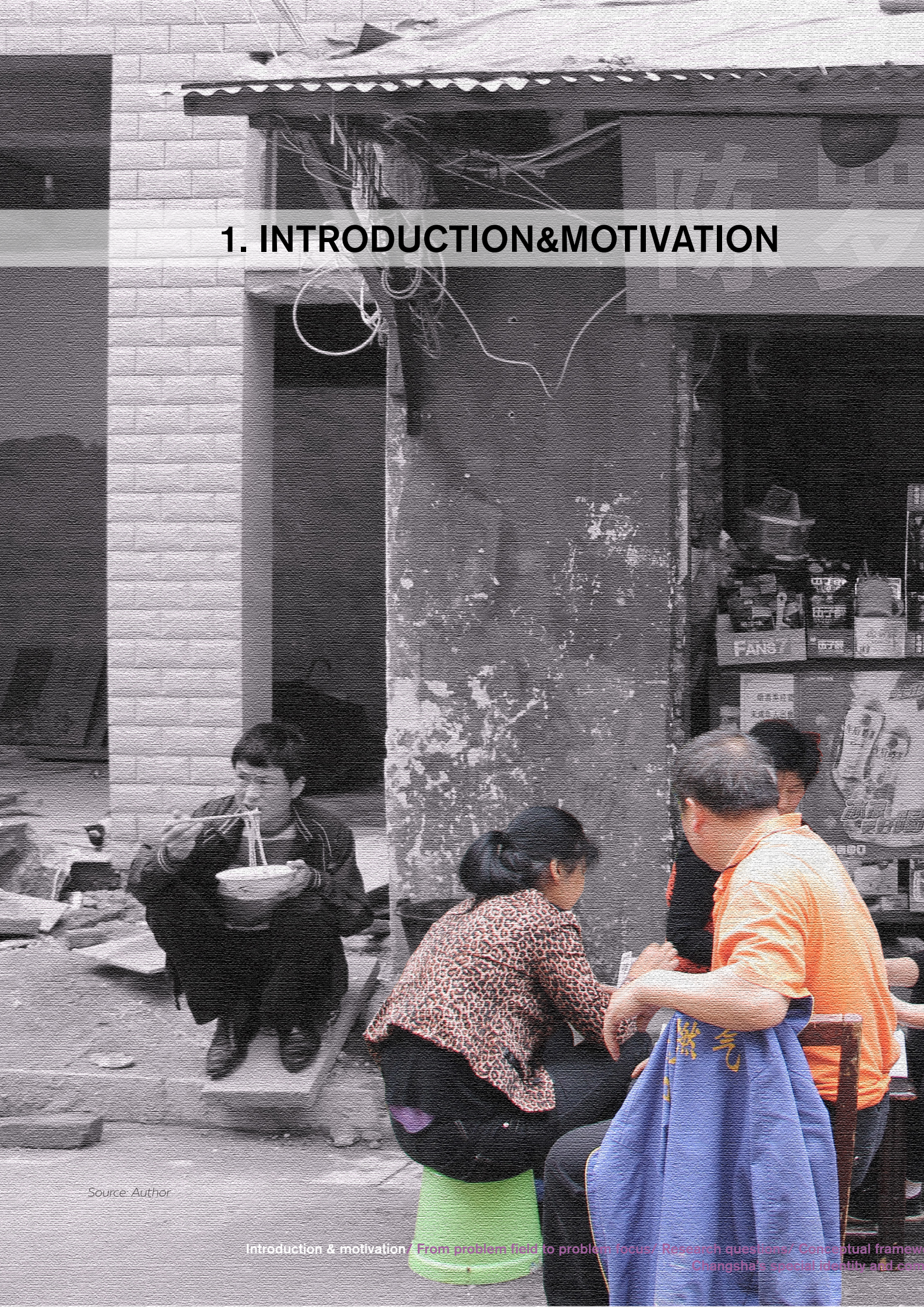
1. INTRODUCTION&MOTIVATION



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1. INTRODUCTION&MOTIVATION

Image 1: The current situation of the Chinese elderlies

Source:financialtribune
Edited: Author

Ageing is a serious problem all around the world, making lots of countries under fiscal and political pressures (United Nations report, 2015), so does China. As country who has the biggest population of ageing, reaching 0.241 billion (National Bureau of Statistics of China, 2017), China faces the most severe conflicts between ageing society and transforming cities. However, the current services systems for elderlies is not sufficient enough for China's rapid growth of ageing group. The neighborhood services system, which takes up the biggest proportion of the existing genres of services systems for elderlies in China, depends on the quality of neighborhood. The level of integration of such services systems is also determined by the setup of the neighborhood. (Li Zhiming, 2016) This thesis aims at seeking a way to integrate the existing neighborhood services systems for elderlies in the historical area of first-tier cities in China. The proposal would turn the relationship between historical area and elderlies from mutually conflicting and exclusive to mutually beneficial. The new urban strategy would address to the existing problems of neighborhood-dependent services systems for elderlies, and the urban conflicts between historical area and elderlies' needs. The conceptual framework of the proposal would touch social, spatial, and governance aspects, based on the theories of environmental psychology, aged-friendly environments, aged-interacting environments, silver economy, participatory management, and participatory design. Changsha, a typical ageing, first-tier city in China, would be the example taken in this thesis for exploring the principles that can be used in other practices in a bottom-up way. There would be four stages—problem definition, problem description, solution proposals and reflection.

Key words: Transforming Chinese cities, neighborhood services systems for the elderlies, first-tier city, historic area, livable city, bottom-up intergrated system design, Changsha

2. FROM PROBLEM FIELD TO PROBLEM F

2.1 CONTEXT
2.2 PROBLEM FIELD
2.3 NOUN DEFINITION
2.4 SOCIETAL & SCIENTIFIC RELEVANCE
2.5 PROBLEM STATEMENT

Source: Author

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2. FROM PROBLEM FIELD TO PROBLEM FOCUS

2.1 CONTEXT

Global ageing population

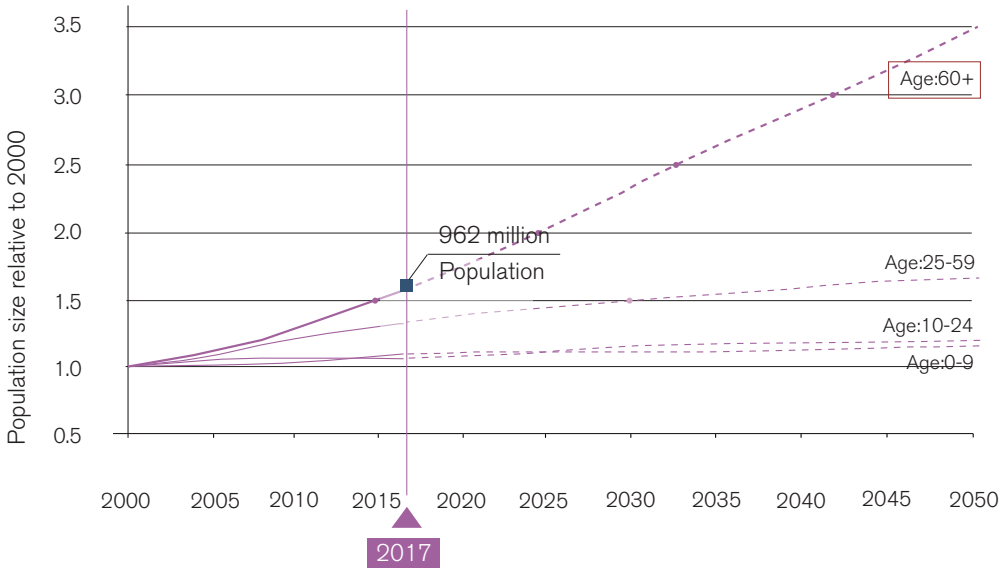


Figure 1: Increase in world population relative to 2000, by broad age group, 2000-2050

Source:World Population Prospects: The 2015 Revision; Redraw by Author

The world's population is aging: virtually all countries are experiencing growth in the number and proportion of older persons in their populations.
The over 60 population is the fastest growing age group. (Figure1)

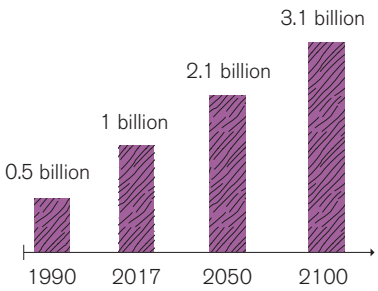


Figure 2: Projected global population aged 60 years or over

Source:World Population Prospects: The 2017 Revision; Redraw by Author

Compared to 2017, the number of people aged 60 or above is expected to more than double by 2050 and more than triple by 2100, rising from 962 million in 2017 to 2.1 billion in 2050 and 3.1 billion in 2100. (Figure 2) For this age range, 65 per cent of the global increase between 2017 and 2050 will occur in Asia, 14 per cent in Africa, 11 per cent in Latin America and the Caribbean, and the remaining 10 per cent in other areas.

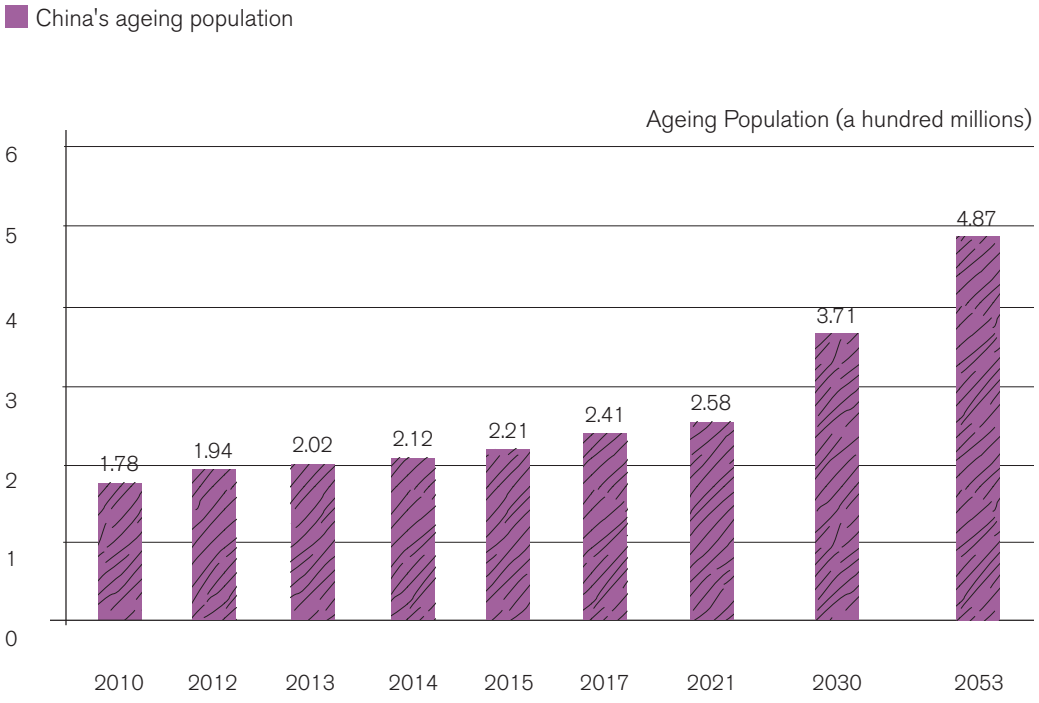


Figure 3: Projected Chinese population aged 60 years or over

Source:National Bureau of Statistic of China (2017); Redraw by Author

Both China and the world has entered the ageing society in 2000. China's population is ageing rapidly. In 2017, China's elderly population over 60 years old has exceeded 241 million, accounting for 17.3% of the total population. China has not only the largest population, but also the largest elderly population, and the number of elderly people is still growing fast. From 2017 to 2030, the elderly population will grow by more than 130 million. It is estimated that by 2053, the number of elderly people in China will reach a peak of 487 million, accounting for 34.9% of the total population, which means that nearly one in every three people is over 60 years old. (Figure 3)

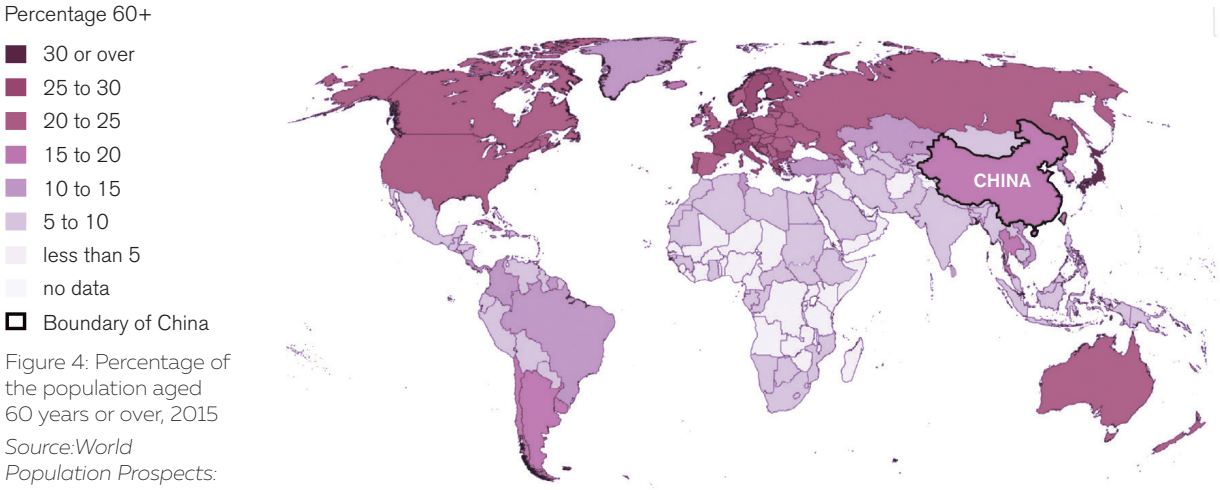


Figure 4: Percentage of the population aged 60 years or over, 2015

Source:World Population Prospects: The 2015 Revision; Redraw by Author

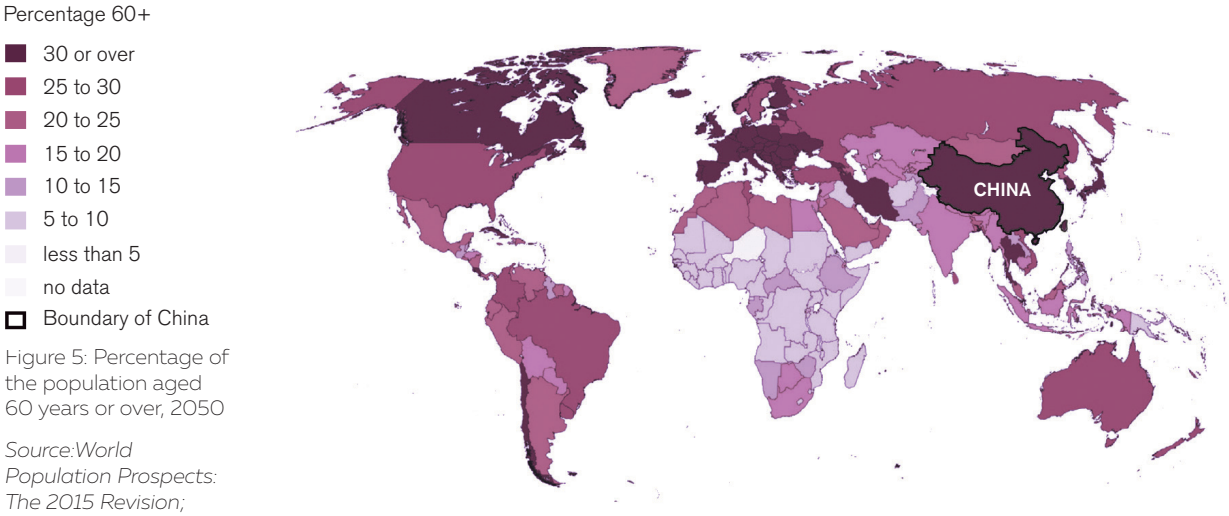
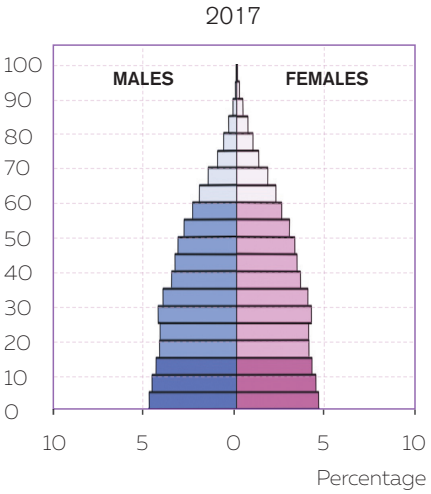


Figure 5: Percentage of the population aged 60 years or over, 2050

Source:World Population Prospects: The 2015 Revision; Redraw by Author

According to figure 4, in 2015, China was at the medium level of the elderlies' population proportion compared to other countries in the world. In 2050, although the average percentage of the 60+ years old people is rising worldwide, China is aging faster than most countries. By 2050, China's elderly population will likely reach 480 million, nearly one-third of the total population. (Figure 5)



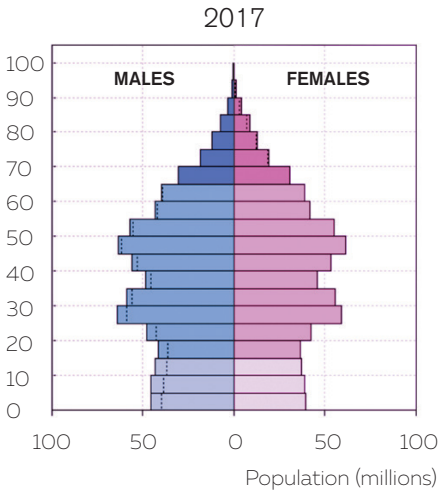
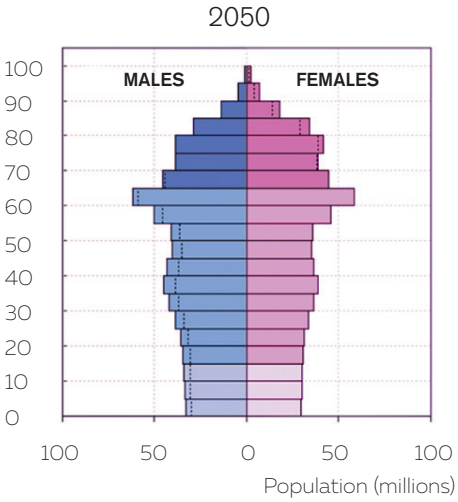


Figure 6: Population pyramid in the world, 2017

Source:World Population Prospects: The 2017 Revision; Redraw by Author

Figure 7: Population pyramid in China, 2017

Source:World Population Prospects: The 2017 Revision; Redraw by Author



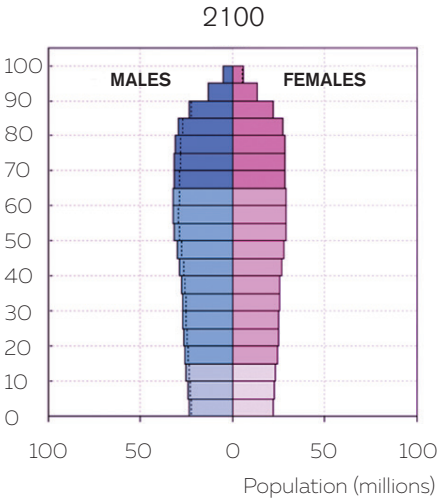


Figure 8 & 9: Population pyramid in China, 2050 &2100

Source:World Population Prospects: The 2017 Revision; Redraw by Author

Compared to world's population pyramid, we can see that China has entered negative growth stage of low fertility due to historic reasons, now we are at peak of labor number, but from the projected data of 2050 and 2100, we can see that increasing aging population is an inevitable process within upcoming years.

Desjardins, J. said, China's "population pyramid" is not really a pyramid at all – in the coming decades, it'll look more like a single pillar stuck propping up a burgeoning elderly demographic of people born before 1979 (One-Child policy).

Family structure

'One-child' Policy & '4 : 2 : 1' Problem

Image 2: 'One child' Policy poster in 1980s

Source:scmp;
Edited by Author

Image 3: 'One child' Policy poster in 1980s

Source:Wall Street Journal;
Edited by Author

Image 4: 'One child' Policy poster in 1980s

Source: kbia.org;
Edited by Author

China's one-child policy was established by Chinese leader Deng Xiaoping in 1979 to restrict communist China's population growth and limited couples to having only one child. Although designated a "temporary measure," it remained in effect for more than 35 years. The one-child policy was discontinued in 2015. The one-child rule has been estimated to have reduced population growth in the country of nearly 1.4 billion (estimated, 2017) by as much as 300 million people over its first 20 years. (Rosenberg, M., 2018)

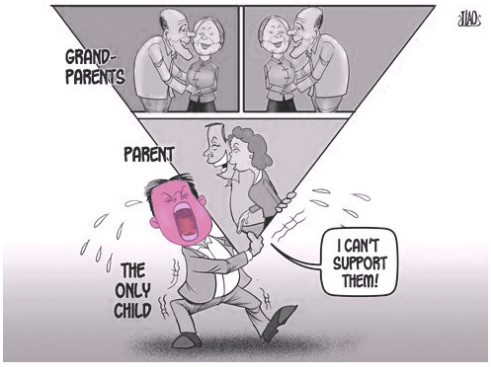


Image 5: '4:2:1' family structure

Source:worldpress; Edited by Author

As the number of elderly people in China continues to climb, the pressure on their offspring to find a way of caring for them has increased dramatically. Once it was the family that provided care for older relatives, but today that is a distant memory. (Chinaoutlook.com) Falling birthrates, exacerbated by the one-child policy and other factors, have led to major growth in the percentage of elderly people in the population. Now China is facing what has become known as the 4:2:1 Problem – namely, there are now four grandparents and two parents for every one working Chinese. (Green, D. ,2014)

As the first generation of law-enforced only-children came of age for becoming parents themselves, one adult child was left with having to provide support for his or her two parents and four grandparents. (Chinaoutlook.com) As a consequence, if the sole child die, six elderly are left without a carer. (cvanmontfort.com)

The 4:2:1 Problem, leaves the older generations with increased chances of dependency on neighborhood support or institution support instead of family support.

2.2 PROBLEM FIELD

Transforming Chinese cities

Global urbanization has been accelerating in today's era, with more than half of the world's population living in cities. China is a large developing country with large population and vast territory with obvious regional differences. It is at the stage of rapid advancement that the rate of urbanization is at its fastest in human history. Urbanization in China is an on-going process that leads to formation and transformation of city regions. Alongside the rapid urbanization process, cities are ageing, as are their populations.

In the current stage of urbanization, there are some contradictions among different objectives, such as the conflicts between ageing society and high-speed economic; old neighborhoods and rapid developing commercial area; vulnerable groups like the elderlies and low accessibility old neighborhoods, etc.

It is urgently needed for us to identify the ways of planning so as to more effectively integrate the physical character of cities with social issues. So that healthier, more livable, and more inclusive places could be created. It is aimed to provide new models of city development that promotes 'people-centered urbanization'. (Planning complex cities. ,2018)

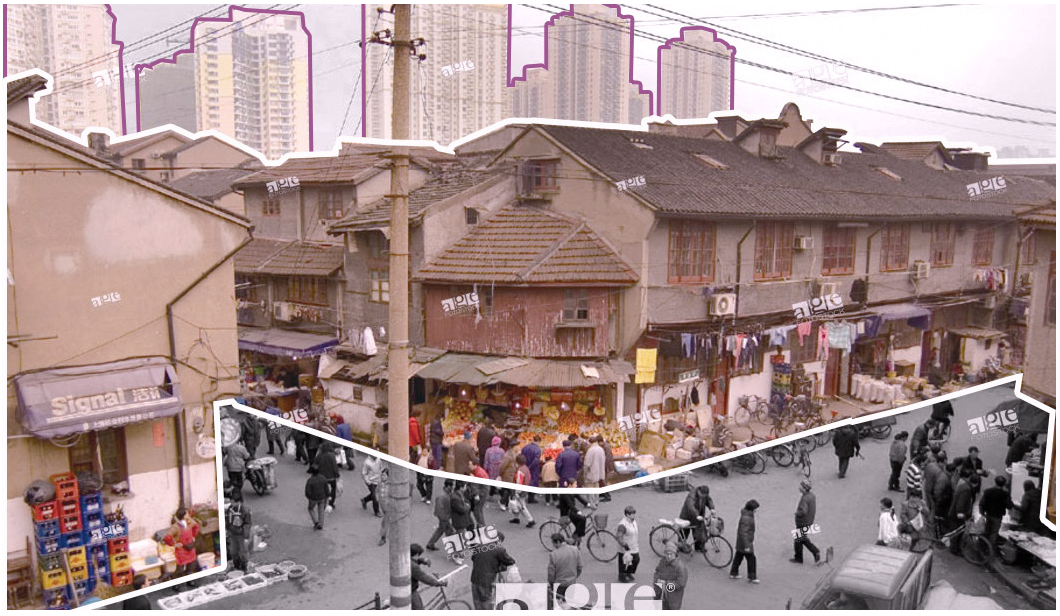


Image 6: The conflicts between old neighborhoods and rapid developing area

Source:AgeFotostock; Edited by Author

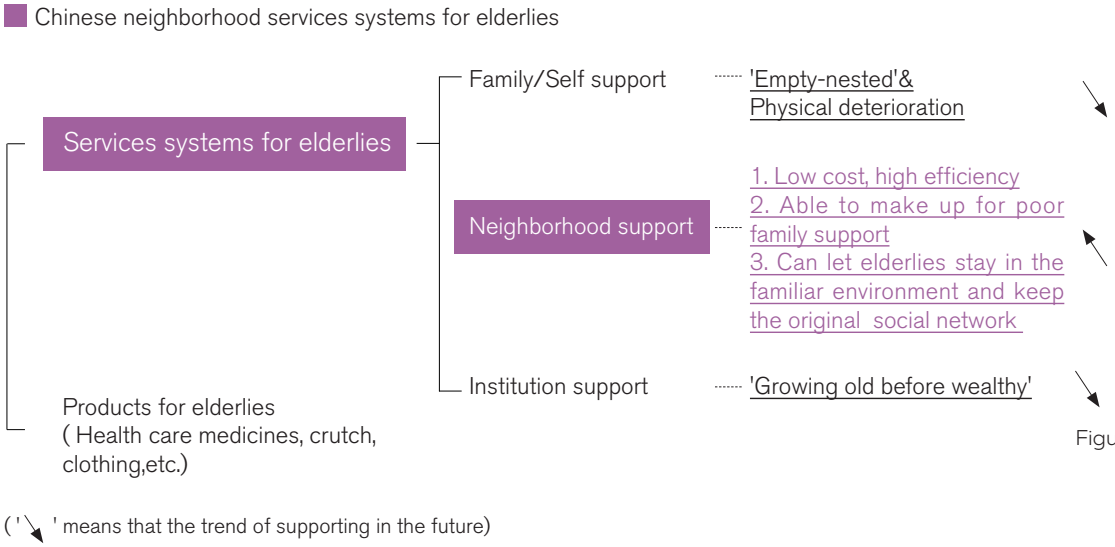


Figure 10: Industry for elderlies in China

Source:Li, Z. 2016; Draw by Author

Industry for elderlies in China

In recent years, based on low population fertility rate, high ageing rate and weaken family security functions, industry for elderlies has become a common demand for maintaining the quality of life of the elderlies and decreasing the care pressure of the elderlies' family members in China. (Li, Z., 2016) Besides, the industry for elderlies contains big potentials of the 'Silver Economy' and employment opportunities which can be the breakthrough point to relieve the pressure which 'transforming Chinese cities' and 'ageing population' bring to China.

The industry for elderlies in China mainly includes services systems and products for elderlies. The thesis will focus on the problem of services system for three reasons: first, services systems is more related to the elderlies' daily life and activities. Second, the services systems have big conflicts between the growing needs of the elderlies and backward facilities and policy. (Li, Z., 2016) Third, as urbanists, we contribute to urban planning and design aspects to improve the aged services system so as to raise the quality of elderlies' lives and to step further to decrease the influence that the ageing population brings.

In the services systems in China nowadays, there are family/self-support, neighborhood support and institution support. The phenomenon of "empty-nested& physical deterioration" and "growing old before wealthy" mainly makes neighborhood support services system become the biggest proportion and trend in the future. (Yu Ying, Li Dong, 2014)

-Family/Self-support
Family/Self-support takes place when the elderly is living with families or alone, without any professional care.

Image 7: On-site service(neighborhood support)

Source: news.163; Edited by Author

Image 8: Day-care center(Neighborhood support)

Source: Sohu; Edited by Author

-Neighborhood support
There is currently no uniform definition of neighborhood (support) services systems for elderlies in China. (Wang, J., Ge, G., Guo, Y., & Zhang, X., 2017)

In European countries, neighborhood (support) services are often referred to elderly neighborhood care, which is: elderlies do not leave the living neighborhood environment, but human resources outside the neighborhood provide different life services for the elderly. At the same time, launching the human resources in the neighborhood applies neighborhood support system providing life services for the elderly.

X. Zhang believes that neighborhood (support) services systems is: family as the core, neighborhood as the platform, and professional service organization as the carrier. Through purchasing service by government, participating and operating mode by NGO organization, provides medical care, life care and psychological comfort for elderlies in the neighborhood.

In the thesis, neighborhood (support) services systems is defined as offering assistance and support to the elderly in both formal and informal forms, including volunteer services and community support networks, and providing comfortable, familiar and safe travel environment and public space for the elderly.

-Institution support
Institution support can provide professional care facilities and organize activities, bringing the elderlies together, effectively solving the problem of elderly- care in the area, reducing the burden on their children, and enriching the elderly's later life. Institutions refer to those who provide comprehensive services such as diet, sanitation, life care, health management, and recreational activities for the elderly, such as nursing homes and senior apartments. It can be an independent legal entity or a department or branch affiliated with a medical institution, an enterprise, a social organization, or a comprehensive social welfare institution. (Chen, W., & Xue, X., 2017)

The phenomenon of empty-nested

According to National Bureau of Statistics of China in 2015, among the elderlies over 60 years old, urban empty-nested families accounted for 49. 7%, which means that nearly half of the elderly lives alone. At present, the elderly population over the age of 60 in China is increasing at a rate of more than 3% per year. By 2030, the elderly population will reach 3. 600 million, the proportion of empty-nested elderly people in the elderly population will reach 90%, which means that by 2030, there will be one elderly person in every three people, and the empty-nested elderly person will have one in every 20 people. (Yu Ying, Li Dong, 2014)

Image 9: Typical Chinese big families

Source: cim.chinesecio; Edited by Author

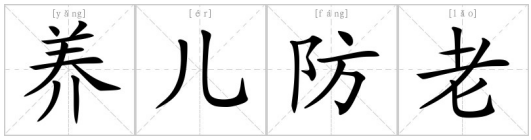


Image 10:Traditional Chinese proverb: Bringing up children for the purpose of being looked after in old age

Source: Pandarow

In the traditional Chinese proverb, we have an idiom coming from the Confucius culture , called ' ', which means that bringing up children for the purpose of being looked after in old age. So in the past, Chinese families always had large groups of people and elderlies more relied on family support.

However, according to the one-child policy and the phenomenon described above, family support is not the trend anymore. Self-support is also not the long-term plan for elderlies, limiting to the irresistible physical deterioration and aging of the elderlies.

Physical deterioration

People's **balance ability** begins to decline from the age of 60
-Every 10 years decline 16%

Falling is the first cause of death among the elderlies over 65 years old

About **one-third** of the elderlies in China have fallen many times.

Image 11:Physical deterioration of the elderly

Source: Yanmin Zhou, 2016;
Redraw by Author

As people grow older, their response, balance, strength, endurance, and other bodily functions gradually deteriorate. Many elderly people have physical obstacles especially in legs and feet. For the elderly who lives alone, they have a higher chance of falling if there is no available support from a community environment (Zhou, Y., & Qin, L., 2018) while falling is the most common cause of death for elderlies aged over 65. (Zhou, Y., 2016)

Growing old before wealthy

Another obvious characteristic of Chinese elderlies is growing old before wealthy.
The average price of the Nursing home is quite high compared to the low retirement wage. (Zhao, Y. et al. ,2013)

	Ineffective elderlies	Healthy elderlies
Pension	2773	2893
Spouse's pension	1432	2253
Child support	239	118
Total income	4476	5251
Health care	796	798
Hydro property costs	226	331
Housekeeping	480	66
Money for offspring	122	168
Total expenditure	3709	3239

Table 1: The average income and expenditure of 2031 elderlies in Xicheng

Source:Zhang, W., & Wei, M. , 2014; Redraw by Author

The table clearly shows that the average income and expenditure of the elderlies in Xicheng district in the capital city in China in 2013, which is one of the wealthiest areas. From the webpage named yanglaocn, it shows that in 2013, the basic fees of the nursing home are over 3000 yuan per month in Beijing, but these prices only include the accommodation and the basic care fees. So, for most of the elderlies, institution support is also not the affordable choice. According to the Fang. Y's survey and research in 2014, 43.5% of the surveyed elderly clearly indicated that they cannot afford the price to go to the nursing house. Besides, the institution support service systems in China mainly target more on the elderlies who are disabled, demented or ineffective that cannot take care of themselves. So, for those healthy elderlies, they prefer not to leave their familiar environment to ask for institution support.

Image 12: Institution support services are limited to a small group of elderlies

Source:happytify.cc; Edited by Author

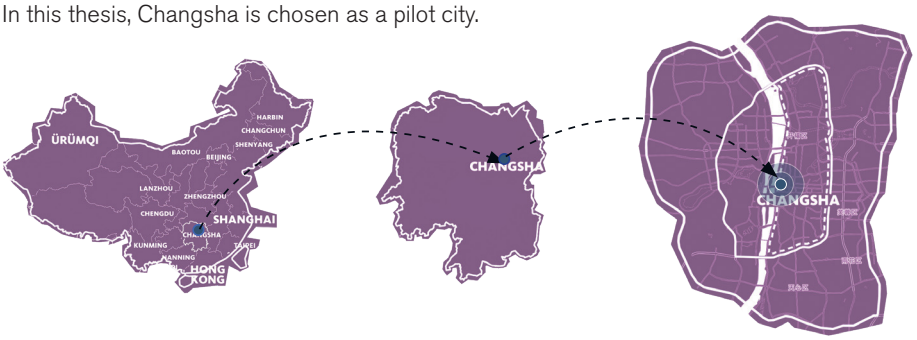
Conclusion

According to the special Chinese situation described above, in the ageing stage nowadays, neighborhood services systems are the breakthrough points to deal with such serious ageing problems and to relieve the ageing pressure for elderlies, families and society. It combines with the advantages of family support and institution support, that is, elderlies do not need to leave your familiar living environment but still have professional caregivers and activities organizers around them. At the same time, the whole neighborhood is walkable for them. In the neighborhood support systems, elderlies can even be part of the helpers to achieve their own self-actualization.

First-tier city----Changsha

In 2018, the first-tier cities are Chengdu, Hangzhou, Chongqing, Wuhan, Suzhou, Xi'an, Tianjin, Nanjing, Zhengzhou, Changsha, Shenyang, Qingdao, Ningbo, Dongguan and Wuxi. This list is based on the comprehensive evaluation of Fifth Financial Weekly by five indicators: Business resource concentration, Urban hub, Urban activity, Lifestyle diversity and Future plasticity. These cities have a certain degree of similarity and are at the forefront of economic development. On the one hand, these cities are in a period of high-speed urban transforming, so their contradictions during transforming process are relatively prominent. On the other hand, strong economic pillar and preferential supporting policies of first-tier cities can support the trial run of pilot project, sharing other cities some practices of urban renewal and reform under China's conditions.

In this thesis, Changsha is chosen as a pilot city.



China Hunan Province Changsha City

Figure 11: Location of the field

Source: Mapbox; Edited by Author

Changsha (Area: 11819 square kilometers), is the capital city of Hunan Province, locating in the middle-south of China. Changsha is one of the most important central cities in the middle areas of the Yangtze River. It is also the political, economic, cultural, transportation, science and technology, finance and information center of Hunan Province. (Baidu, web)

Xichang historic block

Image 13: Satellite of the main second ring area of Changsha

Source: Google earth; Edited by Author

Image 14-18: The impressions of Changsha

Source:Baidu; Edited by Author

Source:Baidu Edited by Author

Source:Author

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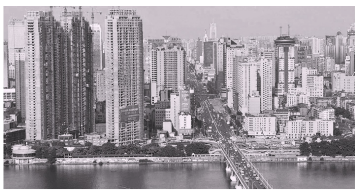


Source:Baidu; Edited by Author

Historic area

Nowadays, there are two main types of historic areas in China. (Wang, X., 2017)

One is with prominent cultural& commercial characteristics and has strong **tourism potential**.

Image 19: Tourism-dominated historic area

Source: Lvyouji.com; Edited by Author

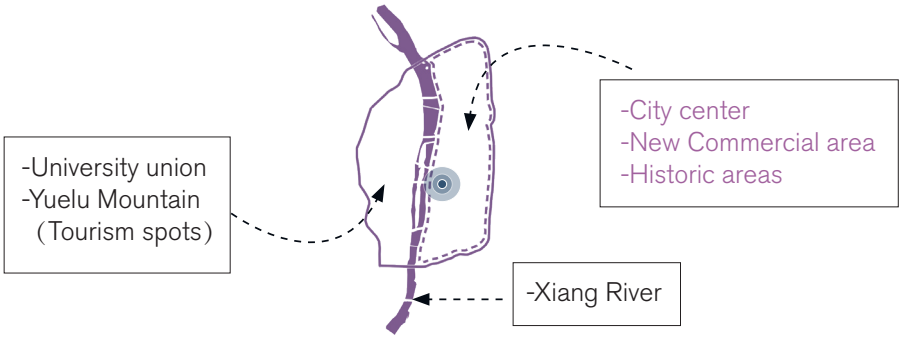
The other is **Residential-dominated**, which retains their original style and features. They are influenced by both nature and man-made factors and are poorly protected.

Image 20: Residential-dominated historic area

Source: naic.org.cn Edited by Author

In the thesis, it will mainly focus on the residential-dominated historic areas. These historic areas keep more elderlies living inside because of the low living cost. At the same time, environment quality is relatively poor, public spaces are been occupied and lanes are travel difficulties. Compared with the tourism-dominated historic areas or new-built neighborhood, the contradictions between the elderly and neighborhood environment are more prominent and severe here. (Wang, X., 2017)

The project in Changsha mainly focuses on the one of the residential-dominated historic block named Xichang, which locates in the east part of the Second ring area in the city center and next to Xiang river. In Changsha and many first-tier cities, old neighborhoods as the core of historic areas, overlapping with the city renewal area. The neighborhood environment itself contains the dual needs of protection and development.



Xichang historic block

Figure 12: Second ring area of Changsha

Source: Author

In the context of rapid urban development, how to renew city, especially for historical area, more organically, effectively and reasonably is also an important issue that the government and urban residents have been discussing and concerned about in recent years.

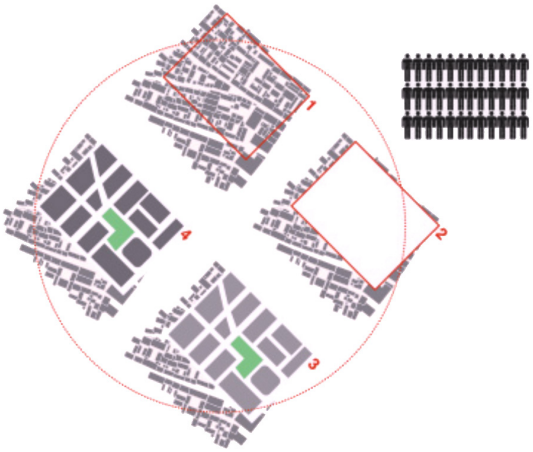


Image 17: The model of typical large-scale urban renewal process

Source: dashilar.beijing99.cn

In the past time, urban renewal model in China usually were:
1. Circle development zone.
2. Residents are compensated for relocation.
3. All the buildings in the development zone are removed and rebuilt in a short period.
4. Zones are injected large-scale commercial, office buildings or residentials.

In recent years, frequency of occurrence of this model has been reduced, replaced by conscious reservations of some historical blocks, what is called as organic renewal. But there are still problems: (Ye, L., 2015)
1. Limited to the protection of historical buildings, but ignores the overall protection of historical blocks/areas, making the loss of the overall style.
2. The consciousness of renovation of historic area only stays in the state of demolishing old buildings and building new ones. However, the quality of newly built buildings is poor, which destroys the original historic characteristics.
3. The purpose of protecting historic area is to develop tourism resources.
4. Historic buildings are not demolished, but local residents are relocated.
5. The opinions on historic area planning and design are put forward by experts, ignoring the opinions of local residents.

In 2018, Liansheng Street, which borders the north of Xichang historic block, experienced urban renewal. All the original residents were moved out, including one third of the elderly population. To a large extent, the current mode of planning, construction and development in historic area which without considering residents has become a defect of the sustainable development of historic area. For the elderlies who live here, this kind of compulsory relocation measures which destroy community relations and social ecology make the problem of ageing more serious.

Chinese top-down governance

In China's top-down governance system, residents always rank the lowest among all stakeholders, which means residents' voices and opinions cannot be expressed in the urban planning and design stages most of the time. It leads to ineffective measures as new policies and regulations are applied from government's perspective, rather than from that of residents.

Taking application of neighborhood support in Changsha as an example. In order to improve the neighborhood services systems for the elderlies in Changsha, the local government has published a series of policies (such as Detailed Rules for the Construction and Fund Management of Changsha City Elderly Day-Care Center) and taken actions. One of the main actions is to settle at least one day-care center in each district. From the list in the official webpage of the facilities (http://www.csyl.gov.cn/mw/i/mwia.html), it shows that the task of settling is finished. However, during the past four years, there were lots of local medias (like Changsha Evening News) reporting and criticizing that the day-care centers in Changsha have a very high vacancy rate. Some of them were even empty for the whole month.

When we look back at the contents of the policies, it shows that it only highlights the quantities of beds, chairs, etc. but never talks about quality. Ignoring the voice and needs from elderlies leads to the current situation. Where do the elderlies go in the day-time actually? What are their usual activities? Why not go to day-care centers? In which aspects should the neighborhood guarantee them? These are all issues that planners need to rethink.

The current role of urban planners/designers in China

Nowadays, registered urban planners/designers in China are not really independent individual stakeholders, but just a beautiful label or a flamboyant title which can only represent planners/designers themselves. Majority of registered planners/designers spend most of their time technically modifying the development plans for political or economic elites. (He, D., 2003)

For example, in Chinese large-scale urban renewal process, the relocation and resettlement of residents always result in conflicts of interest. The resettled residents often lack 'agency' to organize their opinions and suggestions so as to reflect to the government. As original residents' representatives, 'community/street residents committees' are essentially the administrative organs of the government. Under the pressure of politics and administration, they safeguard the interests of the government. (He, D., 2003)

In China, the future direction of planners/designers is to serve as a bridge between residents and the government, breaking the current exclusive situation of top-down planning. This does not mean a direct conflict or confrontation with the government or developers, but to safeguard the legitimate rights and interests of citizens and maximize the interests of both parties.

livable city

Livability has emerged as an important concept in the field of planning. Increasingly, policy and community planning efforts at all levels of governance use the term 'livability', often in describing long range goals. (Herrman, T., & Lewis, R., 2017) Livable city, as the quality of 'fit to live in' (van Dorst, 2013, p. 224), is an ideal image of the city and is often used to describe the long range goals of governments. Despite the wide usage of this term, the concept of livability is still implicit.

Livability is frequently used as an umbrella of indicators. However, in many cases, the indicators are chosen first and then gathered under the livability 'umbrella' rather than following from a distinct conceptual framework. (Herrman, T., & Lewis, R., 2017)

For people to successfully age in place, to live in one's own home and community safely, independently and comfortably, regardless of age, income or ability level (cdc.gov., 2009), it is important that their communities be livable. In the thesis, according to the problem described in the front pages, 'aged-friendly', 'place-making', and 'walkable' are chosen as the three main indicators under the 'umbrella' of livability. Although the contents that the three words represented are partly overlapped, they are put in parallel because they have specific qualities that the aimed system wants to achieve.

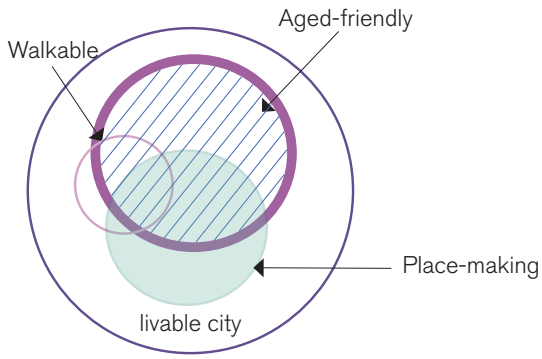


Figure 13: Connotation of livable city

Source: Author

Aged-friendly

An aged-friendly city encourages active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people's age. (WHO, 2007) So 'aged-friendly' is the first indicator of livable city under the context of ageing society.

Health and well-being are determined not only by our genes and personal characteristics but also by the physical and social environments in which we live our lives. (WHO,2007)

Environments play an important role in determining our physical and mental capacity across a person's life course and into older age and also how well we adjust to loss of function and other forms of adversity that we may experience at different stages of life, and in particular in later years. Both older people and the environments in which they live are diverse, dynamic and changing. In interaction with each other they hold incredible potential for enabling or constraining Healthy Ageing. (WHO, 2007)

To build up the aged-friendly environment, we need firstly know the physiological and psychological requirements of elderlies. Besides, environment mentioned here not only means physical environment, but also includes social environment. Let elderlies achieve their own values is also part of the task of aged-friendly.

Walkable

Jeff Speck (2013)' s general theory of walkability a journey on foot should satisfy four main conditions: be useful, safe, comfortable and interesting.

Since falling is the first cause of death among the elderlies over 65 years old (Zhou, 2016), walkable neighborhood environment is the essential and basic element for providing safety for elderlies.

Not only for preventing and decreasing falling, a safe and interesting walking environment can also encourage people to go outside more, meet more people, and take more activities. It will lead longer time on comfortable walking and outdoor activities, helping to build up good health for all residents, especially for elderlies. Besides, the more people come out, the more active and harmonious that the neighborhood will be. So, walkability is another important indicator under the 'umbrella'.

Place-making

Place-making also has its unshakable position in the city renewal process under the context of ageing society. In Friedmann, J. (2010) 's place-making theory, there are two main ideas: 1. Making places is everyone's job. 2. The 'centering' of place: spaces of encounter and gathering.

Building up the aged-friendly neighborhood or enhancing the neighborhood especially for the elderlies is not the final aim of the thesis. Since the elderly is not an individual group, the interaction between the elderly and other groups is also crucial. So, the cooperation and gathering that proposal by place-making theory can help to mix the neighborhood better.

2.3 NOUN DEFINITION

Second ring area& Historic pedstrian planning area& Historical cultural area& Street

Second ring area: Main city area in Changsha. It is the most densely populated area and the most dynamic area.

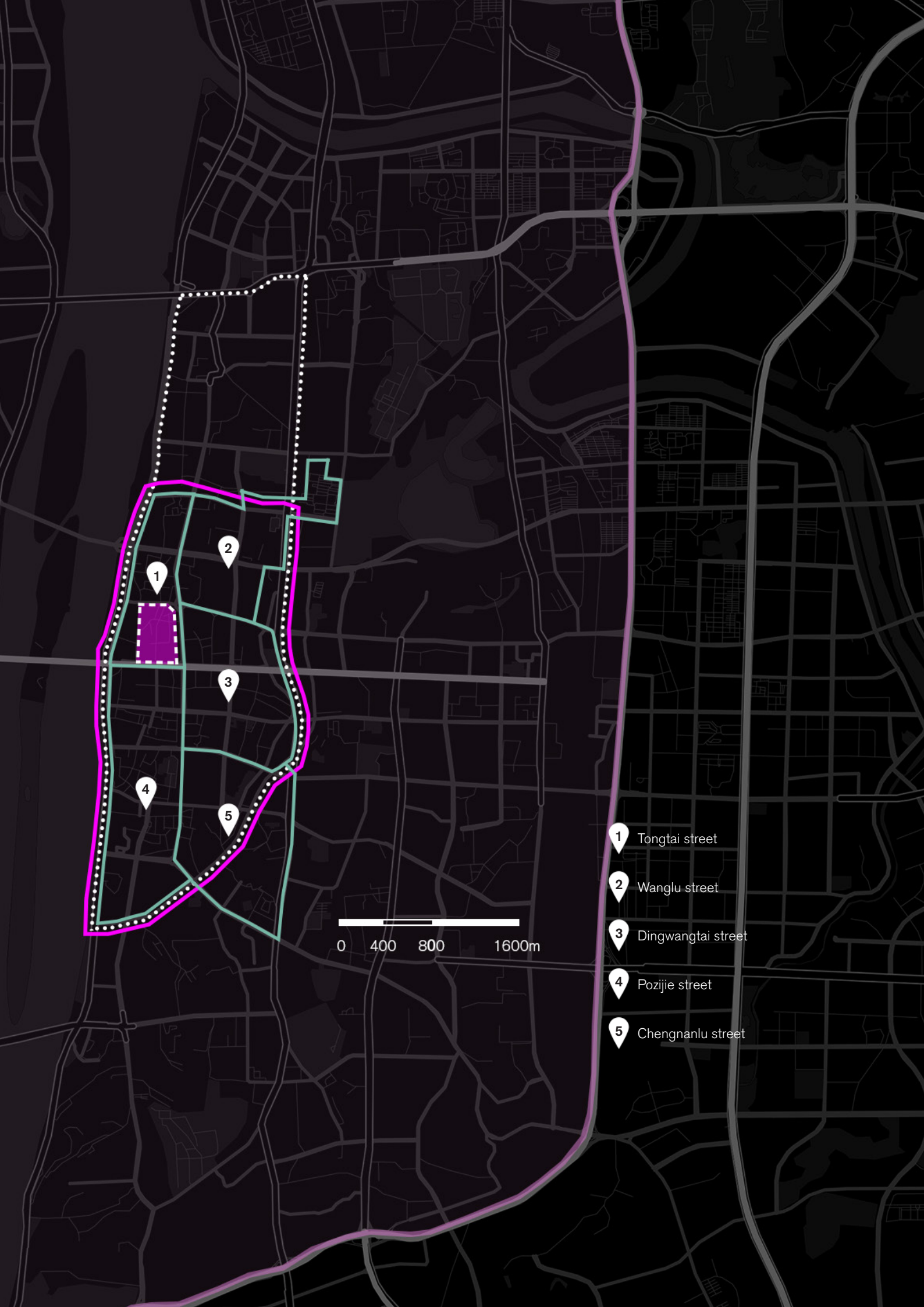
Historic pedestrian planning area: The planning was brought up in 2016. It includes the important historical points, recreational lane systems and the supporting facilities.

Historical cultural area: Rich in historical and cultural resources. It is not only the central area of urban development, but also the key area of urban renewal. There is a contradiction between protection and development in itself.

Street: 'Street' here means the political administrative boundary which connects with geographical area. Normally, for each 'street', it contains six to seven communities.

Figure 14: Distribution of second ring area, historic pedestrian planning area, historical cultural area and street

Source: mapbox
Edited: Author


1
2
3
4
5
0
400
800
1600m
1 Tongtai street
2 Wanglu street
3 Dingwangtai street
4 Pozijie street
5 Chengnanlu street

Block& Community& Neighborhood

Block: A city block is the smallest area that is surrounded by streets. City blocks are the space for buildings within the street pattern of a city, and form the basic unit of a city's urban fabric. (Baidu.cn)

Community: In China, communities are often associated with regions, which is intended to emphasize that this social group life is built within a certain geographical area. Nowadays, most of the communities in mainland China are converted by original urban residents' committees, while a few are renamed by village committees incorporated into cities and towns. Communities in China are the most basic level for the Party and the government to transmit and implement policies. At the same time, it will pass the voice from residents to the Party and the government. In the thesis, community is an administrative division. Yaodaoping community and Xuanyuandian community belongs to Tongtai street.

Neighborhood: Neighborhoods are often social communities with considerable face-to-face interaction among members. It doesn't have visible boundaries.

Image 17: The scale of block& community& neighborhood

Source: google earth; Edited by Author

The elderly

According to the definition of the World Health Organization, middle-aged people were 65 years old. 65 to 74 years old are younger seniors. 75 to 89 years old are the real seniors. 75 years old is the cutting point, people will really feel obviously physical deterioration. Over 90 years old are longevity seniors.

In China, the national statutory retirement age of employees is 60 for male and 50 years for female employees.

In July 2012, He Ping, director of the Institute of Social Security of the Ministry of Human Resources and Social Security, proposed that China should gradually delay the retirement age. It is recommended that by 2045, both men and women, the retirement ages are 65 years old.

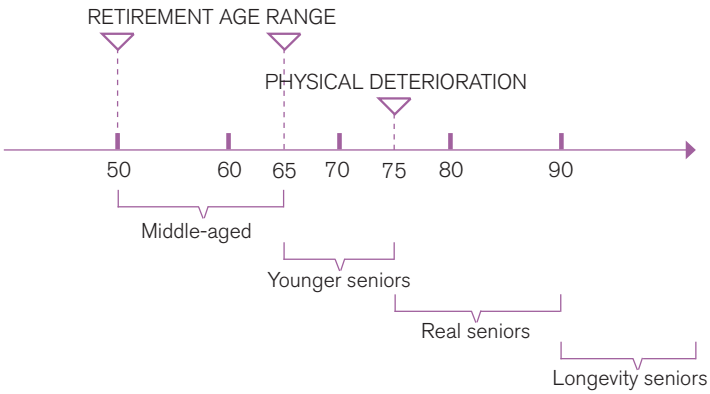


Figure 15: Definiton of elderlies

Visualization: Author

Since those who cannot live on themselves are the main target groups of the institution support system for the elderlies, the main target elderlies of the thesis are those who totally retire from the formal job (after 65 years old) and live on themselves or partly live on themselves. Word 'the elderlies' which mentioned in the whole thesis will especially refer to this special groups.

2.4 SOCIETAL & SCIENTIFIC RELEVANCE

Societal relevance

Image 21:
'Empty-nested' phenomenon in nowadays China

Source:hk.next.nextmedia; Edited by Author

At present, Chinese family structures come to the stage of core and miniaturization. On top of it, the high living pressure (especially considering the extremely high prices of housings) in the cities drive less and less elderlies to live with their offspring. It leads to the 'empty-nested' (the elderly who lives alone) phenomenon, which is a quite 'popular' scenario among the elderlies. According to National Bureau of Statistics of China, among the elderlies who are over 60 years old, urban empty-nested families accounted for 49. 7%. By 2030, the elderly population will reach 3.600 million, while the proportion of empty-nested elderly people in the elderly population will reach 90%. Furthermore, with better health care, better food, better water, better environment, and better living quality in China compared to decades ago, average lifespan of elderlies increases significantly. Besides, the traditional Confucius concept of family support is diminishing every year. All of the above factors are ringing the alarm for us to improve the services systems for elderlies.

Proposing the solutions for the services systems for elderlies in the context of ageing society in China can help us to: firstly, reduce the ageing pressure for both governments and families; secondly, promote both the mental and physical health for aged people to raise their happiness index and the livable index of the city; thirdly, identify the economic benefits brought upon by the elderlies—"Silver Economy", which contains huge potential. It has tons of new economic breakthrough points, thus weakening the impact of ageing on the economy. Lastly, improve the industry for elderlies which includes products for elderlies and service systems can brings a lot of employment positions and opportunities, so that the ageing rush in labor market could be reduced.

Image 22: Elderlies made in China

Source:theatlantic; Edited by Author

Compared with many developed countries, however, in the initial phase of ageing society, China still has a lot of unprepared work that needs to be solved, especially in the formulation of relevant policies and the development of services systems for the elderlies. Not only does the current scheme lacks overview in design & planning process, but it also lacks specific design guidelines that should be implemented into practice. (Pan, Y. , 2014)

Ageing is not only the issue of the elderlies, but also connects with every aspect in our daily life and influences everyone.

2.4 SOCIETAL & SCIENTIFIC RELEVANCE

In this thesis, I took the residential-dominated historic areas as an example, since they have high aggregation of the elderly. The neighborhood environment is relatively poor. Public spaces are occupied, which raises conflicts between the neighborhood and the ageing situation. However, urban renewal in China is still at its early conceptual development with high level of uncertainty. It results in chaotic development of the services systems in the historical blocks.

The historical blocks where services systems for the elderlies are to be built must be supervised so as to guarantee security and enrichment of the social life for the elderlies in that neighborhood. Creating aged-friendly facilities and environment to suit their lifestyle and needs would be the next step. On the other hand, protection and maintenance of community relations, social ecology and customs can promote community vitality, which eventually provides new possibilities of organic renewal of old blocks. Ageing is not only an issue of the elderlies, but it surely connects to every aspect in our daily life and influences the society performance.

Scientific relevance

Compared to developed countries, China is still at the stage of exploring systematic theory and practical systems to deal with ageing as this is relatively a “new” phenomenon in China. In the past, the research of ageing in China mainly focused on family support and institutional support. Neighborhood services systems were neglected. However, in recent years, it becomes the focus of the domestic research that is in the direction of: the connotation of neighborhood services systems; the advantages and strengths compared to family support and institutional support; neighborhood services systems in various regions and the existing shortcomings, potential causes and improvement measures, etc. (Zhu, H., 2013) For example, Wang, M., & Xu, G. (2015) has Analysis of Status quo and Counter Measures of Community Home Care Model. Yang, Y., et al (2015) published SWOT Analysis of Neighborhood Services Systems in Underdeveloped Cities in China. Chen, W. (2016) had Reflections and Prospects on Key Issues in Current Community Home Care Services.

However, there is a big tendency of disciplinary differentiation in the study of services systems for the elderlies in China. Such as in the fields of sociology, economics, etc. More attention to the study of pension services and social management should be paid. While in the fields of urban planning and design, the focus tends to lie on space and environment design, and less on elderly services. It leads to insufficient links between space environment of services support and demand for social services, and does not form a comprehensive service system. (Wang, X., 2017) In other words, the research on how to integrate the neighborhood services systems for elderlies with urban planning and design is still lacking a systematic research, especially for the historical neighborhood that was formed naturally through continuous development by residents. The operability is low for the neighborhood services systems in the historical block, and is even lower in efficiency when the systems are put into practice.

This thesis would use multi-disciplinary knowledge to combine the solution of ageing problems with the protection of historical blocks and the blend of space and social life, so as to form a comprehensive and supportive environment for ageing care. It would continue to track and guide the whole process of the related design to reach implementation and management in the later stage.

2.5 PROBLEM STATEMENT

The neighborhood services system for the elderlies is the hub of the entire aged services systems, effectively integrating various aged services systems such as self-support, family support and institution aged services system. (Li Zhiming, 2016) By building a neighborhood aged services system, the service entities and multi-party services resources will be effectively pooled and sank to the neighborhood. The neighborhood service system is mainly reflected in the neighborhood and also the integration of service resources is mainly implemented in the neighborhood. The key to establish a good interaction among institutions, communities and families relies on the neighborhood. (Li Zhiming, 2016) If there is no neighborhood environment to support, neighborhood aged services system will become empty talk.

Historic blocks are more suitable for the elderlies to live in. The elderly often lives in historic blocks for half a century. They are full of nostalgia and memory for their houses and neighborhood, and are reluctant to leave, which conforms the traditional Chinese concept of hate to leave a place where one has lived long. (Wang, X., 2017)

However, most of the current historic blocks in China are aged-unfriendly to live in, such as unwalkable lane, dirty environment, poor infrastructure, etc.(Wang, X., 2017) Under the background of rapid urban development, the renewal of historic blocks are in an unknown transition period, and the community environment is in an unstable state. The existing planning and design in the historic blocks have few responses to the neighborhood services systems for elderlies. In other words, neighborhood services systems for elderlies and urban design & planning systems do not integrate each other in the historic area.

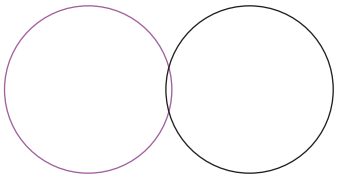
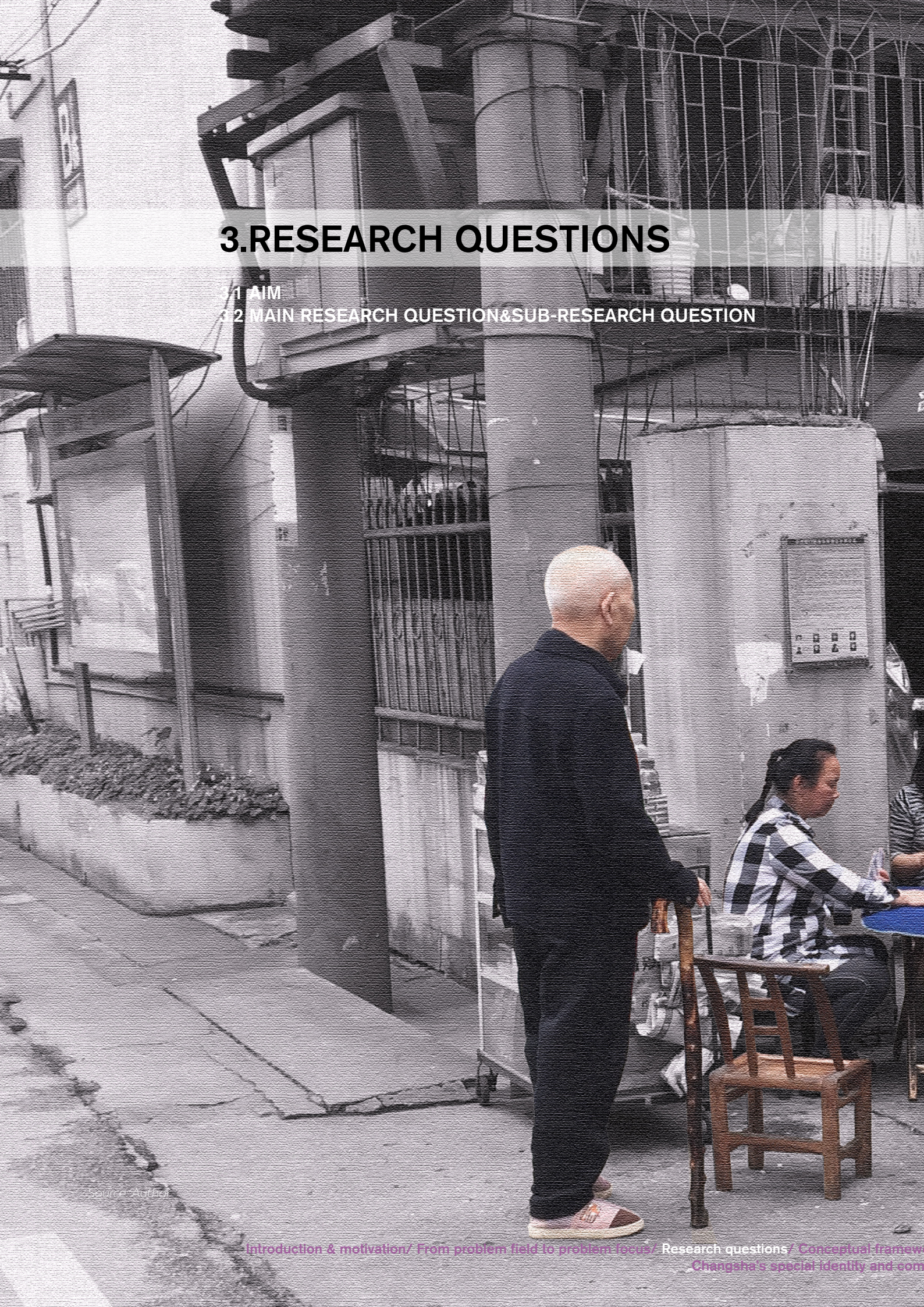


Figure 16: The current relationship between the systems and planning in the historic area

Source: Author

3.RESEARCH QUESTIONS

3.1 AIM
3.2 MAIN RESEARCH QUESTION&SUB-RESEARCH QUESTION



Source: Author

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3.RESEARCH QUESTIONS

3.1 AIM

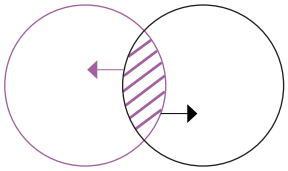


Figure 17: The proposal relationship between the systems and planning

Source: Author

This thesis has aims to integrate the current Chinese neighborhood services systems for the elderlies with urban design and planning in the historic area of first-tier city, transforming the interaction between historic area and the elderly from mutual influences to mutual promotion and benefit, towards the livable city in China.

3.2 MAIN RESEARCH QUESTION&SUB-RESEARCH QUESTION

RESEARCH QUESTION

RQ

In the context of rapid urban development, how to integrate the current Chinese neighborhood services systems for the elderlies with urban design and planning from governance and spatial aspects in the historical neighborhood?

SUB-RESEARCH QUESTION

SQ1	"How does the nowadays neighborhood services systems for the elderlies work?"
SQ2	"How does the nowadays city renewal process carry out in the historical neighborhood?"
SQ3	"What is the aged-friendly spatial condition in the historical neighborhood?"
SQ4	"What kinds of governance system can promote a sustainable development both for the services systems and urban renewal?"

Figure 18: The question exploration process scale bar(from SQ1 to SQ4)

Source: Author

The sub-research questions exploration process will go through three scales (Figure 13). First, it will be tackled in China's level. Then, the questions will be narrowed down to the first-tier city Changsha. Last, combining with the two former processes, reflects general principles that can be used in other cities' in China.

4. CONCEPTUAL FRAMEWORK

Source: Author

长沙市医疗保险协议

4. CONCEPTUAL FRAMEWORK

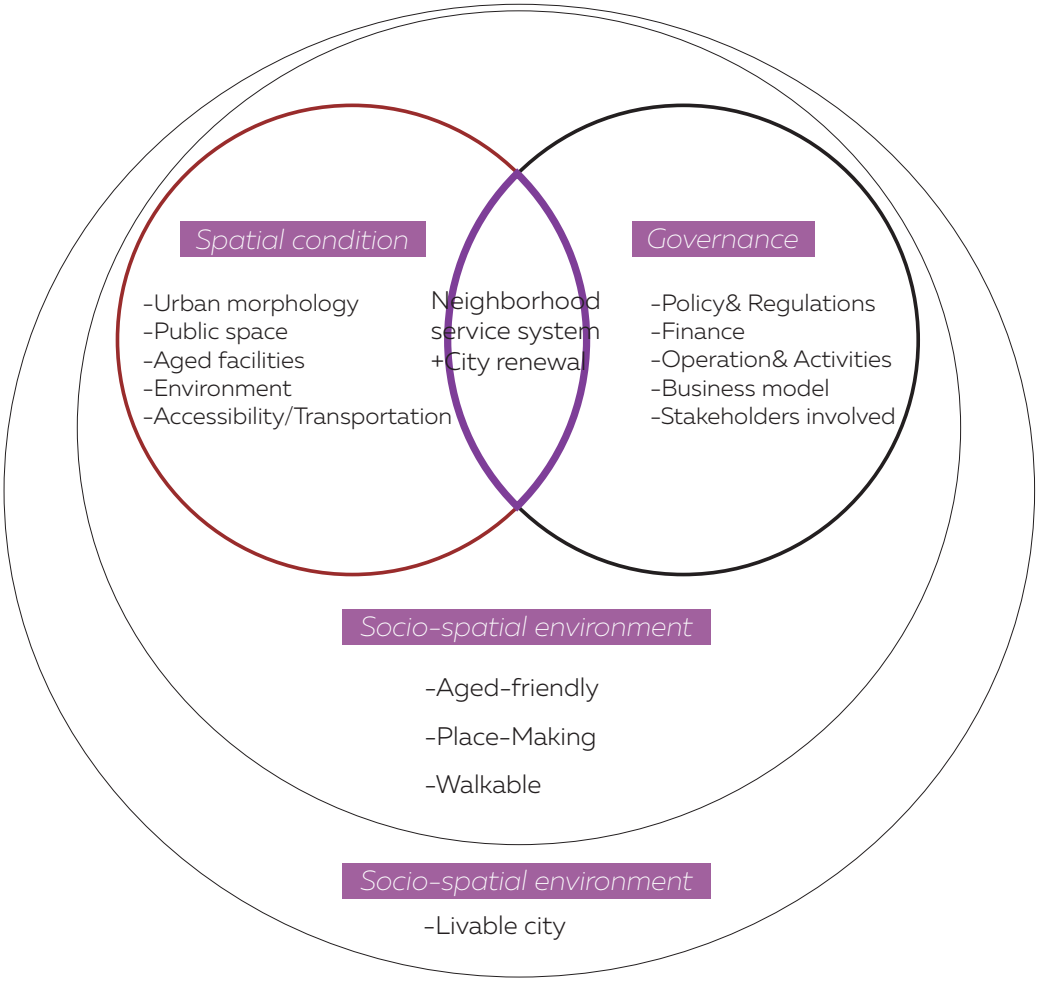


Figure 19: Conceptual framework

Source: Author

Based on the core contents of livability theory under the context of ageing society, developing the conceptual framework mainly from three aspects, socio-spatial environment, spatial condition and governance to integrate the urban planning and design with neighborhood services systems for elderlies.

Below the big socio-spatial environment livable city, there are three main qualities that is urgently needed for the historic neighborhood in the thesis: Aged-friendly, Placing-making and Walkable.

As the platform of the neighborhood service system, the spatial condition aspect contains the urban morphology, public space, aged facilities and accessibility/transportation, etc. which needs to be proposed and improved. For the governance session, it contains policy& regulations, finance, operation& activities, business model and stakeholders involved. These elements in the spatial condition and governance will be reorganized to achieve the goal of aged-friendly, placing-making and walkable.

-Aged-friendly	-Intrinsic capacity	-Physical -Psychological
	-Functional ability*	

Figure 20: The definition of Aged-friendly in the thesis
Source: WHO

-Place-making	-Making places is everyone's job
	-The 'centering' of place: spaces of encounter and gathering

Figure 21: The definition of Place-making in the thesis
Source: Friedmann, J. (2010)

-Walkable
-Useful
-Safe
-Comfortable
-Interesting

Figure 22: The definition of Walkable in the thesis
Source: Speck, J. (2013)

Functional ability* is the process of interacting the intrinsic ability of the elderly and the environment to achieve individual value. (WHO)

5. THEORETICAL FRAMEWORK

Source: Author

5. THEORETICAL FRAMEWORK

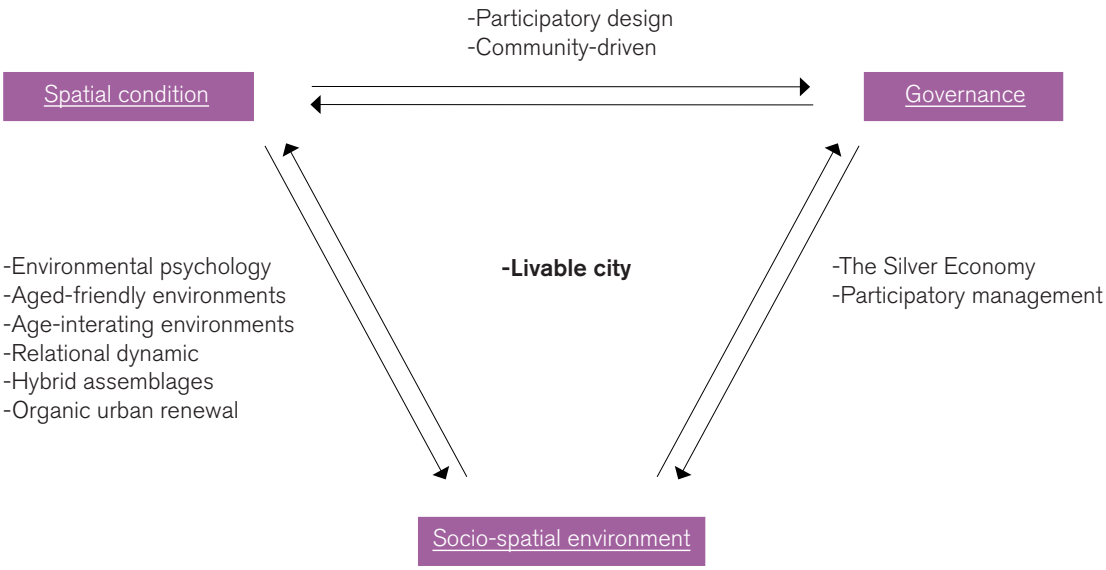


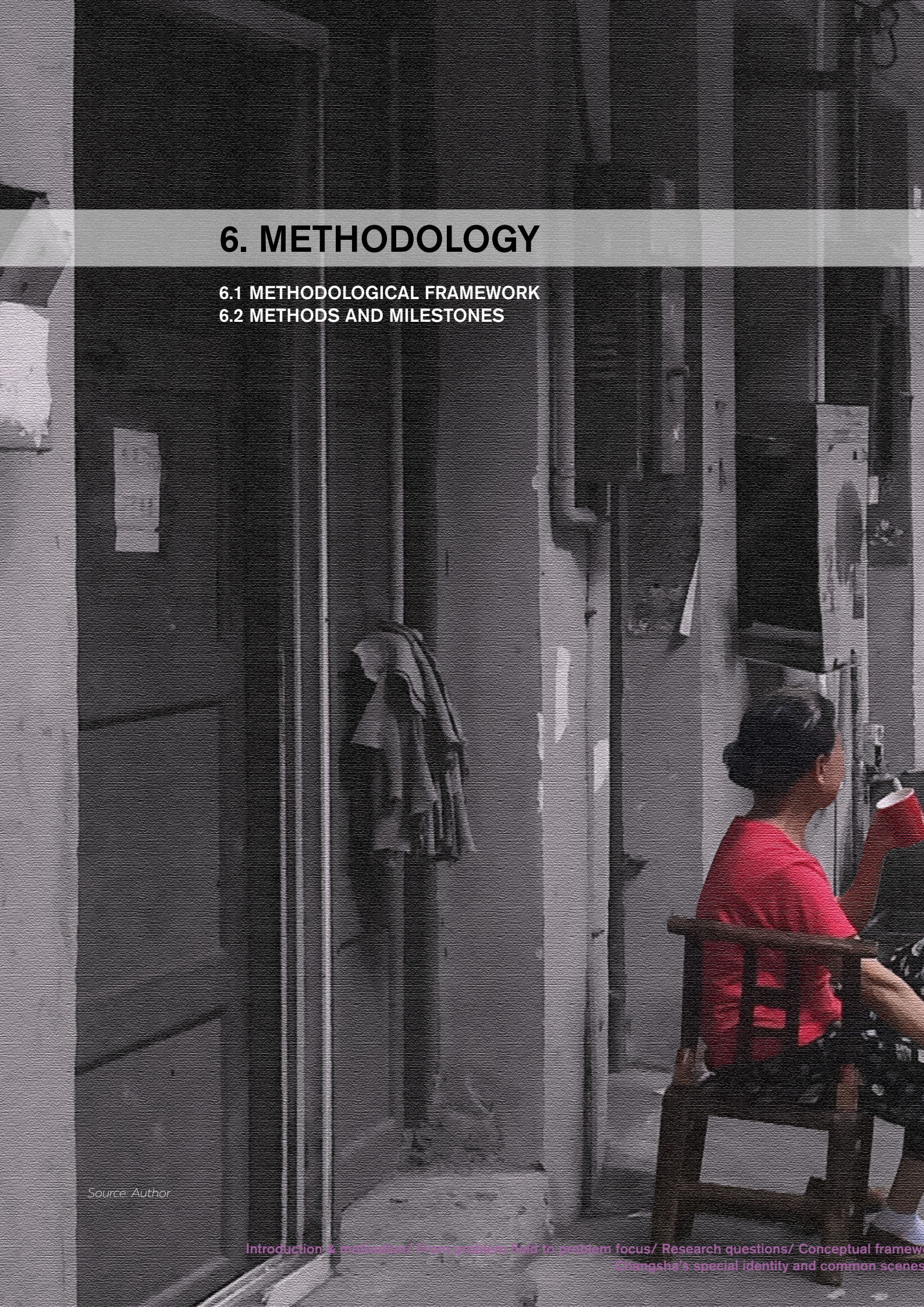
Figure 23: Theoretical framework

Source: Author

All of the three aspects are connected with each other. For example, in the thesis, Participatory management is one of the connections between social environment and governance. It is the practice of empowering members of a group, such as employees of the company or citizens of a neighborhood, to participate in organizational decision making, which can help to balance the interest among different stakeholders and get immediate feedback from them to improve the system effectively. At the same time, the silver economy helps the systems to create its business value, turning into a sustainable economic model. Besides, the systems which contains production, distribution and consumption of goods and services can provide the jobs not only for labors, but also for those elderlies who want to achieve their self-Actualization. Between spatial condition and governance, Participatory design and Community-driven are the bridge. For social environment and spatial condition, Environmental psychology, Aged-friendly environments, Age-interacting environments, Relational dynamic, Hybrid assemblages and Organic urban renewal are the theories to organize the different elements.

6. METHODOLOGY

6.1 METHODOLOGICAL FRAMEWORK
6.2 METHODS AND MILESTONES



Source: Author

6. METHODOLOGY

6.1 METHODOLOGICAL FRAMEWORK

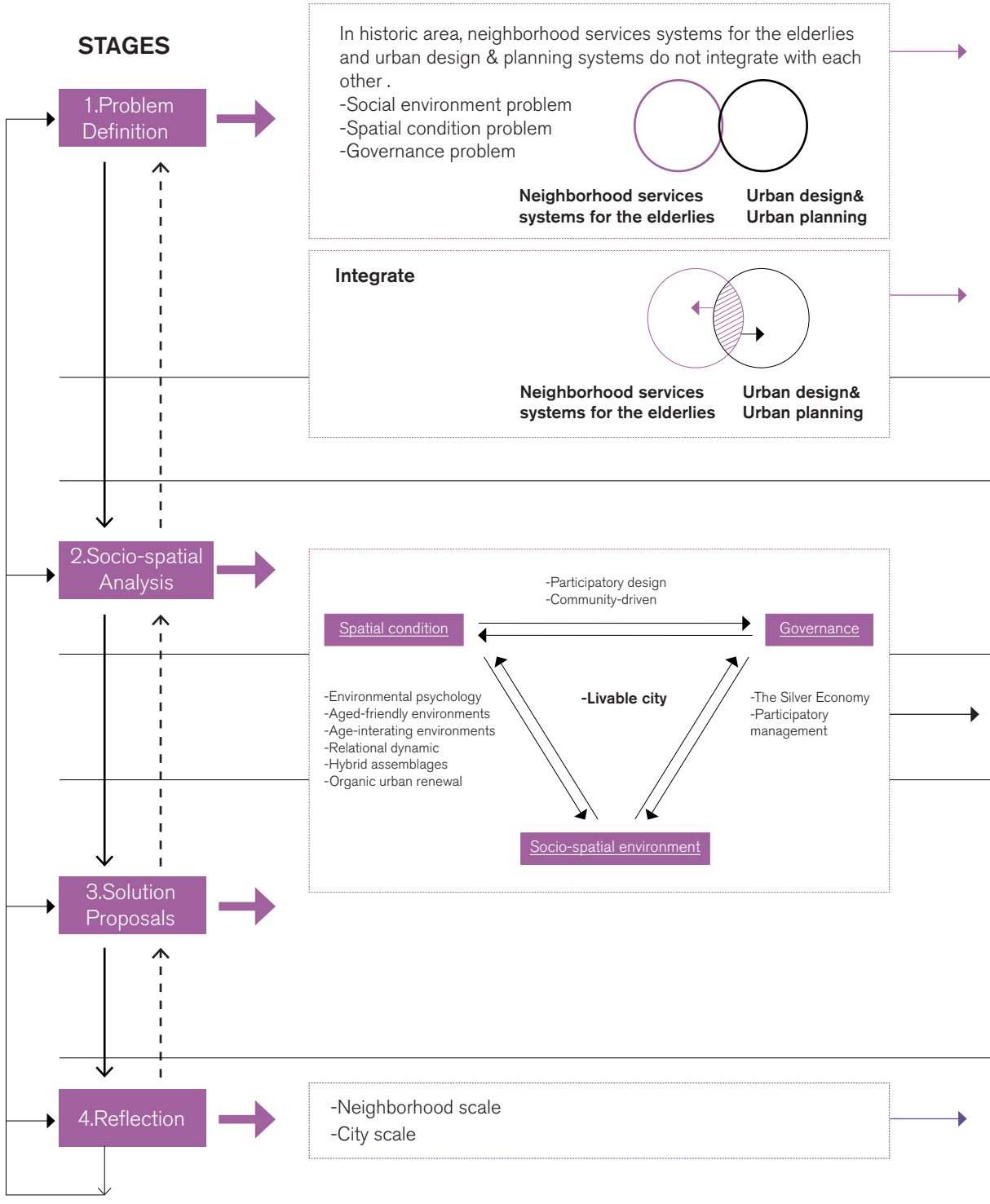


Figure 24:
Methodology scheme
Source: Author

1.1Problem statement

1.2Research questions

1.3Aim

2.1Conceptual framework

2.2Analysis

2.3Theoretical framework

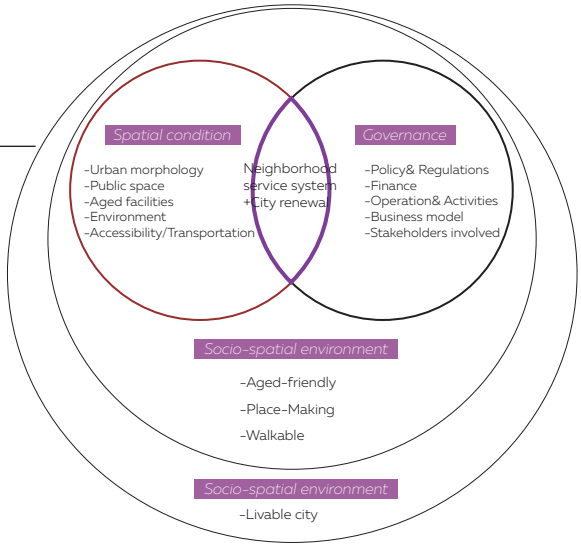
3.1Vision

3.2Strategy

3.3Design Proposal

4.Reflection

In the context of rapid urban development, how to integrate the current Chinese neighborhood services systems for the elderlies with urban design and planning from governance and spatial aspects in the historical neighborhood?



4.1 Principles
4.2 Contributions
4.3 Limitations
4.4 Future studies

OUTCOME

Goals

Understanding

Support

Evaluation

The methodology of this thesis is influenced by DRM- Design Research Methodology (Blessing & Chakrabarti, 2009), and consists of four stages: Problem Definition, Problem Description, Solution Proposal, and Reflection. The outcomes are divided accordingly into four sessions—goals, understanding, support, and evaluation.

The main aim of the thesis is to integrate the current Chinese neighborhood services systems for the elderlies with urban design and planning in the historic area of first-tier city from governance and spatial aspects. Problem Definition stage includes the problem statement, research questions, and aim, which leads to the goal of the thesis. Based on the former stage, the Socio-spatial Analysis analyses the needs of Chinese elderlies, the current neighborhood service systems, and the existing situation of the historic neighborhood by using the methods such as literature review, mapping, field study, etc. Between the first two stages, there is conceptual framework, mainly showing the structure of further direction of analysis based on the aim. The Solution Proposals show the process of design on organizing the elements in governance and spatial environment under the 'umbrella' of livable city. Between the Socio-spatial Analysis and the Solution Proposals, there is another individual chapter theoretical framework. The key points coming from the theories based on the main concepts help to develop the design comprehensively. The last Reflection Stage is to reflect some guidelines from the pilot project that can inspire other Chinese city. And it will also reflect the limitations in the thesis, and put forward the academic contributions for future research in this field. (Figure 14)

1. Problem Definition

This stage is to understand the problem which the study aims to tackle. It requires evidence collection and literature studies that clarify the issue and support the research goal (Blessing & Chakrabarti, 2009). Based on the findings, an initial description of the existing situation (problem statement) is developed, as well as a description of the desired situation (research questions/aim) (Blessing & Chakrabarti, 2009). After narrating the motivation, context, problem field, societal-scientific relevance by literature review, the problem statement comes into being: the neighborhood services systems for the elderlies and urban design/planning systems do not integrate each other in historic area in China. Then the research question indicates the aim of integrating the current Chinese neighborhood services systems for the elderlies with urban design and planning in the historic area of first-tier city, transforming the interaction between historic area and the elderly from mutual influences to mutual promotion and benefit, towards the livable city in China.

2. Socio-spatial Analysis

The Socio-spatial Analysis consists of literature review that supports the detailing of the existing situation put forward in the Research Clarification phase, having the desired aims in mind (Blessing & Chakrabarti, 2009). After getting the explicit aim of integration in the former stage and building up the concept framework (from three aspects: socio-spatial, governance, and spatial) through the literature review, the process comes to the problem description, which mainly analyses the problem and finds out the potential intervention. This stage will dissect the current situation from governance and spatial aspects following the four sub-research questions. They are studied based on the methods of Literature review, Policy& Regulation analysis, Spatial analysis, Interview, Mapping,

etc. in order to answer the sub-research 1: "How does the nowadays neighborhood services systems for the elderlies work?" and sub-research 2: "How does the nowadays city renewal process carry out in the historical neighborhood?" Besides, it will also tackle the mental and physical demands of the elderlies through Literature review, Interview, Mapping, Field trip, etc. to address the sub-research 3:"What is the aged-friendly spatial condition in the historical neighborhood?" Then the field study of the typical aged city, Changsha, will enhance the analysis of the current situation. In this step, the interview and observation will be two of the important methods. In the last part of the stage, case studies of Japan, Australia, and America could provide approaches which are capable of solving similar problems in China. Combing with the literature review and existing diagnosis, it will answer the sub-research question 4: "What kinds of governance system can promote a sustainable development both for the services systems and urban renewal?" (Figure 15)

3.Solution Proposals

According to Lucienne T. M. Blessing and Amaresh Chakrabarti, in this stage occurs the refinement of the desired situation, by putting forward a “vision on how addressing one or more factors in the existing situation would lead to the realization of the desired, improved situation” (Blessing & Chakrabarti, 2009). For that purpose, this thesis elaborates solution proposals. The field of the pilot project is in Xiping Block, Changsha. It is the typical ageing and poorly protected historical neighborhood which urgently need to be transformed. At the same time, it is an old neighborhood, which makes it also attractive for other groups of people because of the low cost of living. To solve the conflict between groups of people is also the step to achieve livable city. The whole process based on the framework of socio-spatial, spatial and governance, divided into two scales in a bottom up way: from neighborhood scale to city scale. According to the solutions of sub-research questions addressing in the second stage, the solution will be explained from vision, strategy to design step to achieve livable city.

4. Reflection

The purpose of the last stage is to examine the effects of the proposal and evaluate its achievements, applicability and usefulness (Blessing & Chakrabarti, 2009). Moreover, in this stage there is an indication of conclusions and need for further studies (Blessing & Chakrabarti, 2009). In this thesis, this is realized through a reflection. The reflection stage is divided into four parts. First, through the solution proposals for Xiping Block, concluding the feasible guidelines that can also be used in other places in China. Then, it comes to explanation for the contribution and limitation of the thesis. Last, it will show the direction of further studies.

6.2 METHODS AND MILESTONES

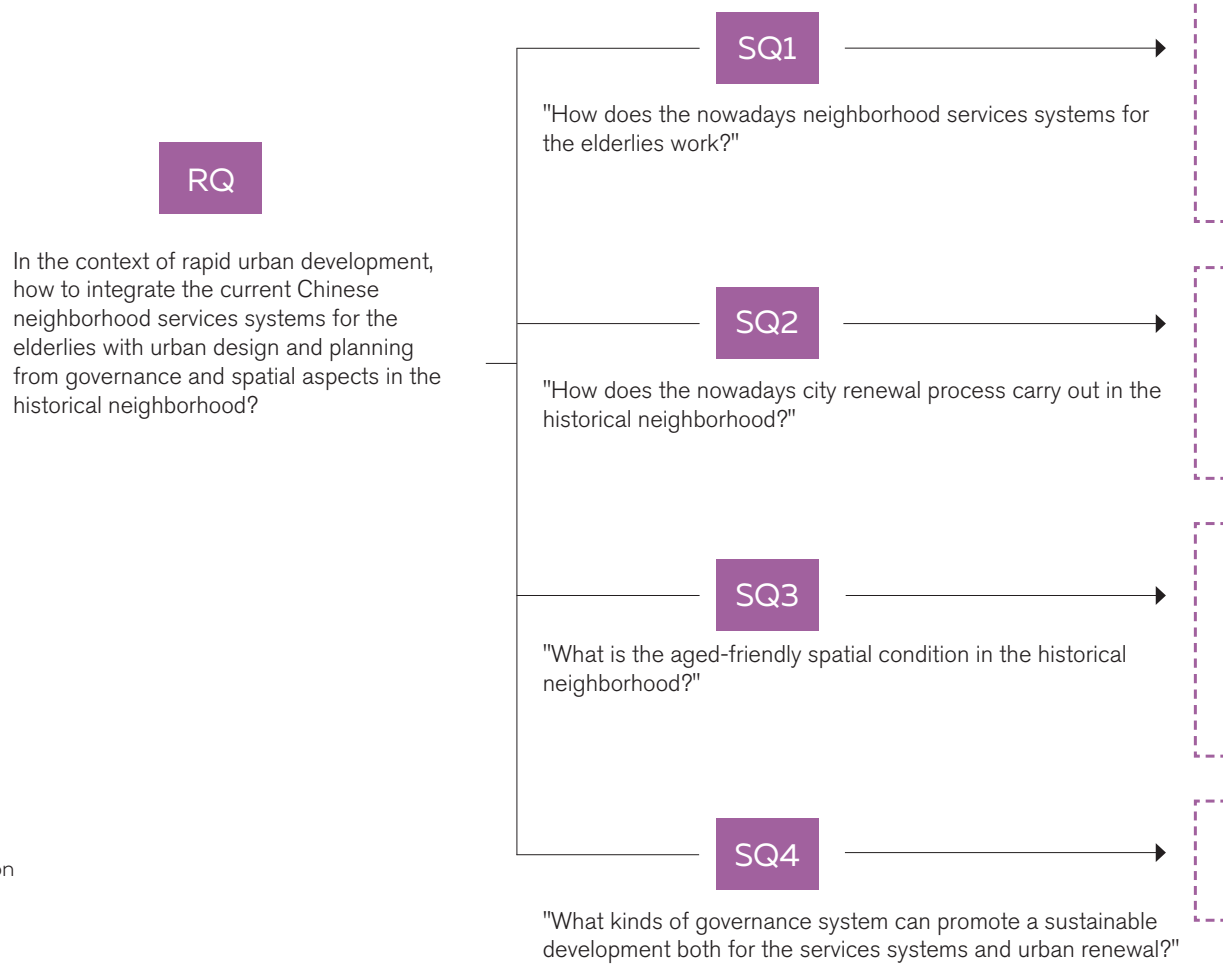
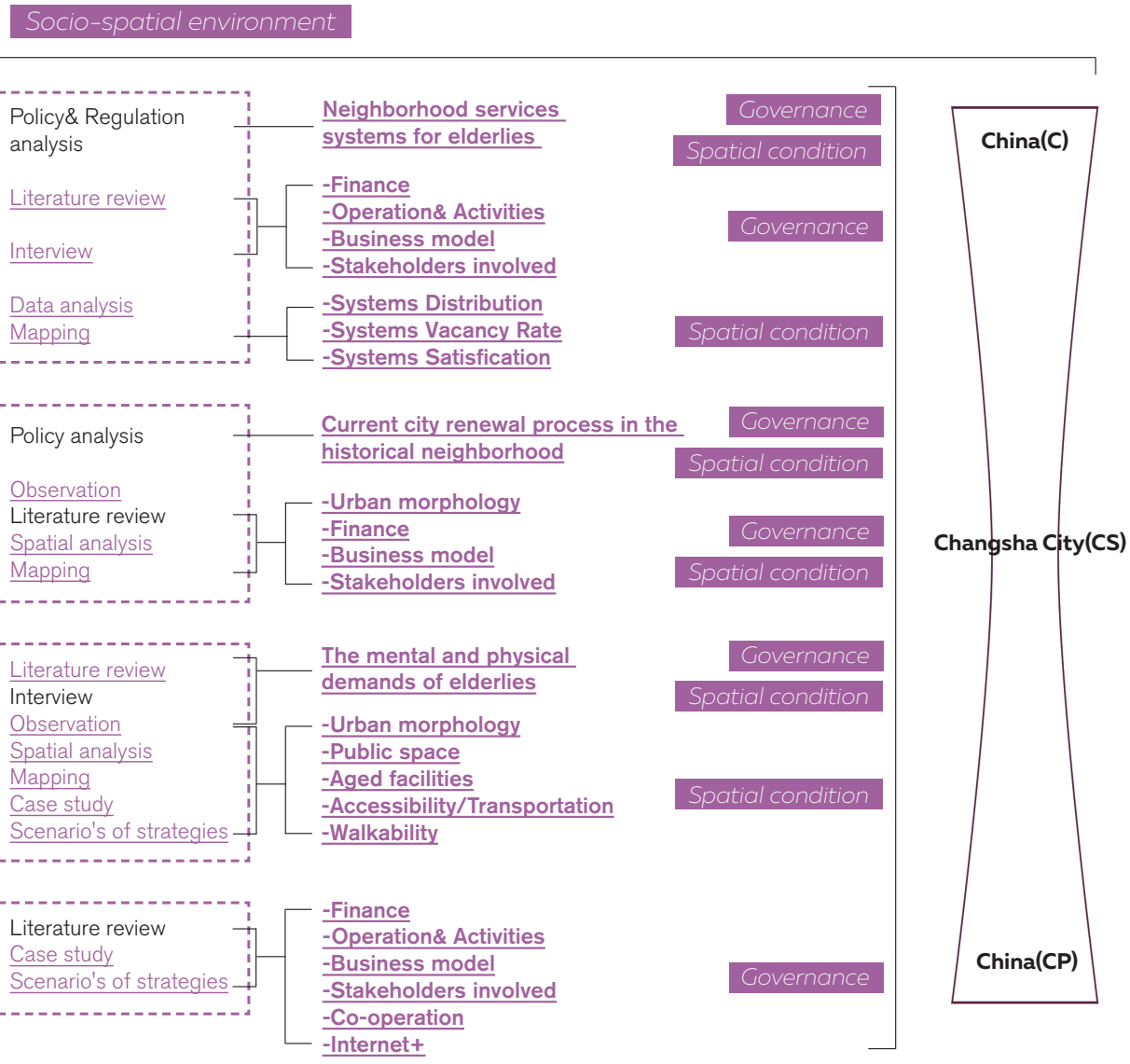


Figure 25: The question exploration process (from SQ1 to SQ4)

Source: Author


Socio-spatial environment
Policy& Regulation analysis
Literature review
Interview
Data analysis
Mapping
Neighborhood services systems for elderlies
Governance
Spatial condition
-Finance
-Operation& Activities
-Business model
-Stakeholders involved
Governance
-Systems Distribution
-Systems Vacancy Rate
-Systems Satisfication
Spatial condition
Policy analysis
Observation
Literature review
Spatial analysis
Mapping
Current city renewal process in the historical neighborhood
Governance
Spatial condition
-Urban morphology
-Finance
-Business model
-Stakeholders involved
Governance
Spatial condition
Literature review
Interview
Observation
Spatial analysis
Mapping
Case study
Scenario's of strategies
The mental and physical demands of elderlies
Governance
Spatial condition
-Urban morphology
-Public space
-Aged facilities
-Accessibility/Transportation
-Walkability
Spatial condition
Literature review
Case study
Scenario's of strategies
-Finance
-Operation& Activities
-Business model
-Stakeholders involved
-Co-operation
-Internet+
Governance
China(C)
Changsha City(CS)
China(CP)

In Methodological framework chapter, it shows the structure of the whole thesis. In Methods and milestones chapter, it mainly focuses on solving the four sub-research questions by framing the methods of each steps and contents that need to be tackled based on governance and spatial environment. All these four questions will be answered in China and Changsha level. In the end, guidelines in China's level would be reflected on after identifying the unique and common scenes in Changsha.

For the sub-research question1, "How does the nowadays neighborhood services systems for the elderlies work?", first, it will use the method of Policy& Regulation analysis to figure out, what are the Changsha level and China level standards of the current systems from the policy aspect; second, making use of literature review about neighborhood service systems for elderlies and interview related stakeholders in Changsha, figures out what is the current finance situation, operation activities, business model, and stakeholders involved of the systems; last, after figuring out 'How does the system work?', 'Does the system really work?' becomes an important step to figure out what is the problem. By using the data analysis collected from the government documents and online data, maps the system distribution, system vacancy rate, and system satisfaction to conclude some common patterns of the neighborhood service systems and the existing problems.

The second sub-research question is "How does the nowadays city renewal process carry out in the historical neighborhood?". It will be firstly looked into the policy on the current city renewal process in the historical neighborhood, combined with the methods of literature review and observation in the site visit, mapping and analyzing the spatial condition of the historical neighborhood. At the same time, make clear of the finance, business model, and stakeholders involved during city renewal process. Because the aim of the thesis is to integrate two systems together, so understand it individually is vital.

In the third sub-research question, it needs to be figured out 'What is the aged-friendly spatial condition in the historical neighborhood?' Literature review, interview, and observation will become the main methods to know what is the mental and physical demands of elderlies. Based on the requirements of the elderlies, through the methods of observation, spatial analysis, mapping, case study, and scenarios of strategies to get proposals of aged-friendly spatial condition from urban morphology, public space, aged facilities, accessibility/Transportation, and walkability.

In the last question 'What kinds of governance system can promote a sustainable development both for the services systems and urban renewal?', it shows that the main points are on governance. Through literature review, case study, and scenarios of strategies, a newly well-combined governance system will be developed from finance, operation& activities, business model, stakeholders involved, co-operation, and Internet+ aspects.

To conclude, the methods are listing below:

Methods		Purpose of the method	Procedure
Policy and regulation analysis		To fully understand the context. To collect the related policy to the thesis.	The understanding about how did the nowadays neighborhood service systems work and how did the current city renewal process work in the historical neighborhood in the policy aspect.
Literature review		To fully understand the context. To collect and synthesize theories and concepts relevant to the thesis.	This method goes through the whole process of the thesis, which means that from building up the context of problem statement, getting the information from the similar or related topics, to having inspiration ideas for solving the problems.
Field trip	**Interview**	To make clear about the common and uniqueness of Changsha and the elderlies lived in before making guidelines for other cities in China. To understand elderlies' indeed need in a more direct way. To fully understand the context and locality of the project.	Through the interview, walk-by observation, and direct observation, it will help to describe the daily routes of elderlies, their daily gathering places, their recreational places, the typology of the places, the activates they have in these places and their preferential for the places and activities. And also, the problems about the nowadays systems from the users directly.
	Observation		
Data analysis		To understand the problem of current neighborhood service systems.	Showing the dilemma of the neighborhood service systems in a Marco scale.

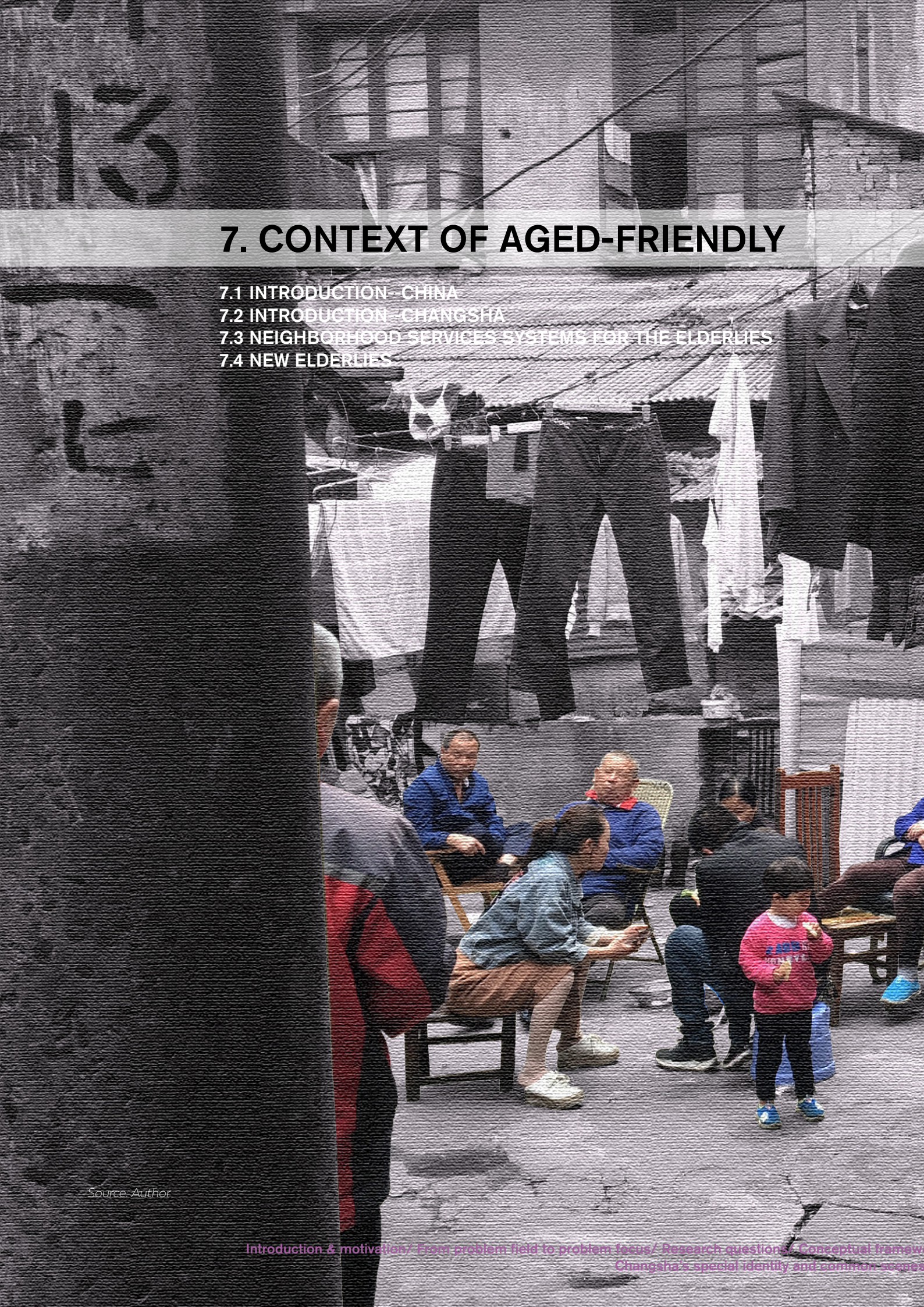
Table 2: Research approach

Source: Author

Methods	Purpose of the method	Procedure
Mapping (Mapping is one of the methods of spatial analysis. Separate mapping here because it has high proportion in the thesis.)	To understand the problem of current neighborhood service systems. To understand spatial condition and characterize the built environment. Mapping and overlaying forms a powerful tool to grasp spatial challenges and identify opportunities for interventions.	Mapping out the current distribution of the neighborhood service systems and spatial condition in the historical neighborhood. Showing the current environmental situation of the historic neighborhood. Concluding the opportunities and threatens from the two systems.
Spatial analysis		
Case study	To compare with the neighborhoods which have the same situation but with inspiration ideas. To propose the design in a more practical way.	Getting some inspirations for how to integrate the two separate systems together and achieve the quality of that new systems needed.
Scenarios of strategies	To develop possible proposals for the vision.	Scenarios here is not the final outcome, but been seen as the tool and method. So, several scenarios which reaches the same vision will be put together and discussed to find out the more reasonable and practical one to put into practice.

7. CONTEXT OF AGED-FRIENDLY

7.1 INTRODUCTION--CHINA
7.2 INTRODUCTION--CHANGSHA
7.3 NEIGHBORHOOD SERVICES SYSTEMS FOR THE ELDERLIES
7.4 NEW ELDERLIES



Source: Author

7. CONTEXT OF AGED-FRIENDLY

7.1 INTRODUCTION--CHINA

Aging character

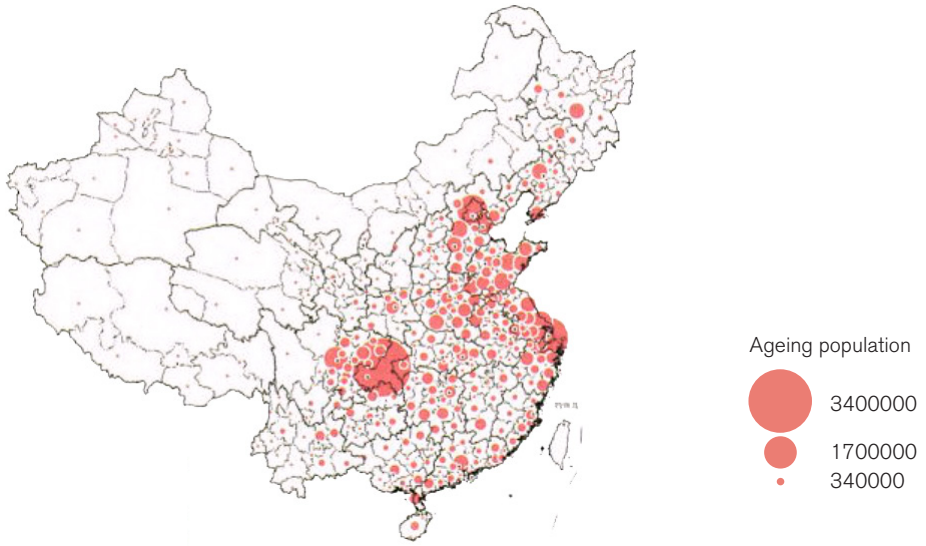


Image 23: Residents aged 65 and over in Chinese cities, 2010

Source: Statistics of the Sixth Population Census in 2010

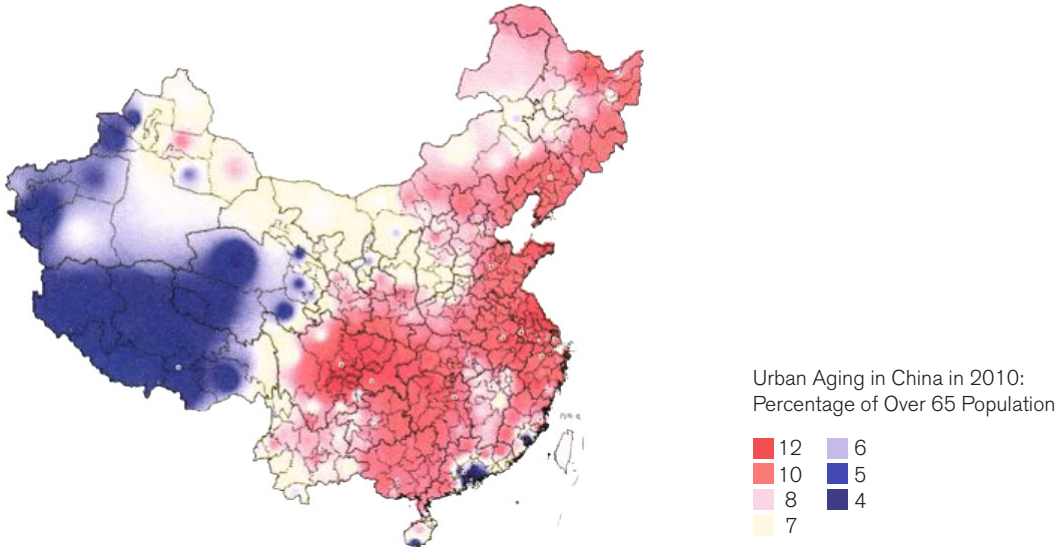


Image 24: Percentage of residents aged 65 and over in Chinese cities, 2010

Source: Statistics of the Sixth Population Census in 2010

1. The elderly population is huge. It will reach 300 million in 2026, more than 400 million in 2037 and its maximum in 2051, and it will remain in the range of 300 million to 400 million after that. According to the United Nations forecast, in the first half of the 21st century, China has always been the world's largest elderly population, accounting for one fifth of the world's total elderly population. In the second half of the 21st century, China is also the second largest elderly population after India.

2. Aging is developing rapidly. The proportion of the elderly over 65 years old in the total population has increased from 7% to 14%. Most developed countries have spent more than 45 years, including 130 years in France, 85 years in Sweden, 79 years in Australia and the United States. It will take only 27 years for China to complete this process, and it will maintain a very high rate of increase for a long time to come, which is among the fastest aging countries.

3. Unbalanced regional development. The development of population aging in China has obvious characteristics of regional echelon from east to west. The economically developed areas along the eastern coast are obviously faster than the economically underdeveloped areas in the west. Compared with Shanghai (1979), which entered the ranks of population aging at the earliest, and Ningxia (2012), which entered the ranks of population aging at the latest, the time span is 33 years.

4. Aging is ahead of modernization. Developed countries enter the aging society under the condition of basically realizing modernization, which belongs to the synchronization of the rich and the old, while China enters the aging society ahead of time without realizing modernization and underdeveloped economy, which belongs to the old before the rich.
(Changsha pension Brochure, 2011)

Goal

By 2020, the overall level of the development of the cause of ageing will be significantly improved, the services systems for the elderlies will be sounder and more perfect, and the social basis for timely, scientific and comprehensive responses to the aging of the population will be more solid.

1. The sustainable social security system will be improved towards the aim of multi-pillar, full coverage, fairer and more sustainable.

2. The elderly service system based on home, community, institution and health care is more integrated.

3. A more complete system is conducive to giving full play to the role of the government and the market.

4. Supporting the development of the ageing cause and the construction of the old-age pension system

（The 13th Five-Year Plan for the Development of the National Aging Career and the Construction of the Pension System， 2017）

7.2 INTRODUCTION--CHANGSHA

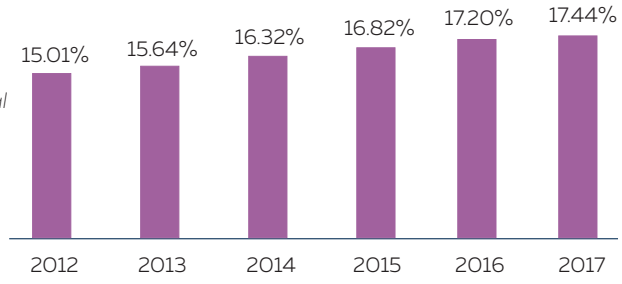
Aging level

Changsha is a typical Chinese ageing city. According to the "2017 Statistical Bulletin on the Development of the Elderly of Changsha" issued by the Changsha Municipal Civil Affairs Bureau and the Changsha Municipal Office for the Elderly, at the end of 2017, total population of Changsha city was 791,180. The number of elderly people aged 60 and over is 1,381,300, accounting for 17.44% of the total resident population of the city. (In 2017, China's elderly population over 60 years old has exceeded 241 million, accounting for 17.3% of the total population.) Compared with the last year, it increased by 0.24 percentage points. The number of elderly people aged 65 and over is 957,600, accounting for 12.09%. There are 183,200 elderly people over the age of 80.

The forecasts in the Bulletin showed, by 2020, the population of Changsha will reach 8 million, and the number of elderly people over 60 will increase to 1.55 million, accounting for 19.4% of the total population.

Figure 26: The proportion of elderly people over 60 years old in Changsha City from 2012 to 2017

Source: 2017 Statistical Bulletin on the Development of the Elderly of Changsha



Goal

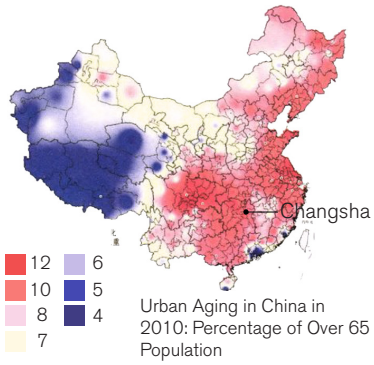


Image 25: Percentage of residents aged 65 and over in Chinese cities, 2010

Source: Statistics of the Sixth Population Census in 2010

Urban Aging in China in 2010: Percentage of Over 65 Population

By 2020

Changsha will be fully built with a home-based, community-based, institutional-based, social-based, well-equipped, well-functioning, well-scaled, well-planned, urban-rural pension service system, “9064” The pattern and "15 minutes of aged care service circle". (90% at home, 6% in community institutions, 4% in institutions)???

By 2050

The goal of Changsha 2050's far-reaching strategic planning is to build an aged-friendly city.

Aging character

1. Big base, fast growth, the trend of aging is aggravated. Changsha has entered an aging period since the 1990s. By the end of 2009, the elderly population over 60 years old in Changsha reached 1.03 million, accounting for 16% of the total population, which is 4 percentage points higher than the national average, and is in the stage of moderate aging. At present, the aging population in our city is increasing at an annual rate of 4.8%. It is estimated that by 2020, the proportion of the elderly population in the whole city will reach more than 20% of the total population, and it will enter a period of high aging. In 2040, the proportion of the elderly over 60 years old will reach 30% of the total population, which is 10 years ahead of the national stage of severe aging. Moreover, with the improvement of living conditions, the proportion of the elderly over 80 years old in the elderly population is also rising, and the pressure of family and society to provide for the aged is increasing.

2. Social pension coverage is low. Due to historical reasons such as the economic and social development of our country, less than 30% of the elderly over 60 years old in our city enjoy pension benefits, and the pension level is generally low, resulting in some elderly people's consumption constraints and generally low quality of life.

3. Family pension function is gradually weakening. The implementation of the national family planning policy has effectively controlled population growth, but at the same time, it has also transformed the structure of three generations of family members into a "421" gradient. Influenced by employment and economic conditions, most children are difficult to stay with their parents. They have no choice but to go home for the Spring Festival, send some money when they are sick and ask a nanny to take care of them. According to the survey, "empty-nest" elderly people have accounted for nearly 50% of the elderly in our city. The traditional family pension pattern of "raising children and preventing old age" is facing disintegration, which has caused a series of social problems.

4. Social security services are in short supply. There are only 120 old-age care institutions in our city (including Township homes for the aged), and the number of beds is less than 10,000, which is far from the actual demand. There is a huge contrast between the growing demand for old-age services and the serious shortage of the total number of old-age service facilities.
(Changsha pension Brochure, 2011)

7.3 NEIGHBORHOOD SERVICES SYSTEMS FOR THE ELDERLIES

Policy

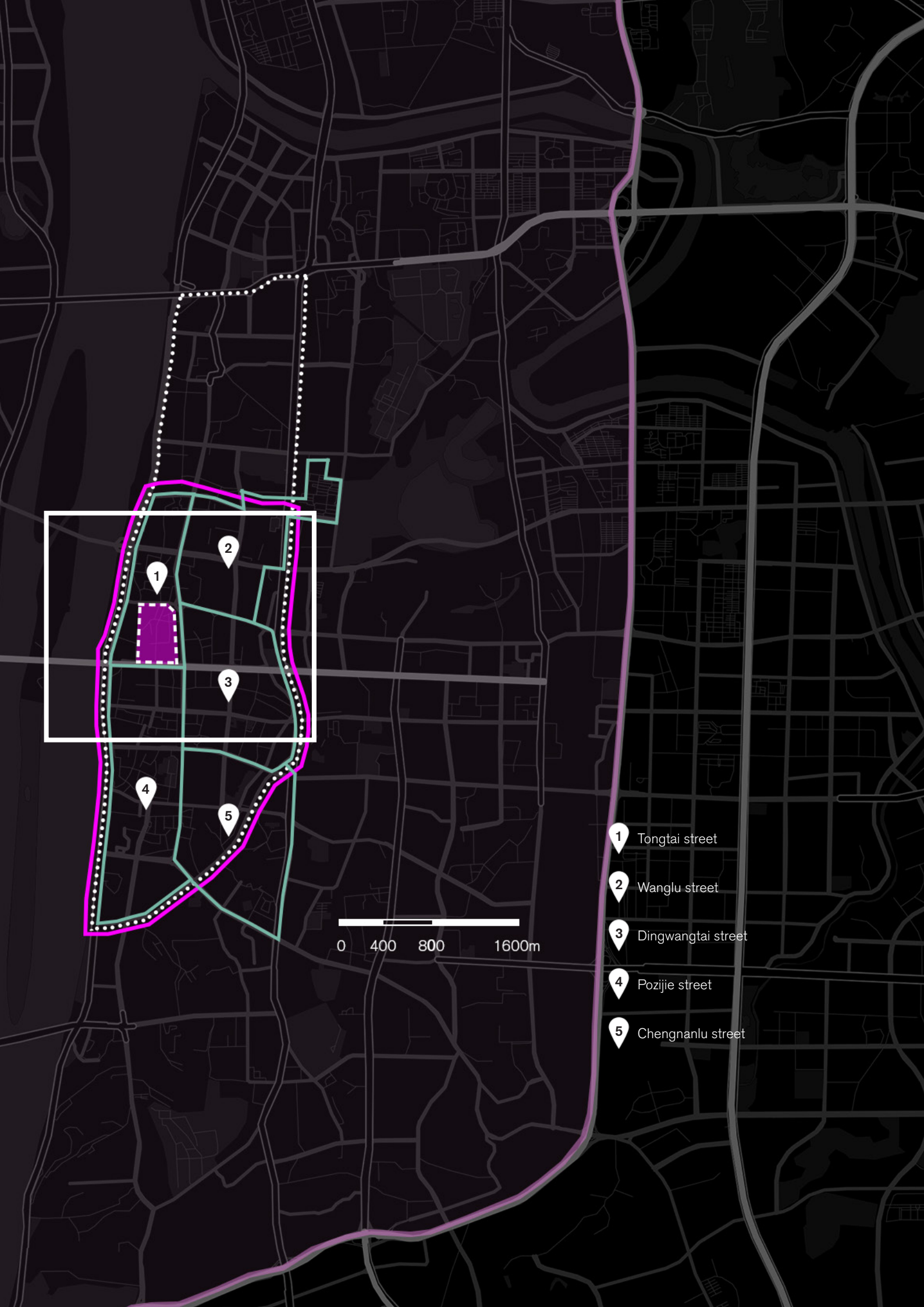
China level: Strongly support the development of neighborhood services systems for the elderlies

Changsha level: At the end of 2017, every 'Street' will build up at least one standardized Day-care center and two neighborhood services centers.

To see how exactly do the Day-care centers work and what is the daily activities of the elderlies, author went to the site visit to do some observations and questionnaires in Changsha. The site was chosen in the city center which has the biggest conflicts (Shown in the white frame in the mapping). The data sources of this chapter come from two different time. One is from 2016, the other from 2019. The one in 2016 did by author, Zhu, M., Yang, G., Han, J. The one in 2019 is done only by author. Twice site visits can largely keep the conclusions more precisely. All the drawings in the thesis was drawn by author.

Figure 27: Zoom in area

Source: mapbox
Edited: Author


1
2
3
4
5
0
400
800
1600m
1 Tongtai street
2 Wanglu street
3 Dingwangtai street
4 Pozijie street
5 Chengnanlu street

Content of standard (Changsha level)

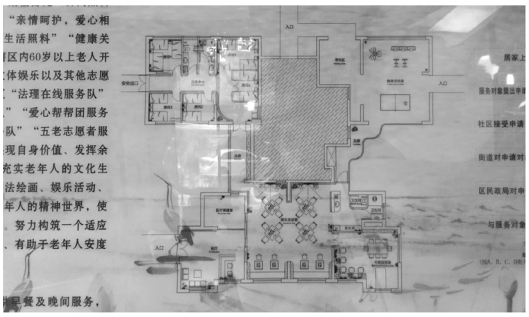


Image 26-29: Photos of Day-care center in the Wangyuehu

Source: Author

Table 3: Requirements of Day-care centers for the elderlies

Source: Detailed Rules for Construction and Fund Management of Daily-Care Center and Neighborhood Services Systems Center for the Elderly in Changsha City. (2015).

Category	Area	Resting Bed	Life Service Room	Health Care Room	Recreational Room	Additional Room	Outdoor Area	Basic Equipment
1	≥600 ㎡	≥10 beds	Resting room /Bathroom /Canteen	Health care room(including counselling)/ Exercise room	Mixed-used recreational room	Office/ Storage room	≥100 ㎡	Necessary and related equipments and stuffs that life service, health care, recreation, safety and firefighting needed/ Necessary transportation
2	400 ㎡ ≤ x<600 ㎡	5 beds ≤ x <10 beds	Resting room /Bathroom /Canteen	Health care room(including counselling)	Mixed-used recreational room	Office/ Storage room	<100 ㎡	

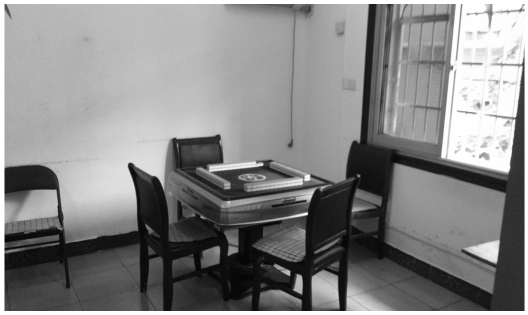


Image 30-33: Photos of Neighborhood services centers(or stations)for the elderlies in Changsha

Source: Author

Category	Area	Resting Bed	Life Service Room	Recreational Room	Additional Room	Basic Equipment
1	≥400 ㎡	≥5 beds	Resting room /Toliet /Canteen	Mixed-used recreational room	Office	Necessary and related equipments and stuffs that life service, health care, recreation, safety and firefighting needed
2	200 ㎡ ≤ x<400 ㎡	<5 beds	Resting room /Pantry	Mixed-used recreational room	Office	

Table 4: Requirements of Neighborhood services centers(or stations)for the elderlies

Source: Detailed Rules for Construction and Fund Management of Daily-Care Center and Neighborhood Services Systems Center for the Elderly in Changsha City. (2015).

N

Distribution and usage of the facilites

Image 34-39: Photos of Neighborhood services centers (or stations) for the elderlies

Figure 28: Distribution and actual usage of the Neighborhood services centers (or stations) for the elderlies

Actual usage data source: Author (2016)

Image source& figure drawing: Author

Distribution Source: Name list of neighborhood services centers(or stations) for the elderliesin Kaifu District (2013).

Neighborhood services centers

Neighborhood services stations

x0
Zhongshanxilu Neighborhood
Services Center for the Elder

x
Lianshengjie Neighb
Station for the Elderl

x0
Xiangchunlu Neighborhood Services
Center for the Elderlies

x0
Yandaopi
vices Stat

x0
Pozi Street Neighborhood Services
Center for the Elderlies

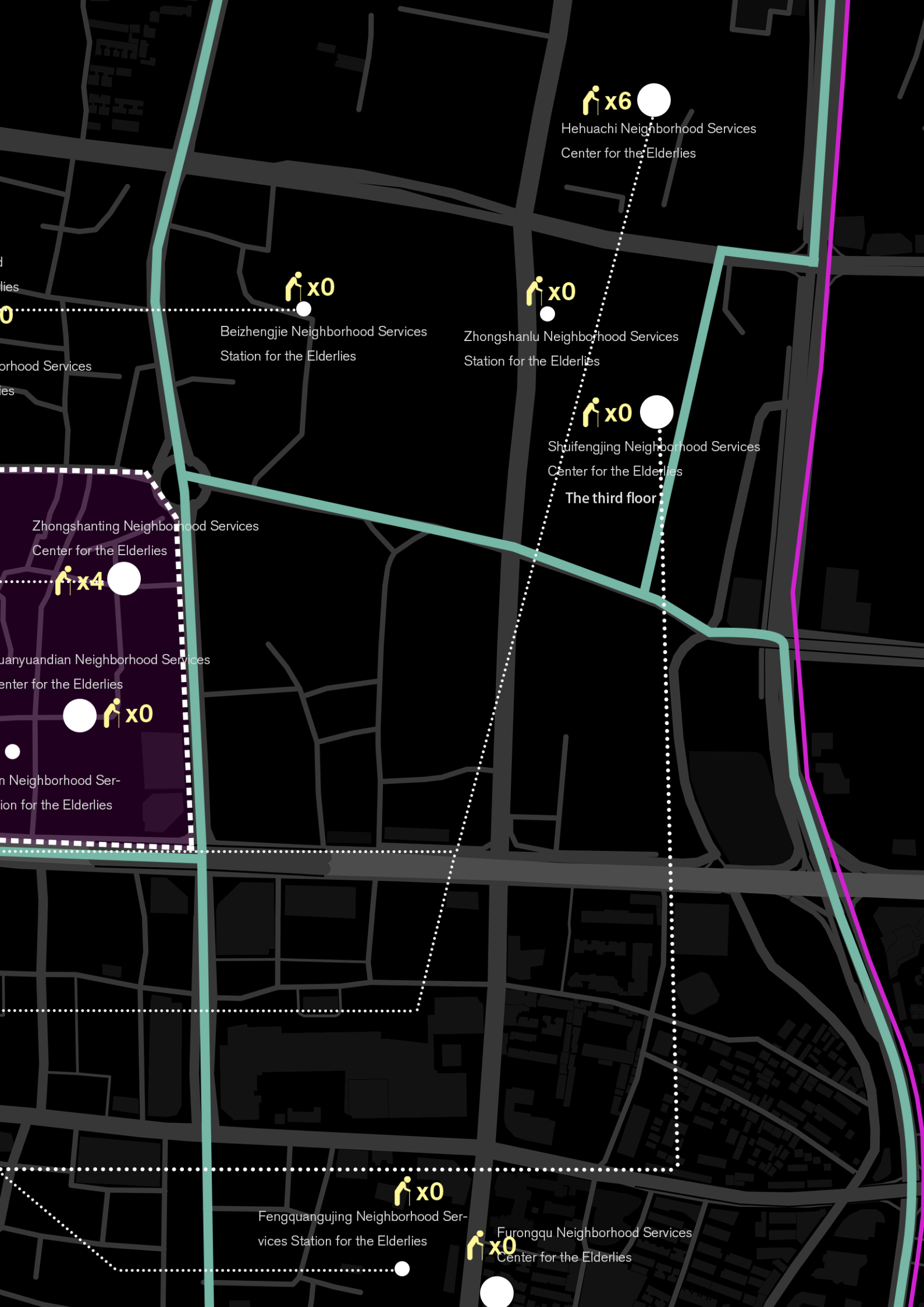

x6
Hehuachi Neighborhood Services
Center for the Elderlies
x0
Beizhengjie Neighborhood Services
Station for the Elderlies
x0
Zhongshanlu Neighborhood Services
Station for the Elderlies
x0
Shuifengjing Neighborhood Services
Center for the Elderlies
The third floor
Zhongshanting Neighborhood Services
Center for the Elderlies
x4
x0
x0
Fengquangujing Neighborhood Services Station for the Elderlies
x0
Furongqu Neighborhood Services
Center for the Elderlies

Figure 29: Coverage rate of the Neighborhood services centers (or stations) for the elderlies

Figure drawing: Author

500 the elderlies/each point
Source: Changsha. government. cn

x6
Hehuachi Neighborhood Services
Center for the Elderlies
x0
Beizhengjie Neighborhood Services
Station for the Elderlies
x0
Zhongshanlu Neighborhood Services
Station for the Elderlies
x0
Shuifengjing Neighborhood Services
Center for the Elderlies
The third floor
x4
x0
x0
Fengquangujing Neighborhood Services Station for the Elderlies
x0
Furongqu Neighborhood Services
Center for the Elderlies

Low usage of the facilities

According to Detailed Rules for Construction and Fund Management of Daily-Care Center and Neighborhood Services Systems Center for the Elderly in Changsha City. (2015), every 'Street' will build at least one Day-care center and at least two neighborhood services centers (or stations). However, in the historical cultural area that I zoom in (Figure xx), four of these 'Streets' do not have any Day-care centers. Instead, some of them have more than two neighborhood services centers (or stations), especially in Tongtai Street, has six. In the figure xx, it shows clearly that although there is no day-care center, the neighborhood services centers (or stations) nearly can cover all of the elderlies. (if take 500m distance as the farthest walking distance that the elderlies can reach) However, the usage of these facilities are extremely low. Most of them are even always in the closed condition.
In order to find out the reason why historical cultural area has no day-care center, but has more services centers (or stations), and the reason why there is no elderlies to used them. I visited several neighborhood services centers (or stations) in the historical cultural area and one Day-care center in the Wangyuehu District and some elderlies in the Tongtai Street.

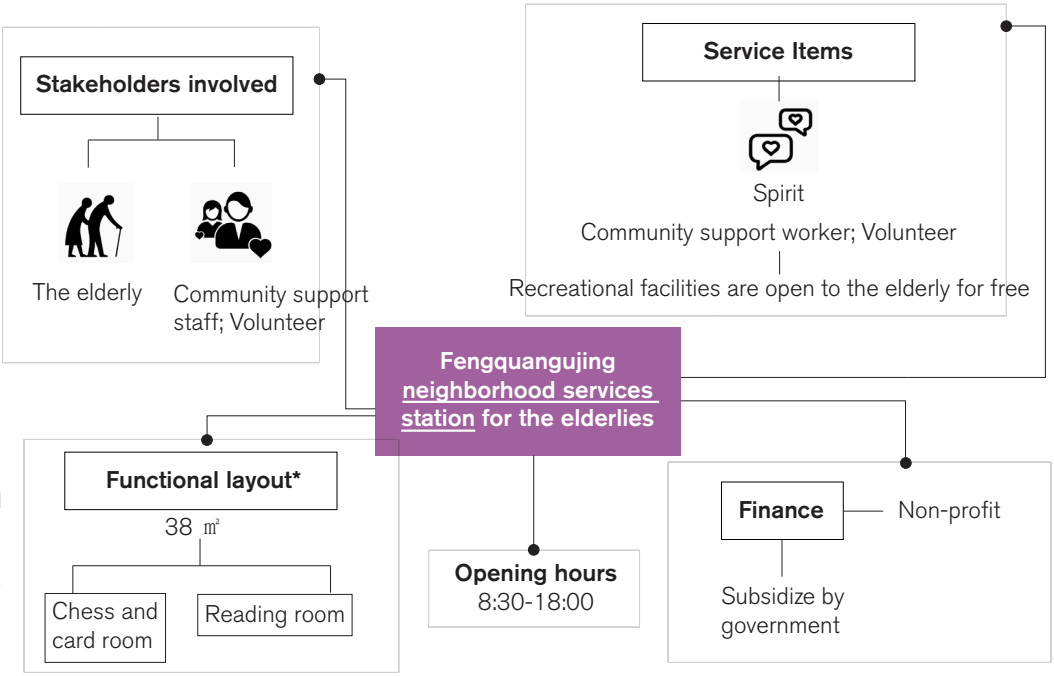
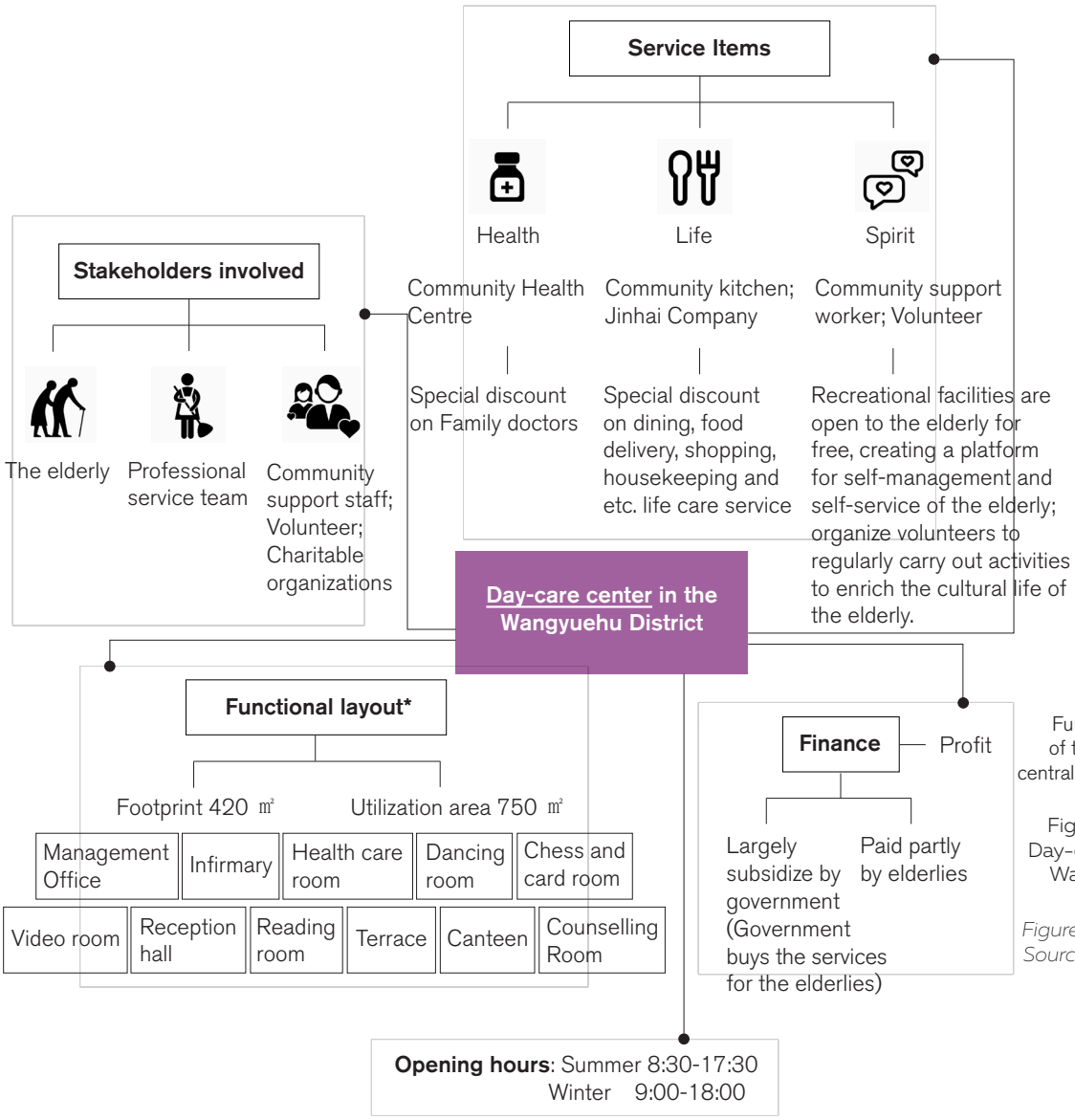


Figure 30: System of Fengquangujing neighborhood services station for the elderlies in the historical cultural district

Figure drawing: Author
Source: The staff in the station

Nearly all of the neighborhood services centers (or stations) for the elderlies in the historical cultural area are integrated with the office building (Image: xx) of the Community Services Centers (which cope with all of the stuffs in the community, such as legal services, job affairs, security, etc.). The services centers (or stations) for the elderlies always occupy a room in the office building (because the limitation of the space, this room is always not on the ground floor), and with some recreational equiements, such as cards, majiong, etc. (Image:xx) Some of them only have some tables and chairs to meet the requirements of the government documents. All of these neighborhood services centers (or stations) for the elderlies are subsidized by government, do not charge from the elderlies.(Figure:xx)



Functional layout*: All of these functions are centralized in one building

Figure 31: System of Day-care center in the Wangyuehu District

Figure drawing: Author
Source: The staff in the center

Compared with neighborhod services centers, the day-care center is more profitable. It is built up by the company or private people, and government will buy the services for the elderlies from them. However, the elderlies themselves still need to pay part of the fees. Besides, day-care centers have their independent building and the services they provide are also more multiple. (Figure: xx)

I separately interviewed the coordinator of Day-care center in the Wangyuehu District, the staff of Fengquangujing neighborhood services station for the elderlies and the elderlies in the Tongtai Street.
(Q: question A: answer)

The coordinator of Day-care center in the Wangyuehu District

Q: What elements will you consider when you choose the site of the day-care center? Why don't you consider the historical cultural area? I mean there are more elderlies there.

A: Well, from my aspects, Profit, Space and Safety are the top-three elements. For the elderlies in the historical cultural area, they are relatively low income, cannot afford the paid services. Besides, space in the old neighborhood is really limited, cannot find the area which have enough indoor space and also nice nearby outdoor environment. Last but not least, as the care center, safety is the first thing we need to promise not only to the elderly, but also to their families. Old neighborhood has narrow lane, bad road condition and traffic jam, so ambulance and fire car are always hard to go inside in time. Anyway, for the day-care center, not that much elderlies in neighborhood will come to use, we still mainly relies on the subsidy from government. The neighborhood services model is still in exploration.

The staff of Fengquangu

Q: How many elderlies us

A: To be honest, the room
because there is no elder

Q: Really? Why?

A: Limited to the space
elderlies, and the recre
provide like majiong, ch
attraction for the elderli
these activities nearby
network is fixed on the
walk such a long distanc
use these equipments.

jing neighborhood services station

sually come to the station?

n for the elderlies is always **closed,**
rlies will come.

e, we only have one room for the
eational equipments that we can
ess, and cards do not have extra
es. Because they can easily have
their houses and also their social
surroundings. No one is willing to
e and climb to the second floor to

The elderlies and the elderlies in the Tongtai Street

Image 40-42:
Interviewees

Source: Author, Zhu, M., Yang, G., Han, J. (2016)

Q: What do you usually do in your spare time? Any recreational activities?

A1: My legs are not feeling well, cannot walk a long distance, so I just always sit next to my house on the street in the sunny day, talks to my neighbors.
A2: Same for me. Besides, I sometimes will go to play majiong in the nearby recreational room.
A3: I will go to the nearby recreational room as well, to play majiong or cards. Sometimes I will take a walk in the neighborhood.

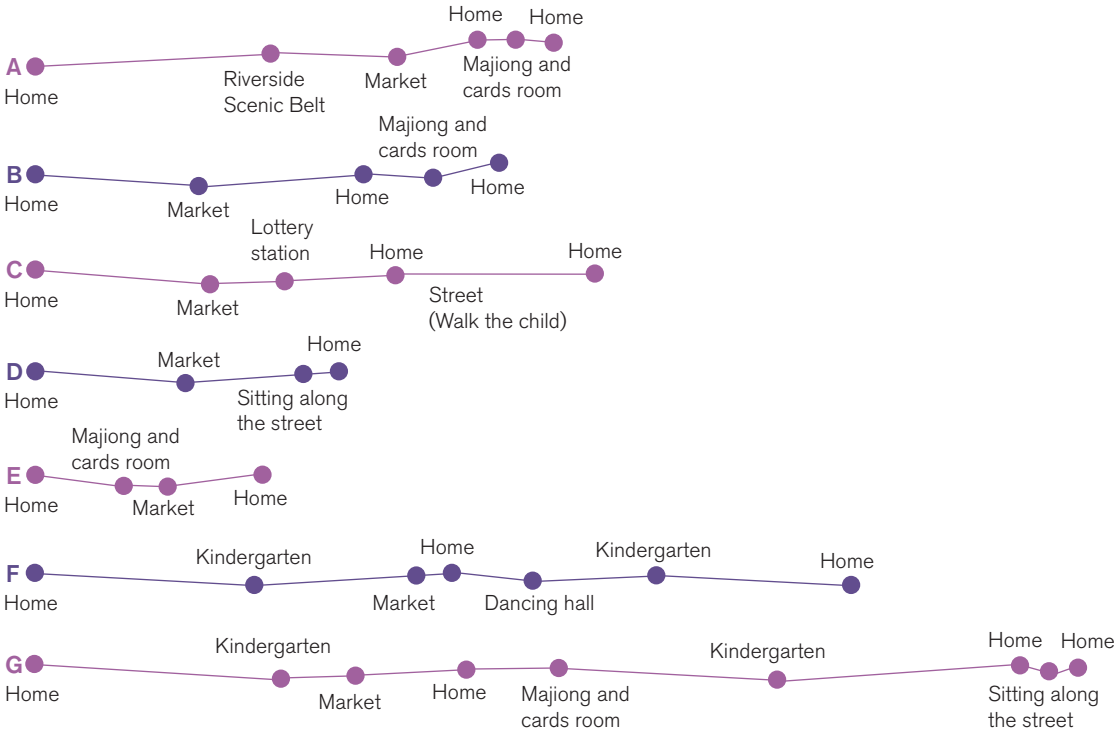
Q: Have you known there are some neighborhood services stations for the elderlies? Why don't you go there? It is for free.

A2: I don't know there are stations for us in the community.
A1: I have heard, for me it is too far to go there.
A3: Yes, not only too far, but also, I already get familiar with the friends in the nearby recreational room. So, I prefer to go there. And it is on the way to the market, when I go back from the market, I can pass by and conveniently go.

The local elderlies' daily patterns

Since the elderlies are not in the neighborhood services centers (or stations), where do they usually gather? What are their activities in these places? To figure out these questions, I randomly picked and interviewed 15 elderlies about their daily routes (Figure xx). Besides, I walked around in the area in one sunny day (22/May/2016), to mark out the places that elderlies gathered (Figure xx), the space types (Figure xx) and their activities (Figure xx).

The length between the points stands for the vague time (that the elderlies told) needed from one point to the other



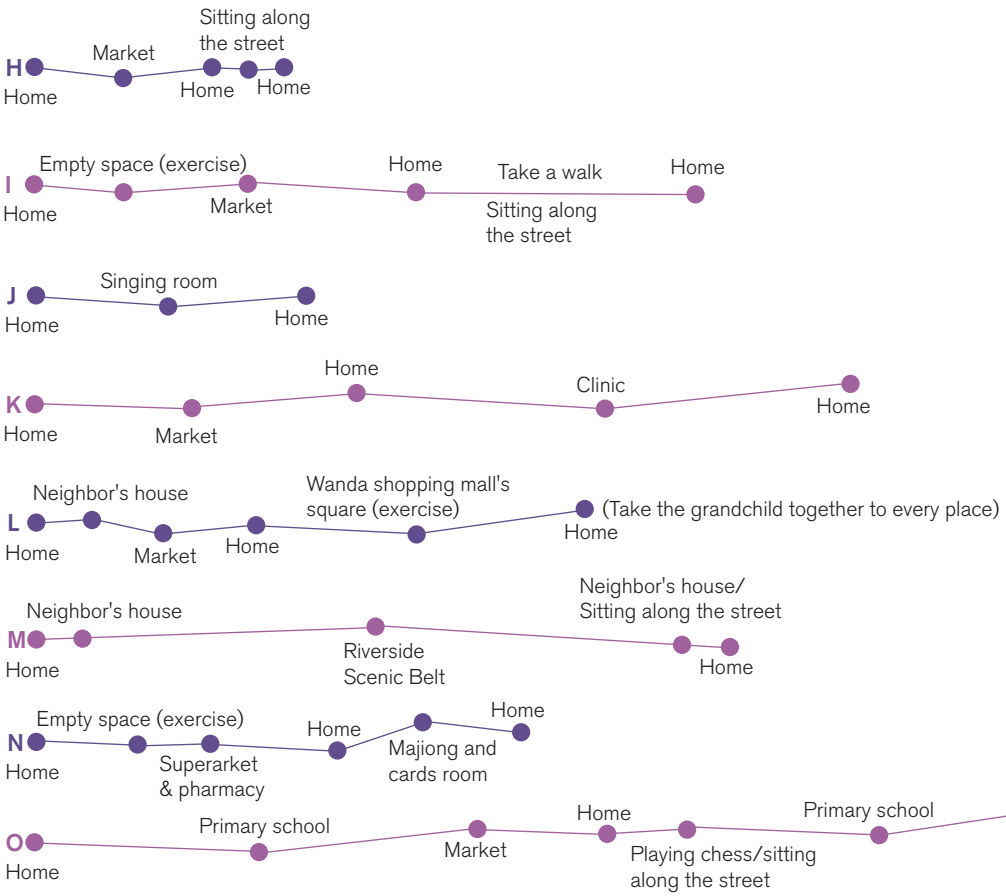


Figure 32: Daily routes of 15 interviewed elderlies

Source: Author, Zhu, M., Yang, G., Han, J. (2016)

Figure xx shows clearly that the daily routes of the 15 elderlies. The length between the points stands for the vague time (that the elderlies told) needed from one point to the other. Combining with the basic information of these elderlies such as **age, physical condition and family structure**, there are some regularity and findings through the observation.

1. For most of the elderlies, for all age, all physical condition (those who cannot live on themselves are not the target groups of the thesis) and all types of family structure, market/supermarket is the most common place and necessary place for the elderlies to go.
2. Sitting along street (which always nearby their own houses) is another important and common activity especially on the sunny day that do not limit the age, physical condition and family structure, nearly all of the elderlies can participate in it. When people sitting along street, they always bring the chairs themselves, gather together, chatting, playing chess, drinking tea, etc. Street is an important social place for the elderlies in old neighborhood.
3. The elderlies, who has grandchild and live with and are relatively young age and with good health condition, always has the important task to send and pick up the child to kindergarten or primary school, for releasing the pressure from the next generation. For them, kindergarten and primary school are another necessary place.
4. The elderlies who are not in a good health condition, clinic and pharmacy are their necessary place to go.
5. The recreational room (such as Majiong and cards room, dancing hall, singing room, etc.) is another important social and entertaining places for the elderlies. They are dispersed everywhere in the community; elderlies can easily go there. But it still limits to the relatively young age and not bad health condition.
6. For the elderlies in the old neighborhood, going to Wanda shopping mall's square or going to riverside scenic belt (which have large public space) to do some exercise can only be achieved by those who are in good health condition and young age, because the elderlies need to cross the 8-lane roads. For others, who cannot or don't want to walk such a long distance or take the risks to cross the main roads, they will choose to take a walk in the neighborhood lane or find an empty space to do some stretch.
7. In an average level, for elderlies, age is in reverse proportion to physical condition and walking distance.

However, the interview I done was in 2016 and only got 15 answers from the elderlies, so I went to the field trip again in Tongtai street (historical cultural area) during 25th Feb.-9th Mar. 2019 to verify the findings. It shows that the findings still fit the nowadays situation. Figure xx on the right shows the simplified conclusions.

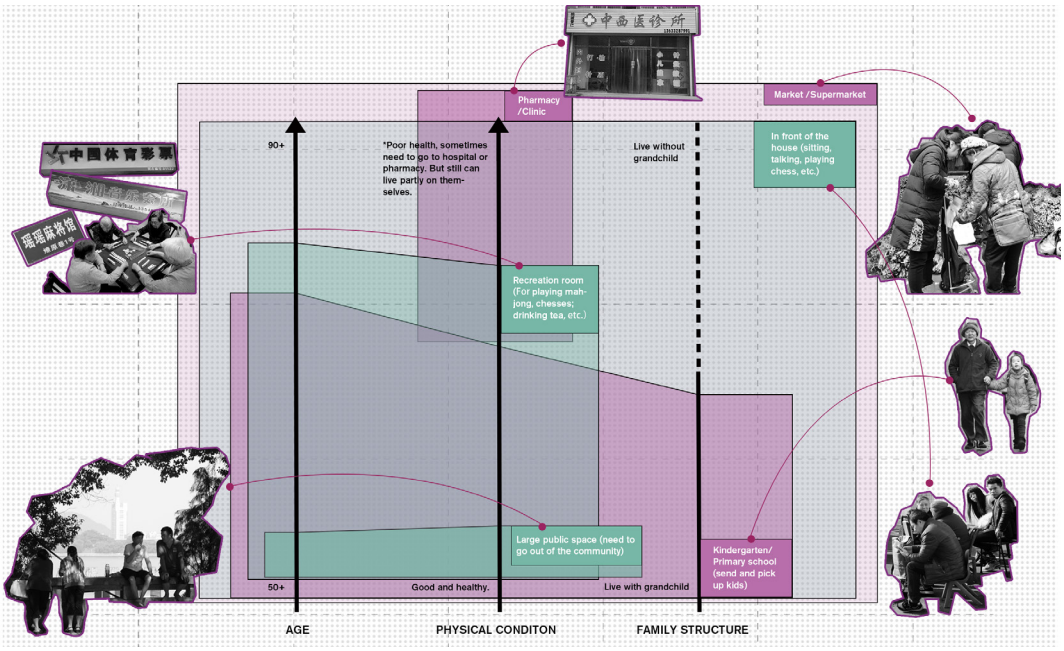


Figure 33: The relations between places and elderlies' age, physical condition &family structure

Source: Author

$$\text{AGE} \propto \frac{1}{\text{PHYSICAL CONDITION}} \propto \frac{1}{\text{WALKING DISTANCE}}$$

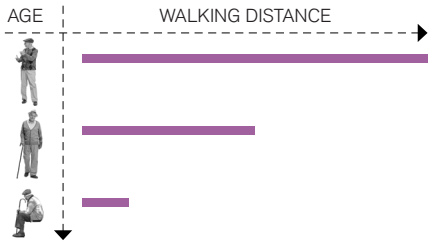


Figure 11: The relation between walking distance and elderlies' age

Source: Author

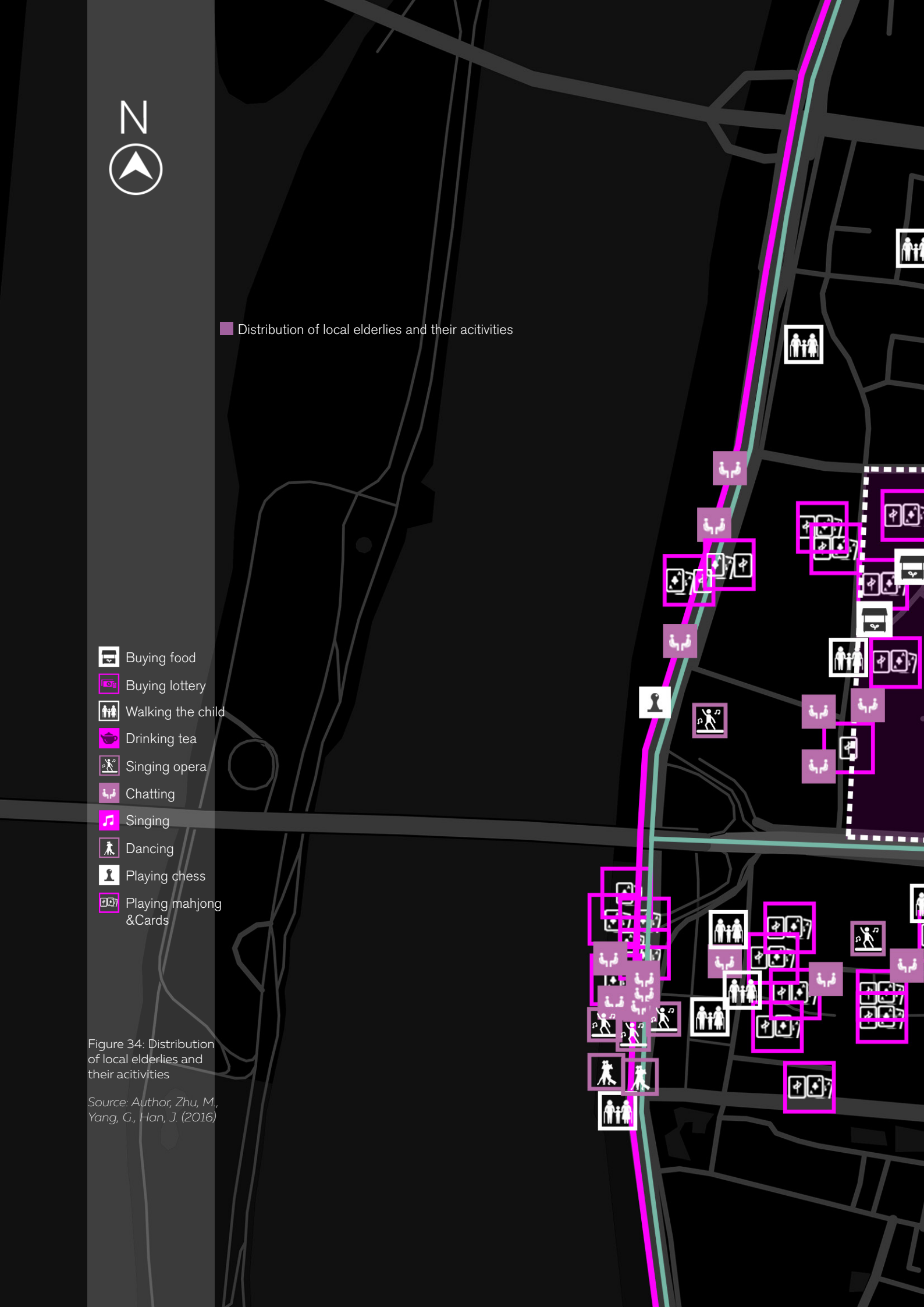
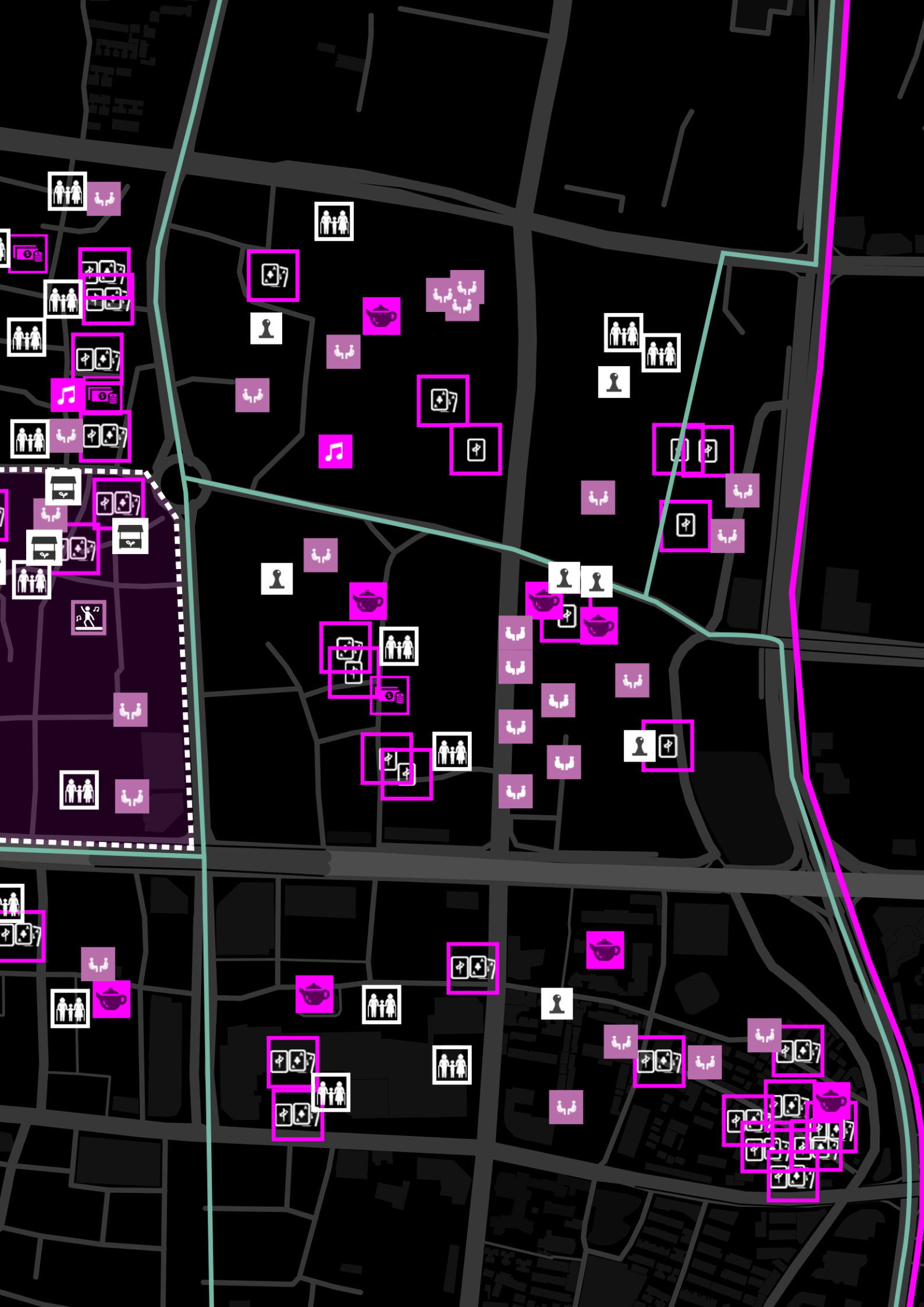
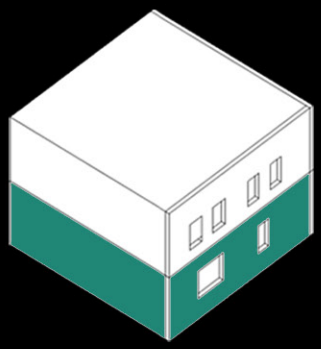


Figure 34: Distribution of local elderlies and their acitivities

Source: Author, Zhu, M., Yang, G., Han, J. (2016)



Corresponding activity space of local elderlies



-INDOOR
-Ground floor space
-Paid
-All weather all temperature

Playing mahjong &Cards

Dancing

Buying lottery

Source: image.baidu

Drinking tea

Buying food

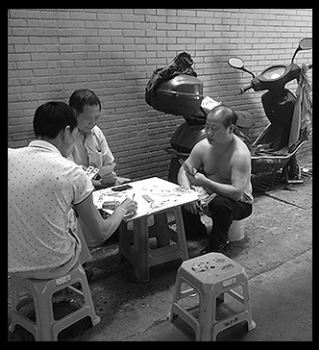
Singing

Figure 35: Activity space of local elderlies

Source: Author

Walking the child

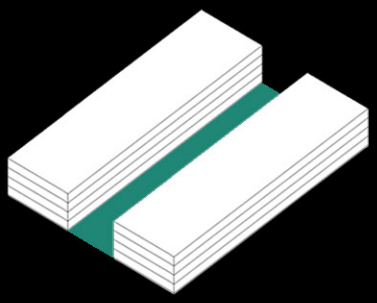
Drinking tea



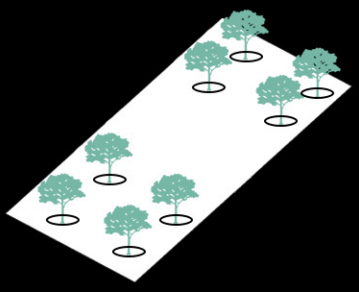
Playing mahjong &Cards

Chatting

Playing chess



-OUTDOOR
-Street Space （Public space)
-Always with rounded edge
-Free
-Sunny days and suitable temperature



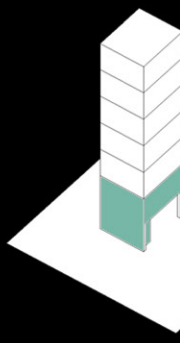
-OUTDOOR
-Park (Public space)
-Good quailty landscape and furnitures
-Free
-Sunny days and suitable temperature

Dancing

Walking the child

Chatting

Playing chess &mahjong &Cards



-SEMI-OP
-Ground f
-Free
-All weath
temperatu

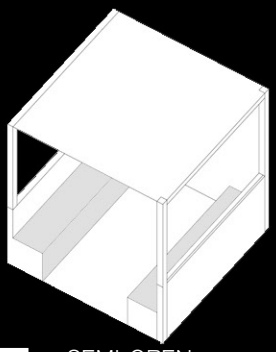
Figure 36: Activity space of local elderlies

Source: Author

Playing mahjong
&Cards

PEN
loor empty space

er and suitable
ure



-SEMI-OPEN
-Pavilion (Public space)
-Good quailty landscape and furnitures
-Free
-All weather and suitable temperature

Chatting

Singing opera

Playing chess
&mahjong
&Cards

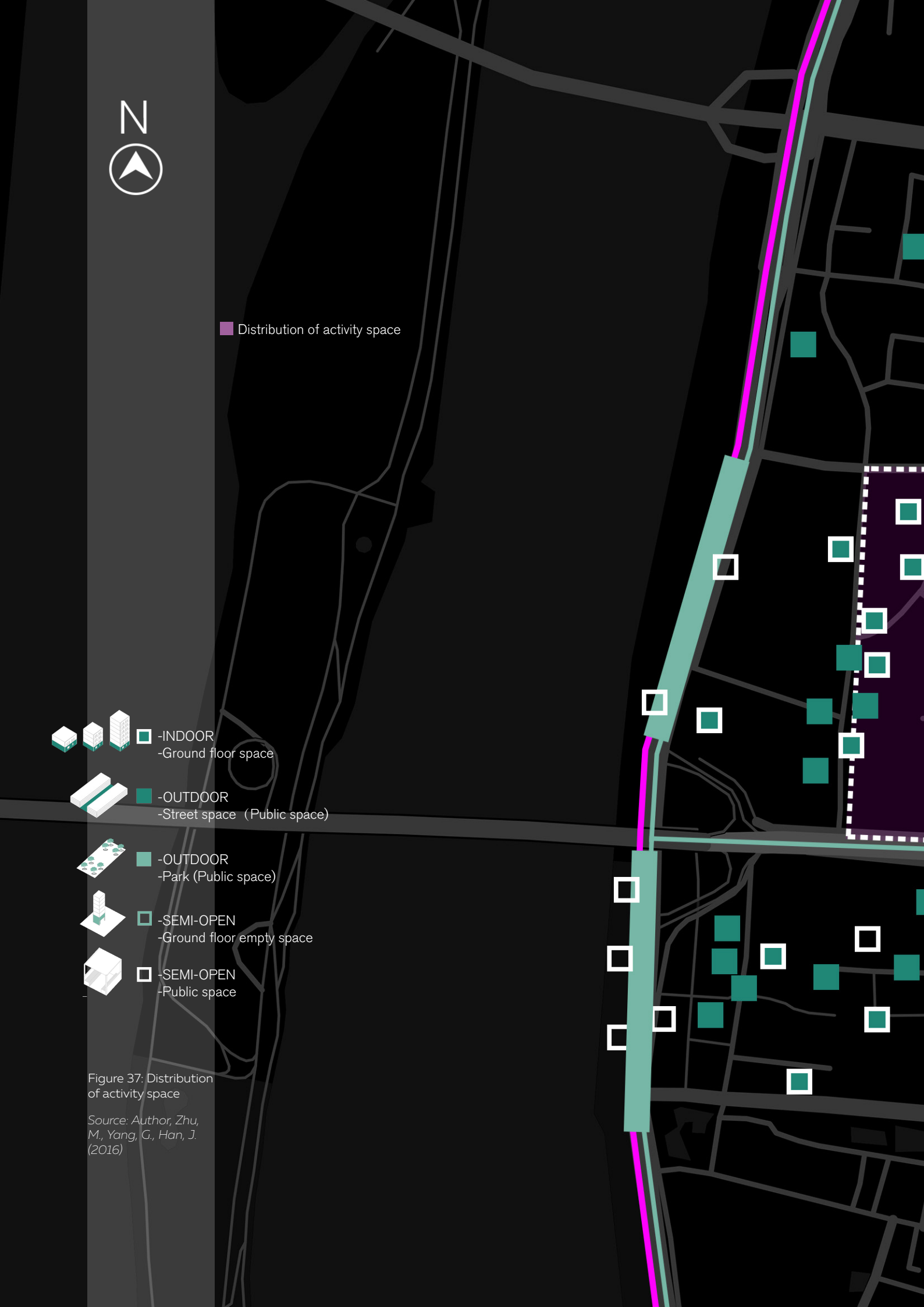


Figure 37: Distribution of activity space

Source: Author, Zhu, M., Yang, G., Han, J. (2016)

Conclusions

Figure xx-zz separately shows the activities of the elderlies, gathering places and space typology from author's walk-by observation on 22/May/2016 in the zone-in historical cultural area. Through the observation, it shows some specific demands and habits of the local elderlies:

1. The activities that local elderlies loved are abundant and varied, including both dynamic and static types. (Figurexx) Among these activities, playing mahjong&Cards is the most common and popular entertaining activities in the old neighborhoods. (Imagexx)

Image 43: The 'heating' phenomenon of playing mahjong&cards

Source: Author

2. The space typology can be mainly divided into five types, there are indoor ground floor space, outdoor street space (public space), outdoor park (public space), semi-open ground floor empty space and semi-open pavilion (public space). (Figurexx-xx)
Changsha city belongs to subtropics monsoon climate region with distinctive four seasons, featuring abundant precipitation and full sunshine. For the elderlies, indoor, outdoor and semi-open space are all necessary, so that in the different seasons, temperature and weather, they can still have recreational activities regularly.

3. From the figurexx, it can clearly show the places in the neighborhood that elderlies gathered are decentralized and miniaturized. And outside the neighborhood, the elderlies will choose to gather in the big public space with good quality landscape and city furniture along the river bank.

4. Since lacking of well-functioned public space in the old neighborhood, people here are really good at making good use of the street space. Imagexx only records a small part of the furnitures that people especially the elderlies put on the street. These furnitures helps the street space becoming a big outdoor living room. Because of these furnitures, lots of activities are happening on the street, such as chatting, playing cards, enjoying the sunshine, drinking tea and so on.

Image 44: The 'voluntary' furnitures on the street in the old neighborhood

Source: Author

5. To further classify the activities and space that the elderly used, the concepts that Gehl, J. (2011) put forward of necessary, optimal and social activities are been used as the criteria for division in the thesis.

According to the feature of the local activities, the related places are also been divided into three categories: necessary, optimal and social. For the 'necessary' categories, there are three main places, they are market/ supermarket, kindergarten/ primary school and pharmacy/clinic. The lanes in the neighborhood has the 'Optimal' feature, since people will choose to take a walk or walk the child along the lanes. However, for most of the places, they have both the features of optimal and social, such as multiple recreational rooms. The elderly not only will choose to go there and entertain, but also will have the chance to socialize with other elderlies. Besides, large public spaces like riverside scenic belt, street space and ground floor empty space are also belonging to the both Social' and 'Optimal' categories.

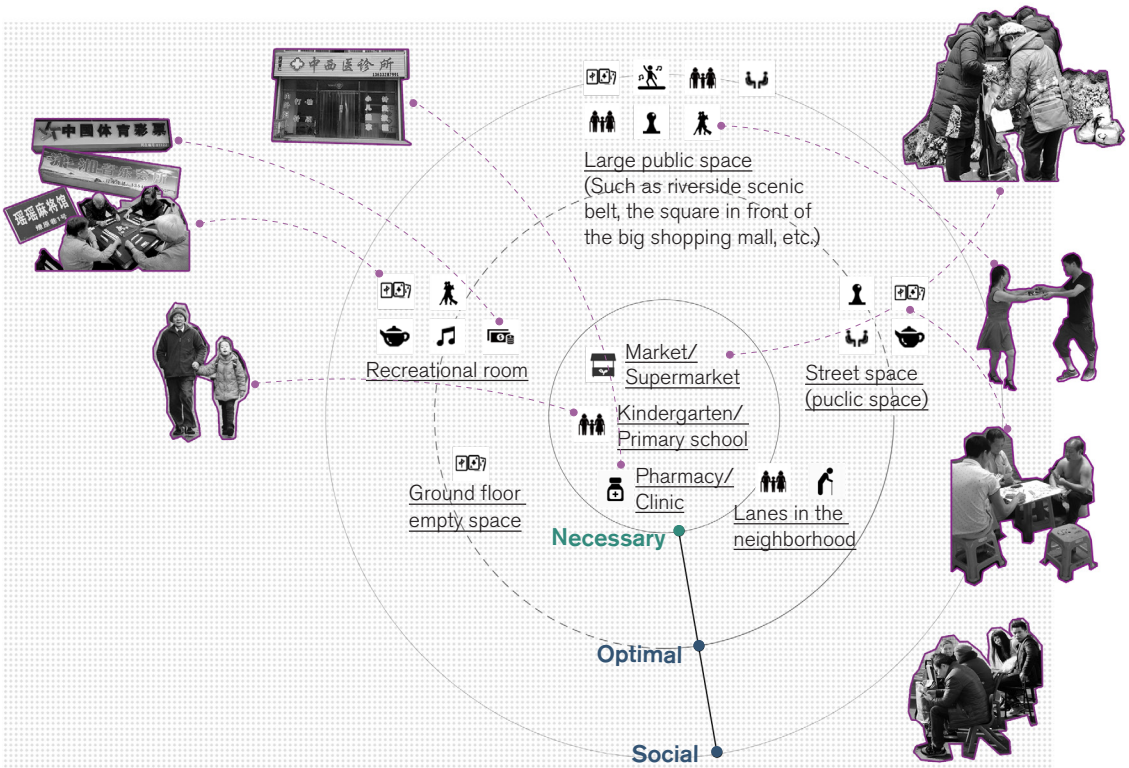


Figure 38: The classification of elderlies' daily activities places

Source: Author

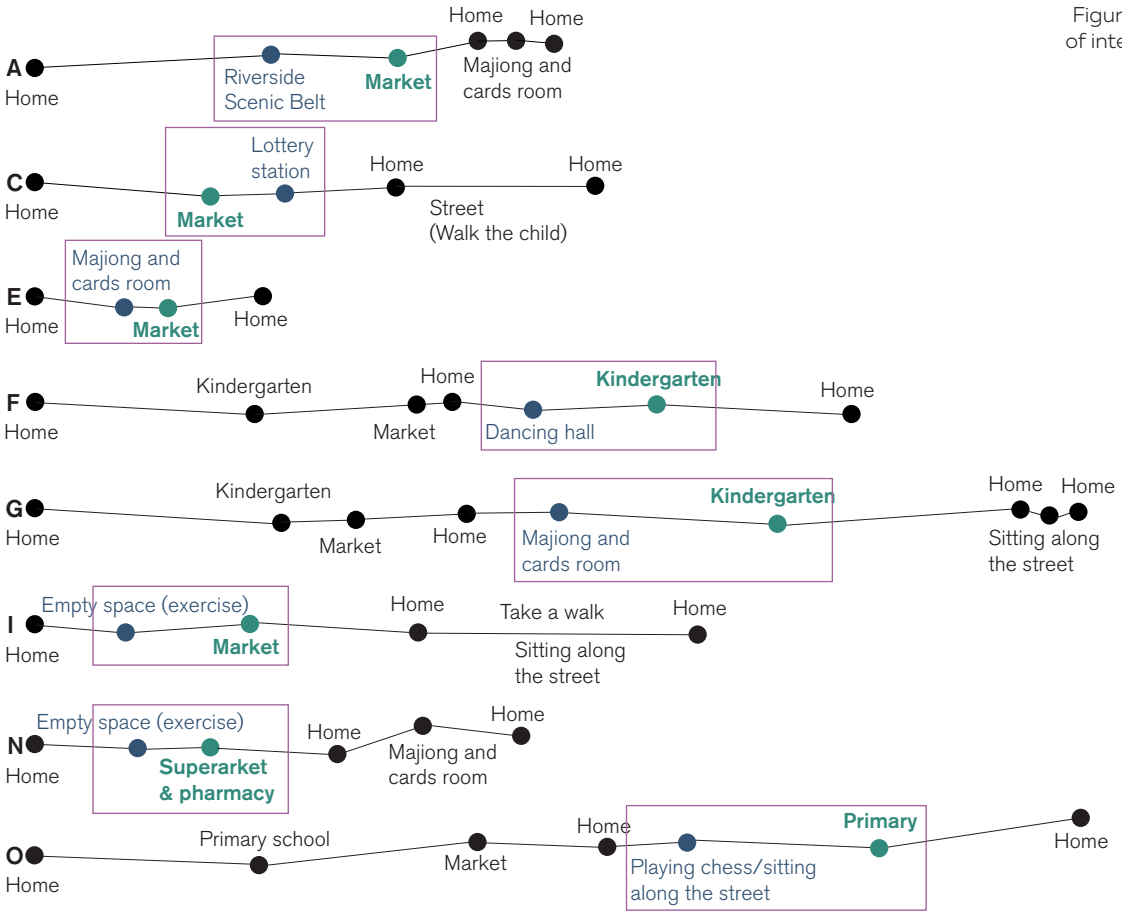


Figure 39: Daily routes of interviewed elderlies

Source: Author, Zhumeng (2016)

When look back to the daily routes of the 15 elderlies, it shows that the necessary activities are always gone with the optimal or social activities. It is because the elderlies are totally free after the retirement, most of their time is discretionary. They do things without a strong purpose, easily be attracted by the surroundings. So, they will be easily attracted to go to a lottery station or a Mahjong room on the way back from the market. On the other hand, it also has the reason that limited to the physical health condition or the environment situation, the elderlies cannot or are not willing to take a long-distance walking, so the place they choose to go and have some entertainment or social activities is on the way to the necessary place.

6. The method that I used in the site-visit was walk-by observations, and it recorded the happenings I saw at that moment, so it cannot show the complete states of all the elderlies in the neighborhood. However, it still can present some common characters or regularity from the places and activities that the elderlies gathered and went.

Elderlies' gathered points

Conferted activities on the street space

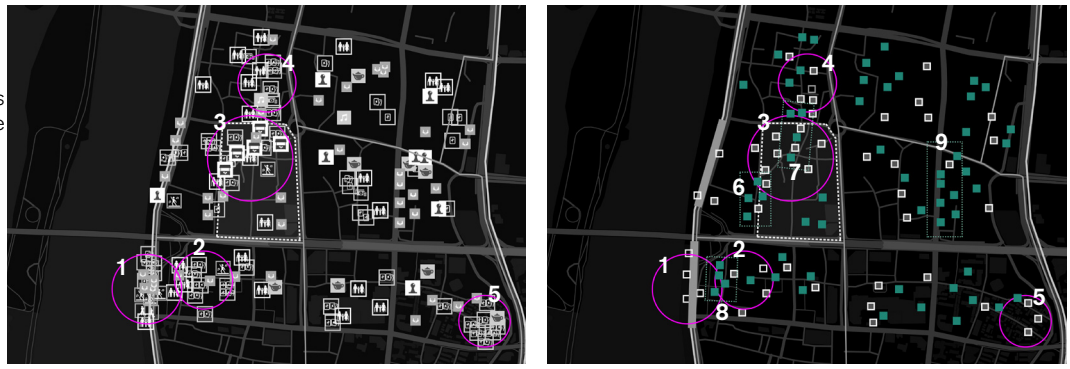


Figure 40: Elderlies' gathered points and conferted activities

Source: Author

6.1 Elderlies gathered point no.1 in the figurexx is the riverside landscape belt. The unique elements here compared with the space in the community are (figurexx):
- Good quality and continuous landscape
- City furniture, can easily find a place to sit down or play cards/chesses
- Tall trees provide shade in summer, and most of the furnitures for sitting are under the trees
- Have both semi-open and outdoor public space.
- It is also a important public space for elderlies meet with other groups of people.
- Have enough space for all types of activities, like dancing, opera singing, playing chess, etc. The multiple activities also become an attraction for those elderlies who want to join.

Image 45-50: Environment elements and people activities in the riverside landscape belt

Source: Author

However, the riverside landscape belt has an eight-car-lanes border, which largely limits the elderlies who will go to use the landscape belt.

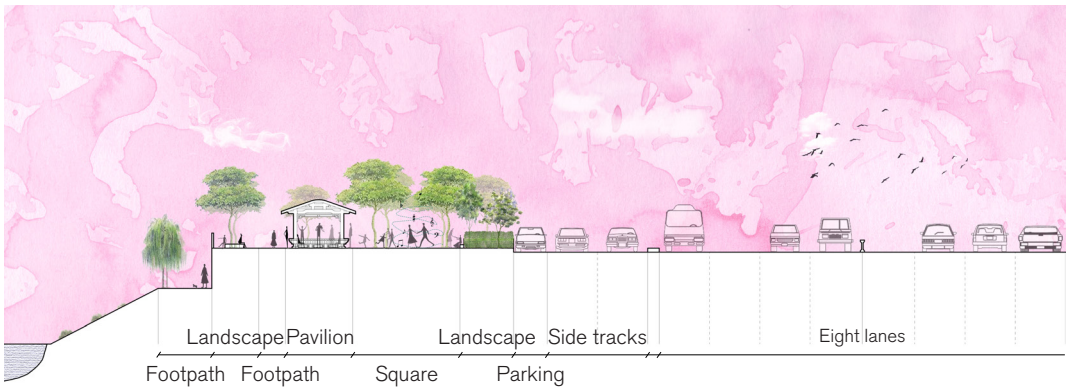


Figure 41: Section of the riverside landscape belt and its sourroundings

Source: Author

6. 2 Gathered points no.2,3,4,5 are composed by the street space and indoor recreational rooms. Because street spaces that been used are more autonomous and freer, and the indoor recreational rooms are in another way, so here they will be separated into two issues to analyze.

6. 2.1 Street spaces

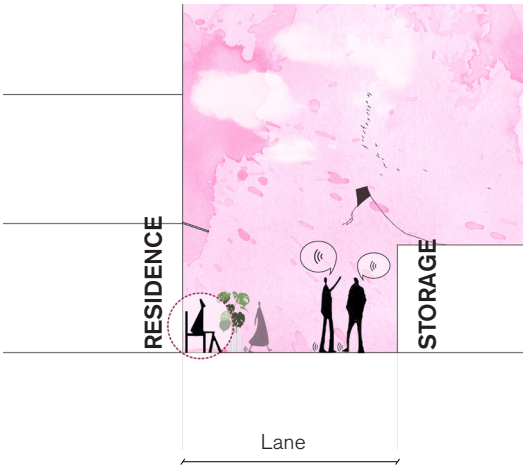
The six sections show the different typologies of street spaces that always gather elderlies. They have some common characters:

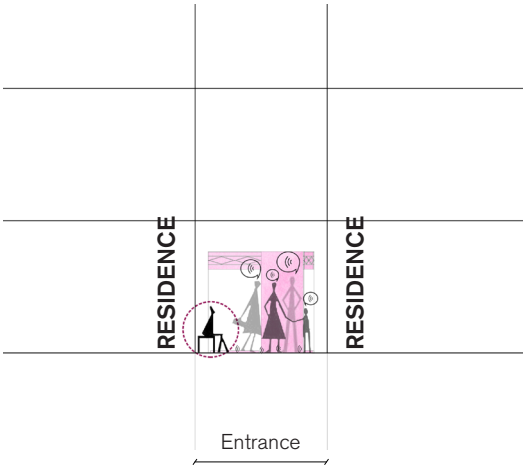
-Elderlies prefer to choose more active and noisier place instead of quiet street place.

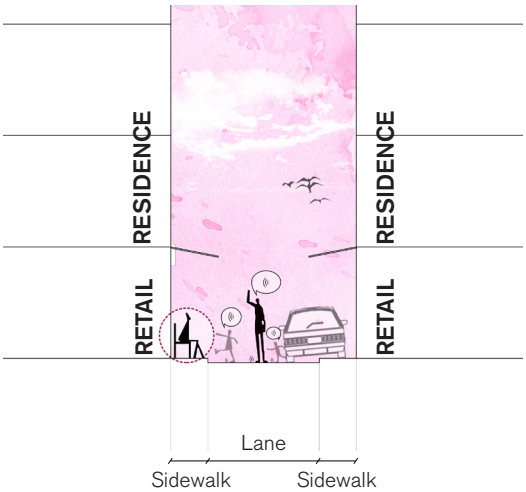
-Street place which can prevent rainy or strong sunny are more popular.

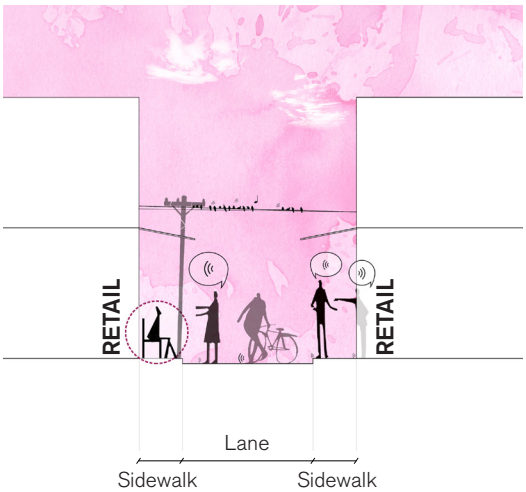
Figure 42-47: Section of different street spaces

Source: Author

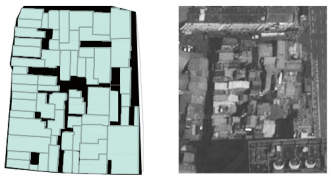

RESIDENCE
STORAGE
Lane


RESIDENCE
RESIDENCE
Entrance


RESIDENCE
RESIDENCE
RETAIL
RETAIL
Lane
Sidewalk
Sidewalk


RETAIL
RETAIL
Lane
Sidewalk
Sidewalk

Besides, I zoomed in one of neighborhood to see the regularity between different typology and street life. It is mainly divided into three types: linear, loop and tower. And the linear one always has the most elderlies to happen the street life since there is no public space inside each small block.



-Linear
-1-6 floors
-Buildings are tightly arranged to give almost no public space. Residents would heavily depend on street space for any activities.

-Loop
-1-9 floors
-Buildings loop to form pocket space, which allows functional public space that gathers people.

-Tower
-10-33 floors
-Tower form high-rises that have ground floor level connected to squares or plazas offer more open and effective public spaces with blur boundary.

Figure 48: Typology distribution and classification

Source: Author

6. 2. 2 Recreational rooms

Since the recreational rooms are decided by market, so all the existing recreational rooms in the historic neighborhood can be seen as the potential gathered points for the elderlies. Through interviewing some owners of the recreational rooms in the neighborhoods, it shows that indeed the recreational rooms are used 99% by the elderlies. However, the indoor room connects more elements such as property right, rent, etc., so the distribution of these indoor rooms can only be seen as a reference, cannot reflect the real demands of the elderlies.

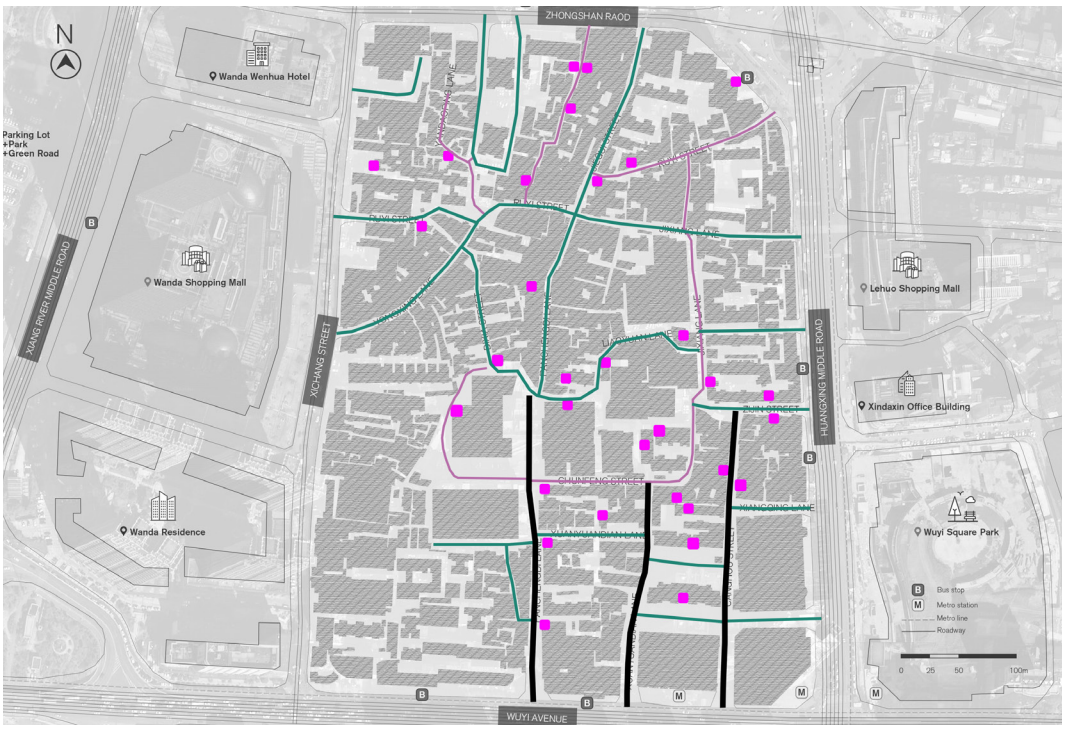
I did a structured direct observation in the zoom-in block on 1/March/2019 to mark down all of the recreational rooms in the zoom-in blocks and see if there is any regularity of the distribution. (Figurexx)

- From Figure xx, it shows that the distribution of the recreational rooms does not have direct relevance with the lane width in the historic cultural area.
- (Precondition: all the recreational rooms are on the ground floor of these buildings) When using the distribution map overlaps with building storey map, it shows that the distribution also does not have relevance with building storey. Below every storey categories, they have the buildings overlapping with recreational rooms, which means that no matter how tall the building is, it won't influence the preference for elderlies to choose to go there.
-In the figure xx, dark colors mean commercial zones, such as butcher, fruit/vegetable store, grocery, etc. Black and green points separately stand for pharmacy/clinic and kindergarten/ primary school. It shows that the recreational rooms are always along or surround the commercial streets.

To conclude, the distribution of the recreational rooms in the block is more random and disperse, so that they can cover more elderlies. Besides, they are all along or surround the commercial streets.

Figure 49: The recreational rooms overlapping with main lane width map

Source: Author



Recreational rooms
1-3 floors
4-6 floors
7-9 floors
10-33 floors

Figure 50: The recreational rooms overlapping with no. of floors of buildings

Source: Author

Kindergarten/ Primary school
Pharmacy/Clinic
Recreational rooms

Figure 51: The recreational rooms overlapping with function map

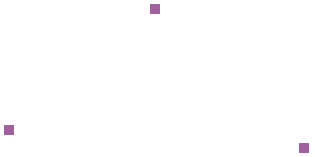
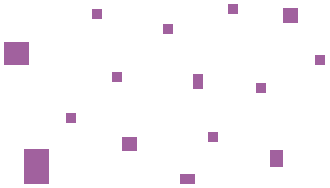
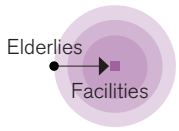
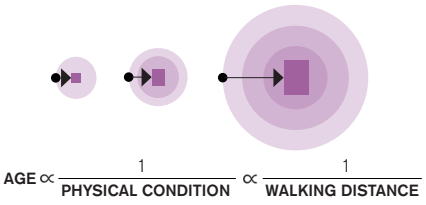
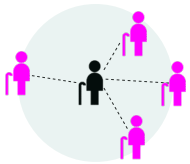
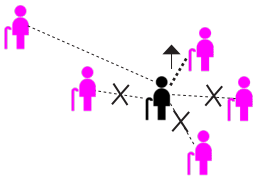
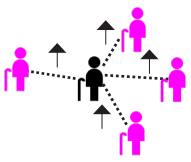
Source: Author

Conclusions: comparison between the nowadays services centers and elderlies' daily patterns

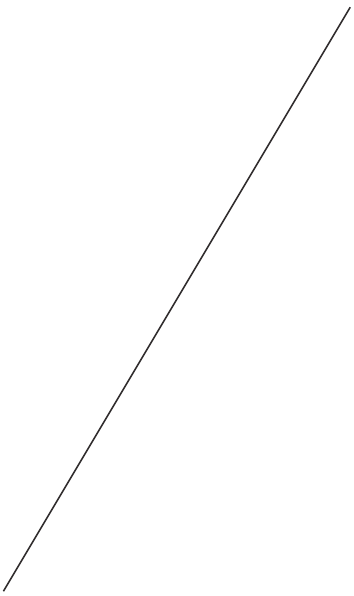
To conclude, the services that the neighborhood services centers provided for the elderlies is different from their daily patterns or still have some distance to reach the demands of the local elderlies.

Table 5: Comparisons between current neighborhood services centers and the local elderlies' daily patterns

Source: Author

	Neighborhood services centers (or stations)	The local elderlies' daily patterns
Facilities distribution		
Walking distance		
Target groups*	Relatively good health condition elderlies	All groups of eldelries
Available time	Has the Opening hours(Only in the day-time). Closed on the national holidays.	No-time limited.
Awareness	Only parts of the elderlies know the facilites.	The elderlies are quite familiar with the facilites surrounded their house and the big public space.
Social network	 	

(Target groups*: Actually neighborhood services centers (or stations) will also buy the door-to-door caring services for those 'empty-nested' elderlies who cannot live on themselves, at the same time, without any income. But this group of eldelries is not the target group of the thesis.)

	Neighborhood services centers (or stations)	The local elderlies' daily patterns
Direction	Strong purpose	Without strong purpose
Activities		
Site selection	Passive. It depends on where the Community Centers are.	Positive. It decided by the demand.
Space typology	 -INDOOR First/second Floor -INDOOR No lift 	 -INDOOR Ground Floor -OUTDOOR -OUTDOOR -SEMI-OPEN -SEMI-OPEN 1. Good quality and continuous landscape 2. City furniture, can easily find a place to sit down or play cards/chesses 3. Tall trees provide shade in summer, and most of the furnitures for sitting are under the trees 4. Have both semi-open and outdoor public space. 5. It is also a important public space for elderlies meet with other groups of people. 6. Have enough space for all types of activities -Single function -Ground floor -The distribution of the recreational rooms in the block is more random and disperse, so that they can cover more elderlies. Besides, they are all along or surround the commercial streets.

The profile of different age elderlies in site

Through the observation and literature review, the classification of elderlies in the thesis can be roughly divided into three types: middle aged, younger seniors, and real seniors. And their corresponding characters are displayed below (showing the average level).

	50-65 Years old	**65-75** Years old	**75-90** Years old
AGE LEVEL	**Middle Aged**	**Younger Seniors**	**Real Seniors**
LIVING PATTERN	**Live on themselves**	**Live on themselves/ live partly on themselves**	**Live partly on themselves/ cannot live on themselves**
WORKING PATTERN	**Re-employment /Volunteer**	**Retirement**	**Retirement**
PHYSICAL CONDITION			
DAILY WALKING DISTANCE	**No boundary**	**Block and its nearby**	**Community and its nearby**
SCOPE OF PLACES	Necessary places: **all** Optimal+social places: **large public space; lanes in the neighborhood**	Necessary places: **all** Optimal+social places: **all**	Necessary places: **market/ supermarket; pharmacy/ clinic** Optimal+social places: **street space; lanes in the nieghborhood**

Table 6: The profile of different age elderlies in site

Source: Author

7.4 NEW ELDERLIES

The current daily routes and activities of the elderlies had in the site are similar and lack of individuality. Their choices are mostly concentrated in the recreational activities such as Majiong, cards/chess, tea and dance.

Majiong

Cards/chess

Tea

Dance

Image 51-54: The elderlies' favourite recreational activities

Source: Author

These activities are popular among the elderlies, not only because they have mass basis, already forming serval groups, but also these activities only require simple space or facilities.

Although these activities are going very well, are there any other activities that are needed or can be promoted in the neighborhoods for the elderlies? In the future, what are the new requirements of the new elderlies? How can these facilities adapt to meet the new requirements for the new elderlies?

The figure below is famous *Maslow's hierarchy of needs*. If we use it as the standard to measure the nowadays elderlies' life level in the site, it only achieves at the middle of the third level, strive to meet the needs of love and belonging. So still have large space to develop love and belonging needs, esteem needs, and need for self-actualization.

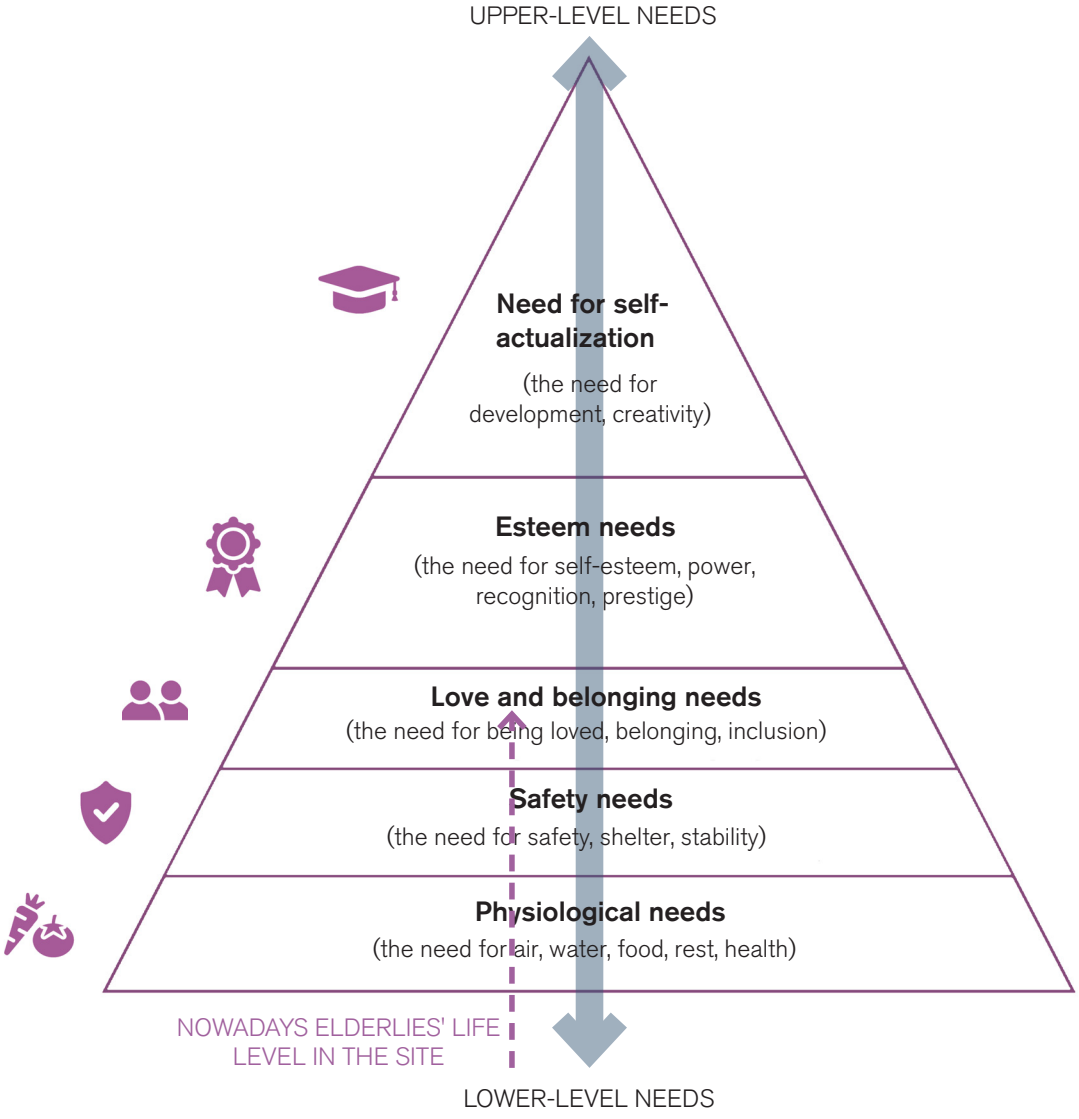


Figure 52: Maslow's hierarchy of needs

Source: Abraham Harold Maslow

Besides, author randomly interviewed 10 Chinese young adults (Chen, S., et al.), which are all in the age range of 24-26, including the groups of working, students, female, and male. Asking them when they became elderlies, what kinds of activities or life habits they still want to keep or develop.

The answers are unsurprisingly different. Some of them said they want to plant some green vegetables in the yard. Some of them said they want to learn some new instruments when retire because nowadays life is too busy and without much personal time to learn. Compared with the old generation, the younger generation is more emphasizing personalization.

So, developing interest groups might be one of the solutions to promote the elderlies' life levels now and in the future. Here are the reasons:
First of all, groups are necessary for the elderly. Robert J. Havighurst put forward that social activities are the basis and core of people's life. Everyone discovers the meaning of life, knows the value of things, understands the social image of himself and improves the satisfaction of life in social interaction. The active degree of social life even determines whether people can enter the aging process smoothly. In order to live a good old age, the elderly should maintain a higher rate of social participation, replace those roles lost due to retirement or widowhood with new roles, maintain and develop appropriate physical, intellectual and social activities, and deny discrimination against the elderly (Wu, 2012). The establishment of groups can encourage the elderly to re-integrate into the social network and build interpersonal relationships. Besides, different and varied interest groups can largely enrich people's retirement life, giving the elderlies lots of choices to do based on their interests. And it is also very important for the 'new elderlies'.

These interest groups are also open for all residents. The interaction between the elderlies and other groups are very important, helping elderlies rebuild esteem needs through the process.

Last but not least, the elderly can become the organizer, leader or instructor in the groups, to achieve esteem needs and need for self-actualization.

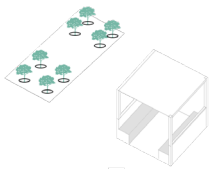
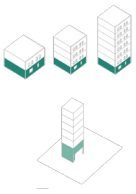
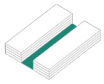
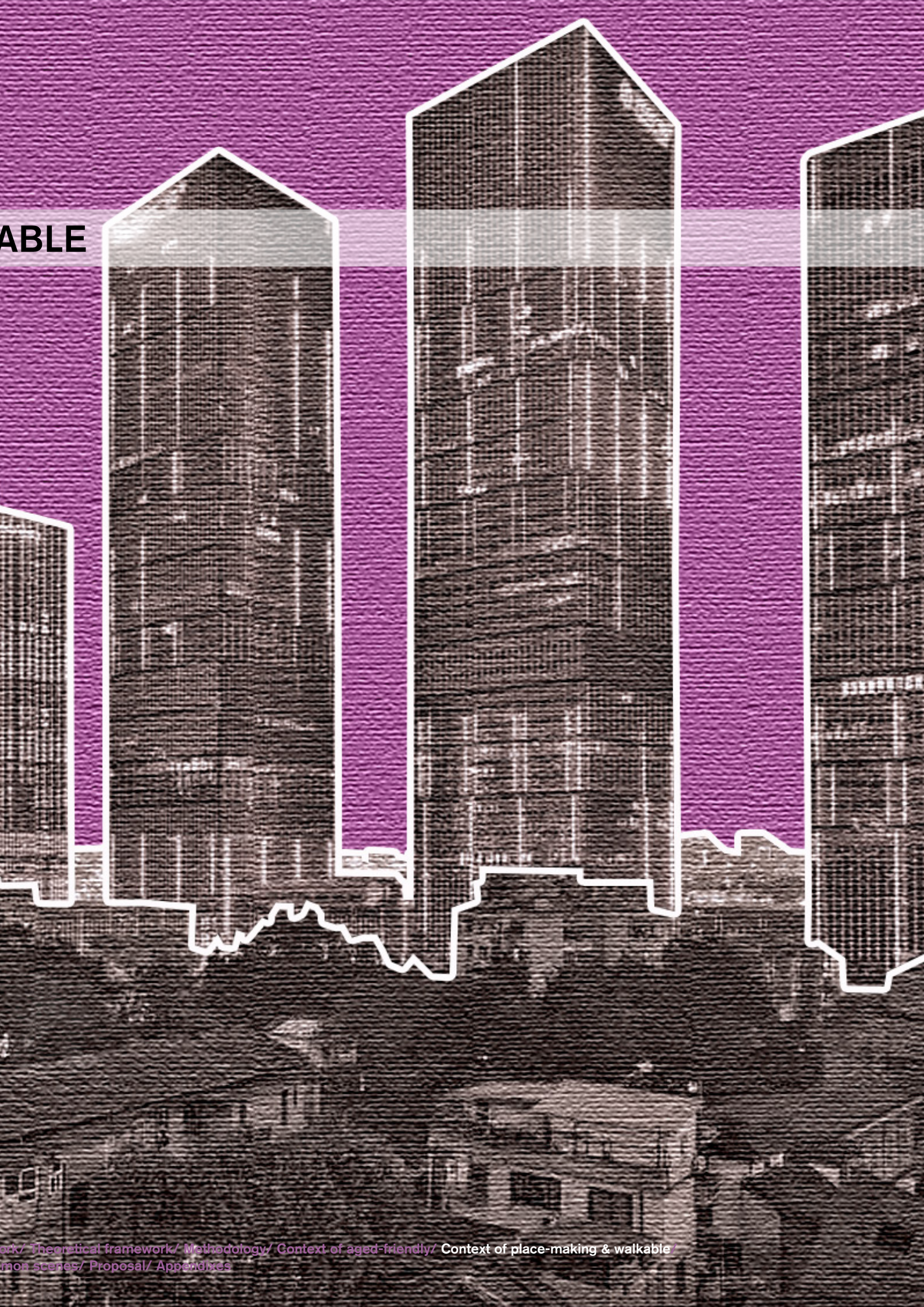
Big scale public space	**Middle scale public space package**			**Small scale public space**	
Big green infrastructure	Necessary facilities	Outdoor	Indoor	Street space	Recreational rooms
	Medical facilities Market&shops Education facilites				

Table 7: Classification of public space in site
Source: Author

For the spatial support, neighborhood will provide different types of public spaces for elderlies to choose to develop their interest groups. Spatial typologies shape the scope of activities, but still are flexible to have different activities. The organizer or leader of the interest groups can book the place in the Governance& information center in advance, and the center will also help them to publish the information for all residents and provide/rent some necessary equipment. In the historical neighborhood nowadays, the middle scale public space is always missing.

8. CONTEXT OF PLACE-MAKING & WALKA

8.1 THE CONTENT OF WALKABILITY
8.2 ANALYSIS-QUALITY OF THE SITE
8.3 CITY RENEWAL



ABLE

ork/ Theoretical framework/ Methodology/ Context of aged-friendly/ **Context of place-making & walkable**
mon scenes/ Proposal/ Appendixes

8. CONTEXT OF PLACE-MAKING & WALKABLE

8.1 THE CONTENT OF WALKABILITY

A neighborhood's-built environment is a critical component of a walkable neighborhood because it is closely related to pedestrian walkability (Abley, 2005). Since it provides crucial information about the current state of a neighborhood's environment, the identification of any built environment features that cause pedestrians physical and psychological discomfort is a primary phase in assessing pedestrian walkability (Haggerty et al., 2013).

In Walkable City: How Downtown Can Save America, One Step at a Time written by city planner Jeff Speck (2013), a "General Theory of Walkability" is outlined focusing on the four key factors of making a city attractive to pedestrians:
1. Useful: Most aspects of daily life close at hand and well-organized
2. Safe: Streets that are designed to be safe and also feel safe to pedestrians
3. Comfortable: Urban streets as outdoor living rooms
4. Interesting: Sidewalks lined by unique buildings with friendly faces

Each of these qualities is essential and none alone is sufficient.

Based on the four key factors mentioned above, author tries to analyze if the typical residential-dominated historic block—Xiping meets the requirements of a walkable neighborhood. In other words, to localize the walkability theory in historic neighborhoods in China, what aspects do planners/designers need to pay attention to? Although Xiping block cannot represent all types of historic blocks, it still can provide some regular patterns.

Useful means that most aspects of daily life are located close at hand and organized in a way that walking serves them well. (Speck, 2013)

Safe means that the street has been designed to give pedestrians a fighting chance against being hit by automobiles; they must not only be safe but feel safe, which is even tougher to satisfy. (Speck, 2013) For the explanation of the last half sentence, Jacobs, J. (1961) has also published the similar concept of "eyes on the street." Jacobs wrote that in order for a street to be a safe place, "there must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street."

Comfortable means that buildings and landscape shape urban streets into 'outdoor living rooms', in contrast to wide-open spaces, which usually fail to attract pedestrians. (Speck, 2013)

Interesting means that sidewalks are lined by unique buildings with friendly faces and that signs of humanity abound. (Speck, 2013) Lamour, Q., et al. (2019) also mentioned that land use diversity and commercial ground-floor façades positively influence walkability at the micro-scale.

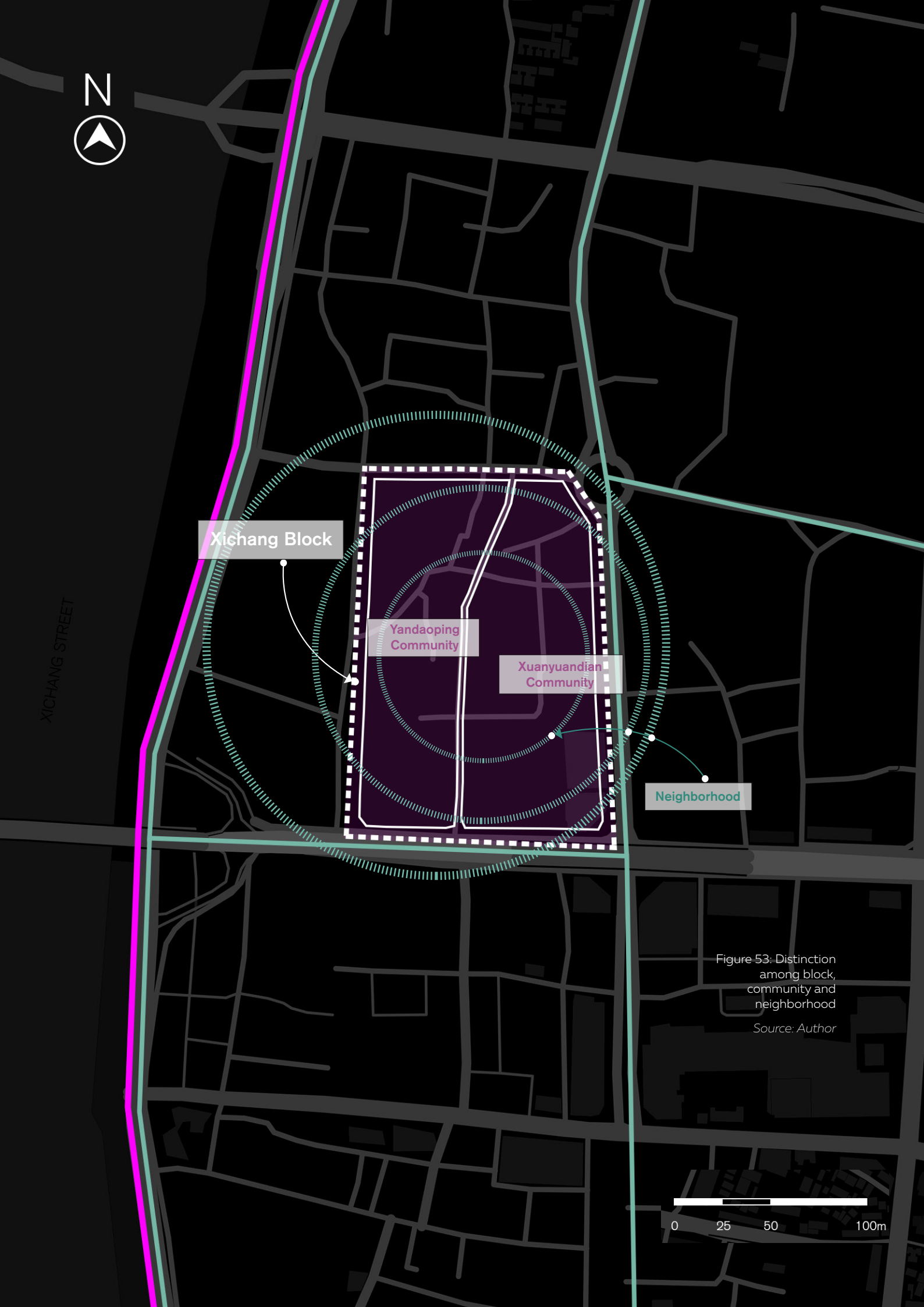


Figure 53: Distinction among block, community and neighborhood

Source: Author

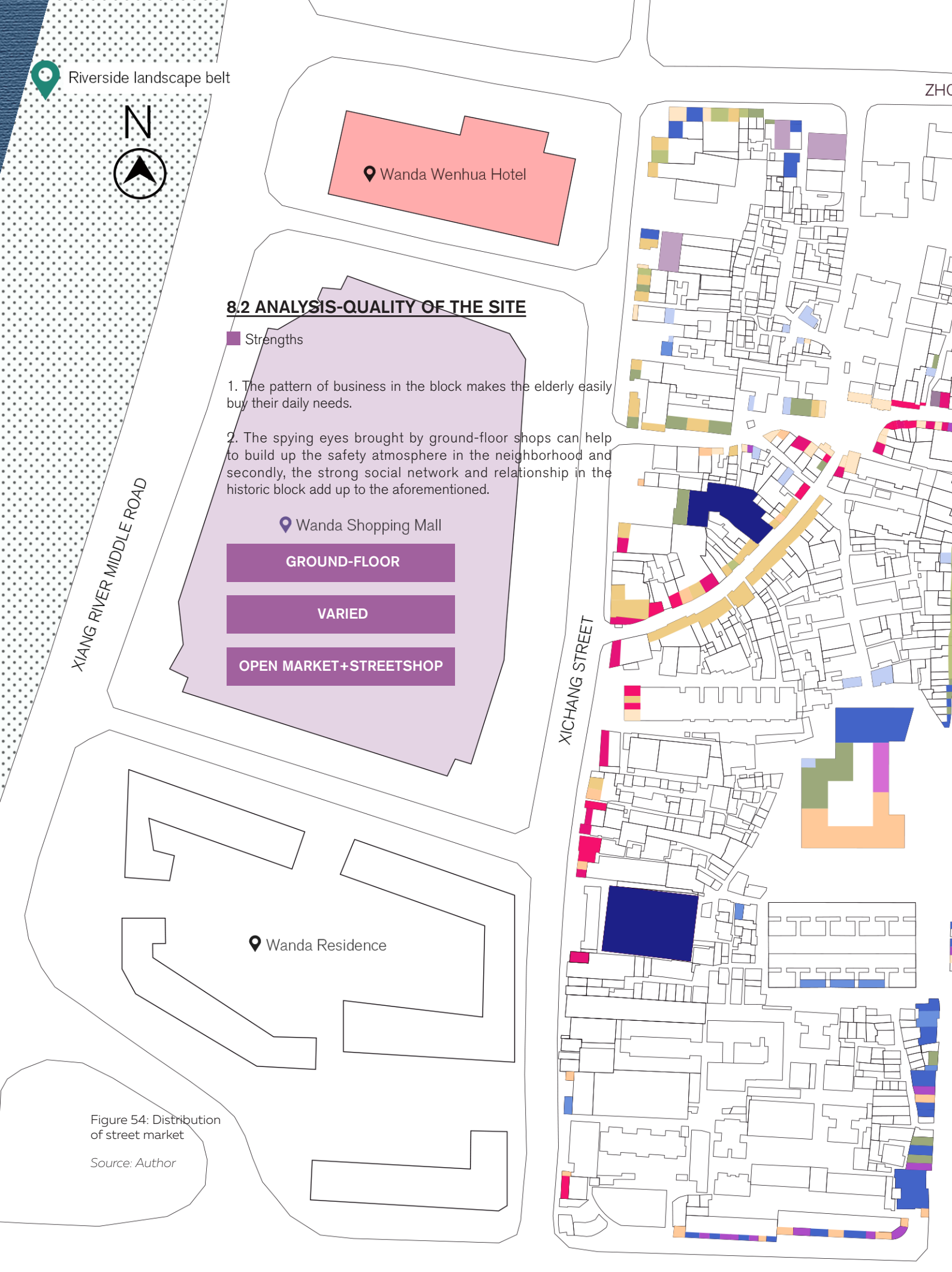
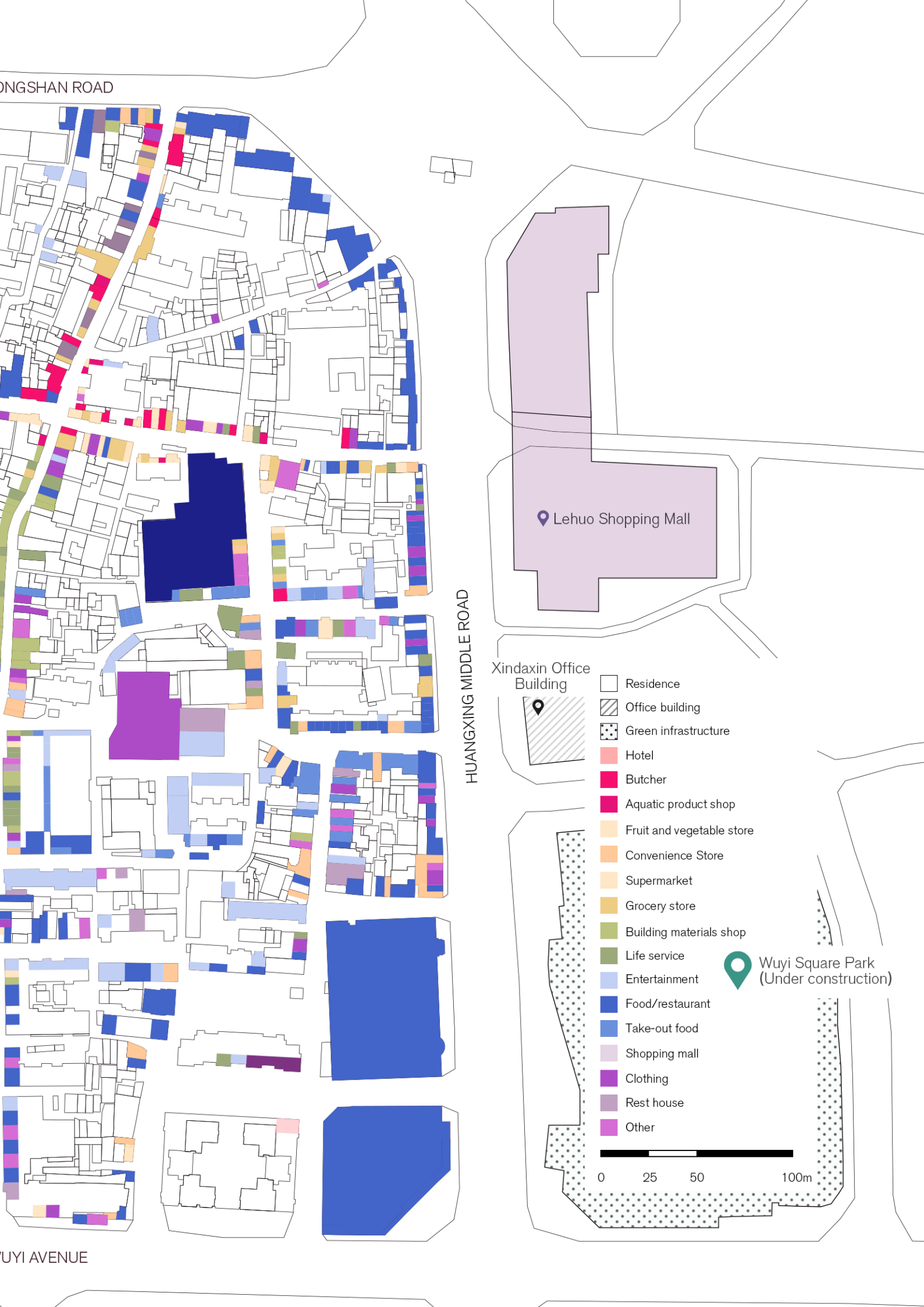


Figure 54: Distribution of street market

Source: Author


ONGSHAN ROAD
HUANGXING MIDDLE ROAD
UYI AVENUE
Lehuo Shopping Mall
Xindaxin Office Building
Wuyi Square Park (Under construction)
Residence
Office building
Green infrastructure
Hotel
Butcher
Aquatic product shop
Fruit and vegetable store
Convenience Store
Supermarket
Grocery store
Building materials shop
Life service
Entertainment
Food/restaurant
Take-out food
Shopping mall
Clothing
Rest house
Other
0
25
50
100m

1. The pattern of business in the block makes the elderly easily buy their daily needs.

2. The spying eyes brought by ground-floor shops can help to build up the safety atmosphere in the neighborhood and secondly, the strong social network and relationship in the historic block add up to the aforementioned.

Image xx: Photo of the business pattern in the site

Source: Author

Image 55: Street market

Source: Author

3. The faces of Xiping block are quite open and active because the ground-floor shops and markets are along the street. Different shops have their own styles or patterns of selling and goods placing which brings the neighborhood unique characters.

Image 56-67: Photo of the business pattern in the site

Source: Author

Weaknesses

1. The management of public spaces are unorganized and disordered. In the block, vehicles& bicycles parking, goods placing and clothes hanging can be seen everywhere, along the street, occupying the yards, and occupying the sidewalk.

Image 68-70: Photos of occupied public space in site

Source: Author

2. The normal usage of sidewalk is extremely low, which means the function of sidewalks here is not for walking anymore. Sidewalks are occupied by the open market or the stuffs of residents. Most of the ground-floor shops will extend their places of displaying goods on the sidewalks. Besides, the sidewalk itself is narrow, uneven, and discontinuous.

Image 71-73: Photos of sidewalk in site

Source: Author

3. Poor ventilation conditions and aged drainage system in historic blocks, bad smelling and dirty water of butcher and aquatic product shops cause people a bad sensory feeling of the street.

Image 74: Photo of butcher in site

Source: Author

Image 75: Photo of butcher in site

Source: Author

ONGSHAN ROAD

Image 76: Photo of aquatic product shop in site

Source: Author

Image 77: Photo of aquatic product shop in site

Source: Author

Market hall

Butcher

Aquatic product shop

Figure 55: xxx

Source: Author

0 25 50 100m

UYI AVENUE

Cultural relic buildings

Historical buildings

4.The overall building quality is relatively low. Although indeed existing some valuable cultural relic buildings, historic buildings, and traditional style buildings in the neighborhood, they are not being well protected. Besides, the rest buildings are with low quality façade, bad environment, some are even dangerous buildings.

Traditional style buildings

Dangerous buildings

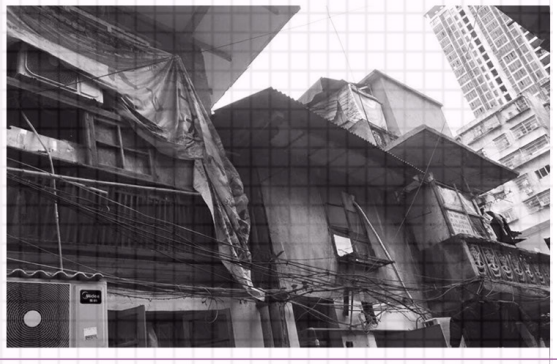
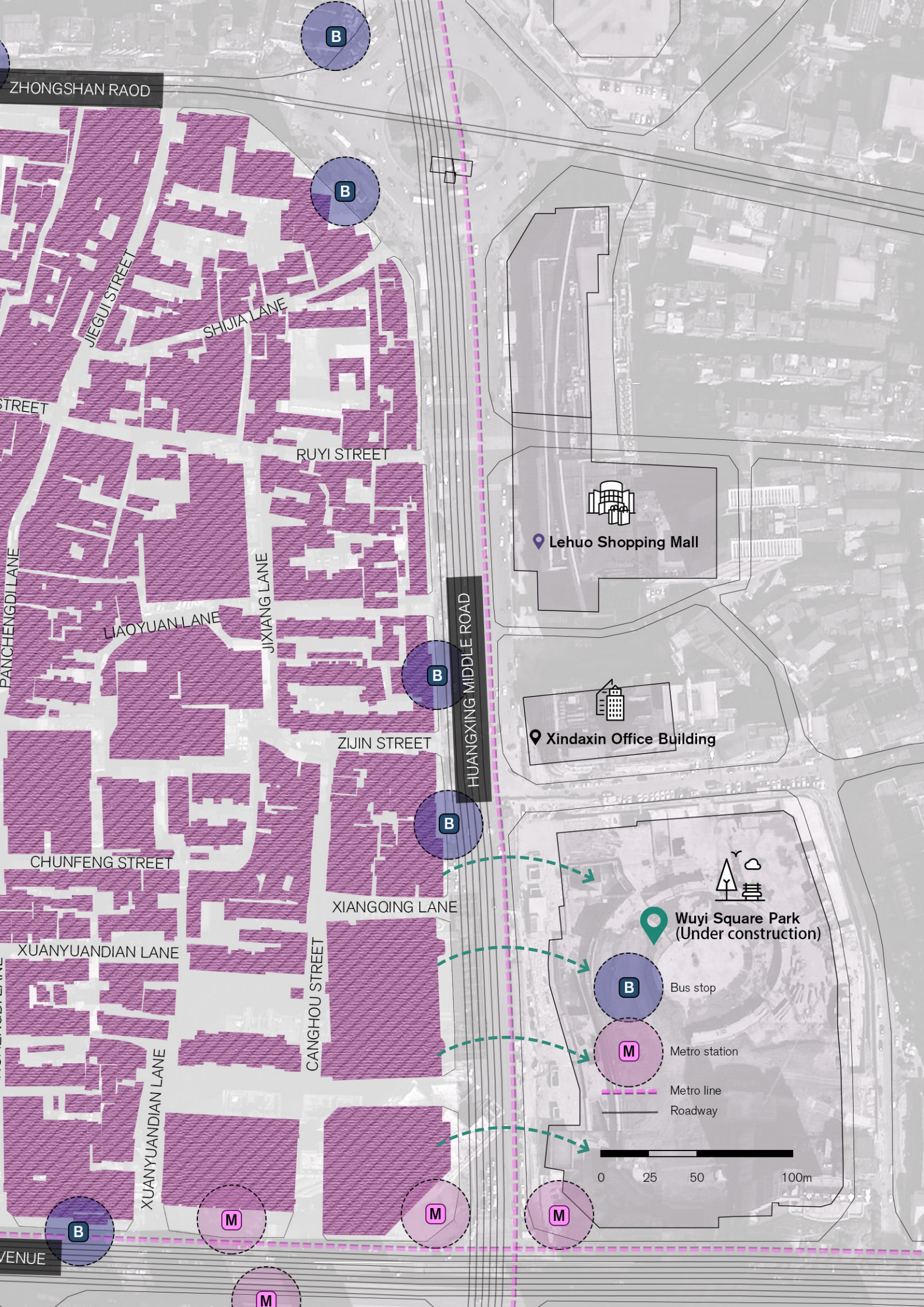


Image 78-89: Photos of buildings' quality in site

Source: Author

Figure 56:
Surroundings facilities of the site

Source: Author


ZHONGSHAN RAOD
JIEGUI STREET
SHIJIA LANE
RUYI STREET
PANCHENGDI LANE
JIXIANG LANE
LIAOYUAN LANE
HUANGXING MIDDLE ROAD
ZIJIN STREET
CHUNFENG STREET
XIANGQING LANE
XUANYUANDIAN LANE
CANGHOU STREET
XUANYUANDIAN LANE
Lehuo Shopping Mall
Xindaxin Office Building
Wuyi Square Park
(Under construction)
Bus stop
Metro station
Metro line
Roadway
0
25
50
100m

2. The historic blocks are always lacking of big green infrastructure inside or soft façade because of the limited space. However, there are some green corners that made by neighbors spontaneously.

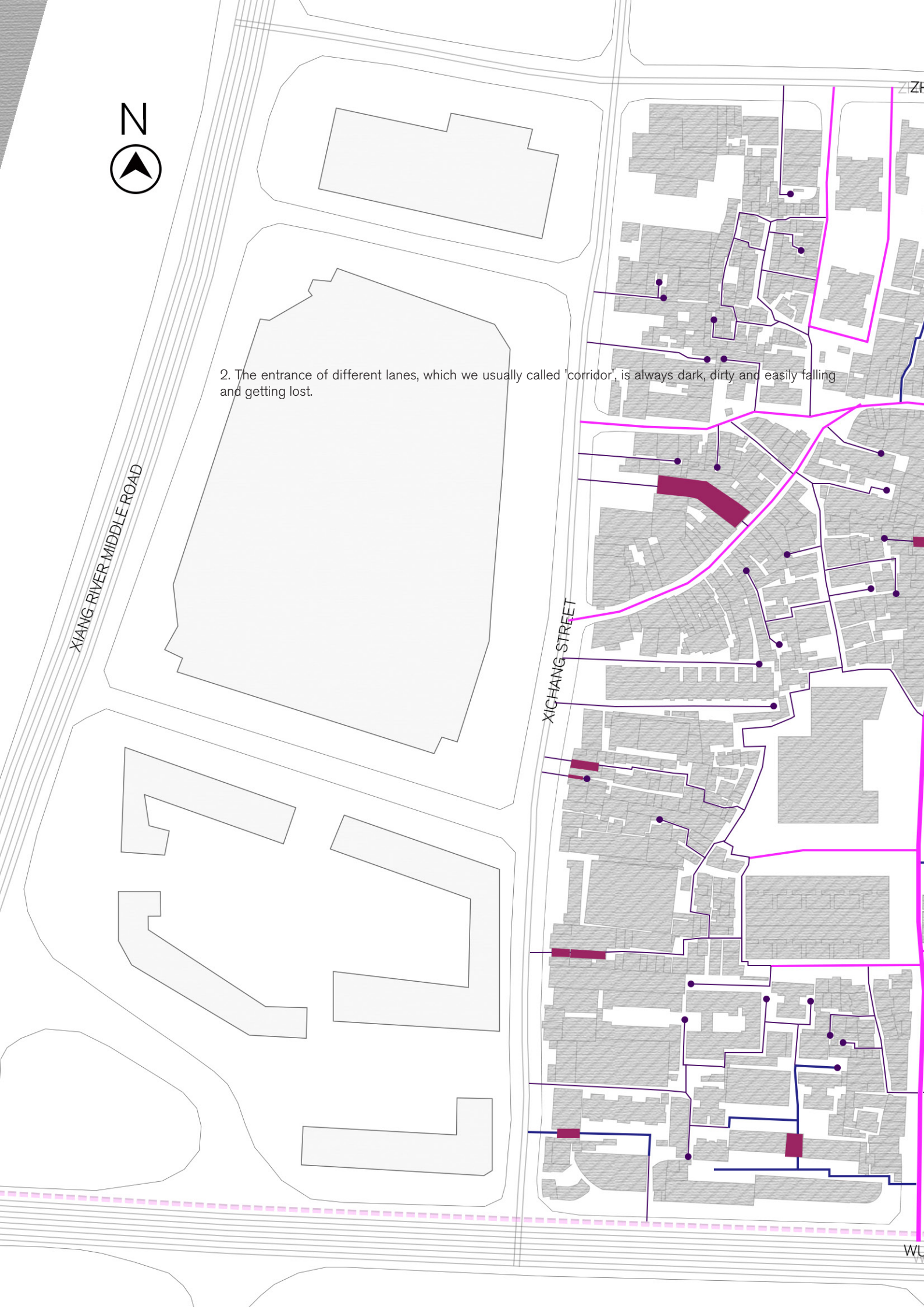
Image 90-95: Photo of the green corners in the site
Source: Author

Threats

1. Lack of lighting in the evening. Since lacking of public illumination in the site, the night lighting relies on lighting in the shops, which are really weak and unstable.

Image 96: Situation of night lighting in the site

Source: Zhang, L.



2. The entrance of different lanes, which we usually called 'corridor', is always dark, dirty and easily falling and getting lost.

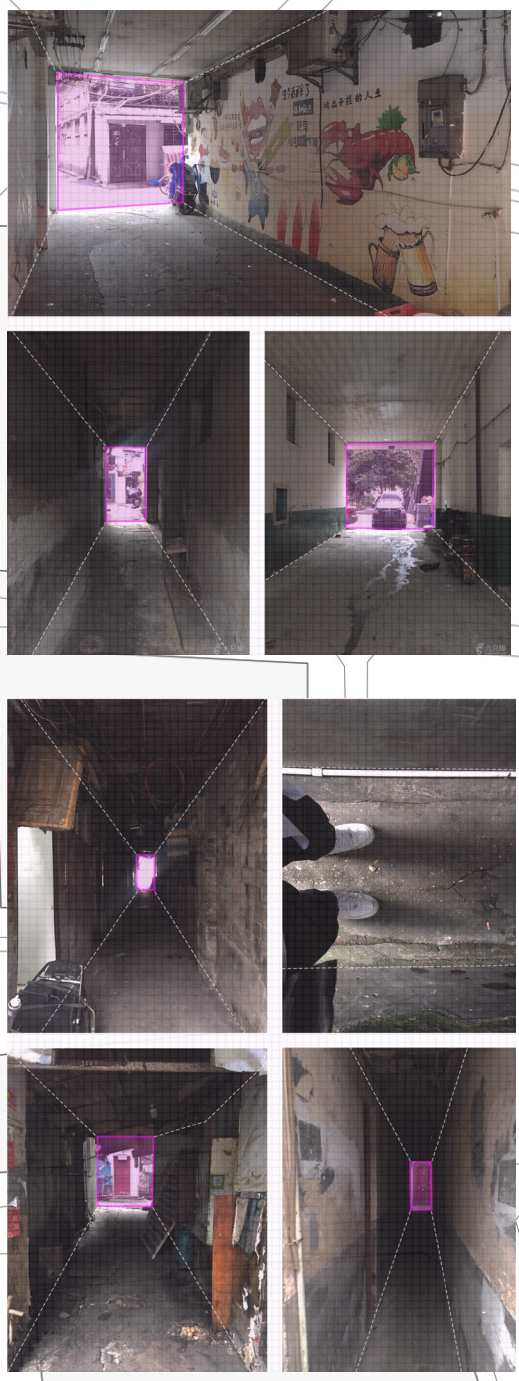


Image 97-103: Photos of corridors in the site

Source: Author, Jiang K.

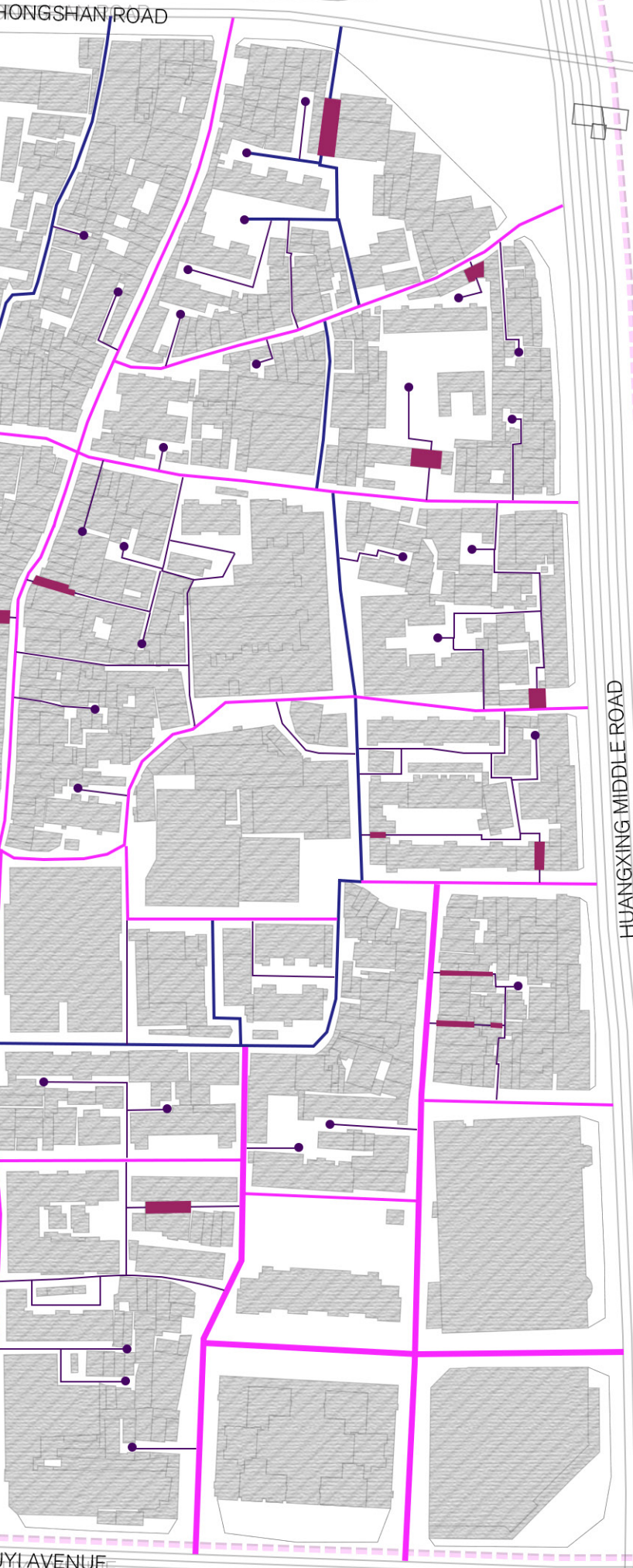


Figure 57: xxx

Source: Author

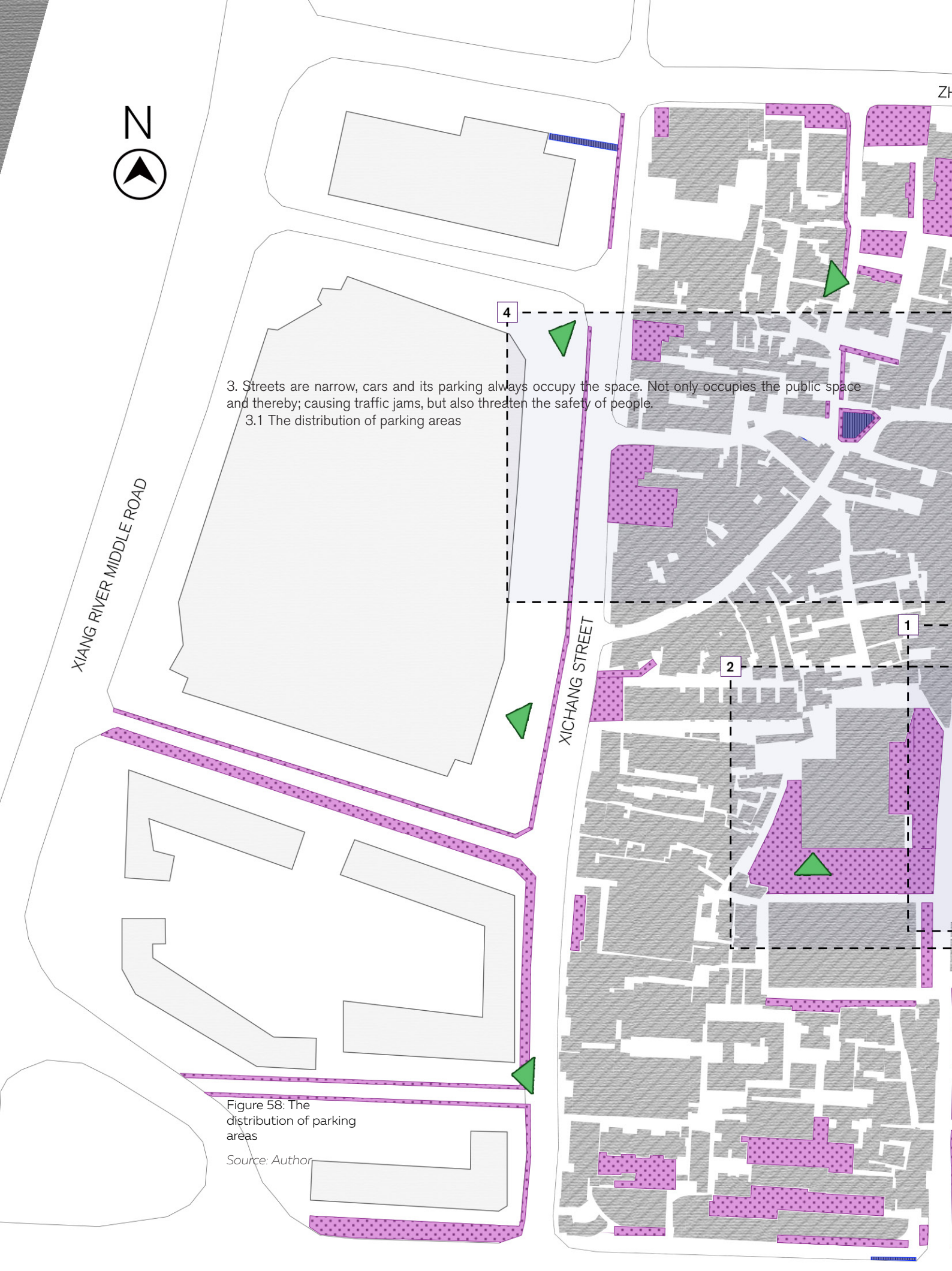


Figure 58: The distribution of parking areas

Source: Author

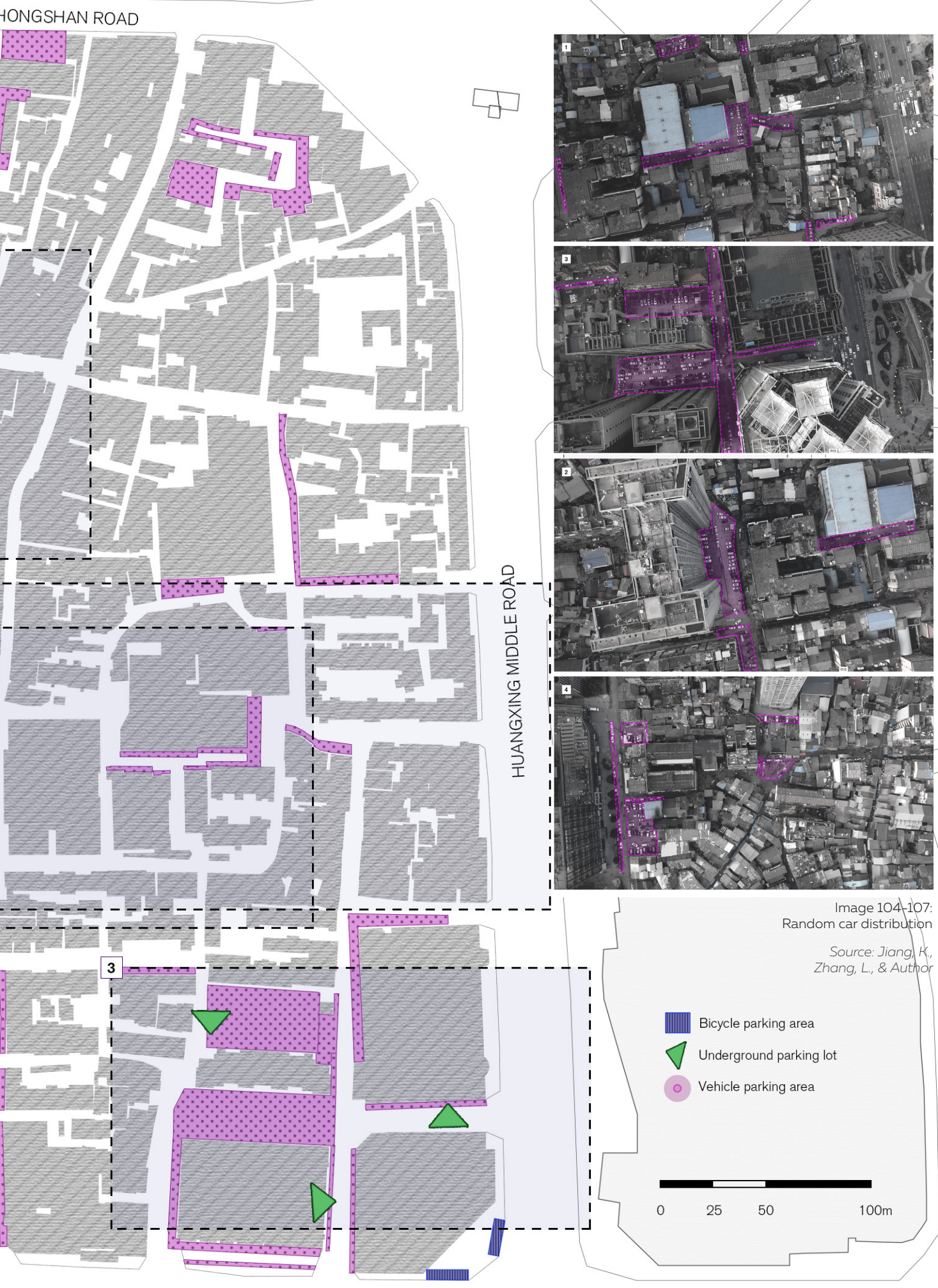


Image 104-107:
Random car distribution

Source: Jiang, K., Zhang, L., & Author

3. Streets are narrow, cars and its parking always occupy the space. Not only occupies the public space, causing traffic jam, but also threaten the safety for the elderly. Besides, some lanes are unable to pass fire vehicle.

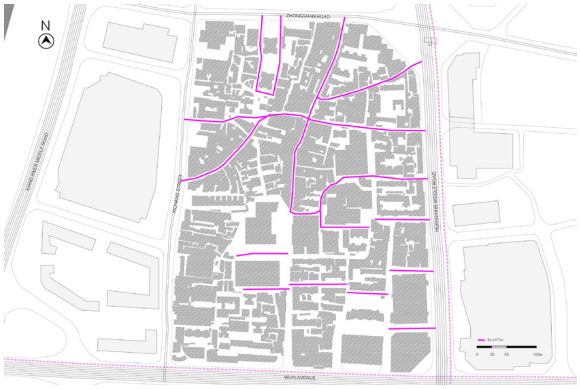
3.2 The classification of car lanes

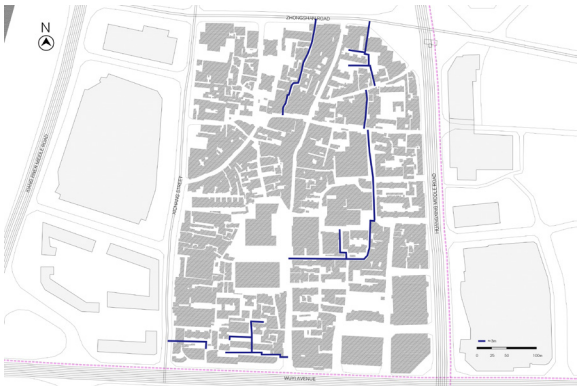
7-10m

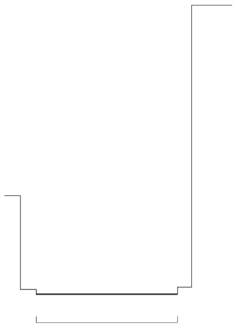
3-5m

≈3m

Unable to pass fire vehicle

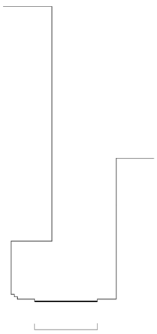






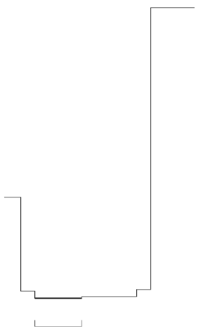
Car lane 9m

Panchengdi Lane



Car lane 4m

Ruyi Lane



Car lane 3m

Jixiang Lane

Table 8: The classification of car lanes

Source: Author

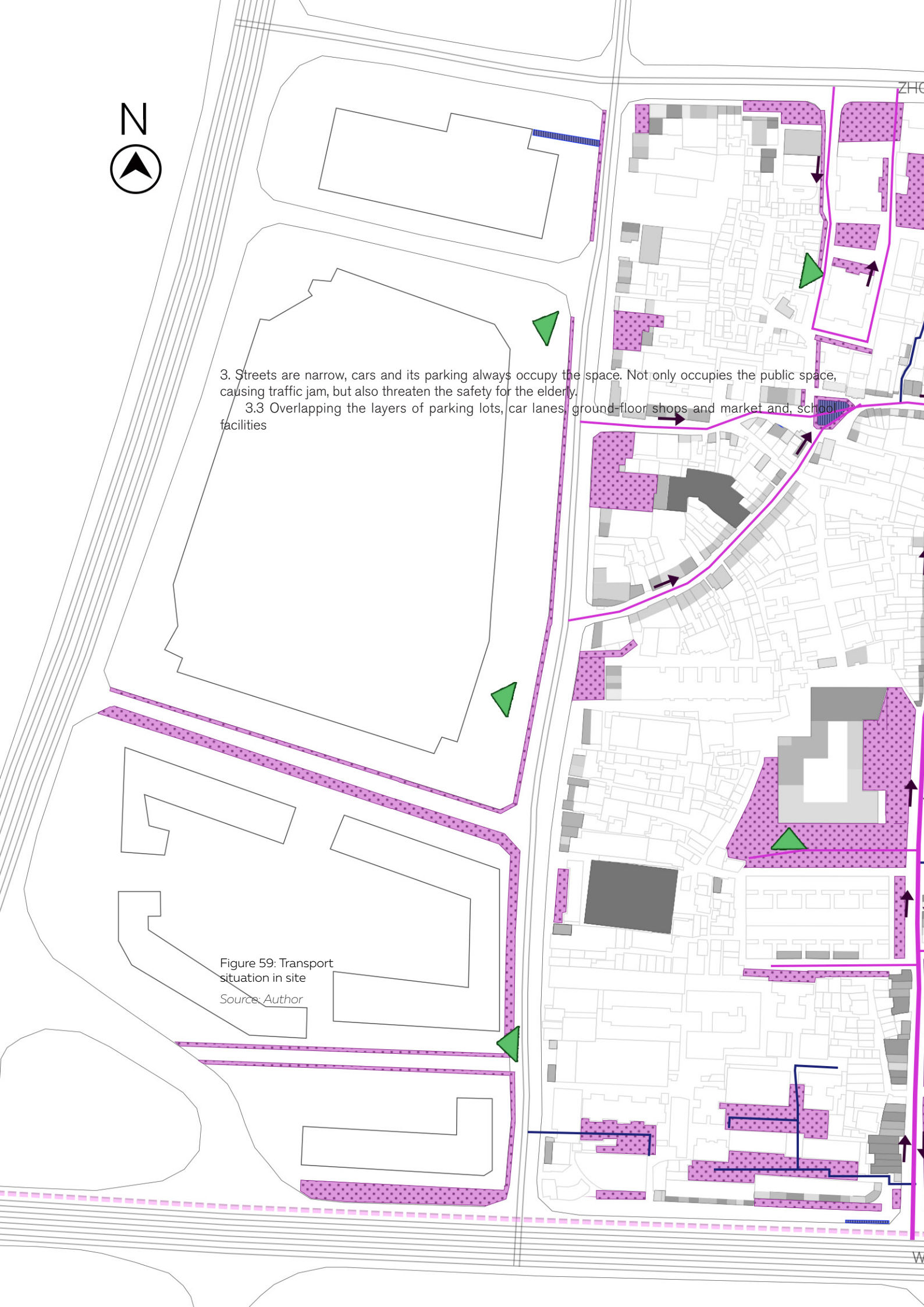
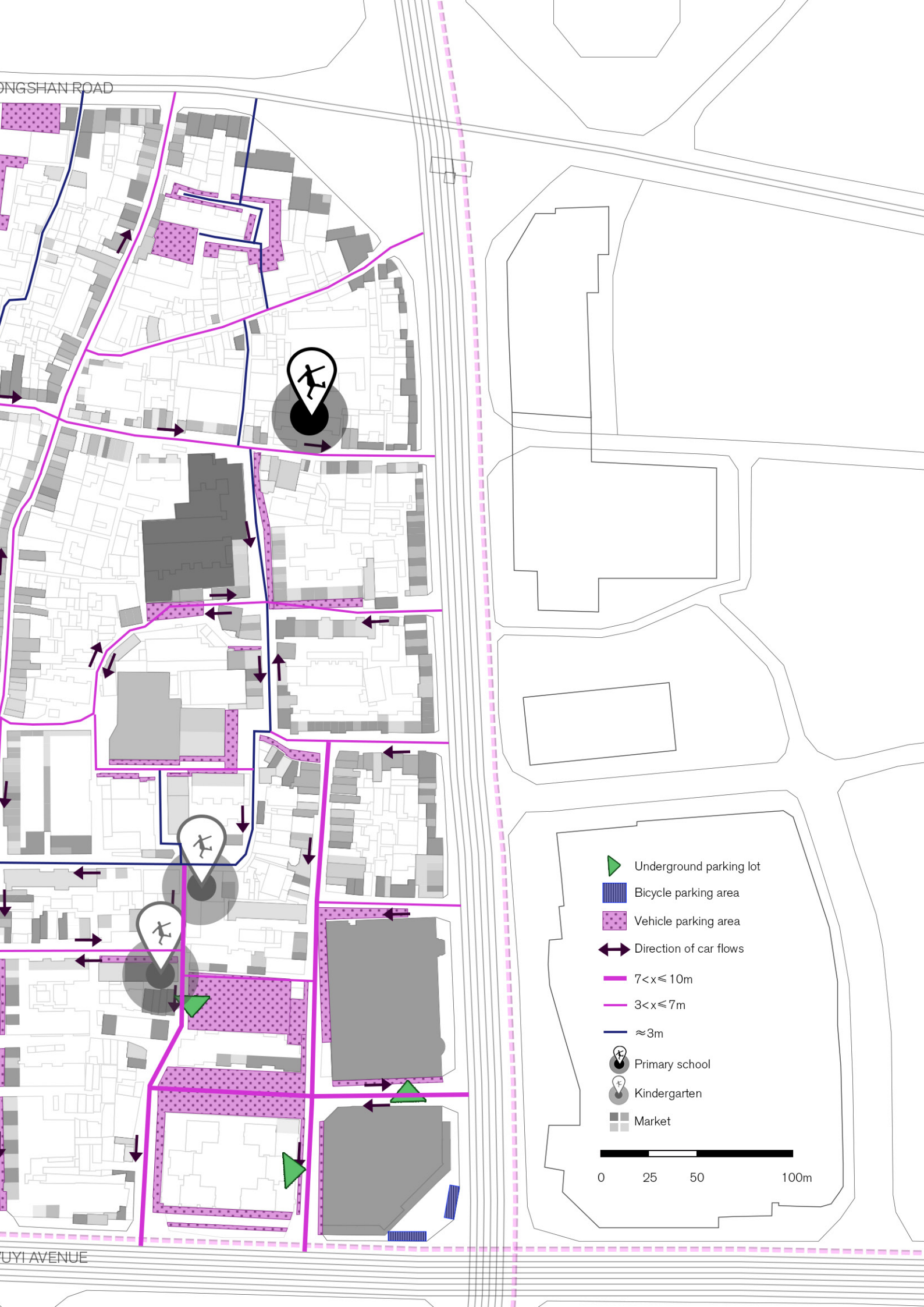


Figure 59: Transport situation in site

Source: Author


ONGSHAN ROAD
UYI AVENUE
Underground parking lot
Bicycle parking area
Vehicle parking area
Direction of car flows
7<x≤10m
3<x≤7m
≈3m
Primary school
Kindergarten
Market
0
25
50
100m

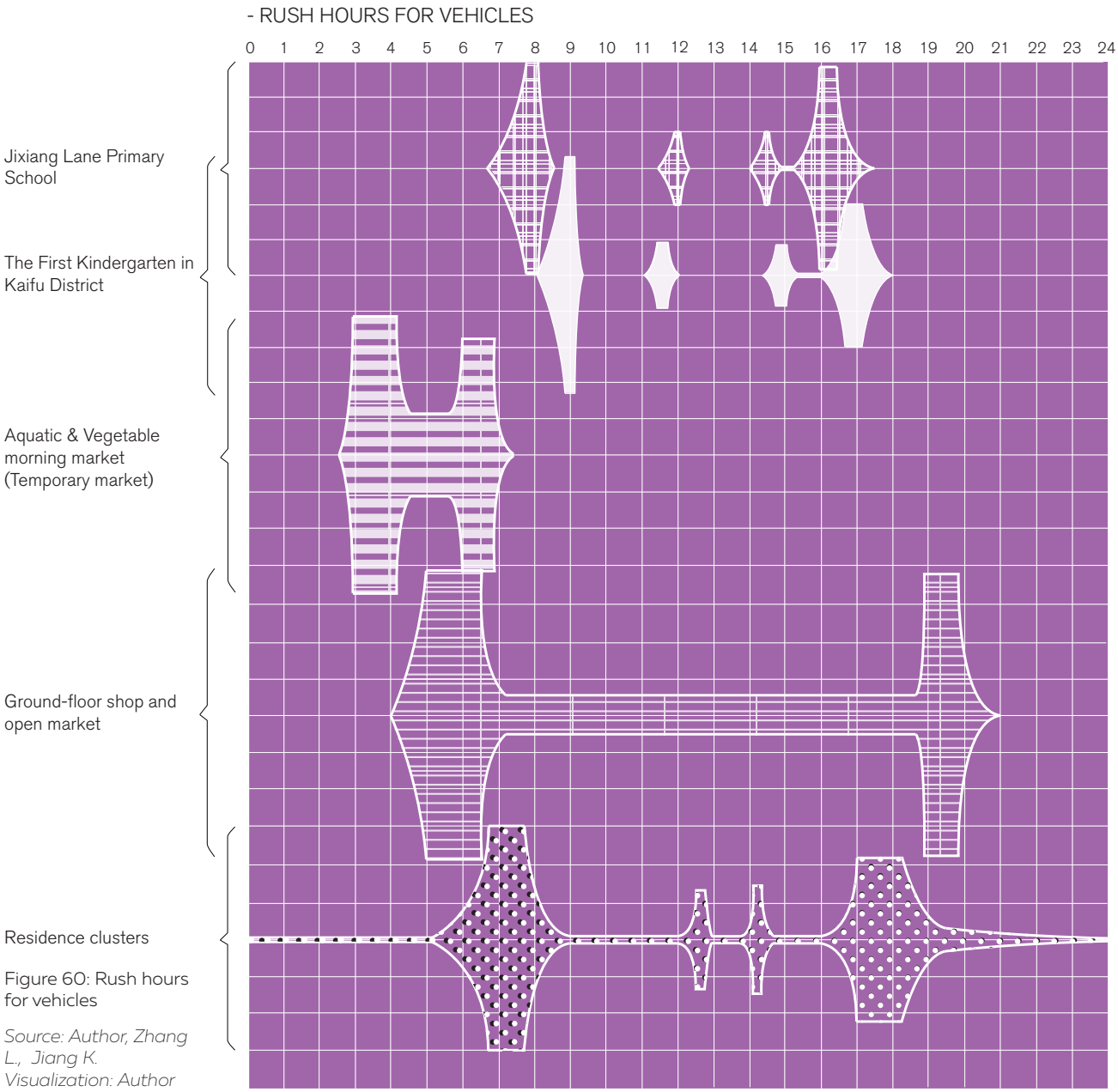


Figure 60: Rush hours for vehicles

Source: Author, Zhang L., Jiang K. Visualization: Author

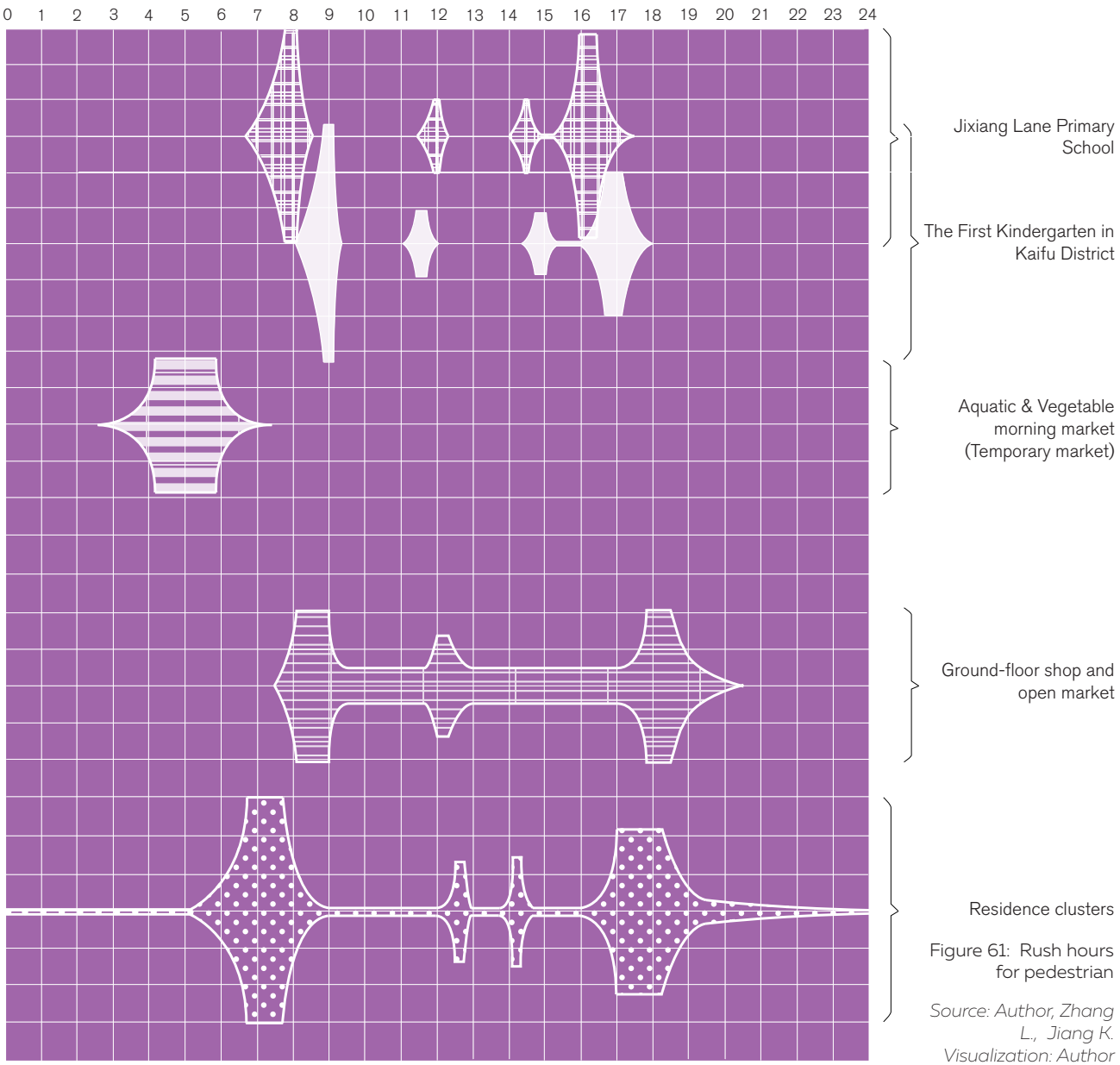


Figure 61: Rush hours for pedestrian

Source: Author, Zhang L., Jiang K. Visualization: Author

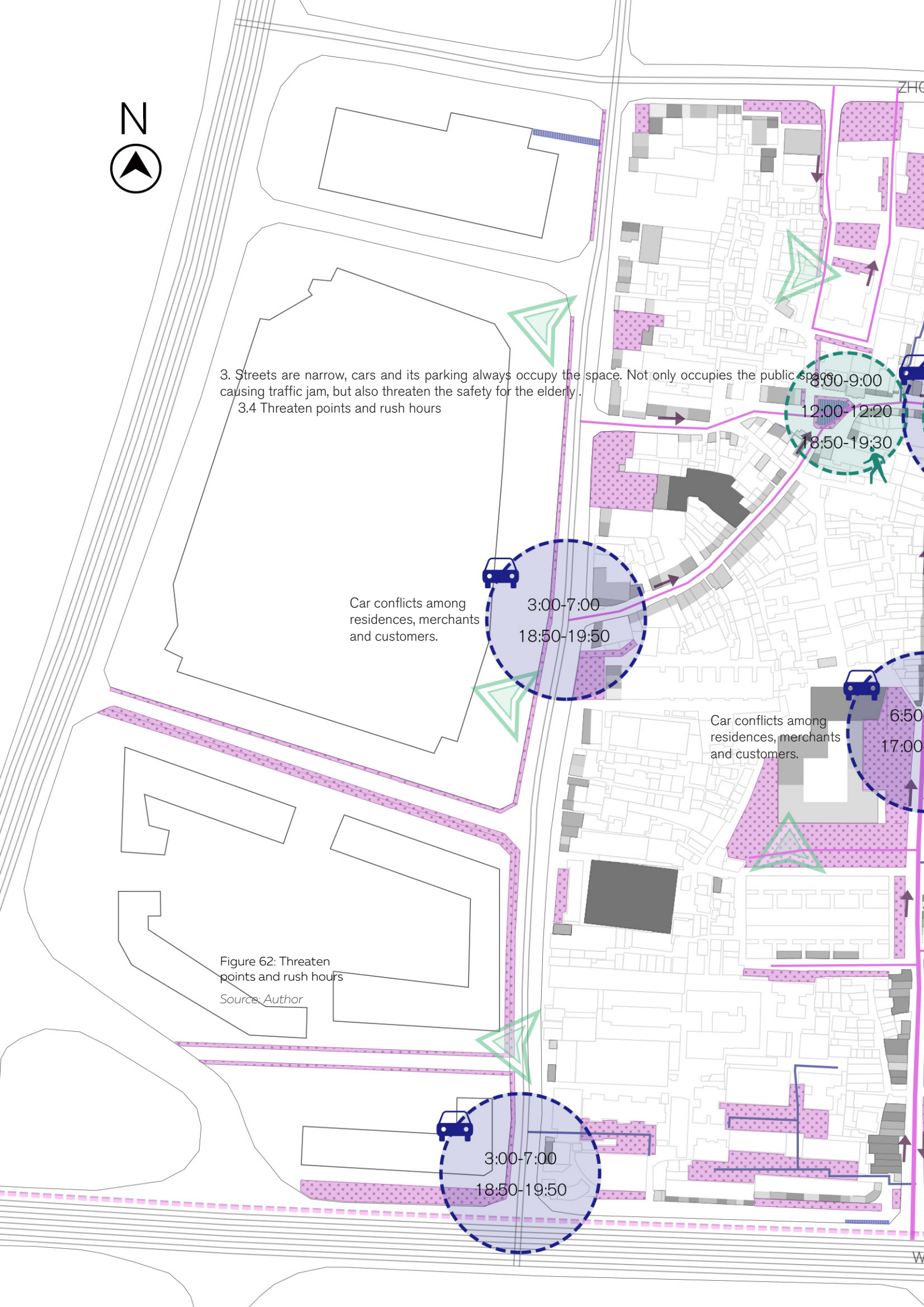
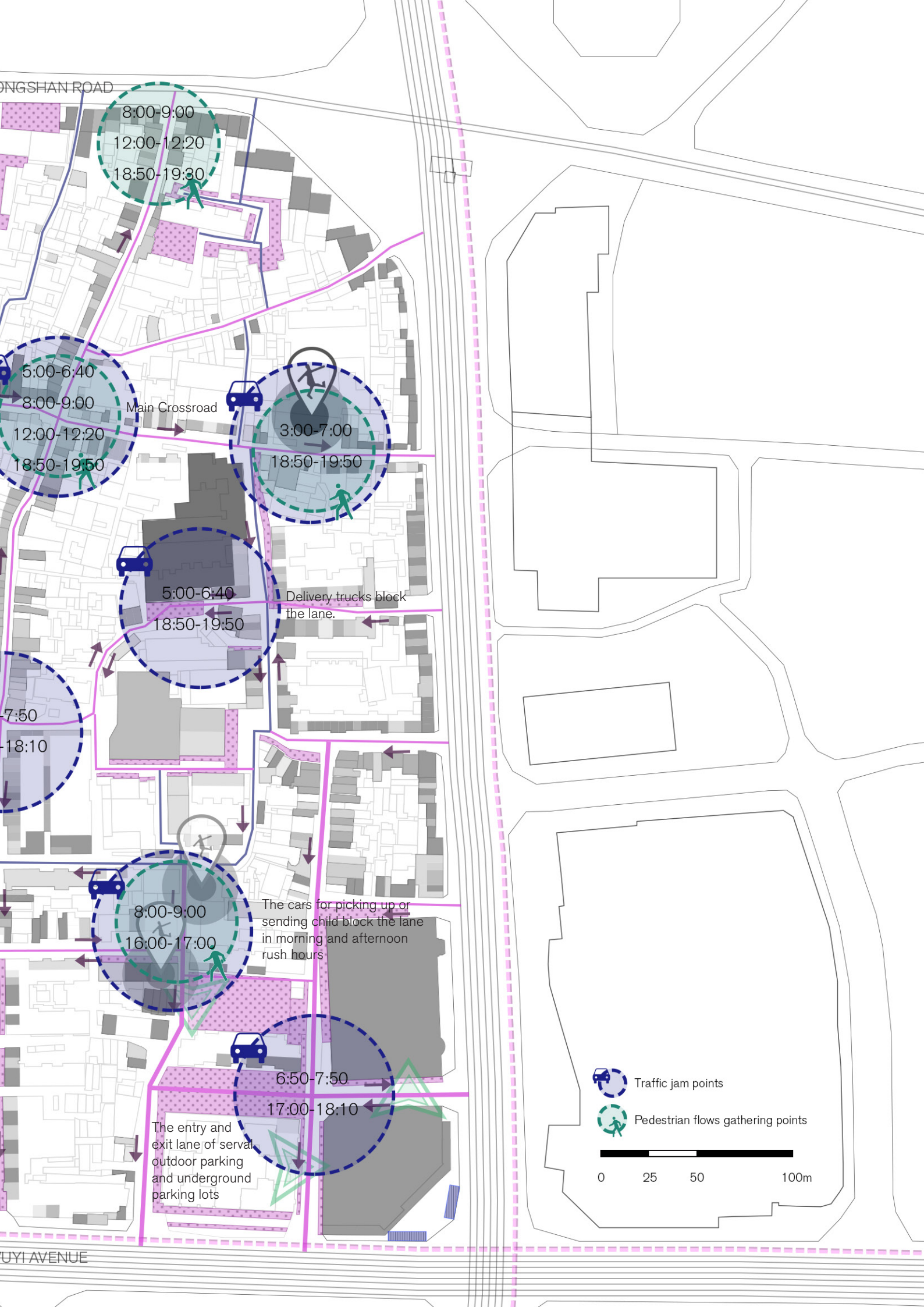


Figure 62: Threaten points and rush hours

Source: Author


ONGSHAN ROAD
8:00-9:00
12:00-12:20
18:50-19:30
5:00-6:40
8:00-9:00
12:00-12:20
18:50-19:50
Main Crossroad
3:00-7:00
18:50-19:50
5:00-6:40
18:50-19:50
Delivery trucks block the lane.
-7:50
-18:10
8:00-9:00
16:00-17:00
The cars for picking up or sending child block the lane in morning and afternoon rush hours
6:50-7:50
17:00-18:10
The entry and exit lane of serval outdoor parking and underground parking lots
UYI AVENUE
Traffic jam points
Pedestrian flows gathering points
0
25
50
100m

Conclusions

1. Pattern of business in the block makes people easily buy their daily needs.
2. The spying eyes brought by ground-floor shops can help to build up the safety atmosphere in the neighborhood and secondly, the strong social network and relationship in the historic block add up to the aforementioned.
3. The faces of Xiping block are quite open and active because the ground-floor shops and markets are along the street. Different shops have their own styles or patterns of selling and goods placing which brings the neighborhood unique characters.

S

O

1. It is relatively convenient to take a public transportation and go to the big green infrastructure nearby.
2. The historic blocks are always lacking of big green infrastructure inside or soft façade because of the limited space. However, there are some green corners that made by neighbors spontaneously.

W

1. The management of public spaces are unorganized and disordered. In the block, vehicles& bicycles parking, goods placing and clothes hanging can be seen everywhere, along the street, occupying the yards, and occupying the sidewalk.
2. The normal usage of sidewalk is extremely low, which means the function of sidewalks here is not for walking anymore. Sidewalks are occupied by the open market or the stuffs of residents. Most of the ground-floor shops will extend their places of displaying goods on the sidewalks. Besides, the sidewalk itself is uneven and discontinuous.
3. Poor ventilation conditions and aged drainage system in historic blocks, bad smelling and dirty water of butcher and aquatic product shops cause people a bad sensory feeling of the street.
4.The overall building quality is relatively low. Although indeed existing some valuable cultural relic buildings, historic buildings, and traditional style buildings in the neighborhood, they are not being well protected. Besides, the rest buildings are with low quality façade, bad environment, some are even dangerous buildings.
5. Lack of lighting in the evening.

T

1. The entrance of different lanes, which we usually called 'corridor', is always dark, dirty and easily falling and getting lost.
2. Streets are narrow, cars and its parking always occupy the space. Not only occupies the public space and thereby; causing traffic jams, but also threaten the safety of people.

8.3 CITY RENEWAL

Methods of historic areas renewal in China

In the past years, large-scale demolition and reconstruction is the main method of city renewal among various cities in China. Through these large projects, the living environment and quality has been greatly improved. However, this way has led to the destruction of some historical streets, historical buildings and city culture. The relocation of residents has also brought inestimable loss on the pattern, texture and lifestyle of historic areas.

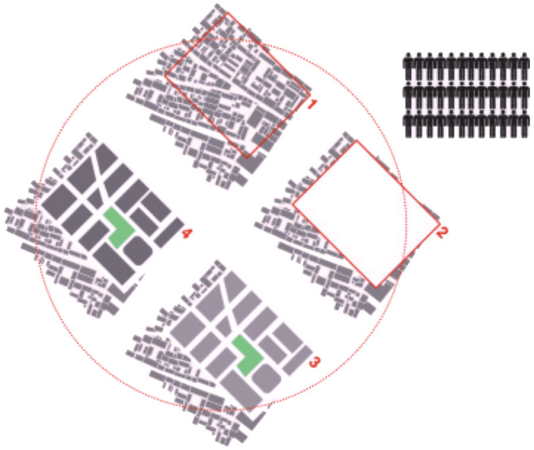


Figure 63: The model of typical large-scale urban renewal process

Source: dashilar.beijing99.cn

LARGE-SCALE DEMOLITION AND RECONSTRUCTION

1. Ascertain development zone.
2. Residents are compensated for relocation.
3. All the buildings in the development zone are removed and rebuilt in a short period.
4. Zones are injected large-scale commercial, office buildings or residentials.
(dashilar.beijing99.cn)
(Zhang, J., 2016)

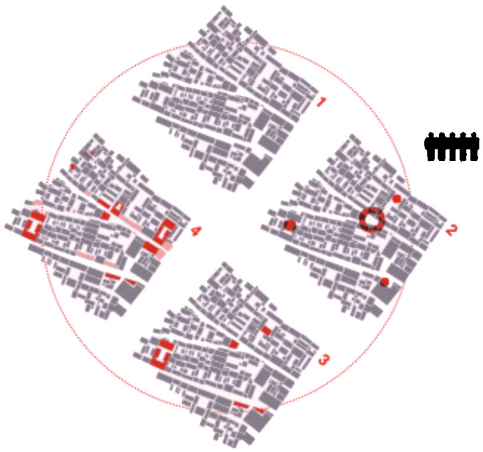


Figure 64: The model of "Organic renewal" process

Source: dashilar.beijing99.cn

'ORGANIC RENEWAL'

1. Comprehensive renovation
2. Micro transformation
3. Small-scale demolition and reconstruction
4. Enhancement of Environmental Quality
(Chen, L., Luo, S., & Wang, C., 2018)

In recent years, 'organic renewal' has the trend of replacing large-scale demolition and reconstruction in historic area because of its low cost and quite positive return and feedback. However, the traditional 'organic renewal' more focuses on the spatial itself, lacking of the thinking on the social aspects and governance aspects, causing some problems that had mentioned in the problem field in the front pages. For example, the opinions on historic area planning and design are put forward by experts, ignoring the opinions of local residents, etc.

Because the aim of city renewal is not about transforming the space, is to improve the living quality and enhance city developed. Space is the material carrier and one of the main transformed objectives. Since the actual situation among different neighborhoods in China are different and complicated, there are not uniform solutions or model for applying 'organic renewal'. So, the product of the thesis which transforms from socio-spatial, spatial and governance environment might bring some new thinking and inspirations for city renewal.

Image 108-113:
Relocation process in
Liansheng Street

Source: Baidu Street map&Jiang K.

The problems that the residential-dominated historic areas facing

Cities are a complex of constant renewal and growth. Since the birth of cities, cities have been repeating the process of metabolism according to people's different needs: creating contradictions, solving contradictions and meeting new needs. This process causes the disappearance of urban culture, urban memory and weakening of urban spirit. In the early stage of modern urban construction in China, urban renewal learned the experience from the United States, demolishing a large number of old historic blocks and filling high-rise buildings.

Historic blocks and their residents are the live history recorder of city. From the disappearance to the convergence of urban history, the process of urban renewal is directly reflected in historical blocks. It not only reflects in space or environment of historical blocks, but also plays a role in the social network and people's life style. The development of the city is directly affected by the quality of the renewal of historical blocks. (Chen, L., Luo, S., & Wang, C., 2018)

Before figuring out the solutions for city renewal, finding out the common conflicts in the historic areas is the first step, especially in the residential-dominated historic areas. Because compared with the historic blocks which has strong tourism potential, residential-dominated historic areas load more local residents, and are more easily neglected. There are some main prominent problems that the residential-dominated historic areas in China are facing commonly:

1.The traditional narrow lanes networks in the historic areas have the conflicts with modern transportation pattern. As a result, vehicles, bicycles and pedestrians are all mixed together and using the same lanes which caused the traffic jam in the neighborhood. Besides, since lacking of centralized vehicle parking areas, vehicle parking always occupies the public space and street space in the neighborhood. (Sun, Y., 2016) (Chen, L., Luo, S., & Wang, C. 2018) (Image:114-116)

Image 114-116: Traditional narrow lanes network have conflicts with modern transportation pattern

Source: Author

2. There are some problems in infrastructure, such as aging, insufficient water supply, backward rainwater drainage system and so on. (Changsha., 2018)

3. The fire prevention system in historic blocks is an empty talk. Firstly, the sizes of most streets and lanes in the blocks cannot meet the requirements of firefighting. Secondly, many buildings in historic districts are wooden or brick-and-wood structures, cooperating with aging wiring lines, easily lead to fires. (Sun, Y., 2016) Hou, Z., 2016)

4. Some historic blocks have high-rise buildings, causing the pattern of streets and lanes has been destroyed. Besides, historic buildings separate as islands in the community, which threatens the pattern and historical features of blocks as well. (Changsha., 2018)

5. High building coverage cause the lighting and ventilation condition is really terrible.

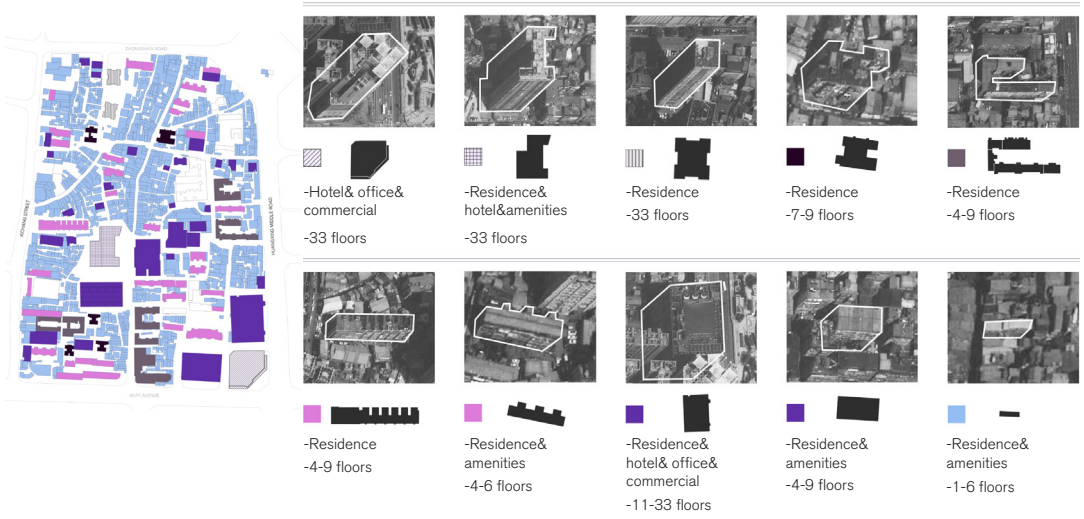


Table 9: Building typology, no. of floors of buildings and distribution

Source: Author

6. Overall building quality is low in the residential-dominated historic neighborhood. Especially there are many dangerous houses and illegal buildings built privately which urgently needs to be renewed (Figure 17). In China, average life span of a building is 50 years. Take the site as an example, according to the building year, the renewal process can be divided into several stages.

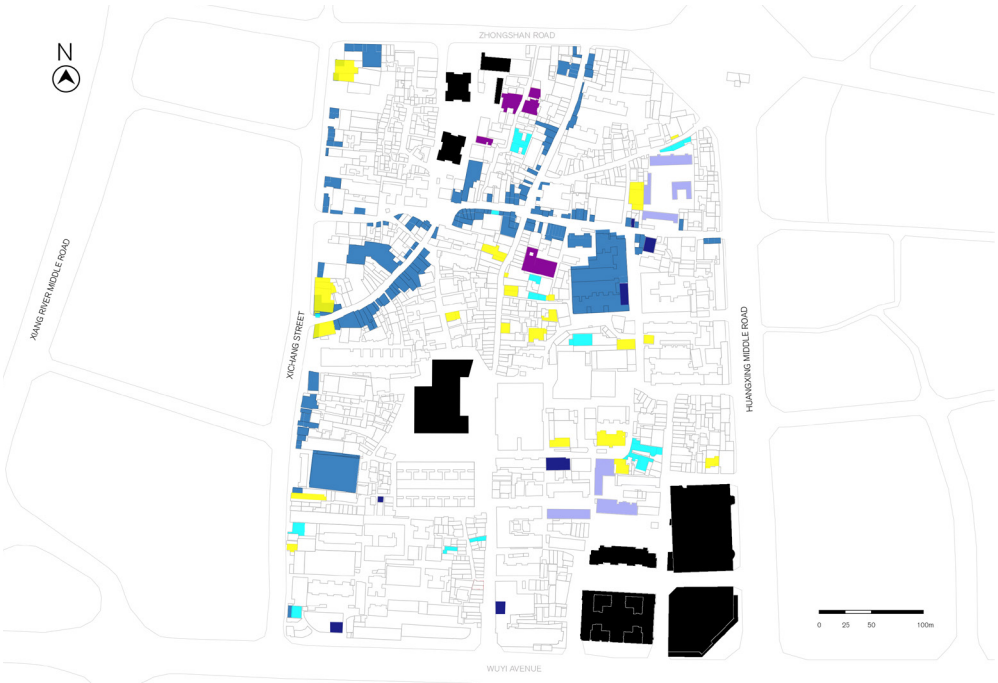


Figure 65: Buildings should be kept

Figure drawing: Author

- Education facilites
- Medical facilities
- Street market
- Good quality buildings
- Cultural relic buildings
- Historical buildings
- Traditional style buildings

Figure 66: Buildings that must be demolished in first stage

Figure drawing: Author

- Dilapidated buildings (Extremely poor quality buildings)
- Poor quality buildings built during 1950s-1970s

(Data sources for building quality evaluation come from Changsha government documents)

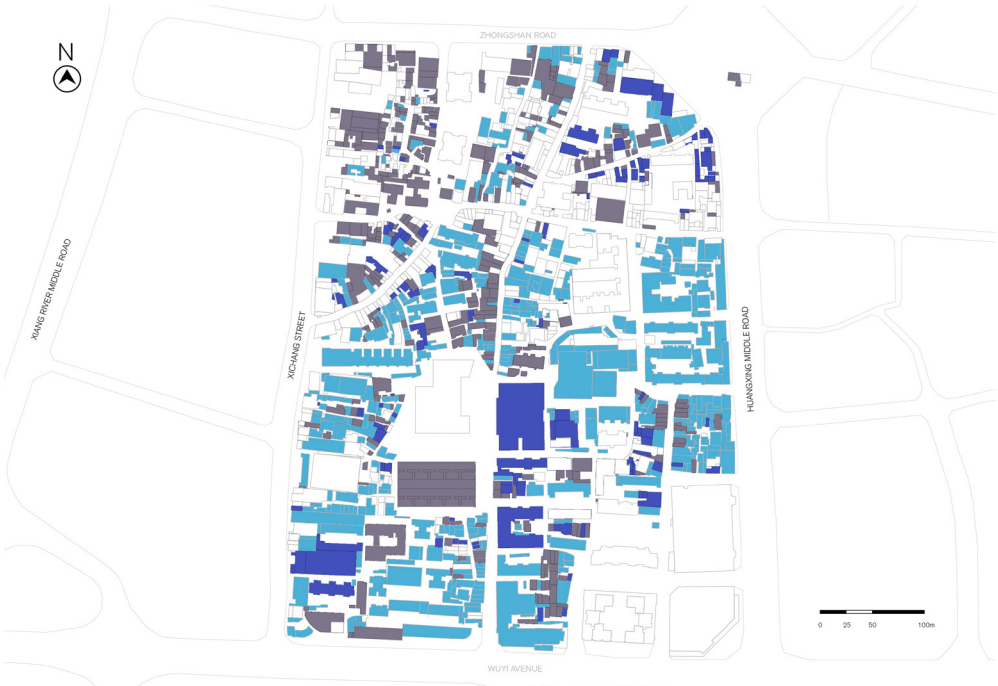


Figure 67: Buildings that can be demolished in following stages

Figure drawing: Author

1950s-1979s
1980s
1980s-2000s

Figure 68: Buildings that can be demolished in several stages

Figure drawing: Author

1st stage renovating& renewing
2nd stage renewing
3rd stage renewing
4th stage renewing

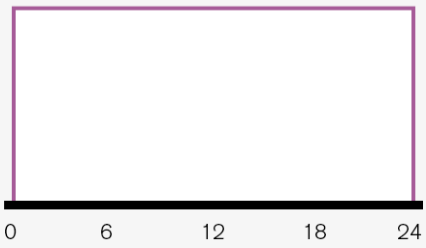
7. The average income level of residents is relatively low in residential-dominated historic neighborhood. Usually while city renovated, these people cannot afford to live in the original places anymore. The process of urban renewal often overlooks the interests of the residents who used to live here.

Residents
Seller

Age:
40-70

Average Income level

Time slot staying in the neighborhood



Ownership
Rent/owned

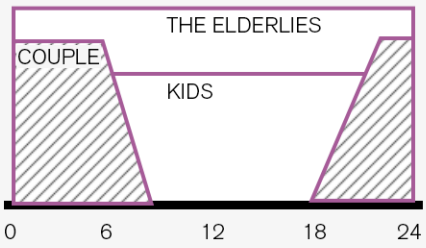
Transportation
Few owned motorcycle or car.
Most of them rely on upper sellers to transport the goods for them by car.

Residents
Family

Age:
⩾50

Average Income level

Time slot staying in the neighborhood



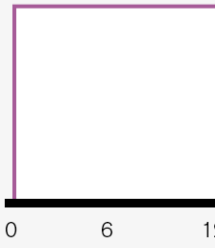
Ownership
Rent/owned

Transportation
Some owned motorcycle or car.
Others rely on bus, metro or sharing bikes.

Residents
The elder

Average Income lev

Time slot staying in



Proportion
1/3

Table 10 shows the composition of residents and their characteristic in the site. Because we need people-oriented as much as possible to maximize the benefits. So how to balance the needs of urban residents and the benefits of urban development will be another problem.

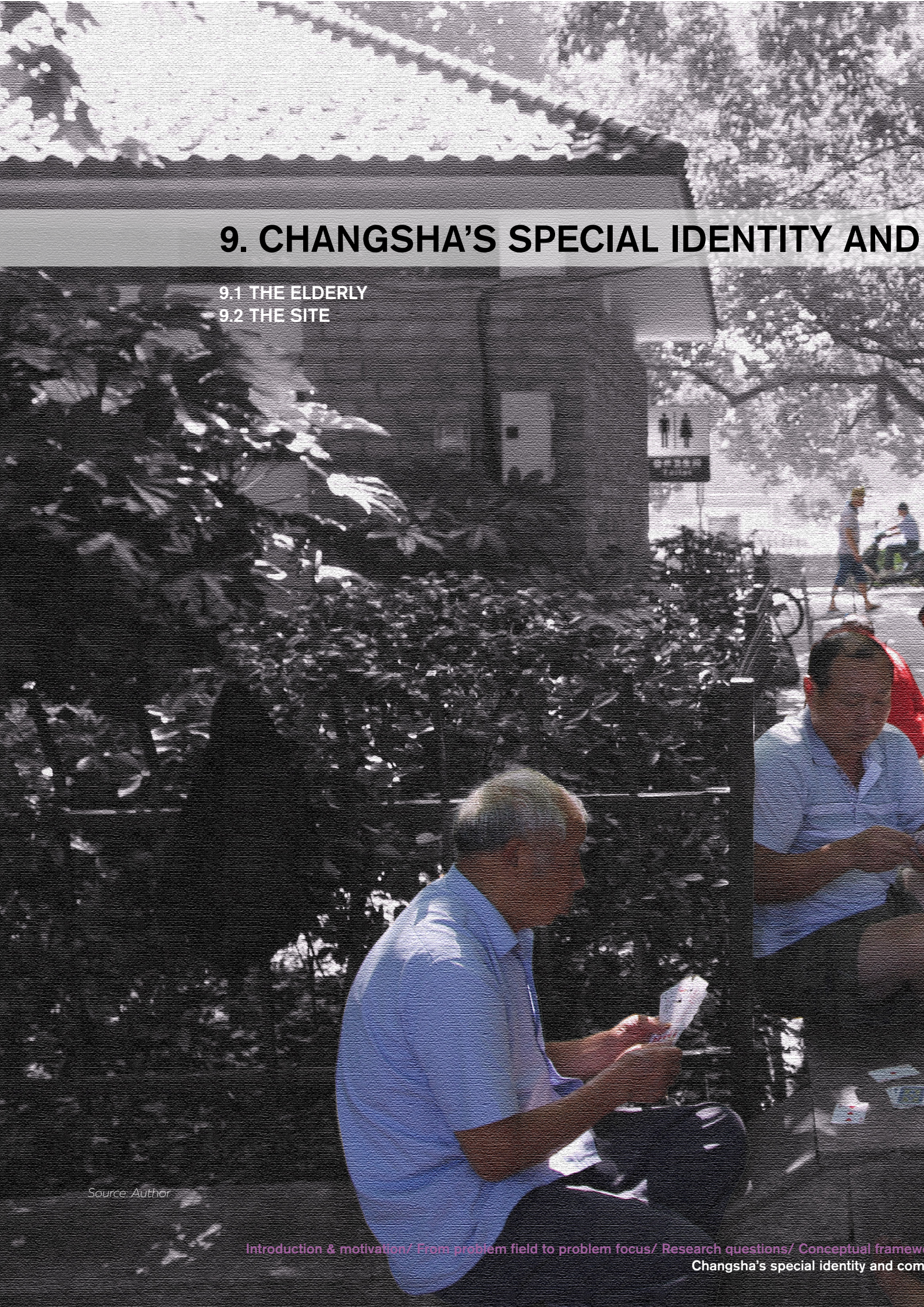
Table 10: Profile of different groups of people in site

Source: Author

ly	**Residents** **The Graduate**	**Residents** **University Student**
Age: ⩾50	**Age:** 22-28	**Age:** 17-24
el	**Average Income level**	**Average Income level**
the neighborhood	**Time slot staying in the neighborhood**	**Time slot staying in the neighborhood**
2 18 24	0 6 12 18 24	0 6 12 18 24
Ownership Rent/owned	**Ownership** Rent	**Ownership** Rent
	Transportation Rely on bus, metro or sharing bikes.	**Transportation** Rely on bus, metro or sharing bikes.

9. CHANGSHA'S SPECIAL IDENTITY AND

9.1 THE ELDERLY
9.2 THE SITE



Source: Author

COMMON SCENES

9.CHANGSHA'S SPECIAL IDENTITY AND COMMON SCI

9.1 THE ELDERLY

Speical identity

1. **Entertainment**: Hunan Huagu opera
It is one important branch of Chinese opera. It is quite popular among the elderlies in Hunan.

Image 117: Photo of Hunan Huagu Opera

Source: baidu.com

Image 118: Photo of elderlies playing Hunan Huagu Opera

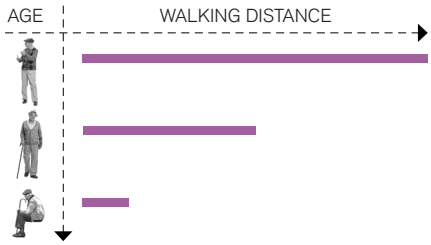
Source: Author

Common scenes

1. **Entertainment**: Dancing, drinking tea, playing mahjong, playing chess, buying lottery, playing cards, chatting, singing, taking a walk.
In China, the elderly's daily recreational activities can be mainly divided into two types: one is toning up the body, like dancing and taking a walk; the other is activating brains, like playing chess, playing mahjong, etc.

2. **Physical condition**:

2.1 $$\textbf{AGE} \propto \frac{1}{\textbf{PHYSICAL CONDITION}} \propto \textbf{WALKING DISTANCE}$$



Age is inversely proportional to physical condition and walking distance, which means that the older the elderly is, the shorter distance he can walk. (Zhou, Y., 2016)

2.2 The elderly's attention is easily distracted by the surroundings.

3. **Psychological condition**:

3.1 The classification of elderlies' daily activities places based on necessary, optimal and social activities are almost the same. Especially for the necessary places, always includes markets/shops/supermarket (Liao, A., 2019), education facilities (Liao, A., 2019) and medical facilities.

3.2 The elderly has diversification and individualization of demand for activity spaces, (Ding, W., 2010) such as indoor places, outdoor places, semi-open places, the places with tables and chairs, etc.

3.3 After retirement, the elderly easily feels lonely, always loves to stay in active places. (Yang, J., 2017) Especially those who are empty-nested elderlies, love going to lively places.

ENES

9.2 THE SITE

Speical identity

1. **Space**:

1.1 Varied ground-floor shops& markets. They are widely spread in the neighborhood, forming several market streets. Not only works for the blocks itself, but also for the nearby blocks, even for the restaurants in the whole city. This block is one of the six famous markets in Changsha City.

1.2. It exists some 'corridors' as the entrance or exit of lanes. To save space, some clusters used one of the ground-floor spaces of buildings as the entrance or exit of lanes in the blocks.

2. **Climate**: Changsha city belongs to subtropics monsoon climate region with distinctive four seasons, featuring abundant precipitation, and full and strong sunshine. It causes tall trees and semi-open places like eaves are always necessary for the local elderlies to avoid the rains and strong sun.

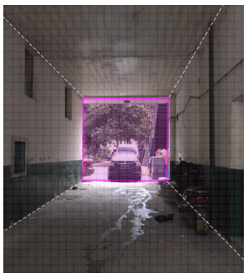


Image 119: Photo of street market

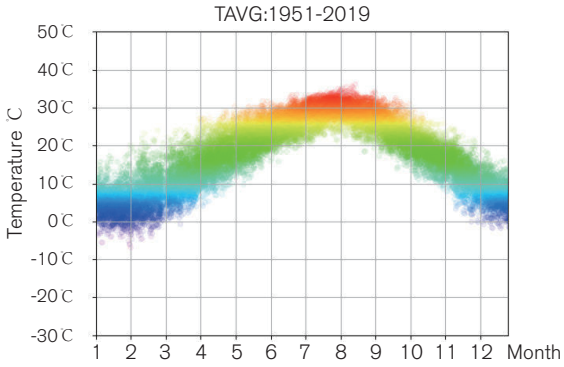
Source: Author

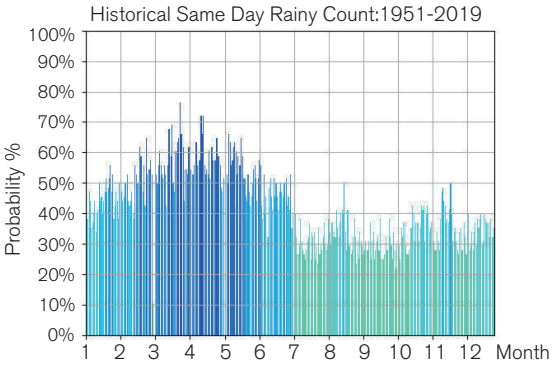
Image 120: Photo of corridor

Source: Author

Image 121: Photo of riverside public space

Source: Author





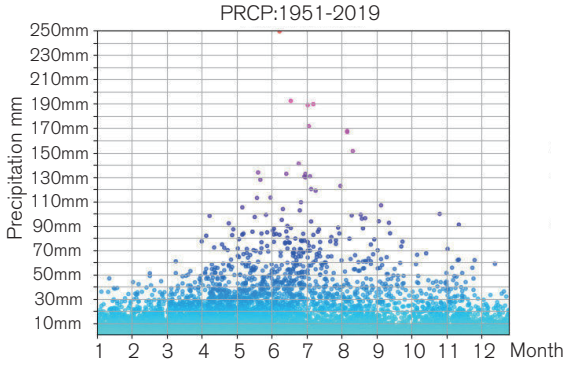


Figure 69-71: Climate situation of Changsha

Source: zhuanlan.zhihu.com

3. **Historical pedestrian planning**: Changsha's historical pedestrian is mainly composed of historical and cultural interest points, path system and supporting system to meet the recreational function of the pedestrian. West to Xiangjiang Middle Road, East to Furong Road, North to Sanyi Road, South to Baisha Road, the land area is about 8.1 square kilometers; North and South are about 6 kilometers long, East and West are about 1.7 kilometers wide, including the entire historical urban area. The map below shows part of the entire planning, and the purple area is the zoom in site of the thesis.

Figure 72: Historical pedestrian planning

Source: Changsha Historical pedestrian planning document
Visualization: Author

Common scenes

1. **Space**:

1.1 Public spaces are not only less, but also occupied, (Cao, J., 2019) (Wei Zhao, & Wu, Z., 2018) (Wei, Y., 2018) which has seriously squeezed the recreational space of residents.

1.2 Basic infrastructure ageing or lacking. (Wei Zhao, & Wu, Z., 2018) Such as lacking of street lighting system, ageing sewage system, etc.

1.3 The pedestrian quality is relatively low. (Wei, Y., 2018) They are always uneven, discontinuous, and been occupied, causing the usage of pedestrian is low.

2. **Building**:

2.1 Average building quality is low, (Wei Zhao, & Wu, Z., 2018) also includes those historic buildings, been poorly protected.

Image 122: Photo of public space in site
Source: Author

Image 123: Photo of lighting situation in site
Source: Zhang, L.

Image 124: Photo of green corner in site
Source: Author

Image 125: Photo of building quality in site
Source: Author

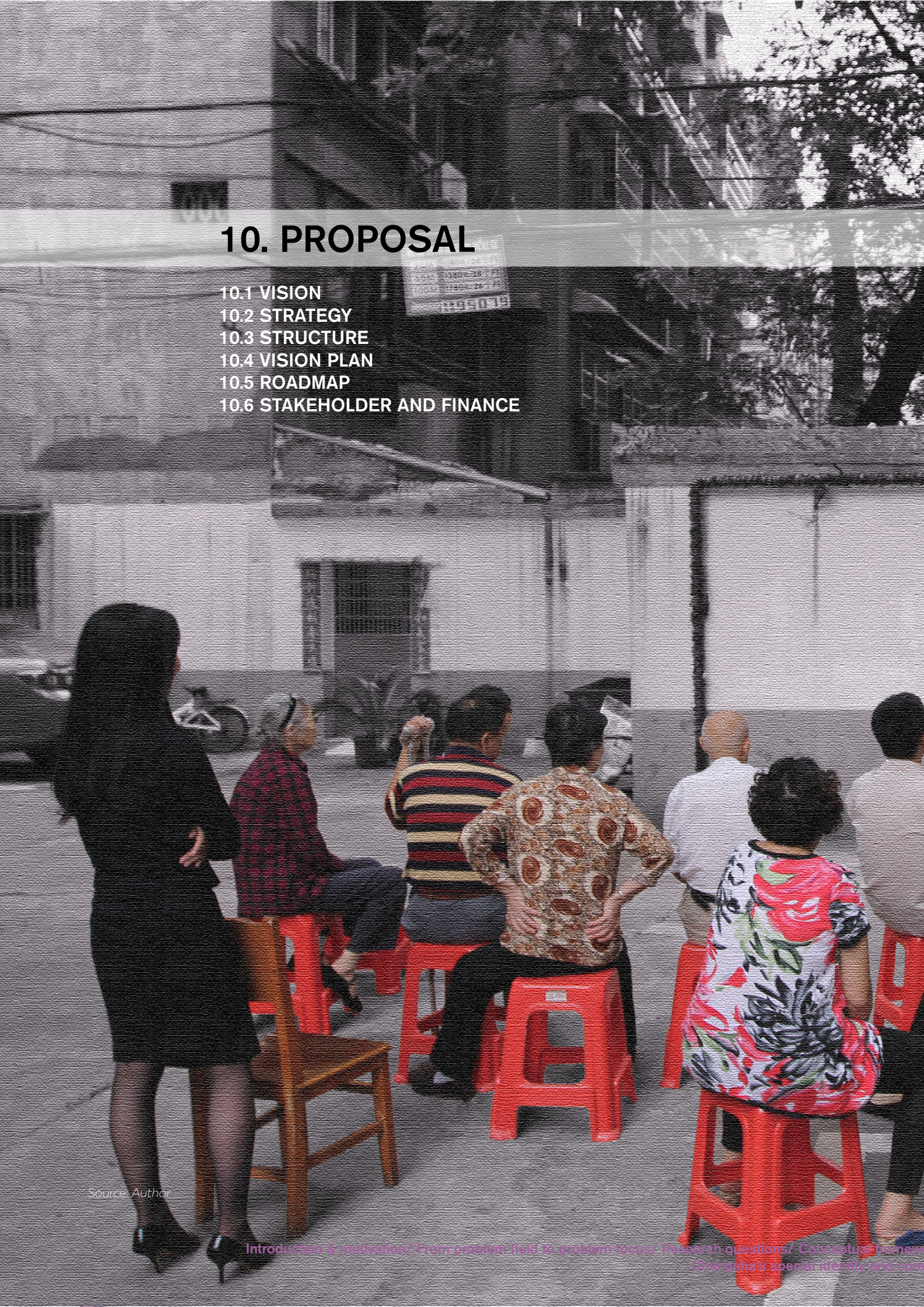
3. **Neighborhood service systems**:

3.1 There is a lack of funds for urban community pension services. It only relies on government investment and lacks multiple investment channels. (Shen, H., 2018) (Li, J., & Xu, Y., 2018)

3.2 The service provided by the neighborhood service system is relatively single, and the equipment and facilities are incomplete. (Shen, H., 2018) (Li, J., & Xu, Y., 2018)

10. PROPOSAL

10.1 VISION
10.2 STRATEGY
10.3 STRUCTURE
10.4 VISION PLAN
10.5 ROADMAP
10.6 STAKEHOLDER AND FINANCE



Source: Author

- Provide the walkable neighbourhood environment

10.1 VISION

财智中心地下停车场出入口
出口 EXIT
5
2.2m
入口 ENTER
雅枫交通设施有限公司
ganzie car lanes and parking lots
PARKING AREA
MEDICAL FACI
美罗汇健康药房
Merrok Health Pharmacy
-Zebra crossing
nd

LITIES

HISTORICAL BUILDING

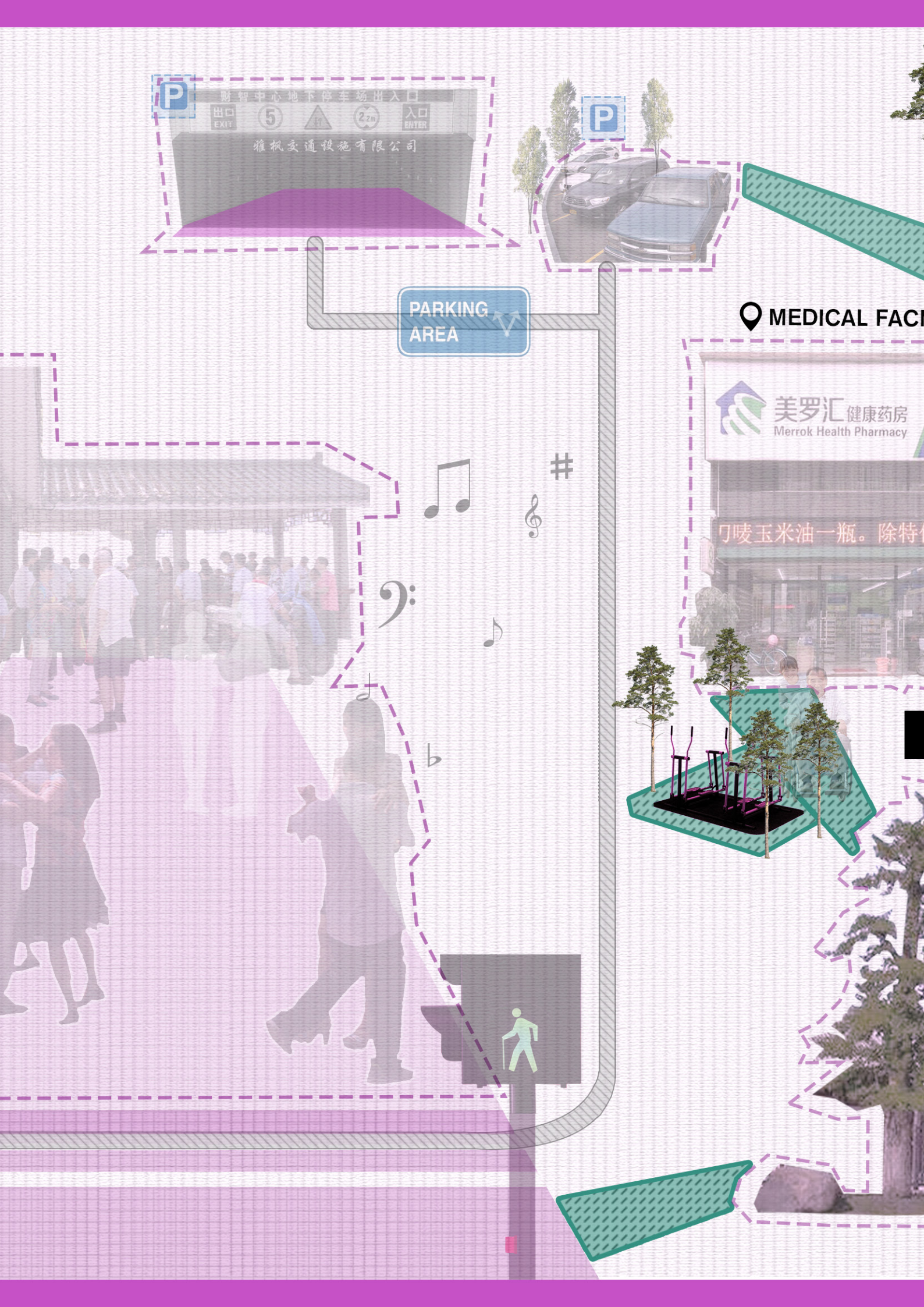
STREET MARKET

INDOOR RECREATIONAL ROOM

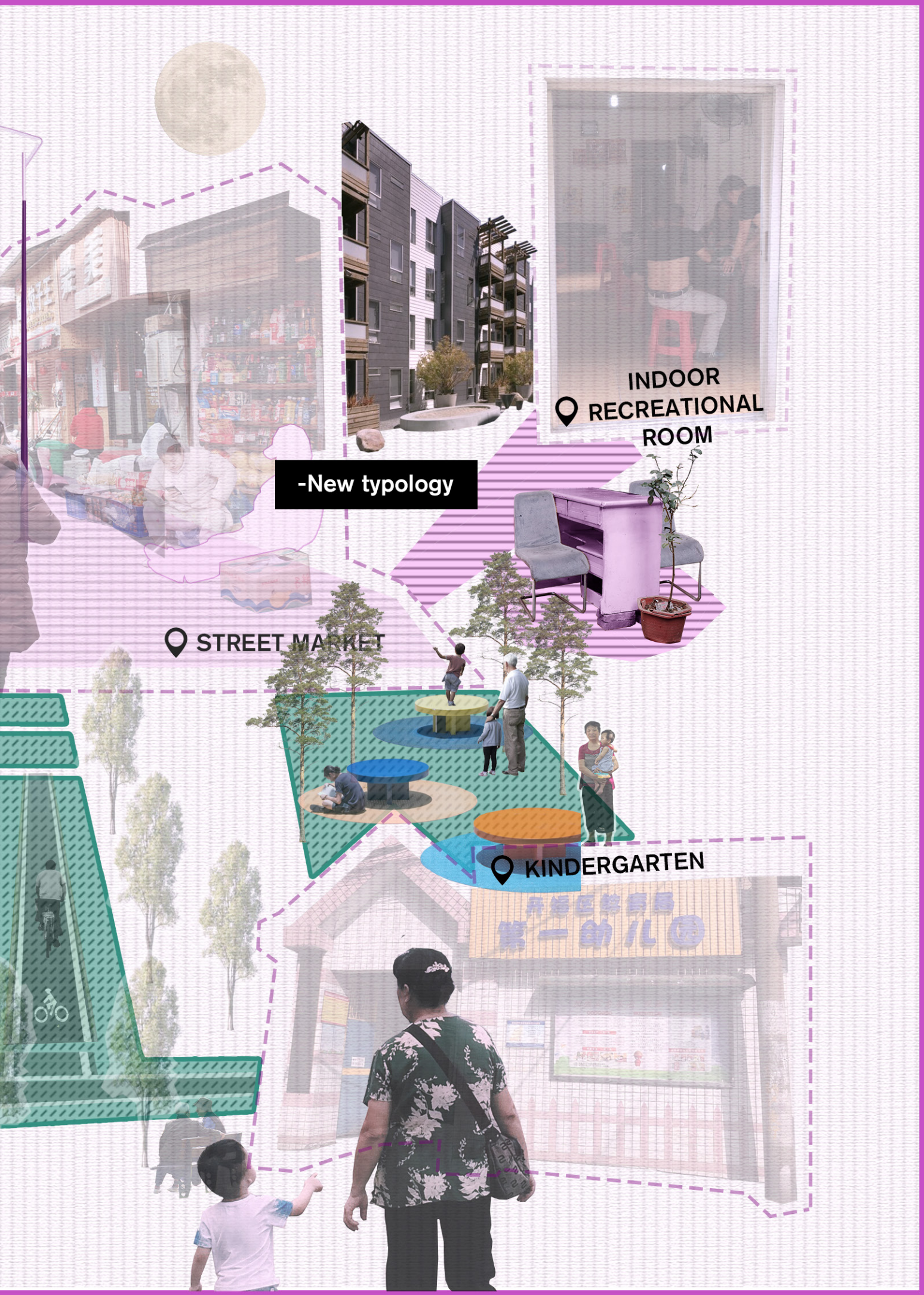
-Slow traffic priority

KINDERGARTEN

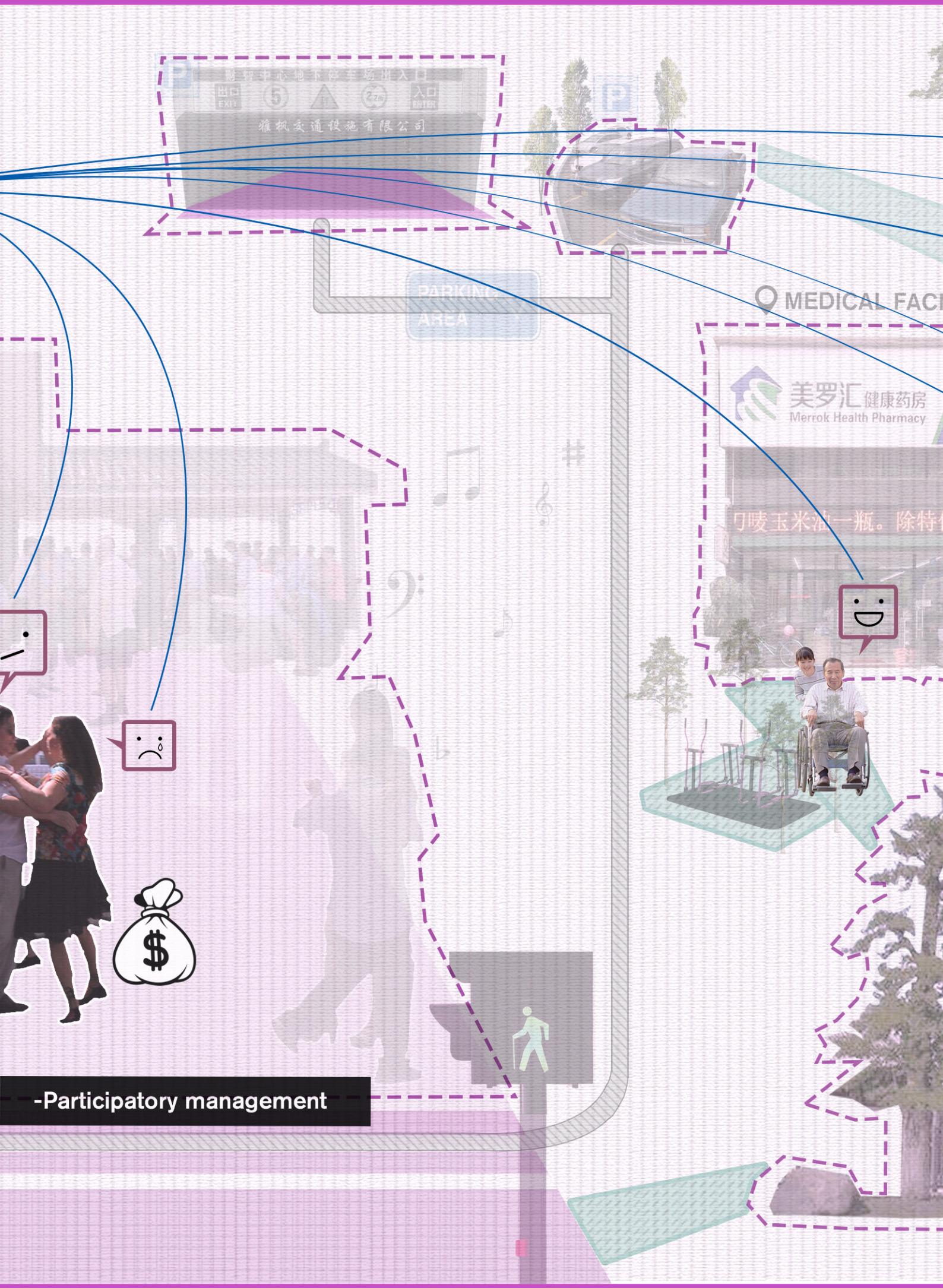
- Build up different-level public spaces network system

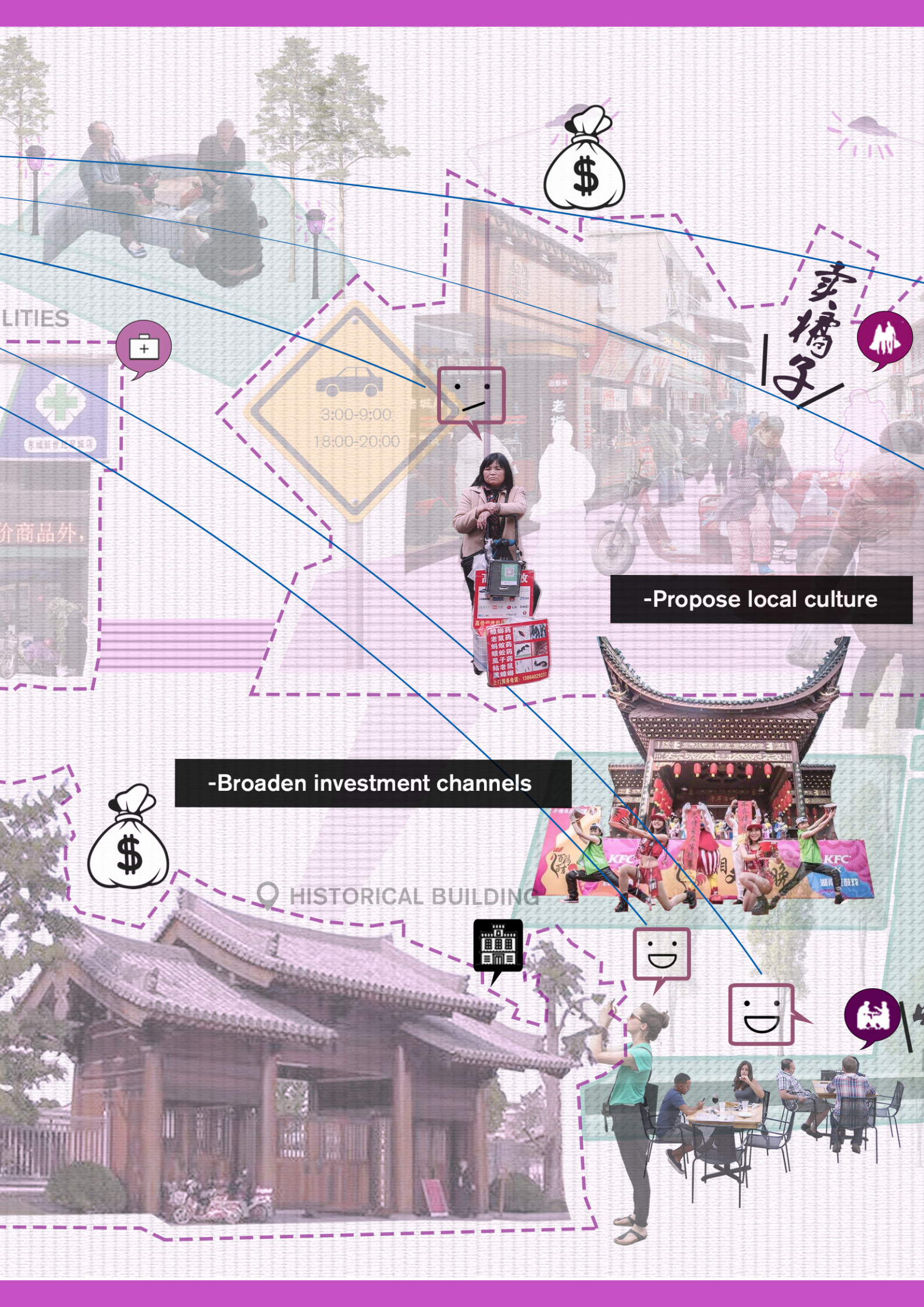

P
出口
EXIT
5
22m
入口
ENTER
雅枫交通设施有限公司
P
PARKING
AREA
MEDICAL FACI
美罗汇健康药房
Merrok Health Pharmacy

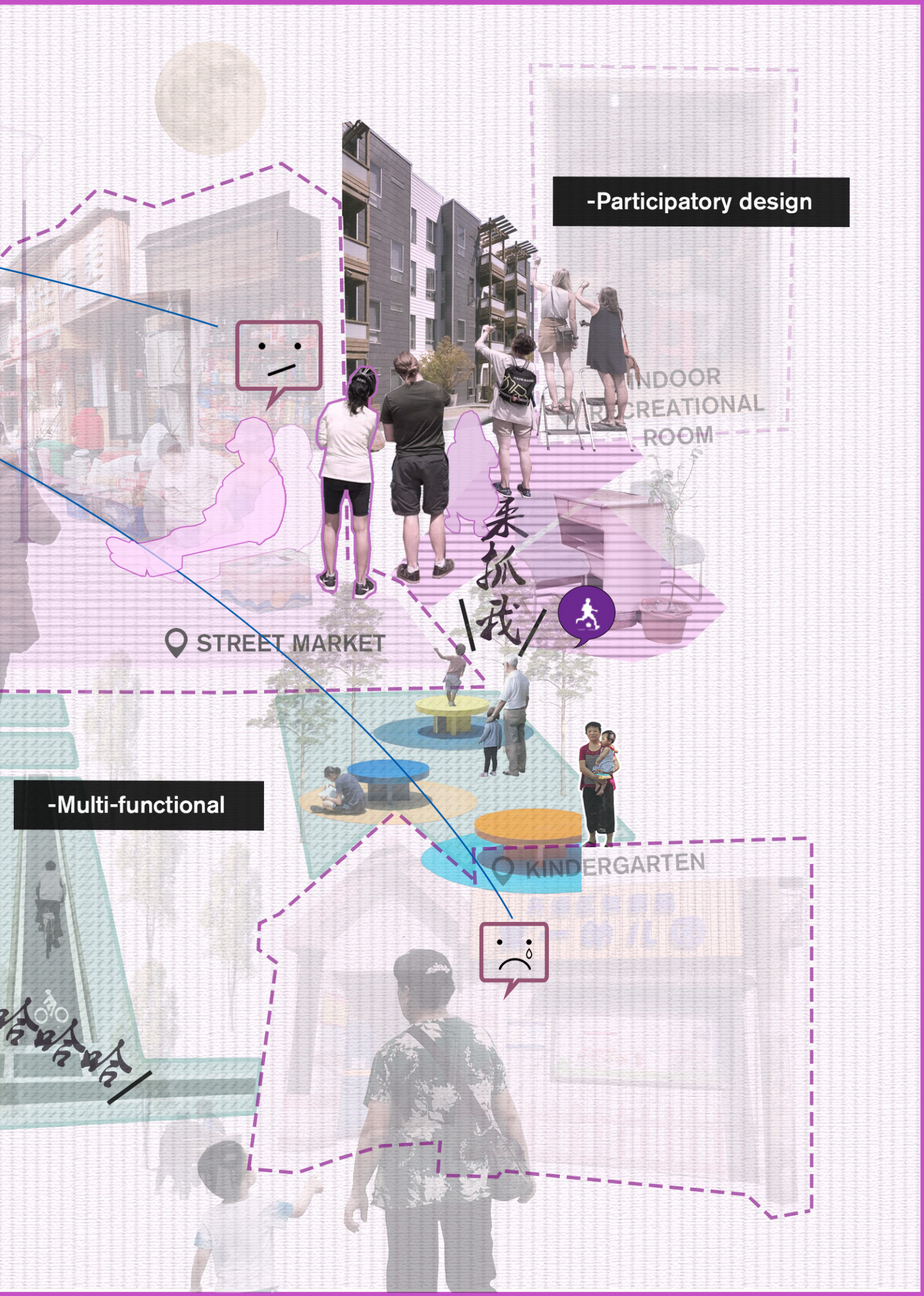
LITIES
3:00-9:00
18:00-20:00
-Varied clusters
HISTORICAL BUILDING

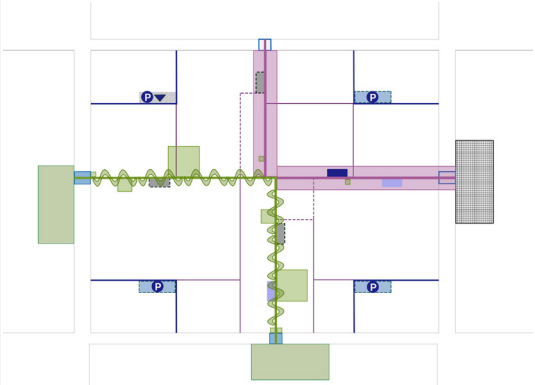

INDOOR
RECREATIONAL
ROOM
-New typology
STREET MARKET
KINDERGARTEN

- Make everyone has the sense of belonging


雅枫交通设施有限公司
PARKING AREA
MEDICAL FACI
美罗汇健康药房
Merrok Health Pharmacy
-Participatory management


LITIES
3:00-9:00
18:00-20:00
卖摊子
-Propose local culture
-Broaden investment channels
HISTORICAL BUILDING


-Participatory design
INDOOR
RECREATIONAL
ROOM
来抓我
STREET MARKET
-Multi-functional
KINDERGARTEN
哈哈哈

10.2 STRATEGY	CONNECTIVITY	
SPACE	1. Determining neighborhood main connectivity network 1.1 Considering the connection with nearby important facilities, like big green infrastructure, shopping mall, etc., and also with nearby neighborhood. 1.2 Connecting as much as necessary places, such as markets/ shops, educational facilities, medical facilities, etc. 1.3 Connecting as much as protected buildings, such as cultural relic buildings, historical buildings, etc. 1.4 Considering the connectivity and accessibility of the lanes	
	2. Reorganizing the lane system and enhancing the quality of walkable 2.1 Inside the block 2.1.1 Selecting parking area. For underground parking area, keep as much as possible. For existing ground parking area, according to actual car requirement, keep or add the places which are near city roads and has the potential to be transformed into green space, since it won't be needed if there is less cars in the future. 2.1.2 Based on the main connectivity network, and location of parking area, dividing the lanes mainly into two hierarchy: one has slow traffic priority, the other is mix-used. According to rush hours, the slow traffic priority lanes will open during rush hours for cars, but during the other time, the lanes will be totally car-free except emergency. For those mix-used lanes, it will always connect with city roads which surrounds the block and main parking lots both inside and outside blocks, helping car owners quickly find the place to park their car before approaching the pedestrian priority area. 2.1.3 Since lane system is always complex and irregular in old neighborhood, it is possible to adjust and add paths when necessary to improve lane accessibility, to make it wide enough for the emergency cars. 2.2 Outside the block 2.2.1 Enhancing the safety elements among the crossings around the block. Highlighting the most important crossing by having the facilities to control speed of car, such as deceleration zone.	
GOVERNANCE	6. Developing participatory design and cooperation 1.1 Encouraging residents to join the design process of adjusting the hierarchy of lanes and also adding new paths when necessary.	

3. Transforming neighborhood clusters

3.1 Renovating protected buildings, buildings in the market street and demolishing dangerous buildings. For those historical protected buildings, it will be transformed into indoor public space, not only works for residences, but also works for the tourism.

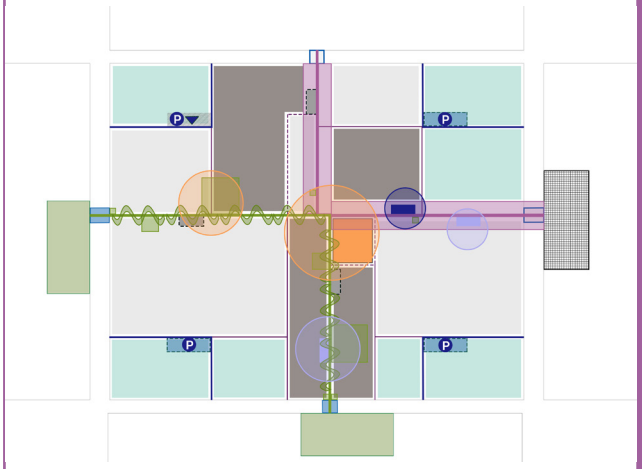
3.2 According to the connectivity network, lanes system and nearby facilities, define the boundary, theme of different clusters, the order and connection with the connectivity network and with other clusters. The public space and landscape along the connectivity network and in the clusters need to be designed to happen varied activities, meet the requirements for different groups of residents and enhance local culture.

3.3 Based on the different characters of different clusters, building up new housing typology and green public space. The transformation will start from one cluster as the pilot project. All renewal process of clusters will take place into several stages according to the residents' willingness and the quality of the buildings. New housing and green public space should be aged-friendly, especially has access facilities, and have good sunlight &ventilate condition.

3.4 In each small block, the first stage of transformation would start with demolishing condemned buildings. What would replace them are taller and more neatly organized housings in order to accommodate both the original and new residents. The second stage would aim at voiding the central part of each block to obtain more effective public space. The last stage would be replacing the obsolete buildings along the lanes. The overall numbers of new housings should be more than the demolishing one, making sure every local resident still have the right to live in the original neighborhood.

4. Transforming basic infrastructure

4.1 With the process of demolishing housing, replacing the aged electrical system, water drainage system, adding the road lighting system and so on.



5. Broadening investment channels

5.1 The new economic model does not rely solely on government investment, but on the development of multi-pillar support and broadening investment channels mainly from four aspects: government support, resident support, corporate investment and non-profit organization.

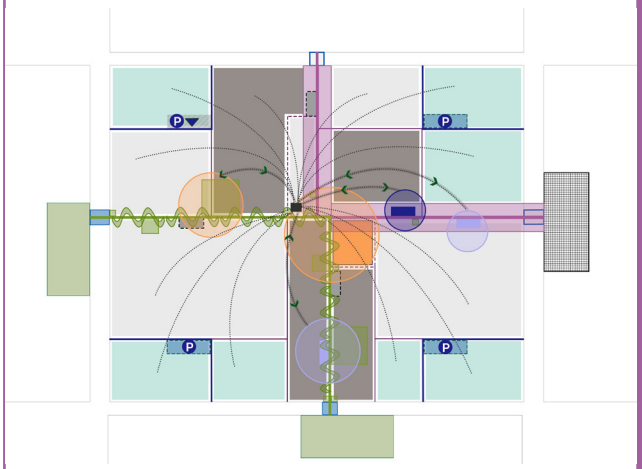
6. Developing participatory design and participatory management

6.1 Neighborhood information service center will be newly set up on the main lane as a hub for information dissemination, consultation, feedback, equipment borrowing, management, etc. From the initial stage, in the dynamic process of design and management, the center will invite different stakeholders to hold round tables regularly to discuss the problems existing in the design and use of community public space and facilities, and maximize the interests. Encouraging neighborhood residents to join the process of design and management to promote neighborhood service systems for the elderlies and revitalize old neighborhoods.

7. Relocating the original function of the buildings and residents inside

7.1 During transforming public space process, it should always firstly start with government owned buildings and dangerous buildings.

7.2 If it is necessary to transform private buildings or outdoor public spaces, it needs to negotiate with the users with relocating the original function, such as residence, parking, hanging clothing, etc. For residence relocation, firstly consider the new housing inside original block.



10.3 STRUCTURE

Connectivity

Figure 73: Street market line

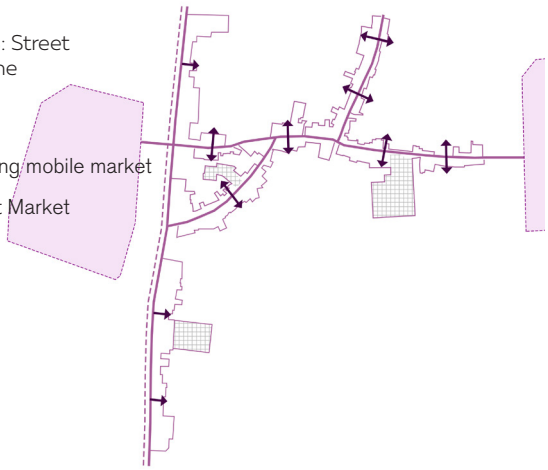


Figure 74: Historical lanes netwrok& tourism line

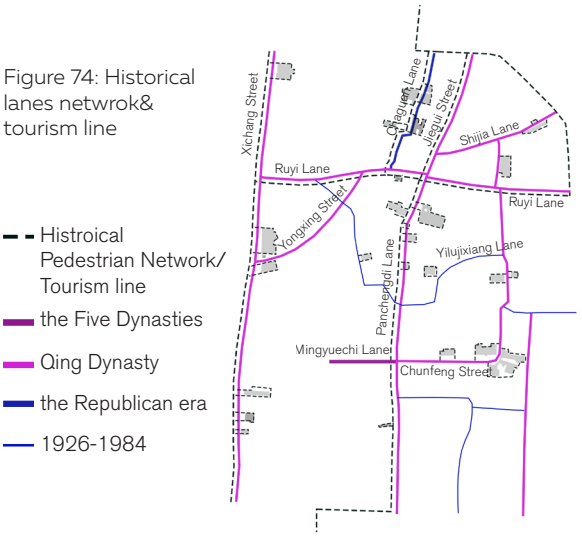


Figure 75: Green line

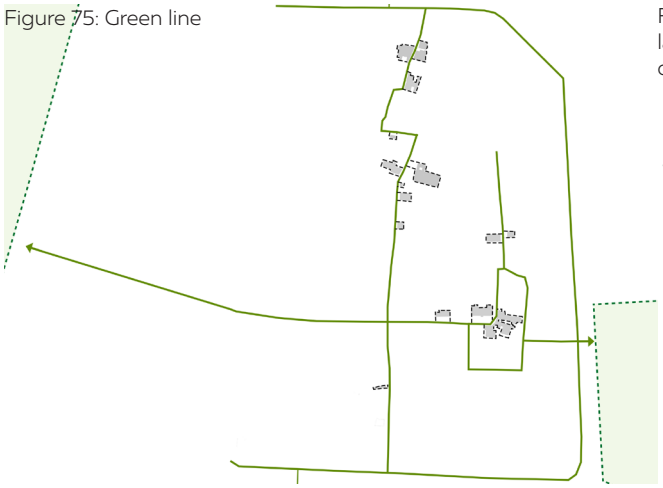
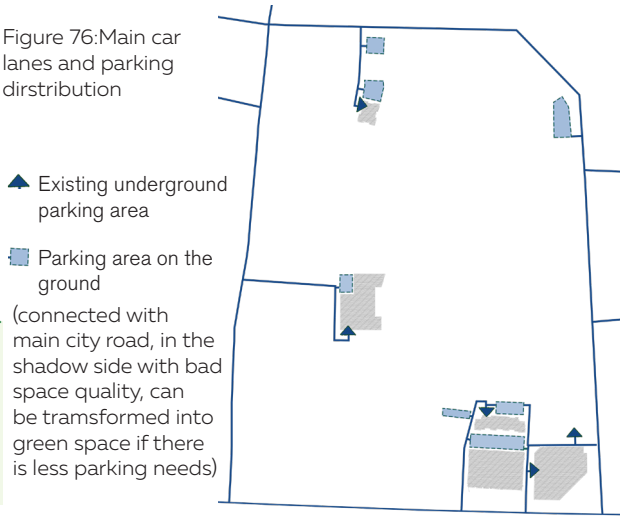


Figure 76:Main car lanes and parking dirstribution



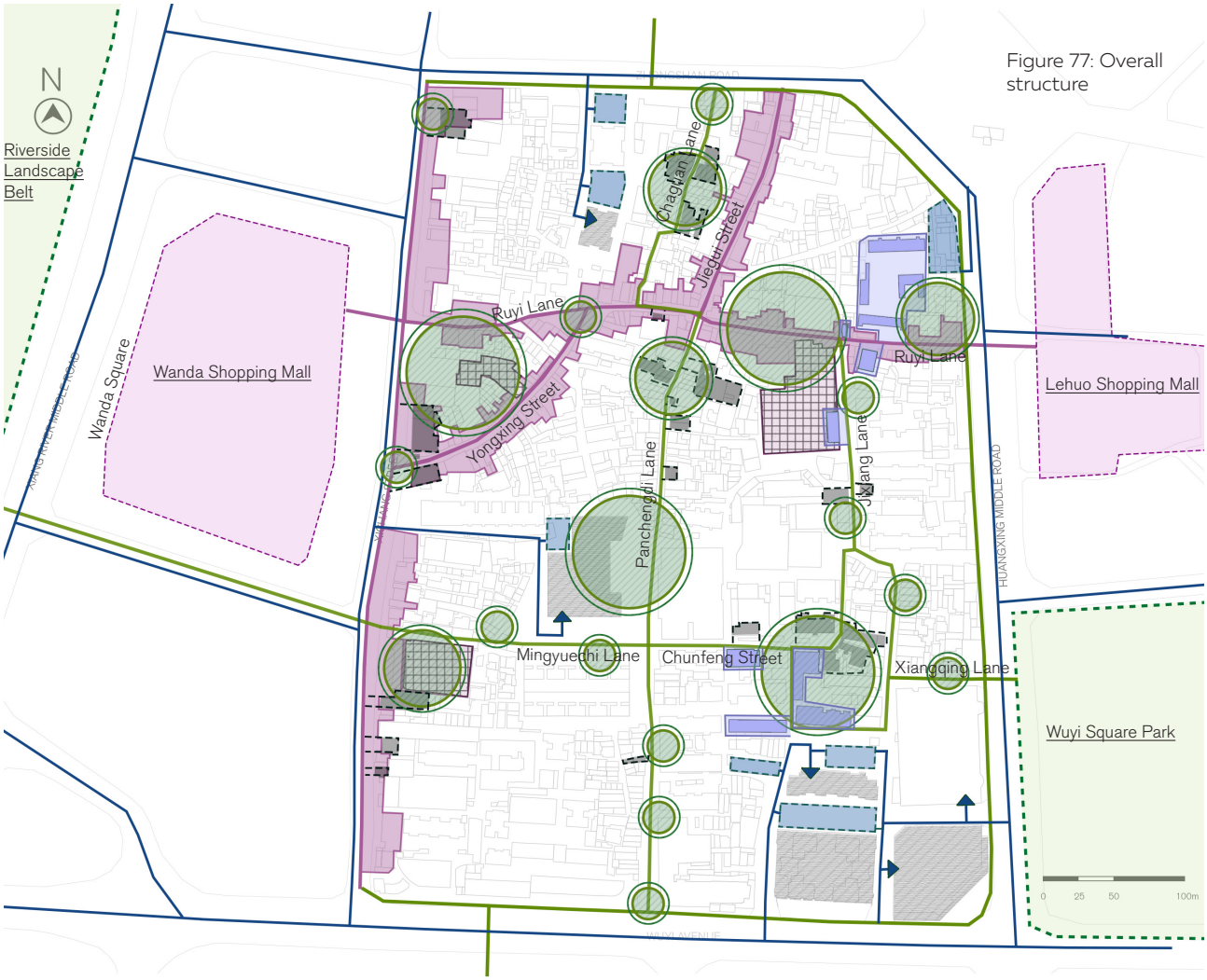


Figure 77: Overall structure

Figure 78: Connection with sourroundings area and facilities

Xiyuanbeili Historic Area
(Tourism Area)
Wanda Office Building
Chaozong Historic Area
(Tourism Area)
Youth Center
Riverbank Landscape Belt
Wanda Wenhua Hotel
Lehuo Shopping Mall
Wanda Shopping Mall
Xindaxin Office Building
Wanda Residence
Wuyi Square Park
Taiping Historic Area
(Tourism Commercial Area)
Commercial Area
Commercial Area
Commercial Area
Commercial Area

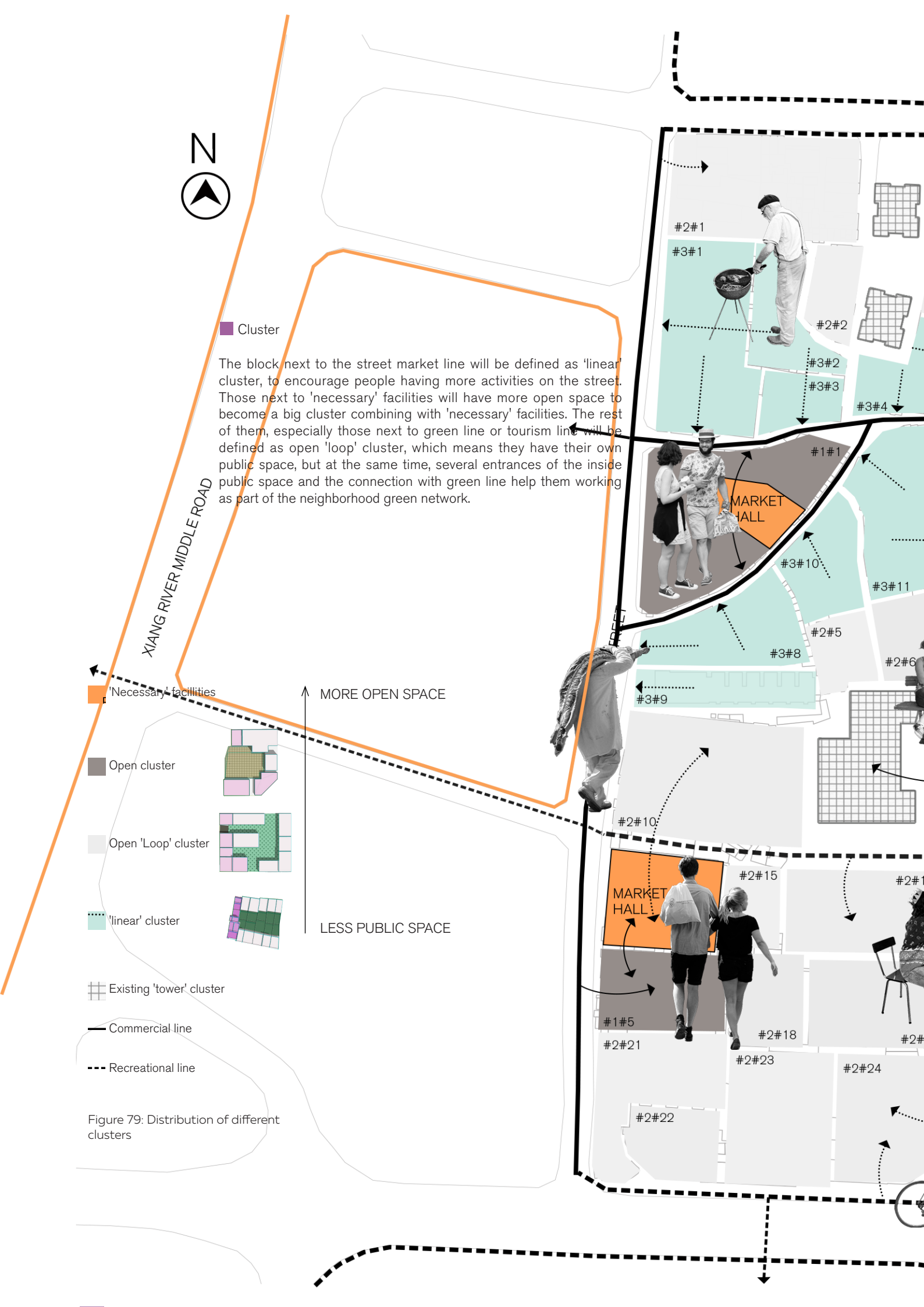


Figure 79: Distribution of different clusters

ZHONGSHAN ROAD
#3#7
#2#4
#3#5
#2#3
#1#2
#3#6
EDUCATION FACILITIES
MARKET HALL
#2#7
#2#9
#2#8
HUANGXING MIDDLE ROAD
#2#13
#2#11
#1#4
#1#3
#2#12
#2#17
MEDICAL FACILITIES
EDUCATION FACILITIES
#2#14
EDUCATION FACILITIES
#2#20
#2#25
0
25
50
100m
WUYI AVENUE

Figure 80: Vision plan

ZHONGSHAN ROAD
Chaguan Lane
Jiegui Street (Rich)
Ruyi Lane (Wishful)
Jixiang Lane (Lucky)
Panchengdi Lane
Chunfeng Street
Xiangqing Lane
HUANGXING MIDDLE ROAD
Lehuo Shopping Mall
Wuyi Square Park
0
25
50
100m
WUYI AVENUE

Figure 81: Public space network

ZHONGSHAN ROAD
Culture theme
#4
Youthful theme
#2
Cultural theme
#4
#3
Sporty theme
HUANGXING MIDDLE ROAD
#1
n opera theme
Youthful theme
#2
0
25
50
100m
WUYI AVENUE

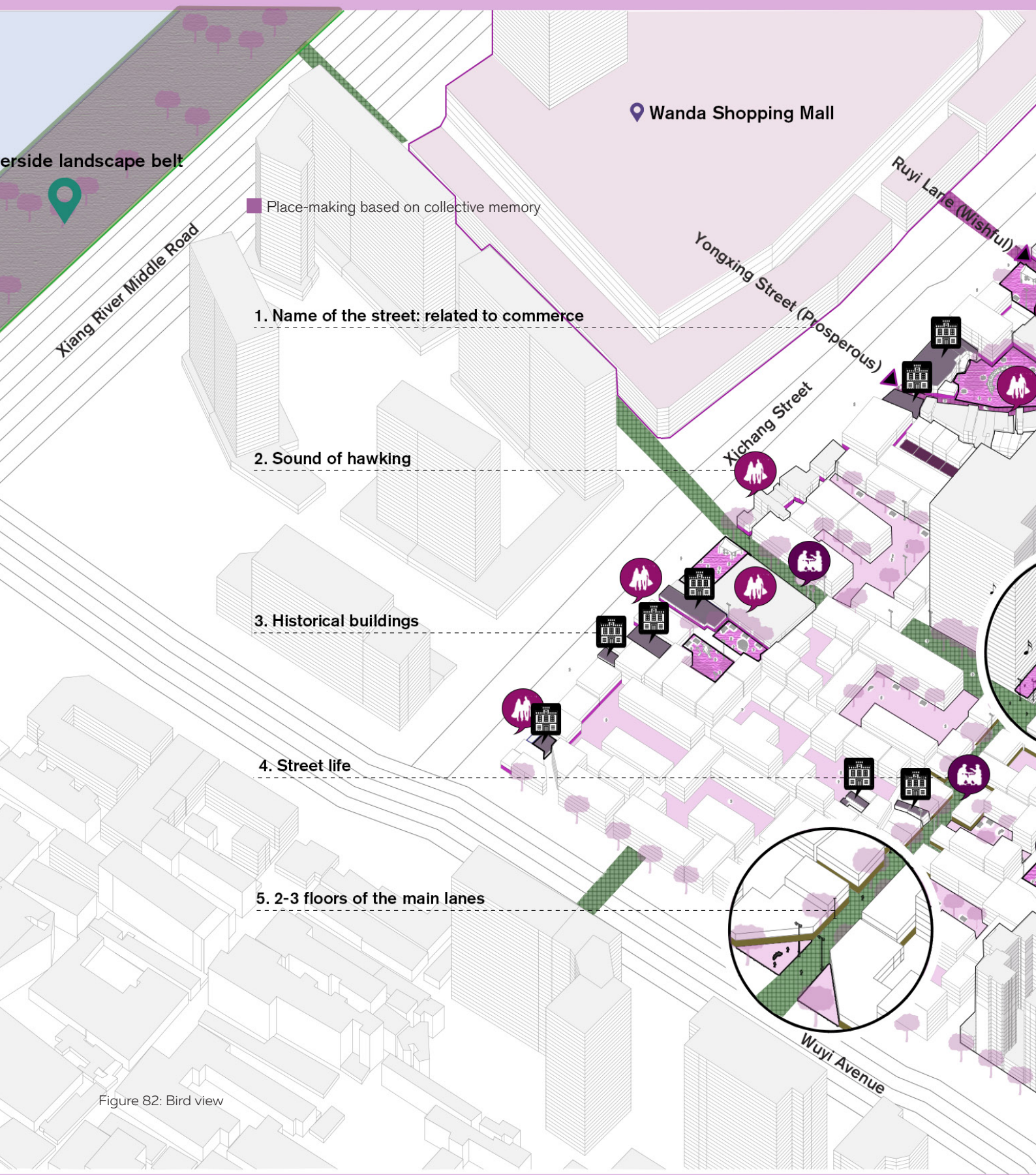


Figure 82: Bird view

Zhongshan Road
Jiegui Street (Rich)
6. Education facilities
7. Medical facilities
8. Local culture: Hunan opera
Ruyi Lane (Wishful)
Lehuo Shopping Mall
Huangxing Middle Road
Wuyi Square Park
(Under construction)

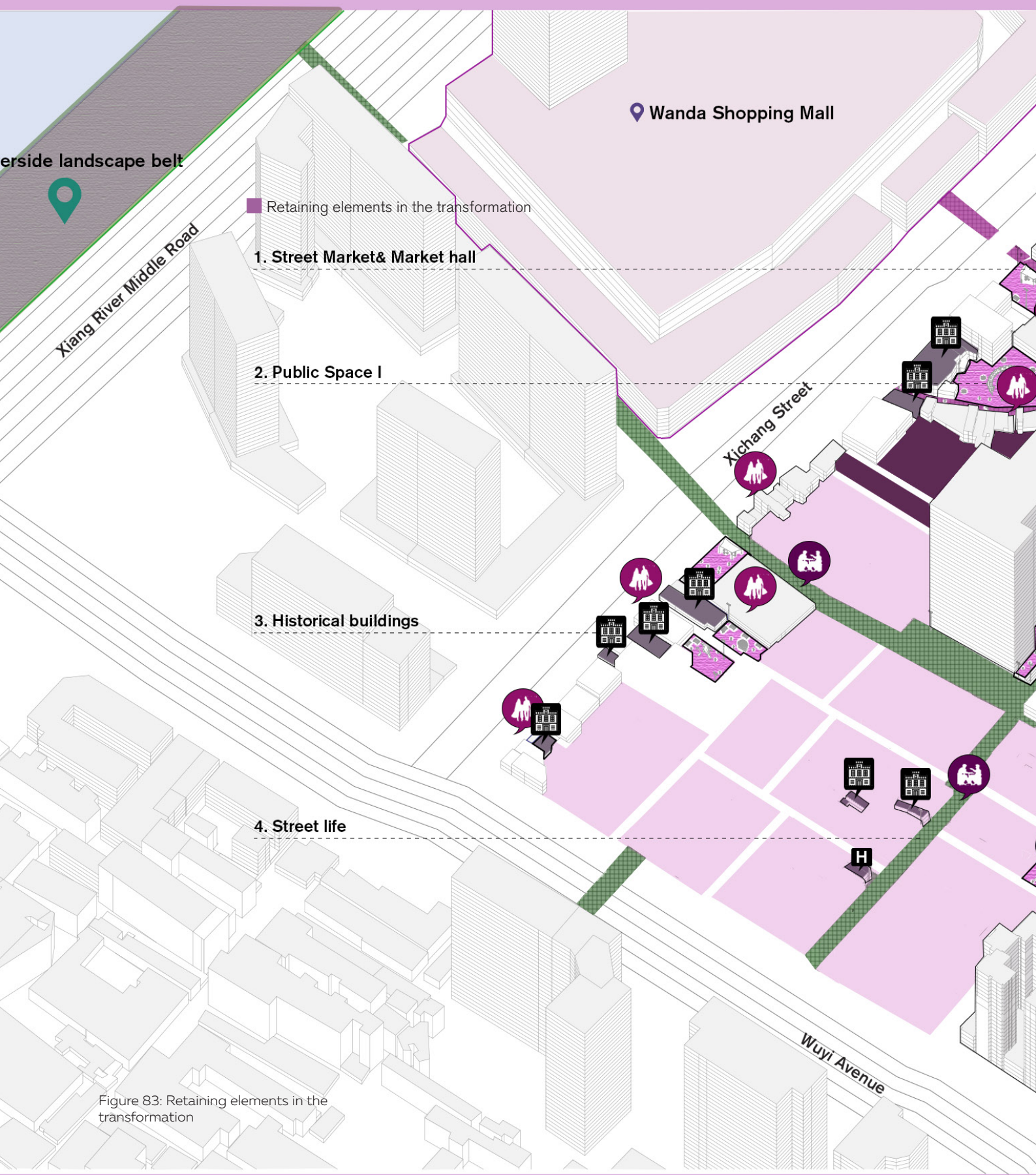
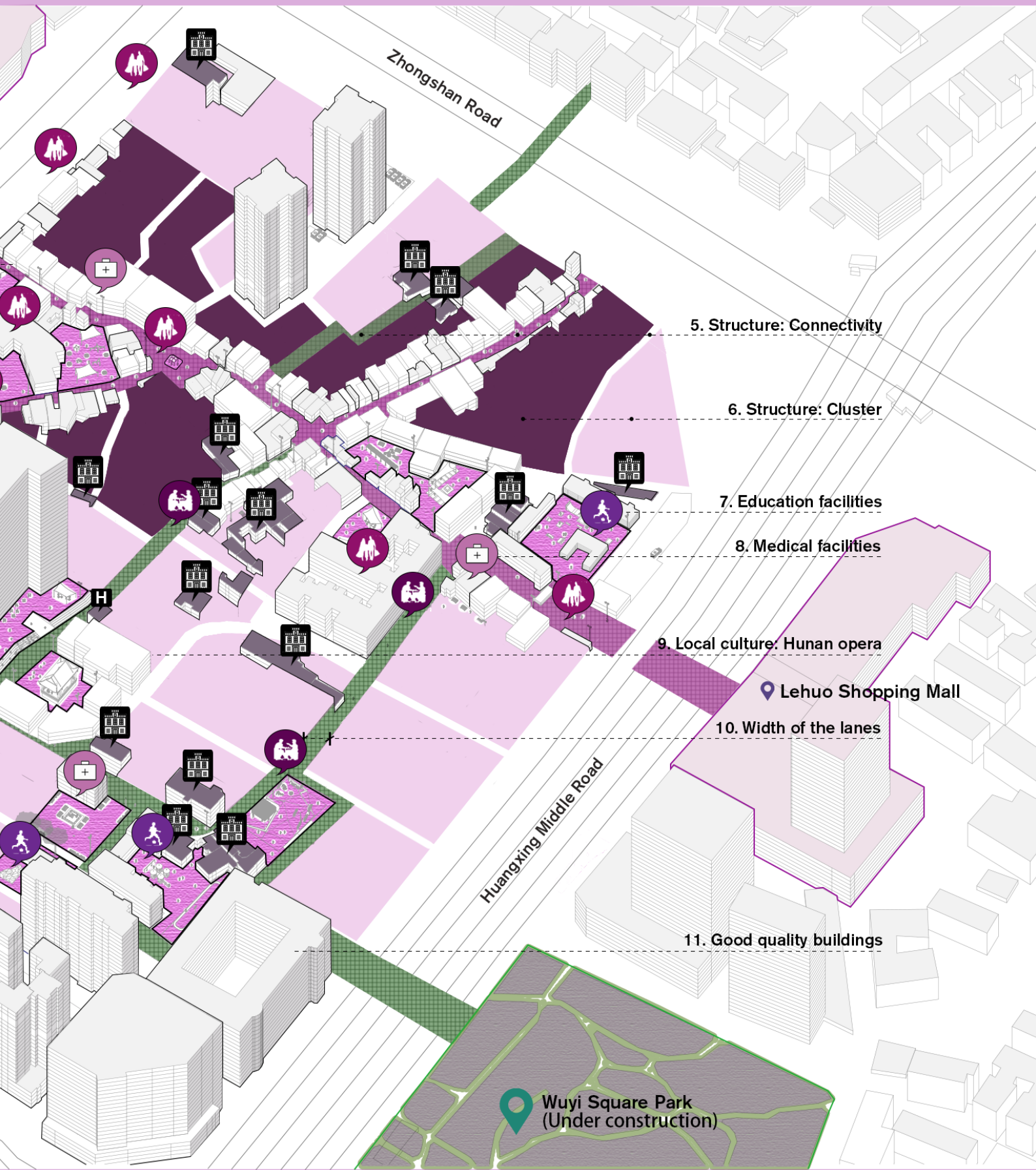


Figure 83: Retaining elements in the transformation


Zhongshan Road
5. Structure: Connectivity
6. Structure: Cluster
7. Education facilities
8. Medical facilities
9. Local culture: Hunan opera
Lehuo Shopping Mall
10. Width of the lanes
Huangxing Middle Road
11. Good quality buildings
Wuyi Square Park
(Under construction)

Variable elements in the transformation

PRINCIPLES

1. PLACE: the overall numbers of new housings should be more than the demolishing one

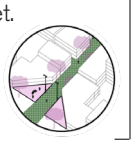
- Housing resettlement (in the same neighborhood)
- Currency allocation

2. ORIGINAL RESIDENTS

In each small block, the first stage of transformation would start with demolishing condemned buildings. If the average quality of these buildings is more or less the same, transformation would start with demolishing low density. What would replace them are taller and more neatly organized housings in order to accommodate both the original and new residents. The second stage would aim at voiding the central part of each block to obtain more effective public space. The last stage would be replacing the obsolete buildings along the lanes.

Should be aged-friendly, especially has access facilities, and have good sunlight &ventilate condition.

- Buildings along the slow traffic priority lanes should be lower than 4 floors to keep the original senses of historical street.



Commerce mixed with residence

Only residence

Should be aged-friendly, especially has access facilities, and have good sunlight &ventilate condition.

Should be designed to happen varied activities, meet the requirements for different groups of residents and enhance local culture.

For underground parking area, keep as much as possible. For existing ground parking area, according to actual car requirement, keep or add the places which are near city roads and has the potential to be transformed into green space, since it won't be needed if there is less cars in the future.

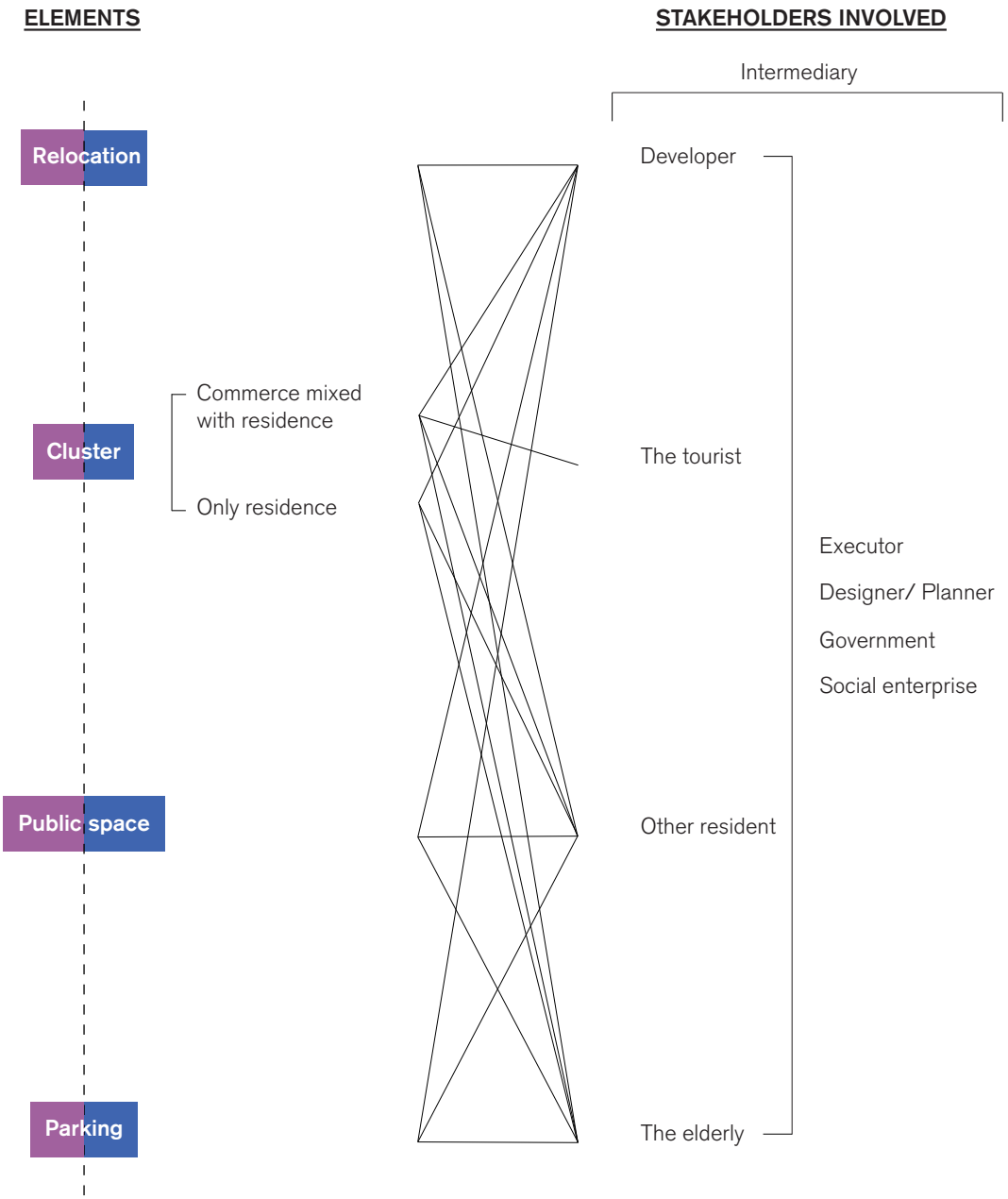


Table 11:Variable elements in the transformation

Process of transformation

The whole transformation process can mainly be divided into three steps. Firstly, renovating the reserved buildings. Secondly, renewing those buildings which blocked the necessary lanes, occupied the planned main public space or buildings themselves were dangerous. Last, according to principles, residents' willing, negotiation and the real situation, renews the rest, flexible buildings. The two maps in this page show two extreme situations: the right one is only renewing the must-renewed buildings, the left one is renewing all flexible ones as well.

Public space I

Renewed buildings

Reserved buildings

Flexible buildings

Figure 84: Extreme vision plan 1

Figure 85: Extreme vision plan 2

Process of transformation

PRINCIPLE	ORIGINAL CLUSTER	CLASSIFICATION OF CLUSTER	VISION PLAN1
In the block which mixed with different stages, always started with the condemned one. Then dealed with those blocked the lanes.		Open 'Loop' cluster	
If the average quality of these buildings are more or less the same, a transformation would start with demolishing low density. What would replace them are taller and more neatly organized housings to accommodate both the original and new residents. The overall number of new housings should be more than the demolishing one, making sure every residents still have the right to live in the original neighborhood. Besides, the buildings along the surrounding street should be taller to block the noise from the outside car road.		Open 'Loop' cluster	
The new 'linear' typology should combine with two types of buildings, one is individual flat, the other is centralized apartment. The first stage of renewal should build centralized apartment for later relocation.		'linear' cluster	

Table 12:Process of transformation

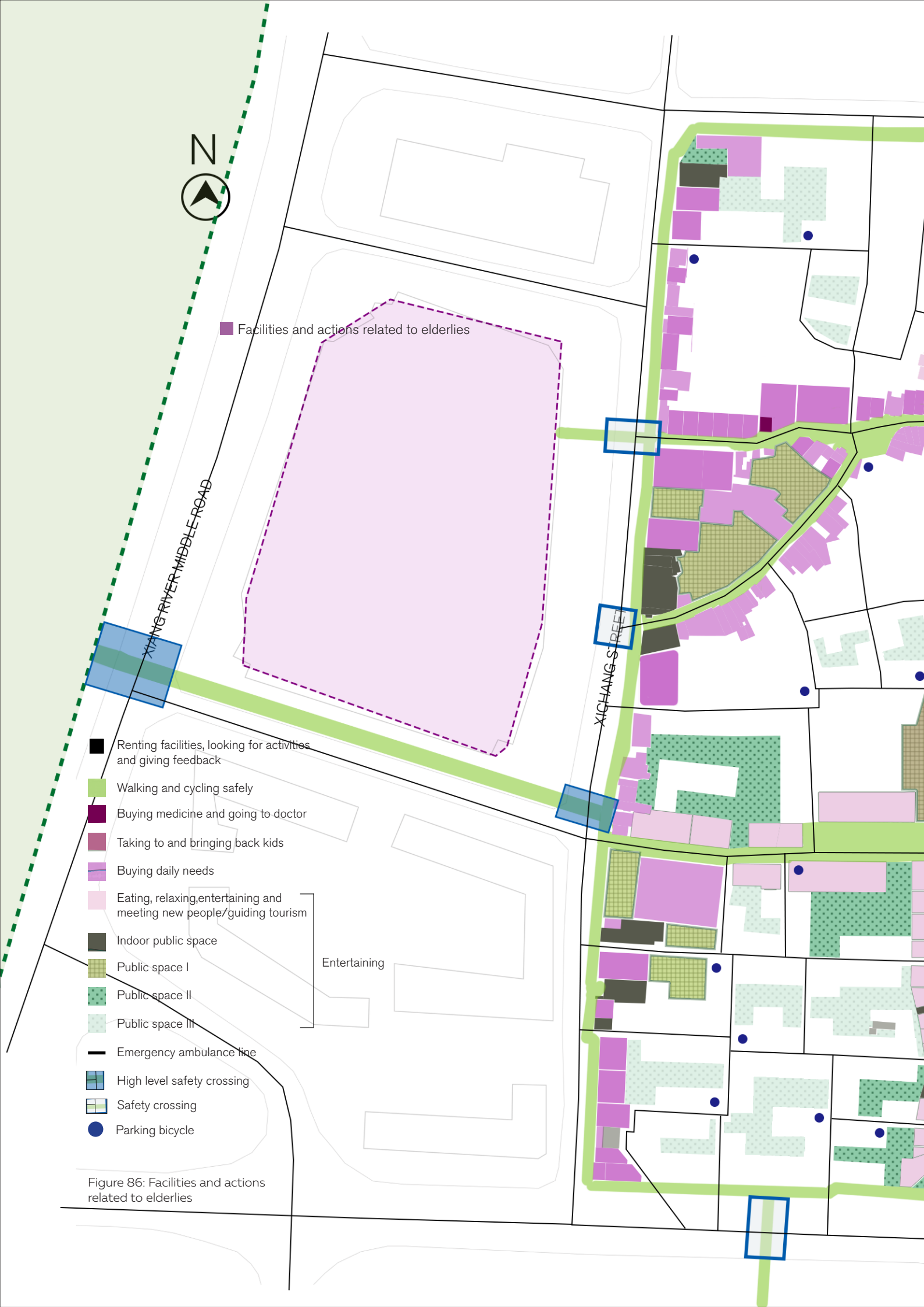


Figure 86: Facilities and actions related to elderlies

HUATANGXING MIDDLE ROAD
0
25
50
100m

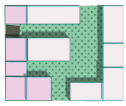
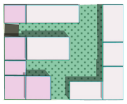
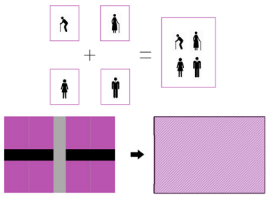
	AGE LEVEL	LIVING PATTERN	HOUSING TYPOLOGY	
50-65 Years old	**Middle Aged**	**Live on themselves**	-Individual flat	-Apartment 
65-75 Years old	**Real Seniors**	**Live on themselves/ live partly on themselves**	-Apartment 	
75-90 Years old	**Younger Seniors**	**Live partly on themselves/ cannot live on themselves**	-Sharing apartment 	

Table 13: Main facilities and actions related to the profile of different age elderlies in site

PUBLIC SPACE CLASSIFICATION

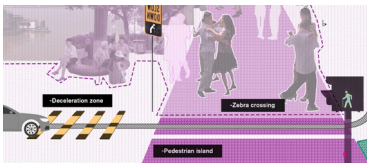
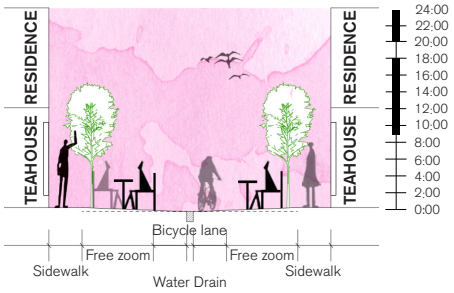
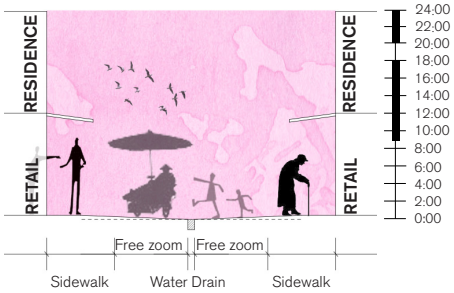
Outside the neighborhood		Inside the neighborhood
-Highlights sidewalk outside the neighborhood 	-Highlights free space	-Highlights sidewalk inside the neighborhood  

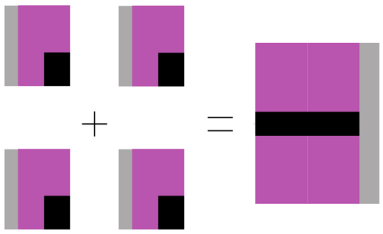
Figure 87: Public space related to different aged elderlies

NGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
0
25
50
100m

'Sharing' typology

In historical neighborhood renewal process, there are several qualities to which attention needs to be paid, at the same time, they are contradicting with each other. In the historical neighborhood, to save city memory, it is important to keep the original street network and its scene. However, these lanes' network density is too high, the lanes themselves are too narrow, to control the building height in the whole neighborhood when considering the sunlight. Since the density and plot ratio is always high in the old neighborhood, on the premise of improving ventilation and lighting condition, how to maintain or improve the residential capacity of the block becomes a major problem.

As it is analyzed in the front part, the main groups of residents are seller, young family, the elderly, the graduate and university student. Since the average income of these groups are relatively low, in order to enable these people to relocate in the original place after the renewal, the orientation of neighborhood housing is social housing.

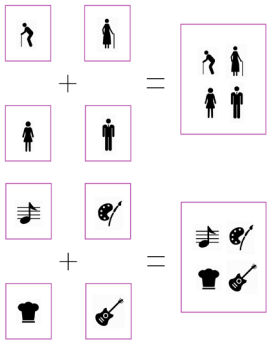


Private room with bathroom

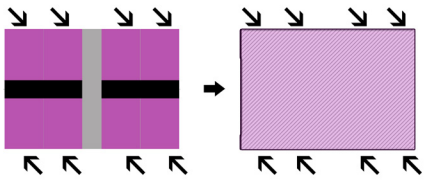
Kitchen

Traffic space (stairs, corridor...)

To improve the space utilization rate and the residential capacity, can propose 'sharing' typology. Since food culture is really important in China, kitchen can be the most important sharing part for residents, and also with traffic space. It can help to create more opportunities for people meeting with each other.



In Taiwan, it already has some pilot projects for transforming the flat into co-housing for elderlies and young people living together which gets positive feedback. (Imagexx) On the one hand, young people and elderlies can share and learn knowledge from each other. On the other hand, young people can largely decrease the loneliness of elderlies and easily notice their emergency situation. According to the timetable of different groups, only cooking time and bedtime are almost overlapping, different groups of people still can have their privacy in the rest of the time.



For the sharing typology, it is important to have good sunlight condition since it can only have one side of window.

Image 126-129: Co-housing in Taiwan

Source: vision.udn.com

Source: ankemedia.com

Source: Taiwan News

Source: lkk.ntpc.gov.tw

THE ELDERLY	THE YOUNG
The elderlies who live alone and with bad health condition do not necessarily go to nursing home.	The young who lives in co-housing will get discounts from renting.
The young can partly take care of the elderly, and pass the passion and vitality to the elderly.	The elderly can provide experience of jobs, life and hobbies.
The young can provide help especially from technology aspect and give emotion support.	From the experience of living with the elderly, the young can fully understand the whole process of ageing, changing stereotype.

Advantages of co-housing

Table 14: The advantages of Co-housing in Taiwan

Source: Lianhebao. taiwan

'Sharing' lane——slow traffic priority lane

Street market (only ground floor is commerce, upper still are residence)

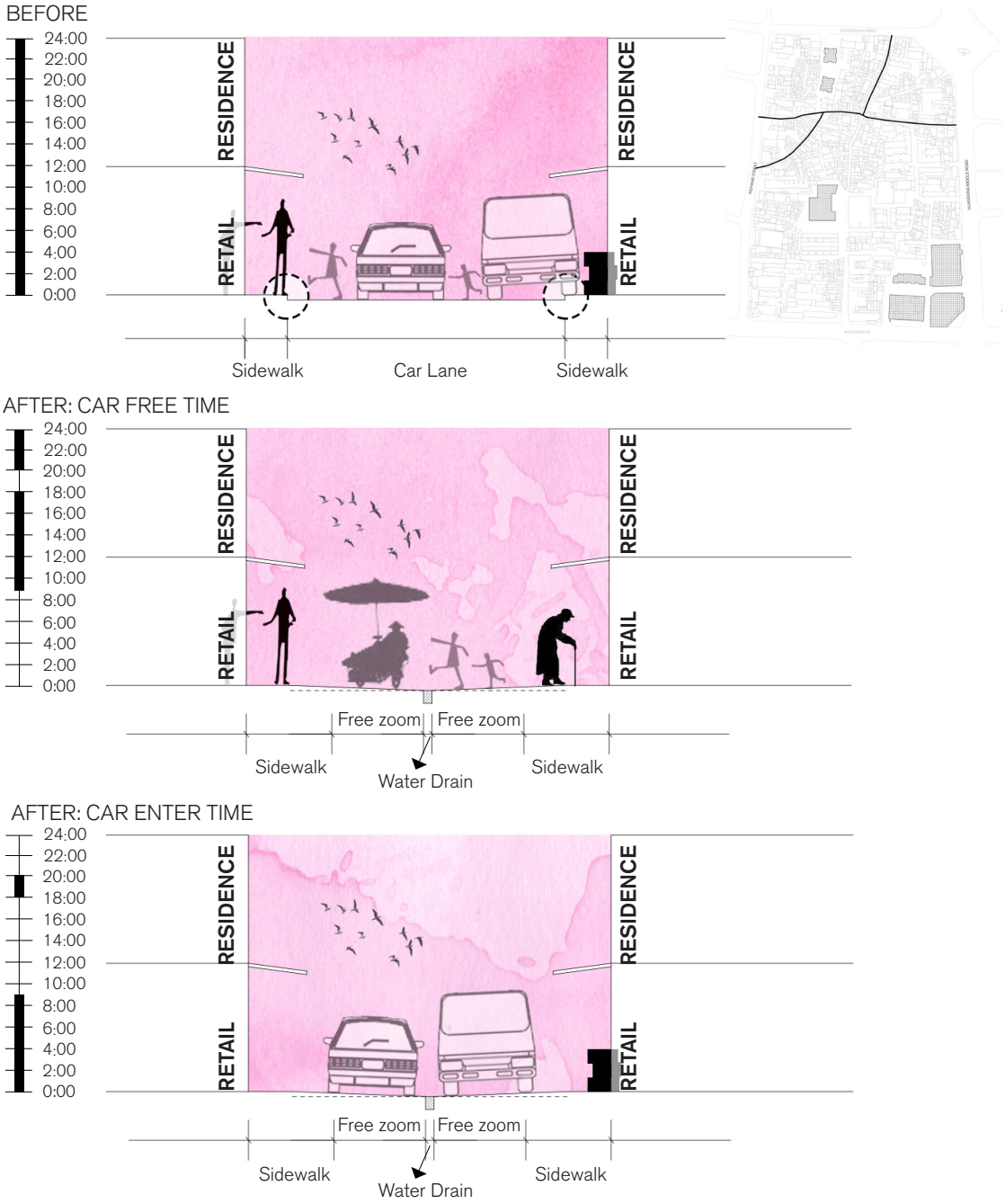
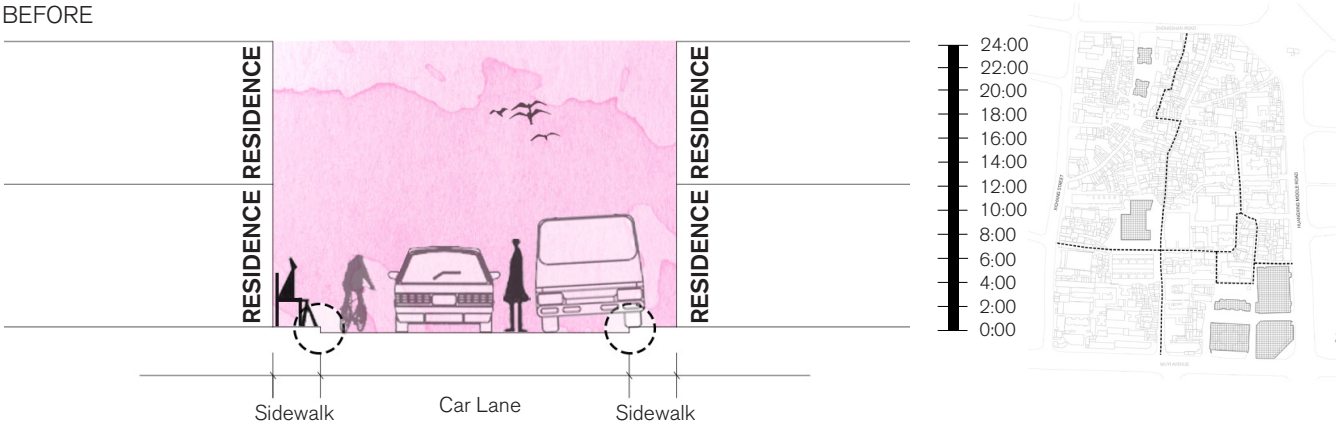


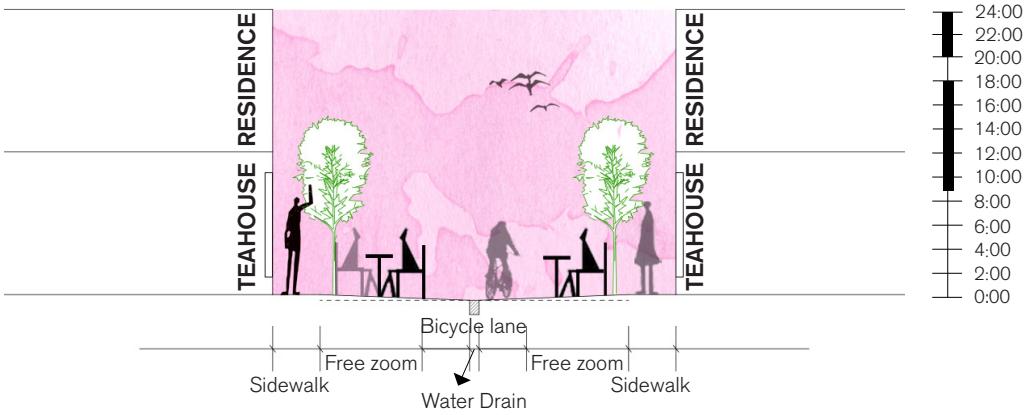
Figure 88: Street market section

Catering and souvenir shops (only ground floor is commerce, upper still are residence)

BEFORE



AFTER: CAR FREE TIME



AFTER: CAR ENTER TIME

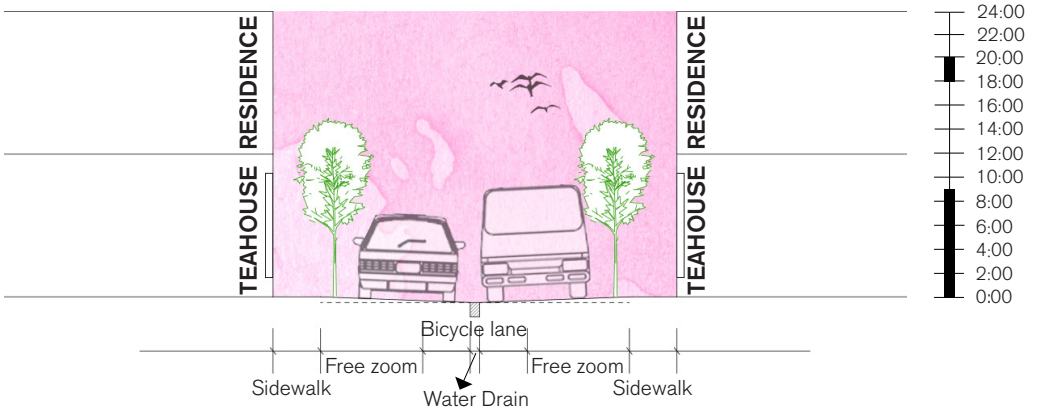


Figure 89: Recreational street section

ORIGINAL
SCENE

Rendering

● One of the entrance of green slow -traffic priority line

ORIGINAL
SCENE

● Street market

ORIGINAL
SCENE

社区服务中心

STUFF OF
SERVICE CENTER

DESIGNER

我给大家解释一下初版方案

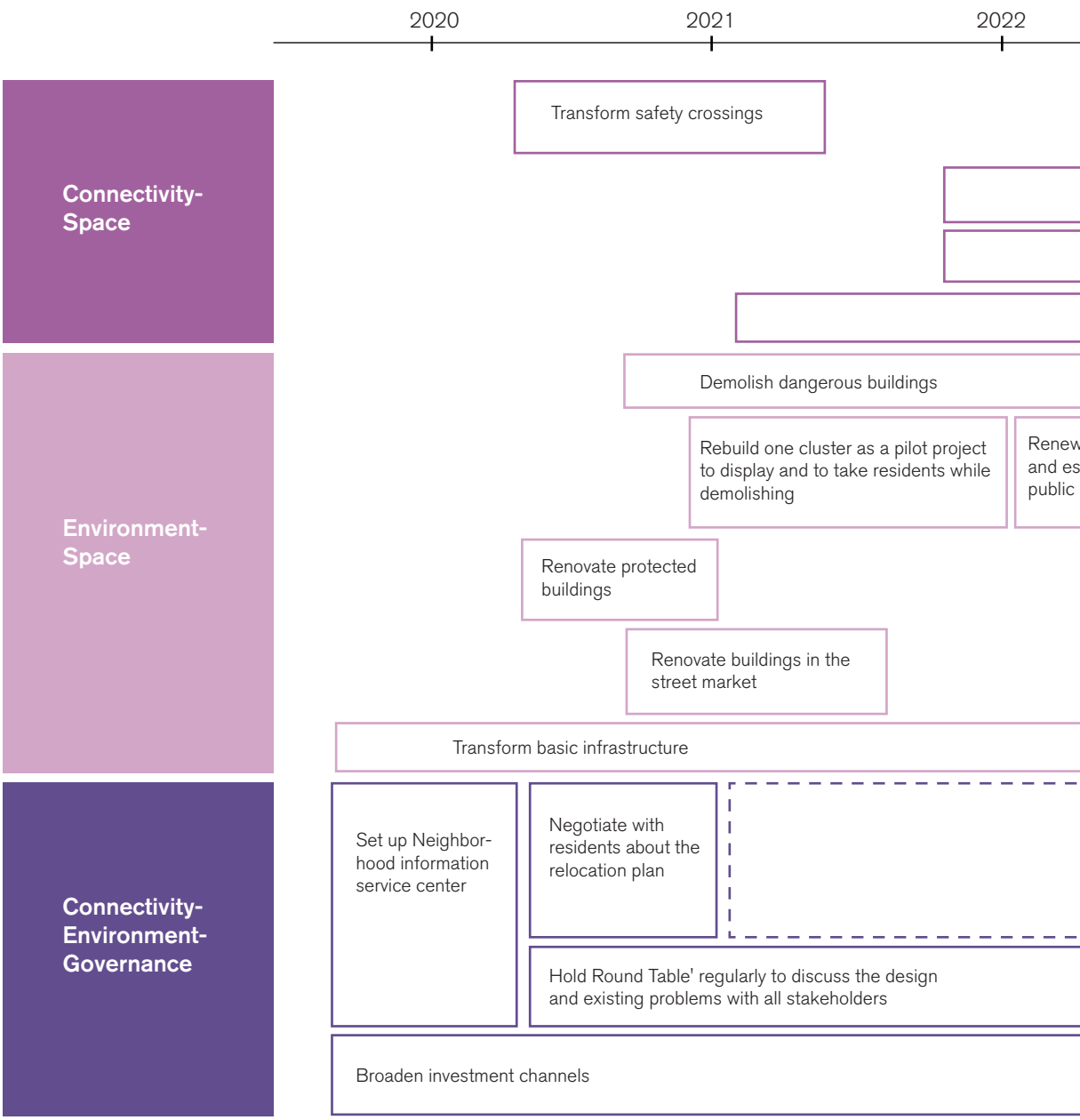
我觉得还可以

#2#4庭院中间的共享自行车需要有统一摆放的地方

Vision
Plan

● Public space I which near educational facilities &Neighborhood service center

10.5 ROADMAP


2020
2021
2022
Connectivity-Space
Transform safety crossings
Environment-Space
Demolish dangerous buildings
Rebuild one cluster as a pilot project to display and to take residents while demolishing
Renew and es public
Renovate protected buildings
Renovate buildings in the street market
Transform basic infrastructure
Connectivity-Environment-Governance
Set up Neighbor-hood information service center
Negotiate with residents about the relocation plan
Hold Round Table' regularly to discuss the design and existing problems with all stakeholders
Broaden investment channels

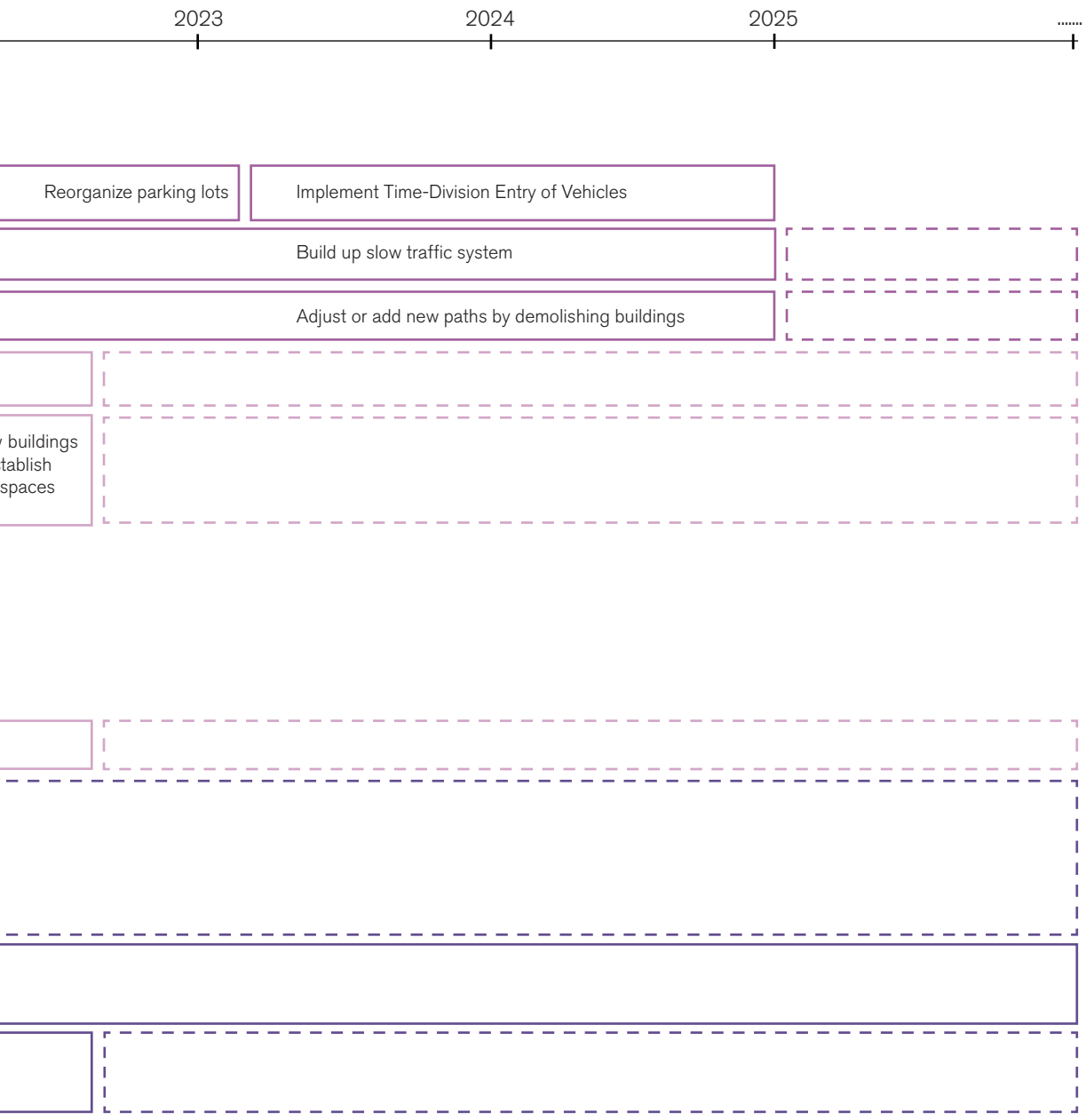
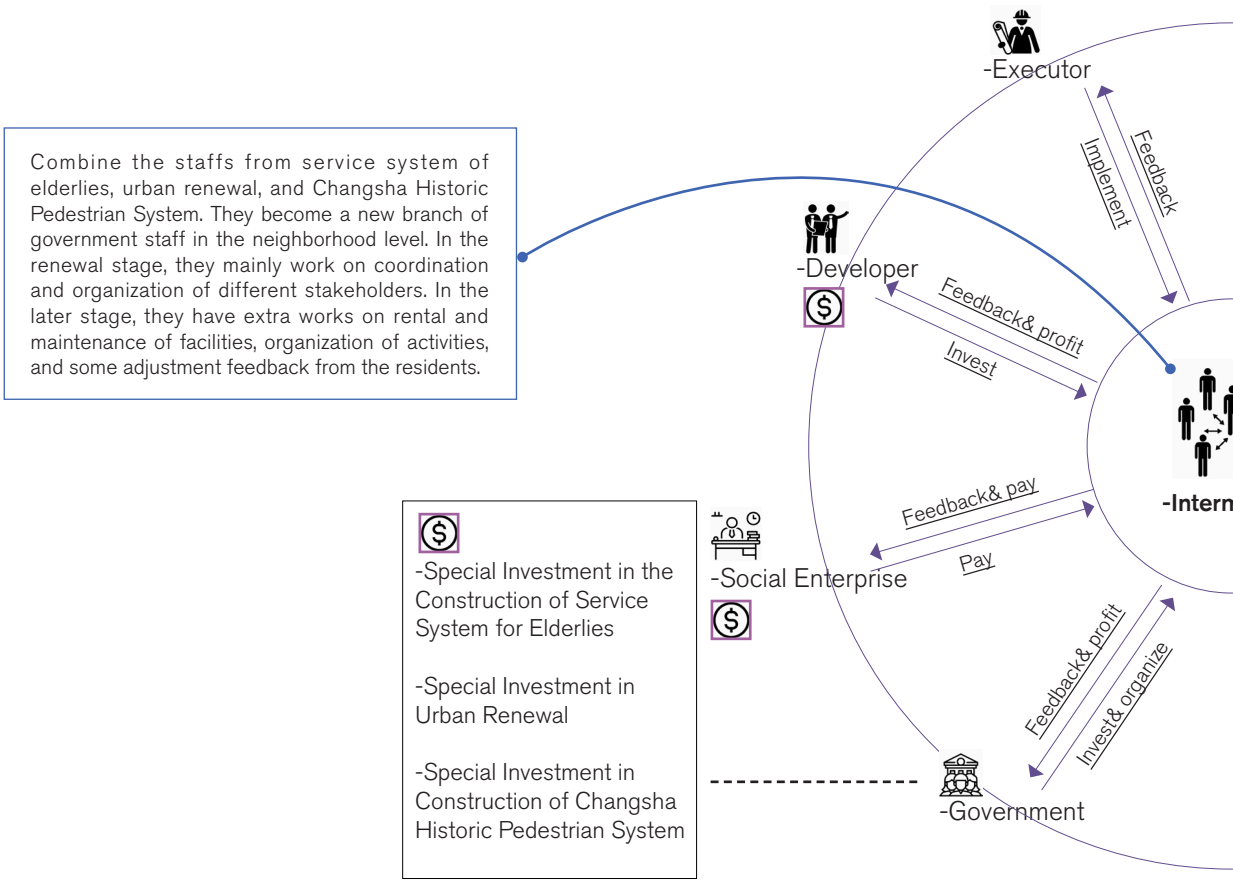


Table 15: Roadmap

10.6 STAKEHOLDER AND FINANCE



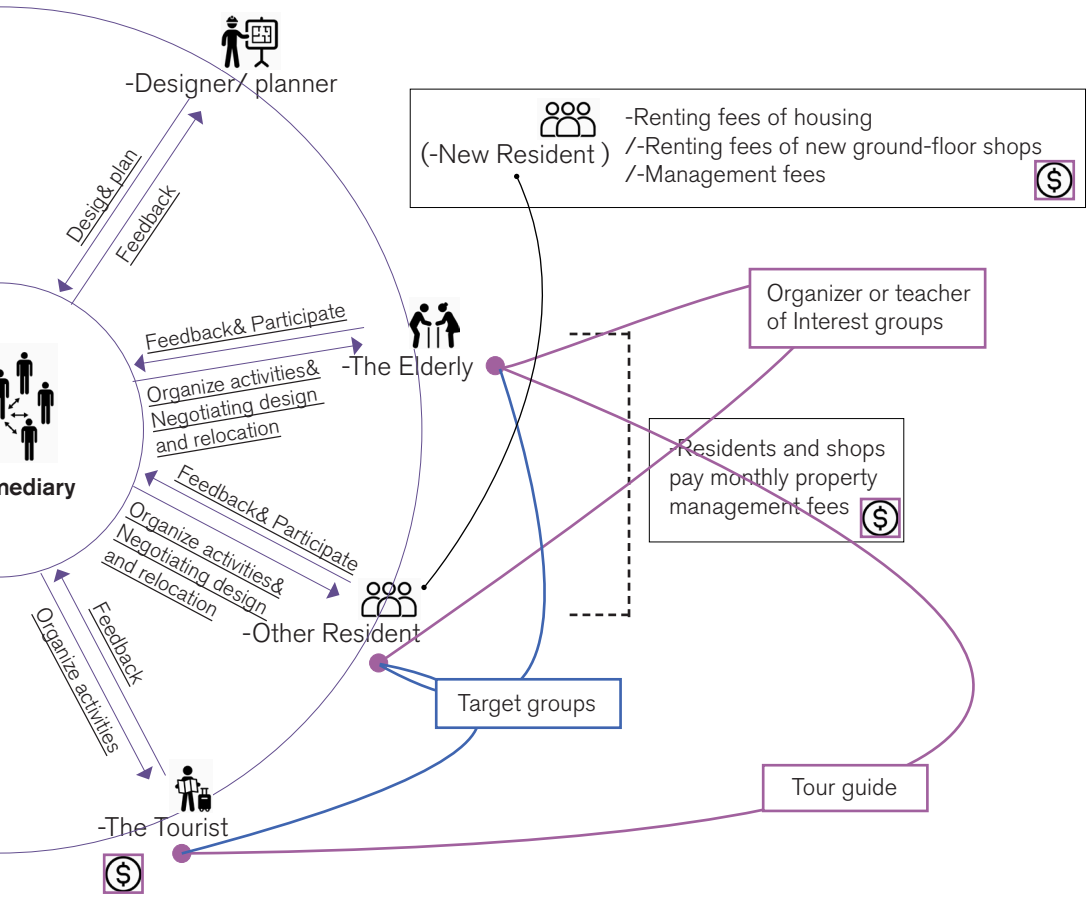


Figure 90:
stakeholders and
finance

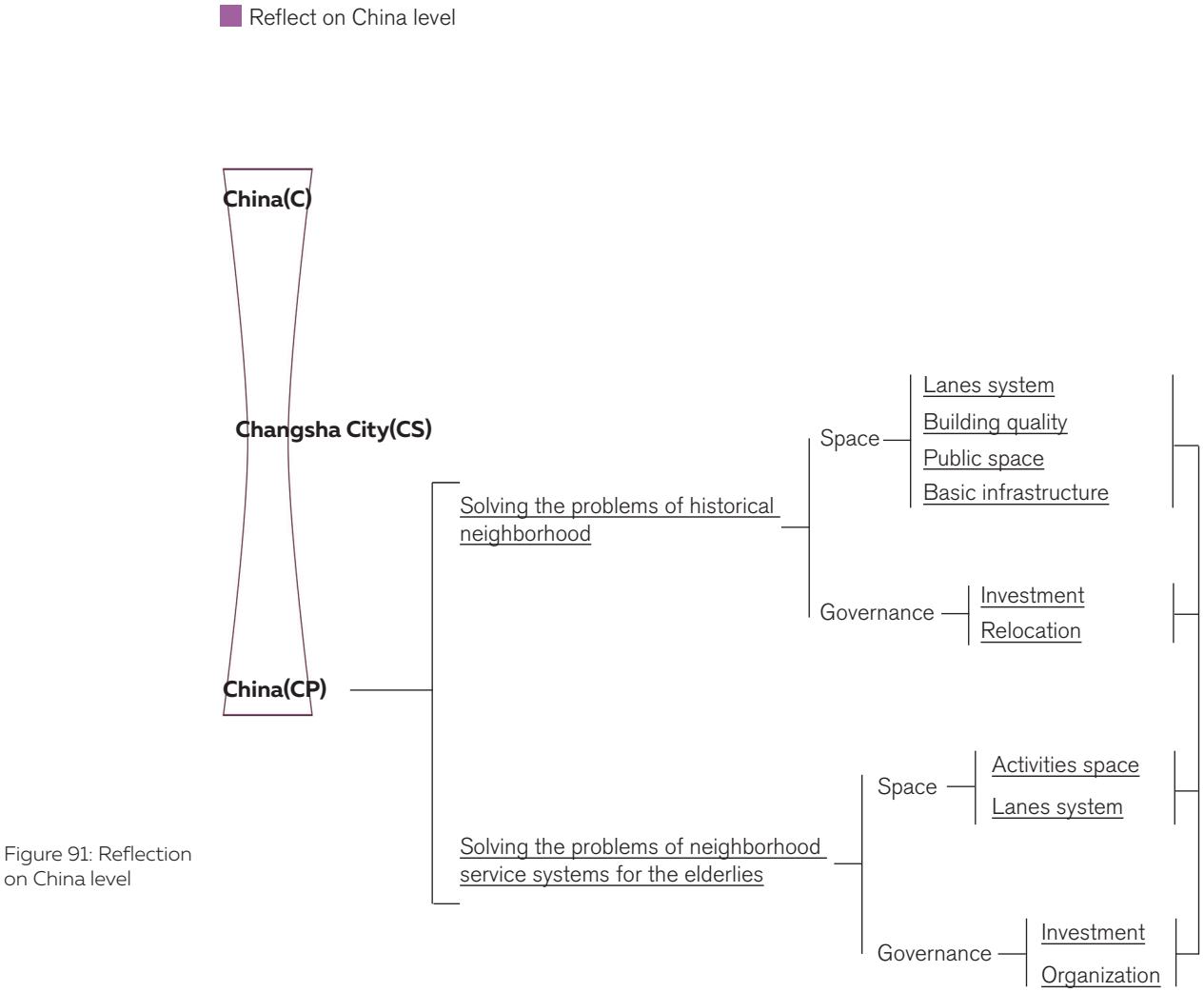


Figure 91: Reflection on China level

To summarize, the problems of neighborhood service systems for the elderlies in residential-dominated historic areas can be tackled mainly from two aspects: one is the existing environmental and governmental problems in historical neighborhood, the other is the requirements of elderlies. In the past, city renewal system and neighborhood service systems for elderlies are independent from each other. Since the elderly is the biggest residential groups in historical neighborhood, while neighborhood environment is the solid ground of service system, there is an opportunity to integrate them together to reach win-win situation. Based on different elderlies' requirements and local environmental situations, the renewal process would be of vast diversity to avoid homogeneous arrangement that exists nowadays. Besides, symbiotic integration is cost-effective. However, it doesn't mean the elderly is the only target groups in the process. Other groups of people will also be considered into the design because the final aim is to reach the goal of designing a livable city for all users. This vital vision makes everyone to have a stronger sense of belongings.

11. APPENDIX

11.1 REFLECTION

This research-design project mainly addresses the ageing problem in residential-dominated historic areas in the context of China. The aim of the thesis is to integrate the current Chinese neighborhood services systems for the elderlies with urban design and planning in the historic area of first-tier city, transforming the interaction between historic area and the elderly from mutual influences to mutual promotion and benefit, towards the livable city in China. Based on the theory of Environmental psychology, Aged-friendly environments, Age-interacting environments, The Silver Economy, Participatory management and Participatory design to build up the conceptual framework from social, spatial and governance aspects. Changsha, a typical ageing city in China, would be the example taken in this thesis for exploring the principles that can be used in other practices in a bottom-up way. There would be four stages—problem definition, problem description, solution proposals and reflection. In reflection, several main aspects would be addressed to.: methodology&limitations, research and design, ageing and transforming Chinese cities, relevance, ethical considerations and conclusion.

1. Methodology & limitations

1.1 Methodology

The methodology of this thesis is influenced by DRM- Design Research Methodology (Blessing & Chakrabarti, 2009), and consists of four stages: Problem Definition, Problem Description, Solution Proposal, and Reflection. The outcomes are divided accordingly into four sessions—goals, understanding, support, and evaluation. These would form the main structure of the thesis. Based on these and the main sub-research questions, the methods I used in the process includes: policy and regulation analysis, literature review, field trip, data analysis, mapping, spatial analysis, case study and scenarios of strategies. Among these methods, field trip, mapping and spatial analysis helped the most to practically look into the ageing problem. Since China has such large area with dense population, it is very important to make clear of the special identity and common scenes in Changsha and the elderlies who live there so as to understand their actual need in a more direct way. These methods I opted for can also aid at fully understanding the context and locality of the project. Through the interview, walk-by observation, and direct observation, daily routes, gathering spots, recreational spaces, typology of spaces, activities involved, and preference of elderlies can be observed and mapped. Such a spatial analysis can help visualising the outcome of field trip, deepen the problem, understanding of the context and propose design in a more practical way.

1.2 Limitation

The main limitation of the thesis is lacking of sample size. During the field trip period, it was rainy most of the time. So, there was less people, especially elderlies having activities on the street that I could observe and interview. And for the observation, I only had one day and only went to one neighborhood, it has large particularity. To some extent it influences the judgment of the preferences of the elderly. Besides, the time I began the design proposal is quite late, cannot have time to provide several scenarios of strategies to compare and improve. In the last period of graduation time, I will try to fulfill it by improving the design part. Last but not least, the real renewal process must be more complicated especially in the negotiation part with residents. How to balance the interest of difference sides must be a big question.

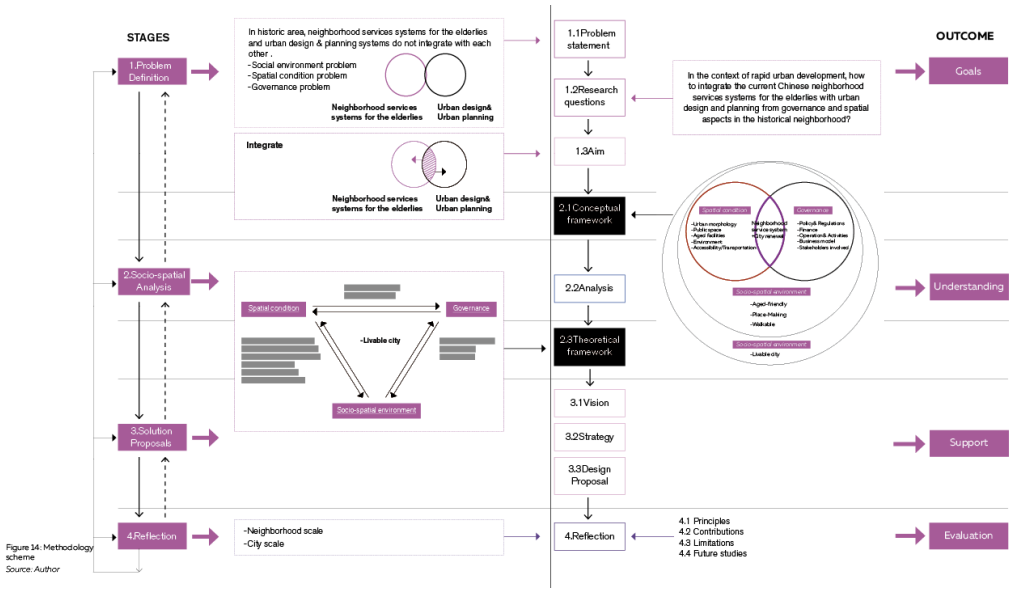


Figure 14. Methodology scheme
Source: Author

2. Research and design.

Before I started my thesis, I learnt from my past design experience that research and design develop linearly, one after another. So, I spent much more time on research than on design since I wanted to find out the absolute direction for the proposal. But after I entered the design part, I found that the uncertainties of my design always pushed me to go back to the research stage. I had to think about the existing site typologies and how they influence people's daily lives, and thus how I should replace them step by step so as to determine the demolishing process, etc., while my initial research package did not include these. After several rounds of back-and-forth reasoning, the research and design stages combined to form a more sense-making and all rounded thesis package.

3. Ageing and transforming Chinese cities

Global urbanization has been accelerating in today's era, with more than half of the world's population living in cities. China is a large developing country with large population and vast territory with obvious regional differences. It is at the stage of rapid advancement that the rate of urbanization is at its fastest in human history. Urbanization in China is an on-going process that leads to formation and transformation of city regions. Alongside the rapid urbanization process, cities are ageing, as are their populations.

In the current stage of urbanization, there are some contradictions among different objectives, such as the conflicts between ageing society and high-speed economic; old neighborhoods and rapid developing commercial area; vulnerable groups like the elderlies and low accessibility old neighborhoods, etc.

It is urgently needed for us to identify the ways of planning so as to more effectively integrate the physical character of cities with social issues. So that healthier, more livable, and more inclusive places could be created. It is aimed to provide new models of city development that promotes 'people-centered urbanization'. (Planning complex cities. ,2018)

4 .Relevance

4.1 Societal relevance

China has the biggest group of elderlies among the world. Ageing not only brings pressure to society, but also to every families. The thesis mainly aims to enrich the retire life of the elderlies based on their requirements. It would largely release the pressure for both families and elderly themselves, Through the neighborhood transformation process, it can also improve the overall living qualities for all residents in the neighborhood towards forming a livable city. Besides, the renewal process would help to dig out new economy improving points to turn the ageing pressure into new 'sliver economy'. So, integrating the neighborhood services systems for elderlies with urban planning and design can provide win-win solution to solve ageing problem.

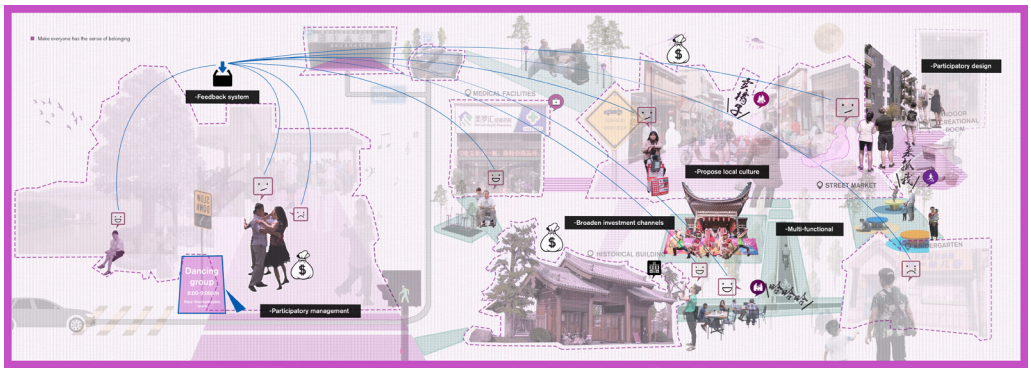
4.2 Scientific relevance

There is a big tendency of disciplinary differentiation in the study of services systems for the elderlies in China. However, these fields are more concentrated on aspects of sociology, economics, etc. And ageing problem is always seen as an individual problem to analyze. For the ageing problem, especially for the neighborhood services systems, its actions rely on environment and space. In other words, a systematic approach in research on how to integrate the neighborhood services systems for elderlies with urban planning and design is still lacking, especially for the historical neighborhood that was formed naturally through continuous development by residents. The thesis integrating these two systems together provides a new possibility to solve both the ageing problem and city renewal.

5 Ethical considerations

In Chinese traditional Confucius mindset, offsprings should always respect and take care of parents and grandparents. However, the reality is that the elderlies are seen as a vulnerable and unrelated group to society. It makes them feel even more lonely. In my thesis, although I made observations in the elderlies' daily lives and habits, I also would focus on other groups of residents, so that everyone can gain a sense of belonging in the neighborhood. To do this I would propose to provide multi-functional public space, shared housing typology, and participatory design and management, etc. On one hand, city renewal is a process that deals with all the residents in the neighborhood, yet there are lots of activities that should have no age limitation. My thesis would propose to break the such age stereotype through effective integration, so that there would be strong communications among different groups and thus to help the elderlied finding their new selves.

Secondly, demolishing and relocation is a sensitive topic in Chinese context. On one hand, people do want to improve their living quality. On the other hand, they tend to fail to come to agreements with government, in which it forced and violent demolition incidents would occur. My thesis proposes to merge the interest and attention of both residents and government, to reach a participatory design and management scheme, so that residents are encouraged to join the process and express their requirements properly. Besides, in the vision plan, I also showed the stages and flexibility of demolishing. The demolishment would not be all at once and would have buffer space up for discussion. Lastly, the vision would also include increasing the residential occupancy after renewal. Not only would it welcome new residents, the original residents can stay behind as they wish once renewal is finished.



6 Conclusion

I have to say the whole year I spent on my thesis is the best learning time ever since the year 2012 when I began to get in touch with design. Ageing is one of my favorite urban topics, since it connects with everyone's life, it is urgent and it still have big potential to improve in Chinese cities. I had done the ageing design in bachelor time as well in teamwork in a short period time. But this time, trying to understand the ageing in another angle fully, individually made me have a lot of new inspirations. Through the process of dealing with this problem, combing ageing with urban renewal, recalling all the knowledge I learned and constantly adding a lot of new knowledges motivates me to go further with excitement. Although in the end, I still feels some uncertainty about my last vision design part, I can say I already tried my best through the whole process.

I would like to give my sincere appreciation to Lei and Birgit, my two amazing tutors. Becuase of their excellent academic knowledge, extraordinary patience and constant encouragement, gave me a lot of instructive advice, useful suggestions and inspiration of new ideas. And the most important one, to endure my broken English. :)

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11.3 POLICY LIST

China level

1. Laws and regulations

1.1'Law of the People's Republic of China on the Protection of the Rights and Interests of the Elderly'

The second amendment was made on April 24, 2015. It repositioned the elderly service system. Article 13 of the amendment stipulates that "the elderly service system is based on home". From the "family" of old version to the "home" of the newly revised version, the difference in meaning is quite different. Although the elderly live in the family, the family gives full play to its family support function, but also the neighborhood should play full support function. This makes the responsibility of the society and the state to do well in aged-friendly neighborhood construction clearer.

2.Policy Documents

2.1'Opinions on Promoting the Work of neighborhood services systems for the elderlies in an All-round Way ' (2008)

This is the first time that China has published a separate policy documents on neighborhood services systems for the elderlies which has put neighborhood services systems on a professional and standardized track. The Opinion puts forward eight specific safeguard measures for the services: (1) Formulating development plans for the neighborhood services systems; (2) Increasing government investment and rationally allocating resources; (3) Implementing preferential policies to support the services; (4) Integrating resources, establishing and improving neighborhood-based service network; (5) Strengthening the combination of specialization and volunteers. (6) Actively cultivate and develop service organizations; (7) Establish a management system; (8) Effectively strengthen the leadership of the endowment service.

2.2'Circular of the State Council on the Issuance of the Plan for the Construction of the Service System for the Elderly(2011-2015)' (2011)

(1) Improve the neighborhood services environment and the service support system. Focusing on neighborhood day-care centers and specialized old-age care institutions, upgrading the level of social old-age service facilities by building, rebuilding, expanding and purchasing new ones. (2) Support the elderly who in need to implement the transformation of family barrier-free facilities. Support the development of neighborhood service institutions, further develop and improve service contents and projects, and provide convenient services for the elderly. (3) Focus on the construction of neighborhood facilities such as day -care centers, and activity centers for the elderly.

2.3'The 12th Five-Year Plan for the Development of China's Aging Cause' (2011)

It puts forward that we should focus on the development of neighborhood services systems for the elderlies. (1) Establish and improve the three-level service network of counties (cities, districts), townships (streets) and communities (villages). Urban streets and communities basically achieve full coverage of home-based pension service network; (2) Speed up the construction of neighborhood service information system. (3) Develop door-to-door service industry, and focus on the development of old-age care services, especially home-based care services for the elderly. (4)Expand the field of neighborhood services, and realize the extension from basic life care to medical health, accessory allocation, spiritual consolation, legal services, emergency rescue and other aspects.

China level

2.Policy Documents

2.4'Opinions on Encouraging and Guiding Non-governmental Capital to Enter the Field of Pension Services' (2012)

Private capital should be encouraged to participate in neighborhood services systems for the elderlies. (1) By means of government subsidies, purchasing services, coordinating guidance, evaluation and certification, all kinds of private capital are encouraged to enter the field of home-based pension services. (2) Supporting private capital to expand the content of home-based pension services, providing life care, home-based services, spiritual comfort, rehabilitation care, home accessibility facilities transformation, emergency call, security assistance and social participation services for the elderly. (3) Encourage private capital to organize day care centers, nurseries, homes and activity centers for the elderly in urban communities.

2.5'Some Opinions on Speeding up the Development of Old-age Service Industry' (2013)

By 2020, an old-age service system based on home, community and institution, with perfect functions, moderate scale and coverage of urban and rural areas, will be built in an all-round way. Local governments should support the establishment of a home-based pension service network with enterprises and institutions as the main body and communities as the link to meet the various service needs of the elderly.

2.6'Some Opinions on Enhancing the Quality of Old-age Service by Opening the Old-age Service Market in an All-round Way' (2016)

Improve the quality of life for the elderly in the home community, and promote the full coverage of the service for the elderly in the home community.

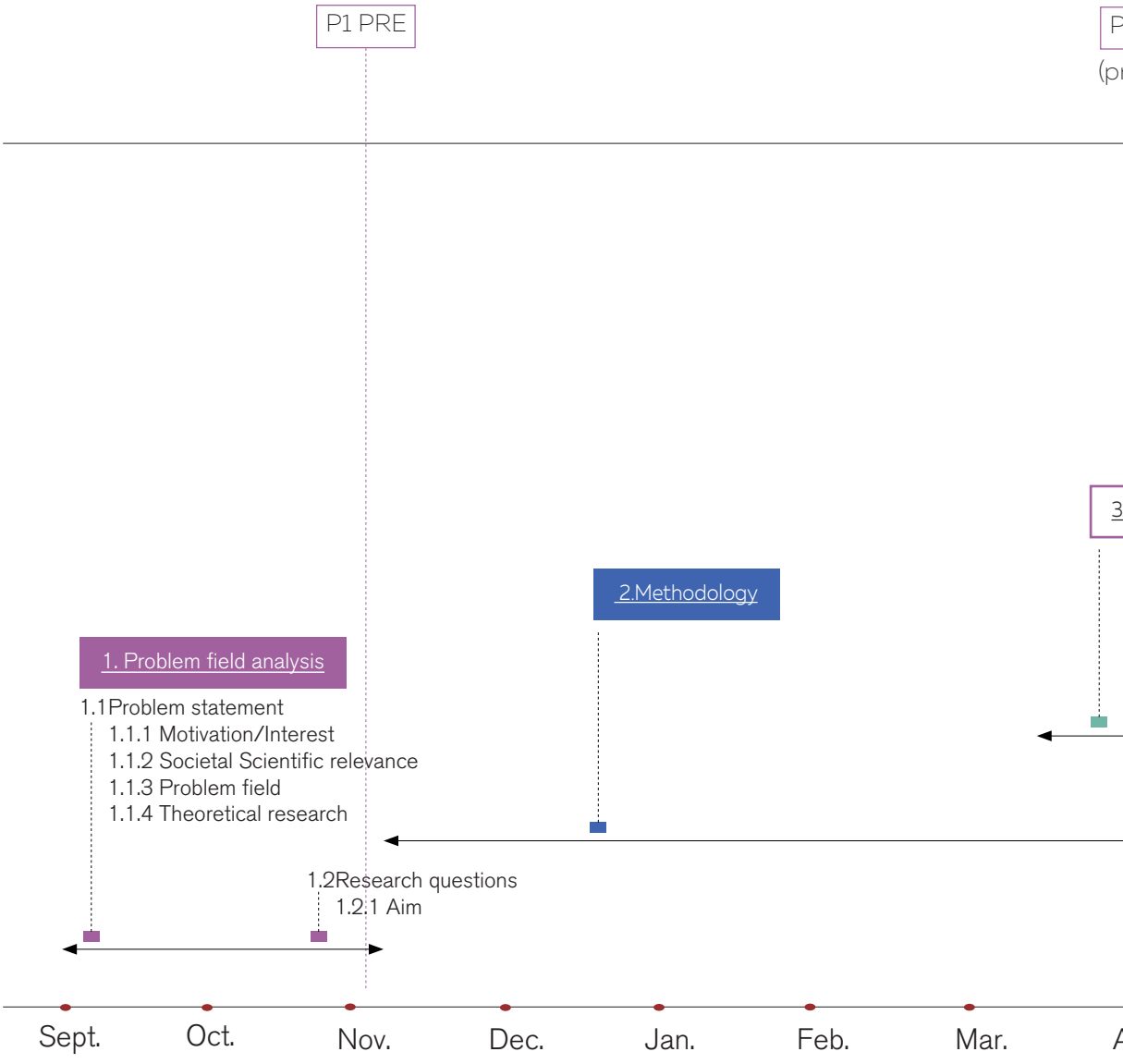
2.7'Thirteenth Five-Year Plan for the Development of Civil Affairs'(2016)

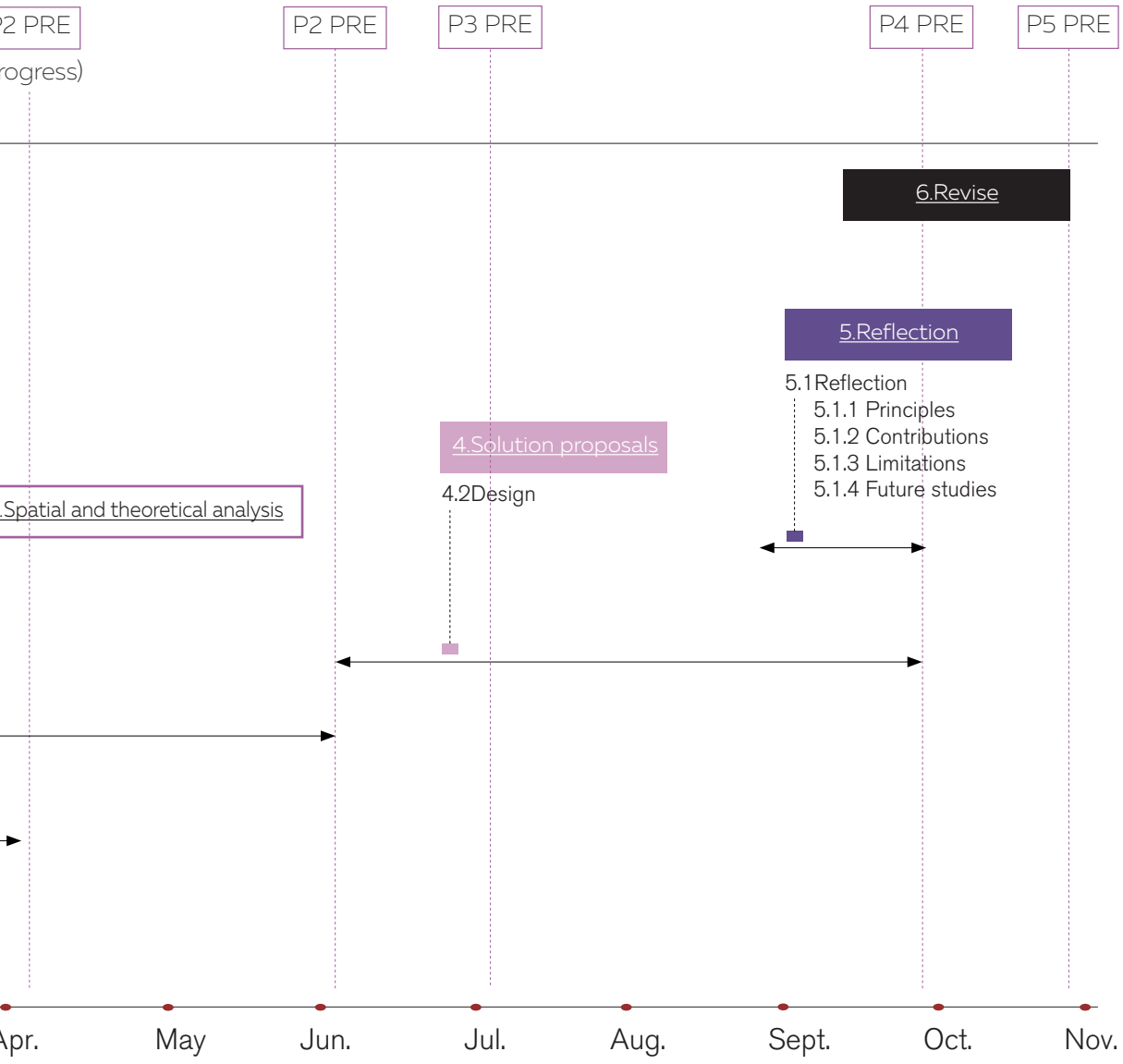
Promote and strengthen neighborhood services systems for the elderlies and actively develop intelligent and mutual pension services. (1) Supporting enterprises and institutions to use mobile internet, cloud computing and other technical means to integrate with the services in depth, and innovate the way of providing intelligent door-to-door services. (2) Strengthen the construction of neighborhood service facilities and equip them with medical care, rehabilitation aids, recreational activities and other equipment in day-care centers, activity centers for the elderly and mutual-aid endowment service centers for the elderly. New neighborhoods should be built to support the construction of neighborhood day-care institutions as required. If there are no neighborhoods day-care institutions or existing facilities in old urban areas or built residential areas that do not meet the planning requirements, community day care institutions shall be established by means of purchase, replacement and leasing.

2.8'Circular on the Issuance of the National Plan for the Development of the Aging Cause and the Construction of the Pension System in the 13th Five-Year Plan'(2017)

Relying on the comprehensive information platform of urban and rural community public service, focusing on the disabled, solitary and empty-nested elderly, the information platform, call service system and emergency rescue service mechanism of home-based community old-age service are integrated and established to facilitate the provision of services such as buffet, cleaning, walking, bath, doctor-assistant and daytime care to the elderly at home by the old-age service institutions and organizations.

11.4 TIMETABLE




2 PRE
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6.Revise
5.Reflection
5.1Reflection
5.1.1 Principles
5.1.2 Contributions
5.1.3 Limitations
5.1.4 Future studies
4.Solution proposals
4.2Design
.Spatial and theoretical analysis
Apr.
May
Jun.
Jul.
Aug.
Sept.
Oct.
Nov.

Key Words
Transforming Chinese cities, neighborhood services systems for the elderlies, first-tier city, historic area, livable city, bottom-up intergrated system design, Changsha

Mentor Team
Dr. L. Qu
L.Qu@tudelft.nl
Department of Urbanism, Delft University of Technology

Dipl.ing. B. Hausleitner
B.Hausleitner@tudelft.nl
Department of Urbanism, Delft University of Technology

Author
Wanting Meng
mengwantingecho@gmail.com
4697820

Research Studio
Complex Cities
Department of Urbanism
Faculty of Architecture and the Built Environment
Delft University of Technology
The Netherlands, October 2019

Towards a Livable City for Elderlies

Designing new urban strategies to integrate neighborhood-based services systems with historical area fabric in Changsha, China.

9. APPENDIX

9.3 SITE VISIT

Questionnaire

Research projects:
1. Questionnaire

2. Observation:

2.1Walk-by observations:Observe which locations have more elderly people gathered, the locations and the number of elderly people on the map

2.2Structured direct observations:What do these old people do here, what spatial features attract them, and what characteristics of elderlies do these places attract gender, posture, etc.)

2.3Interview:
2.3.1 Why use these spaces
2.3.2 What do the elderly value most in this space?
2.3.3 Which spatial condition do you think can be improved?

3.From the perspective of the elderly, to observe community space, what uncomfortab walking / activity experience

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1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

y 沿街　改造

兴圈。其中府后街、
黄泥街改为书市街，
讯办事处近代历史
有街道商业模式。
统追忆的同时也是

建筑外立面进行洗脸打粉的装扮方式。在方案中，改造建
独栋含有一层店铺的建筑。原因有四点：一是这部分建筑
中，直接拆除会造成经济利益和人事方面的双重困难。二
闲置，大体建筑结构较为稳定。三是这部分建筑大部分为
度6-8米来看，这些建筑在空间上形成了较为良好的街区比
例关系。最后也是比较关键的一点，长沙在改革开放初期城市个体经营最先在这些小巷内萌芽。这种沿街商铺承载了许多老长沙的回忆，同时也是城市老旧记忆的缩影，而这正是大家在努力恢复的东西。在这里笔者选取文运街两厢和宝南街街口处建筑立面改造为例。

改造的步骤大致分为一下几个部分：

1)对建筑外立面及街道上空杂乱电缆和招牌广告以及雨棚的清理。以及管线入地的方式，招牌则提倡统一定制的方式且对原有广告和招牌及雨棚进行拆除。

2)对违章加建的低质棚顶进行拆除再改造。

3)建筑饰面和立面雨棚门窗等构件的统一设计。

来源：文运街改造方案设计文本

沿街搭建戏台的改造做法在长沙太平街的改造中也有运用到，太平街宜春院戏院于清光绪三十年建成，位于太平街孚嘉巷。是湖湘地区最早的湘剧戏院。而历史变迁建筑已经消失。最后在太平街改造中在西牌楼街口按原有风格恢复古戏台。戏台以木结构为主，并在柱子和梁枋雕刻纹饰。戗角起翘、龙头雕饰、猫弓背山墙、檐下蝼蜂巢。新戏院做法吸收了湖湘传统工艺和特色。但是太平街戏院的做法虽然样式古朴精致，却仅仅成为街道的一处景观性建筑。由于街区过于商业化发展，导致街区景区化严重而缺少原住民的互动。外加建筑过于官方化的精致缺少亲和力。最后没能实现让戏台成为市民交流戏曲的场所。

图 4.18 太平街沿街戏台

来源：笔者自摄

相比之下文运街有着较多的原住民存在，同时文运街位置相比太平街来说不那么靠近商业核心区域。而这种稍微简单的做法在吸取湖湘建筑特色的元素的同

4)统一店面

由于文云街

取这两条街来进

在文运街

建模的方法。对

面、几种方式。

屋顶形式。坡屋

模仿古建中的封

来完成。立面门

处则单独设立石

China's ageing population

面招牌和广告牌的样式。

街和宝南街的位置和街道整合度较好，因此立面改造主方案主要选进行分析。

图 4.21 文运街口立面改造效果图

来源：文运街改造方案设计文本

东厢一段和二段的立面改造方案设计中采用PS照片整合和SU草图对立面饰面材料的设计包含了白粉墙、水刷石、青砖贴面、木板贴屋顶的设计根据建筑实际情况选取了单坡、双坡、和平屋顶三种屋顶的改造设计中另外在建筑的山墙位置加砌出挑形式的马头墙以对火山墙。折中建筑风格立面改造设计则依靠一些立面线脚和装饰门窗和招牌则依照旧照片中的形式做仿古设计。在内院的沿街入口石砌仿古牌坊。

宝蓝街街口的立面改造方式与细和大胆一些。饰面材料选取上主特性和质感将建筑的体量进行区分构件也精细地仿照传统建筑形式。形成错落有致的建筑形体。这种改

建筑中的一些元素来注入到改造之古朴典雅与现代建筑的轻盈感。

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

reflection

总结为以下几点：

1)全程进行巷道梳理和疏通，开辟小巷步行系统，开辟小广场、小花园等公共空间。

2)按规划一次性拆除“不得不拆”的破败与违章建筑。

3)城市水、电、气等市政管网全面入地。

4)以现有建筑形态为原型，参照长沙老照片，对街巷两厢建筑进行分类别、分条件、分层次进行立面改造。

5)重点打造文运街和宝南街，采用麻石和青灰砖等材料恢复历史街巷风貌。

6)恢复秋瑾祠堂、贡院坪、府后坪、鲁班庙等历史场景。

7)利用公共空间的地下建设多层机械停车库，彻底解决居民停车难题。

在此，笔者对历史街区中一些其他的改造保护案例思路也做了一些归纳。

长沙太平街是距离文运街最近的历史街区。太平街的保护与改造思路从宏观规划来看有以下几个方面[40]：

1)规划历史街区的保护范围和目标

2)对街区的历史文物建筑及院落的分三级进行保护

3)无形遗产传承、历史街区商业复兴以及市井生活气息的延续

4)规划和恢复三个居住街坊保留历史街区的传统生活气息

5)完善市政和基础生活设施，实现历史街区现代化生活

6)恢复历史街区风貌与景观

其中恢复历史街区风貌与景观的具体做法首先是选则清末民初的历史街区风貌作为建筑风格。其次对街区原有的园林景观以及历史建筑如贾谊故居和一些商铺戏台等进行保护式的修复。最后是对街区的入口景观以及道路进行传统模式改造。

China's ageing population

宽窄巷子的保护与改造则主要追寻四个原则[41]：

1）整体性保护——街巷、院落、建筑、装饰等物质文化以及传统生活方式、场景、街区内容与历史信息等非物质文化的全面保护。

2）原真性保护——尊重街区原有的院落街道形态和建筑构造做法，最大限度地还原历史街区风貌。

3）多样性保护——对街区不同年代出现的建筑形式多样化采取不同的方式进

行保护与修复。

4）可持续保护——改造采取循序渐进的有机改造方式，让保留的居民加入到合作建设自我修缮的行列以形成街区的持续性保护。

对比之下几个旧城方案整体对比来看有着不少相似之处，但是又各自有着自己的特点。

首先几个个改造方案都涉及到了对建筑的修复和街区文化的复兴。其中太平街和宽窄巷子属于存留历史建筑较多的街区。因此对现有建筑的态度主要是以修复性保护为主。而文运街的改造则是依靠现存建筑改造来恢复街区历史风貌，这与文运街现状是有一定联系的。

如果抛开所有街区的建筑内部私密空间而言，其余剩下的街道、广场、景观节点，都能看做是街区公共空间的一部分。当三者联系在一起的时候，街道的空间比例也成为影响行人对街区感知的方式。

D/H值中D为沿街建筑距离，而H为建筑高度。D/H的值根据分布将其分为四个部分[16]：

当D/H＜1时候，空间封闭感强，缺口产生出入口感觉，纵长而狭窄的空间有向前的动势，并产生深远感和前进感。

当D/H=1时候，封闭与开敞的感觉不明显，构成适当，如果在其中增加绿地等服务性小品则生活气息便于创造。

当D/H＞1时，空间的封闭性减弱，比例越大，开放感越强。宽敞而低矮的空间具有水平延伸的性质，产生开阔通畅感。

当D/H＞4时候，这时候建筑与街道失去相互的空间吸引关系。

D/H在现今的应用之一，是建筑被作为图形观赏时，从建筑到视点的距离D与对象建筑高度H之比。早期时候，有建筑师认为当人看前方时成40度角，若考虑在建筑的上方看到天空，那么建筑与视点之间的距离D跟建筑高度H之比D/H等于2，仰角成27度时候便能观察到建筑的全部轮廓。

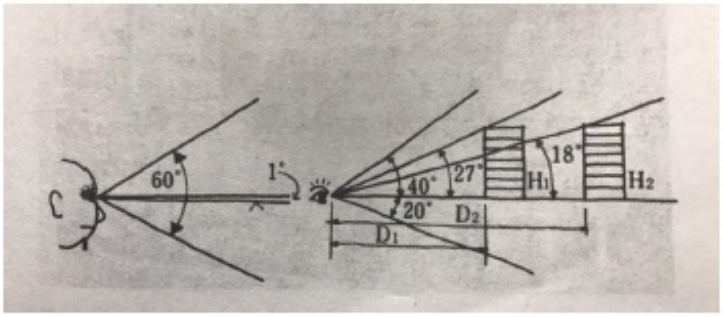


图 3.17 建筑与视野的关系

来源：《街道的美学》插图

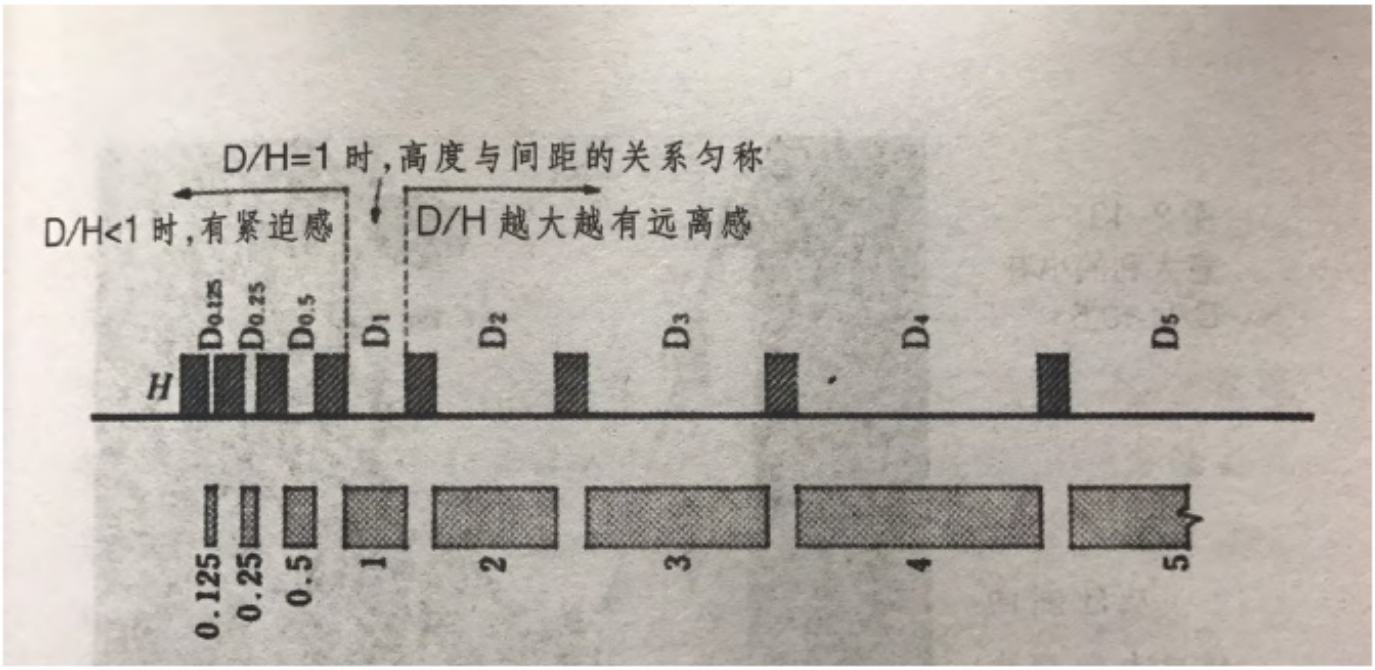


图 3.18 建筑中 D/H 的关系

来源：《街道的美学》描图

经过调研数据分析，文运街区主要街道的D/H数值平均值介于0.7~1.2之间。从比值的关系来看街区空间构成较为适当。其中基地内街道宽度为5~8米，街道旁建筑加上构造物高度为6~9米。相对来说，街道属于比较窄的。同时，街道两侧缺少绿地和景观等缓冲。使得建筑和街道之间空间感觉并不舒适。次要巷弄D/H比值为0.5~0.8之间，空间比例较为封闭。建筑二楼之上的部分难以被观察到。而次要街巷街道立面一般店面较少，建筑墙体缺少空间变化。街道空间跟建筑关系脱离开来，这个部分建筑立面也存在着缺少节奏变化和装饰构建。外加街道缺少景观和绿化的配置，使得街区空间闭塞较为严重，人与建筑以及街道三者难以产生体验和交流，从而巷道的形式限制于满足最基本的通行功能而失去作为城市界面感知的愉悦性。

因此，从文运街街道空间尺度来看，建筑和道路比例关系难以支撑起一个适

度的空间关系，行人的视觉体验被限定在建筑底层的界面。而建筑缺少细节和装饰的立面则不足以让这一部分产生愉悦的空间感知，而街巷也因此而乏味。

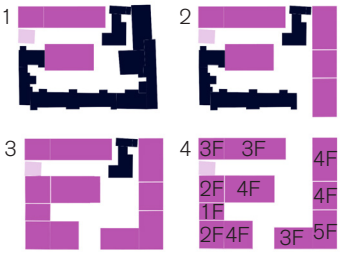
1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

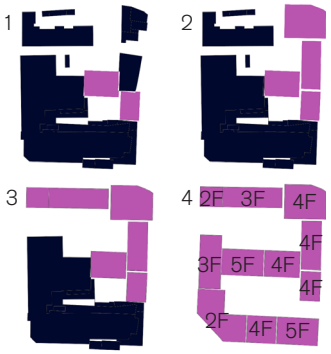
If the average quality of these buildings are more or less the same, transformation would start with demolishing low density. What would replace them are taller and more neatly organised housings in order to accommodate both the original and new residents. The overall numbers of new housings should be more than the demolishing one, making sure every local residents still have the right to live in the original neighborhood. Besides, the buildings along the surrounding street should be taller to block the noise from the outside car road.

	NEW	OLD
Numbers of residence	314	314
Building coverage	50%	60%
FAR	1.2	2.3

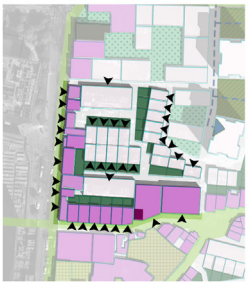


In the block which mixed with different stages, always started with the condemned one. Then dealed with those blocked the lanes.

	NEW	OLD
Numbers of residence	418	370
Building coverage	55%	80%
FAR	2.0	3.8

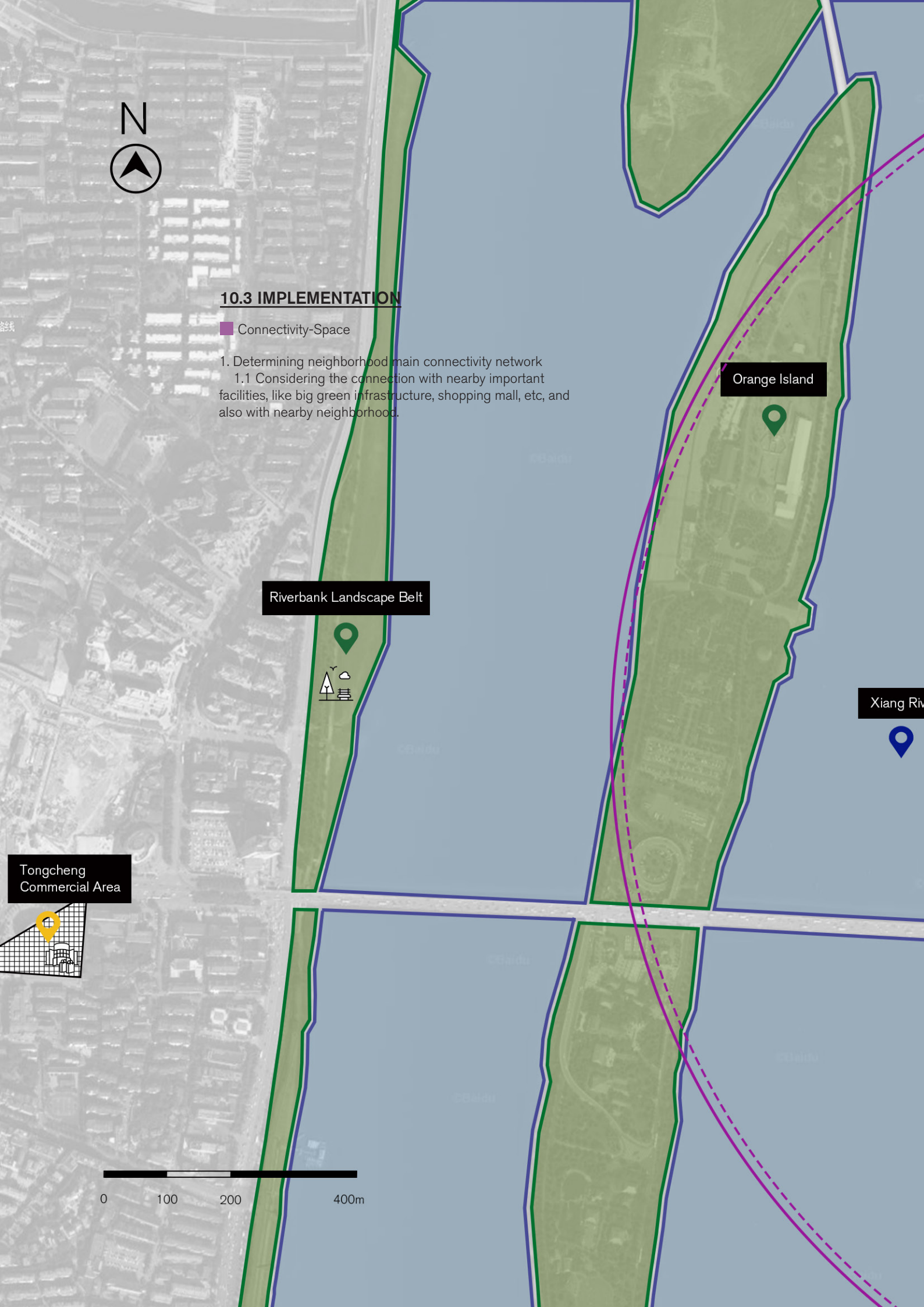


The new 'linear' typology should combine with two types of buildings, one is individual flat, the other is centralized apartment. The first stage of renewal should build centralized apartment for later relocation.



	NEW	OLD
Numbers of residence	279	250
Building coverage	67%	72%
FAR	2.0	2.4

China's ageing population


N
10.3 IMPLEMENTATION
Connectivity-Space
1. Determining neighborhood main connectivity network
1.1 Considering the connection with nearby important facilities, like big green infrastructure, shopping mall, etc, and also with nearby neighborhood.
Orange Island
Riverbank Landscape Belt
Xiang Riv
Tongcheng Commercial Area
0
100
200
400m

Mingde Middle School
Xiyuanbeili Historic Area (Tourism Area)
Zhounan Middle School
Market in the site influences a large city area. Not only works for the residences inside the neighborhood, but also works for amounts of restaurants and nearby neighborhoods.
Wanda Office Building
Chaozong Historic Area (Tourism Area)
Youth palace
Primary School
Riverbank Landscape Belt
Wanda Wenhua Hotel
Lehuo Shopping Mall
Market
Wanda Shopping Mall
Xindaxin Office Building
SITE
Wanda Residence
Wuyi Square Park
Hotel
Hotel
Taiping Historic Area (Tourism Commercial Area)
Commercial Area
Commercial Area
Office Buildin
Hotel
Commercial Area
Commercial Area

N

1. Determining neighborhood main connectivity network
1.2 Connecting as much as necessary places, such as markets/shops, educational facilities, medical facilities, etc.

XIANG RIVER MIDDLE ROAD

XICHANG STREET

ZHONGSHAN ROAD

HUANGXING MIDDLE ROAD

WUYI AVENUE

- Primary school
- Kindergarten
- Clinic
- Pharmacy
- Indoor market (mix)
- Butcher
- Aquatic product shop
- Fruit and vegetable store
- Convenience Store
- Supermarket
- Grocery store

0 25 50 100m

N

1. Determining neighborhood main connectivity network
1.3 Connecting as much as protected buildings, such as cultural relic buildings, historical buildings, etc.

XIANG RIVER MIDDLE ROAD

XICHANG STREET

ZHONGSHAN ROAD

HUANGXING MIDDLE ROAD

The Main Histroical Pedestrian Network

The Secondary Histroical Pedestrian Network

Cultural relic buildings

Historical buildings

Traditional style buildings

0 25 50 100m

WUYI AVENUE

Global integration of streets, radius=n

Local integration of streets, radius=3

The space syntax analysis of street integration by global and local axial analysis demonstrates that streets are better integrated around the blocks. Those which directly connected the boundaries also have good integration. And most of the lanes inside the blocks are intergrated badly.

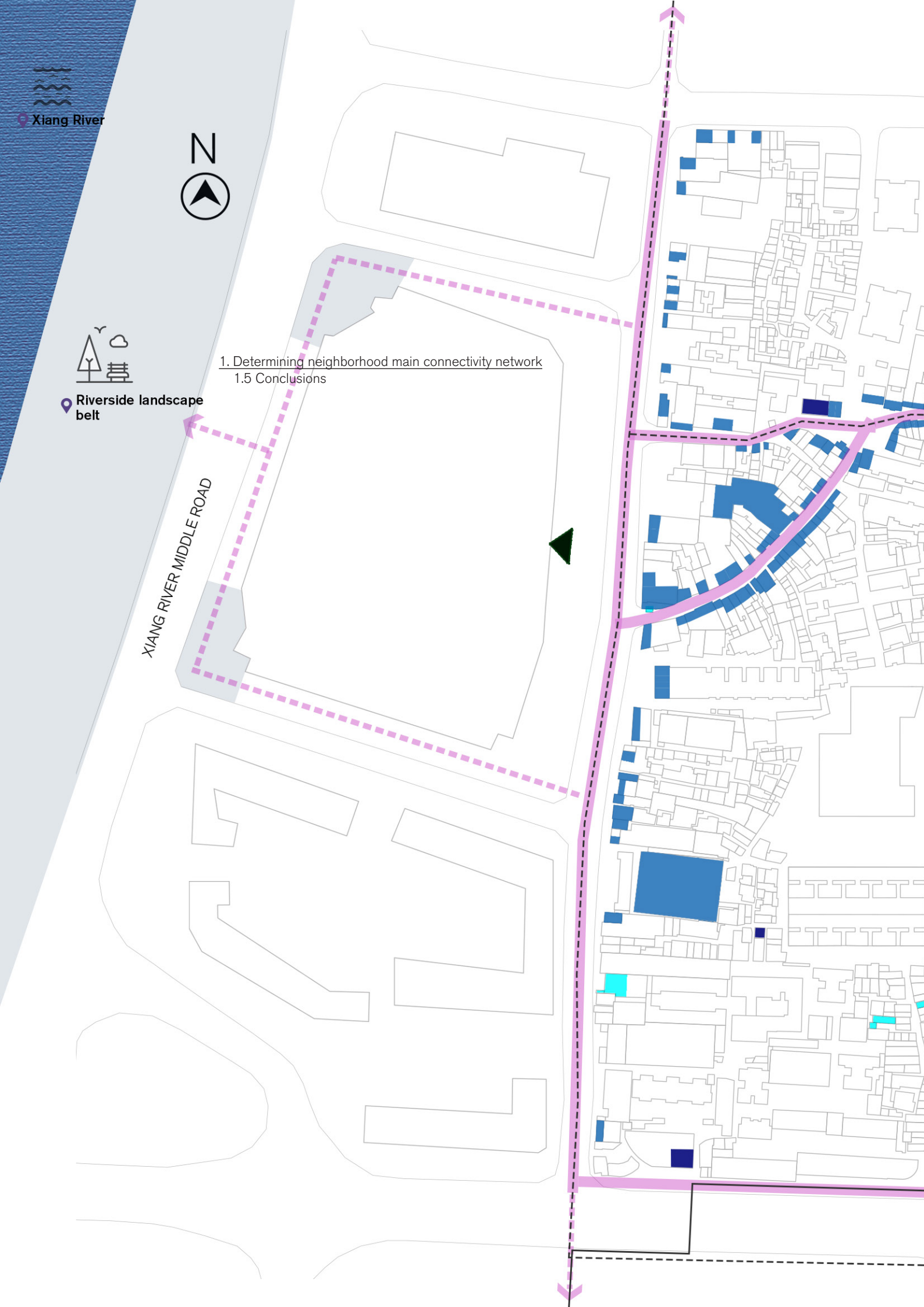
3

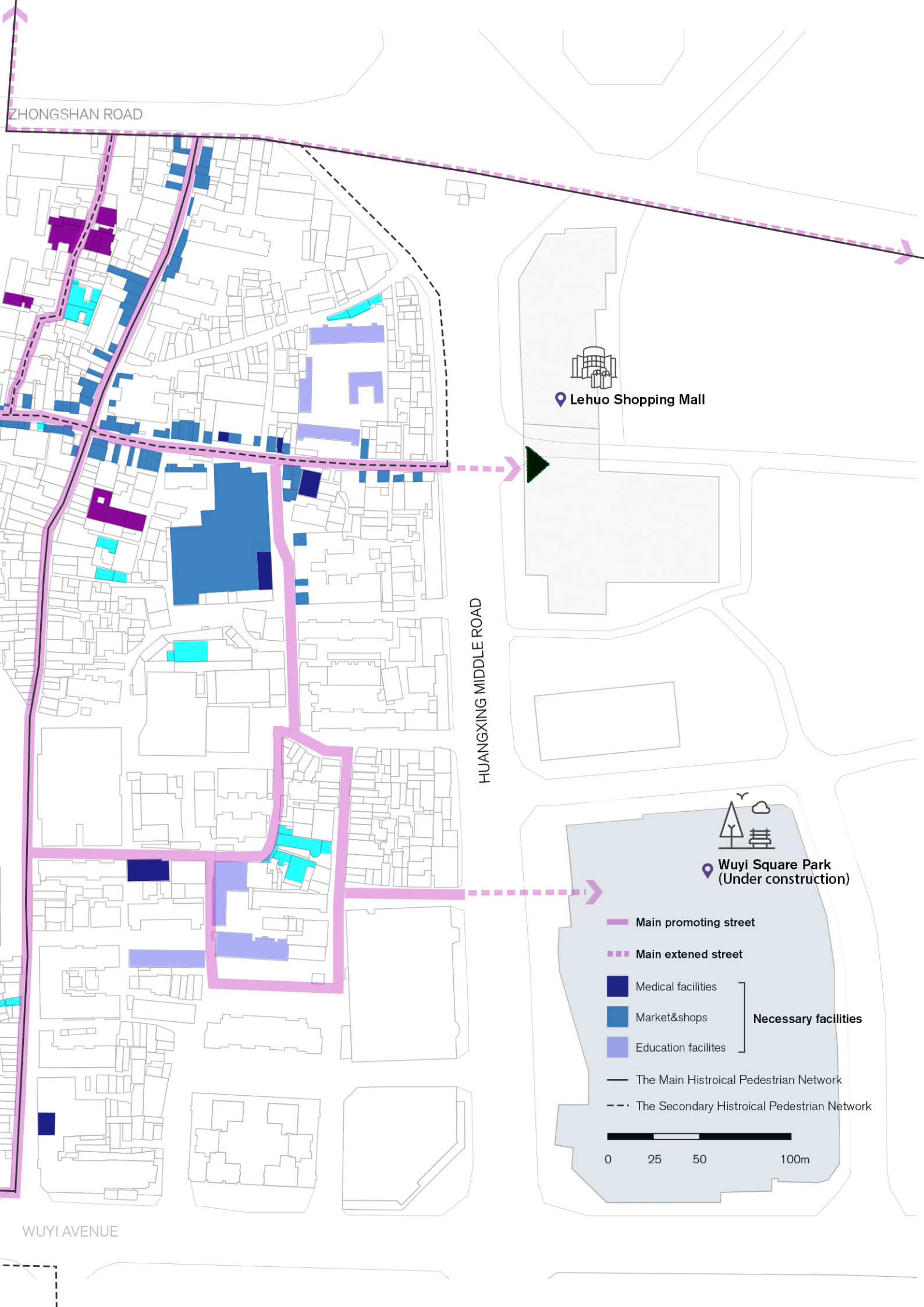
Step Depth

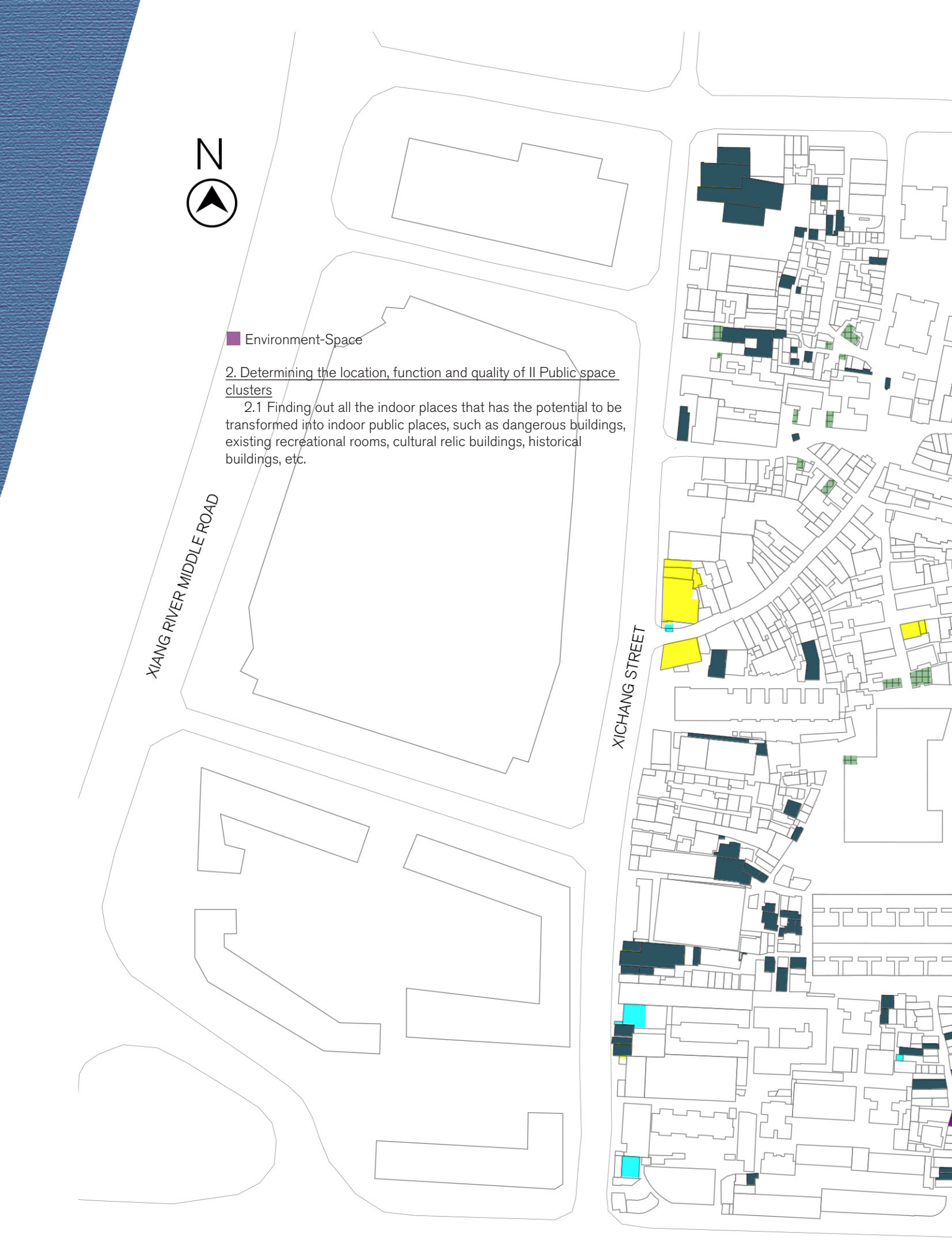
Image xx: Photo of the business pattern in the site

Source: Author

In Step Depth map, it shows clearly that if selects the main markets and shops streets as the centre of the blocks, the area blow the main markets and shops streets has shorter topological path, which means that the blow area has better connection to the markets and shops streets compared the overall streets inside the blocks.


Xiang River
N
Riverside landscape belt
1. Determining neighborhood main connectivity network
1.5 Conclusions
XIANG RIVER MIDDLE ROAD

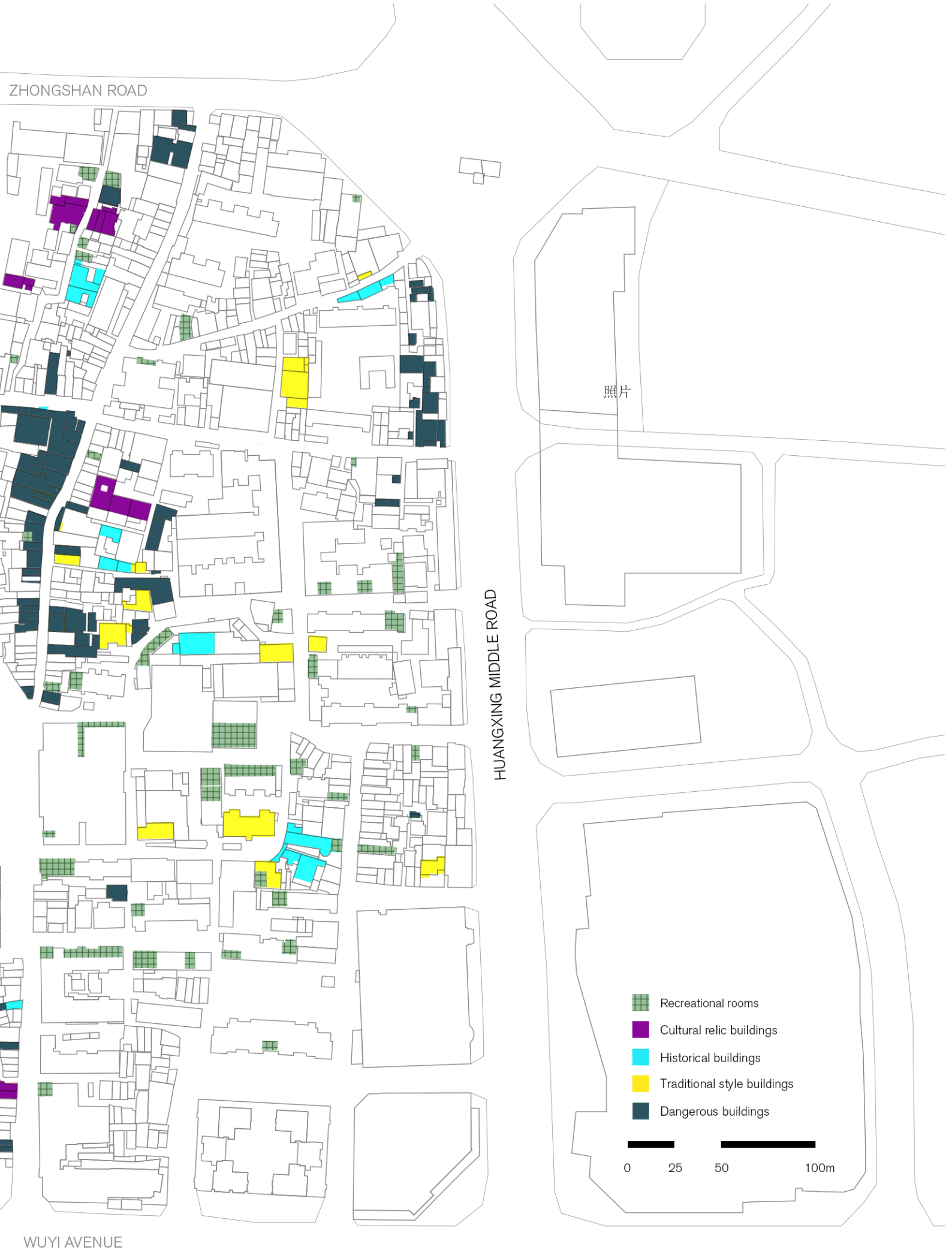

ZHONGSHAN ROAD
Lehuo Shopping Mall
HUANGXING MIDDLE ROAD
Wuyi Square Park
(Under construction)
Main promoting street
Main extened street
Medical facilities
Market&shops
Education facilites
Necessary facilities
The Main Histroical Pedestrian Network
The Secondary Histroical Pedestrian Network
0
25
50
100m
WUYI AVENUE



Environment-Space

2. Determining the location, function and quality of II Public space clusters

2.1 Finding out all the indoor places that has the potential to be transformed into indoor public places, such as dangerous buildings, existing recreational rooms, cultural relic buildings, historical buildings, etc.


ZHONGSHAN ROAD
照片
HUANGXING MIDDLE ROAD
Recreational rooms
Cultural relic buildings
Historical buildings
Traditional style buildings
Dangerous buildings
0
25
50
100m
WUYI AVENUE

2. Determining the location, function and quality of II Public space clusters

2.2 Finding out all the outdoor places that has the potential to be transformed into outdoor public places.

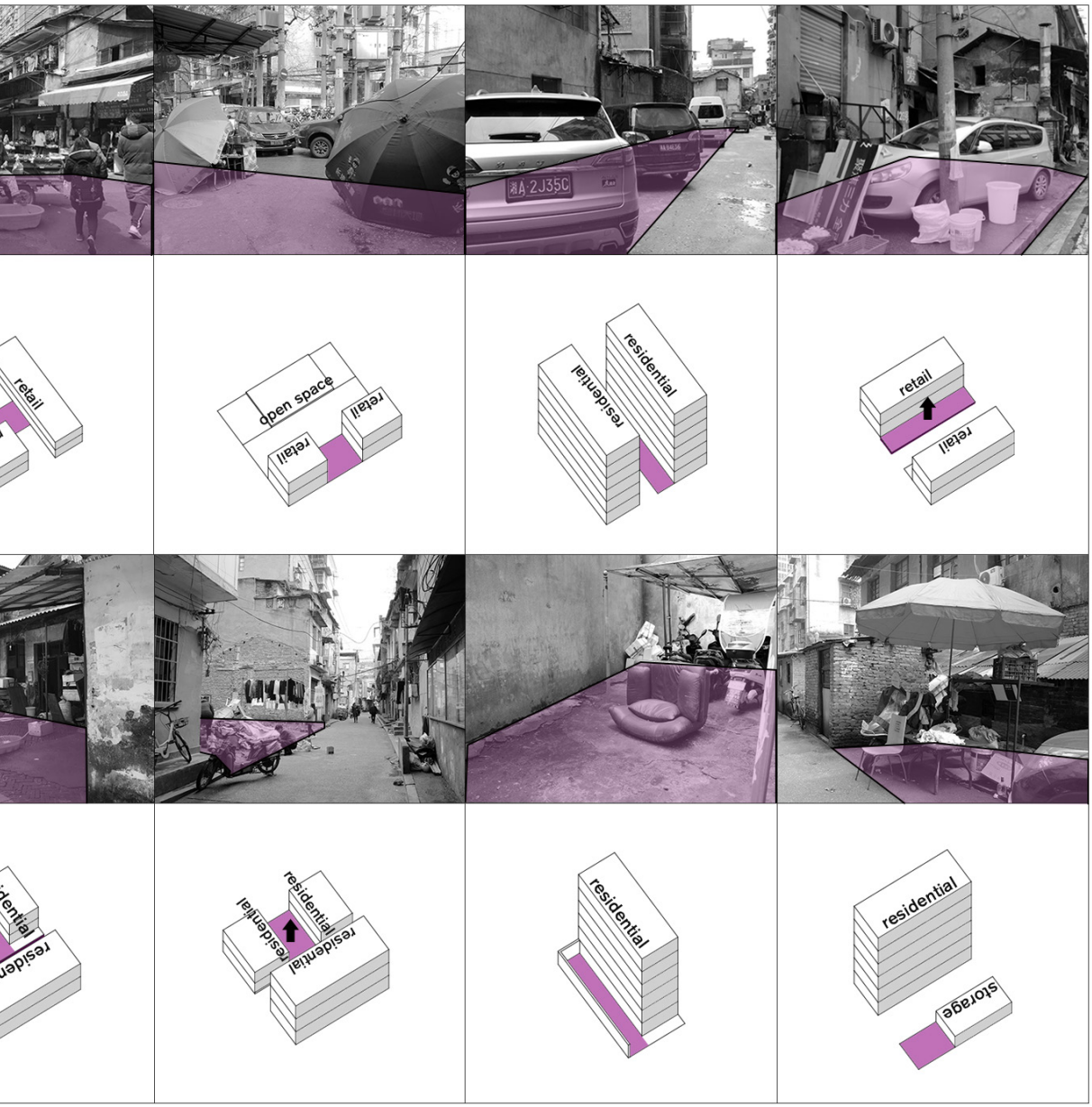
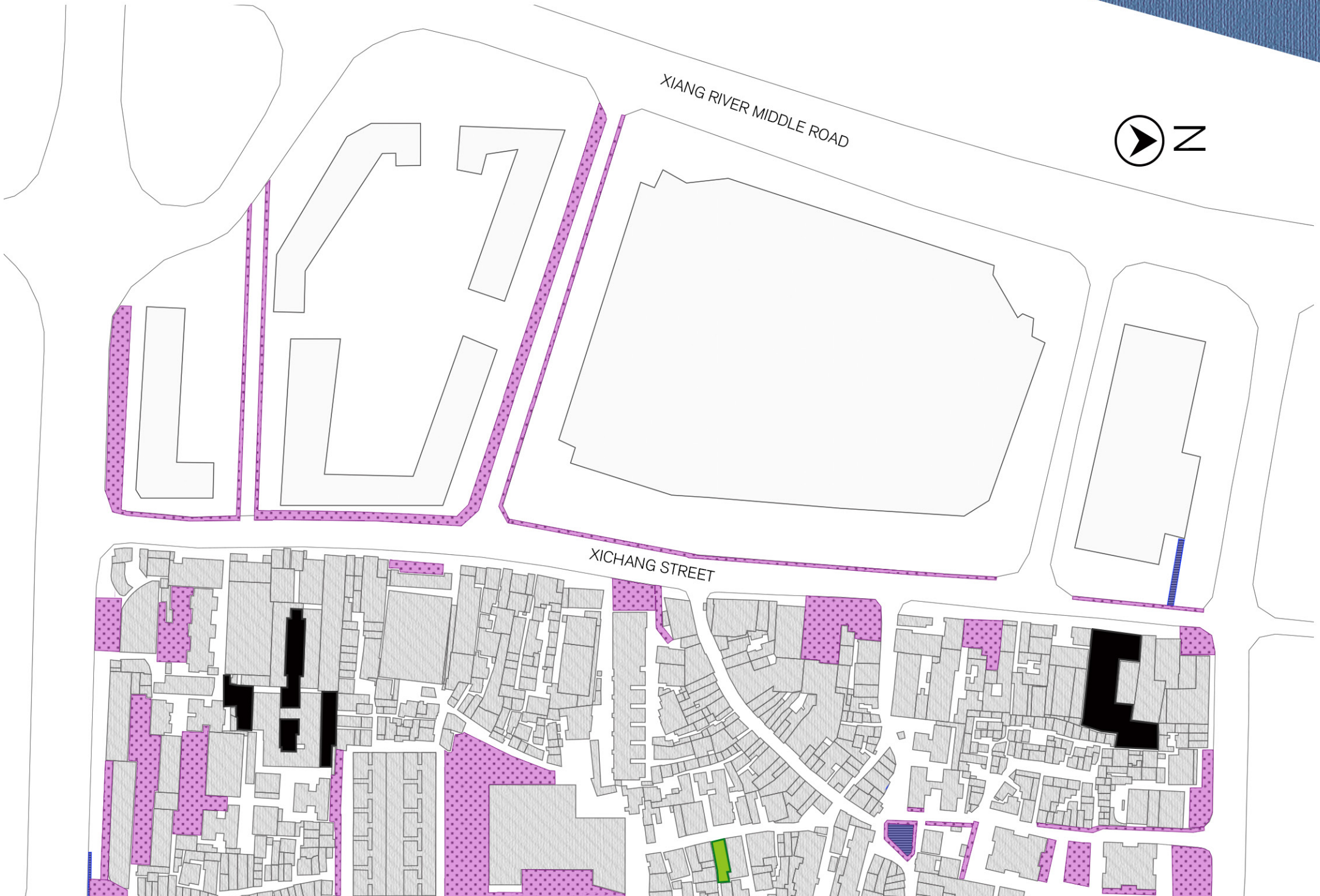
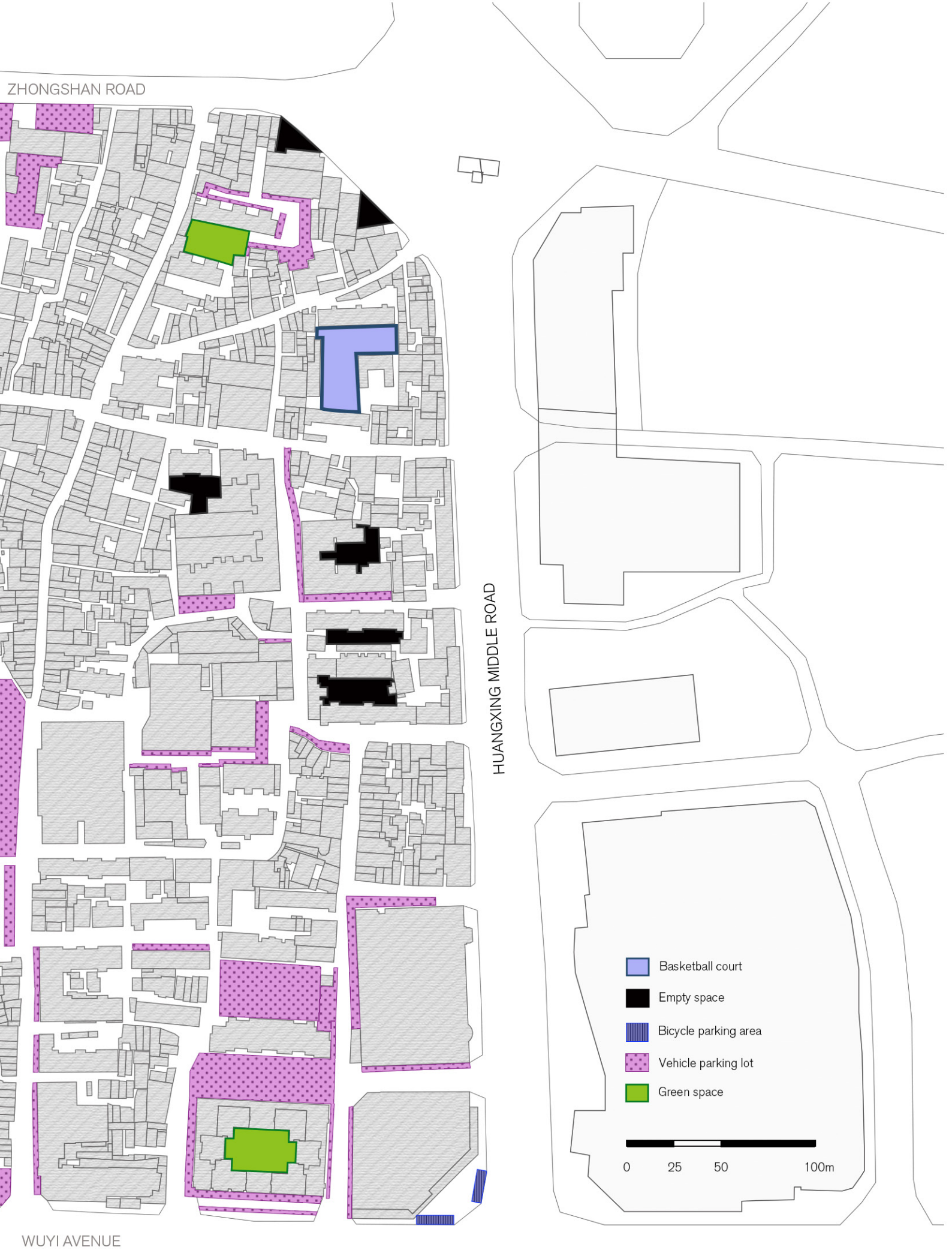
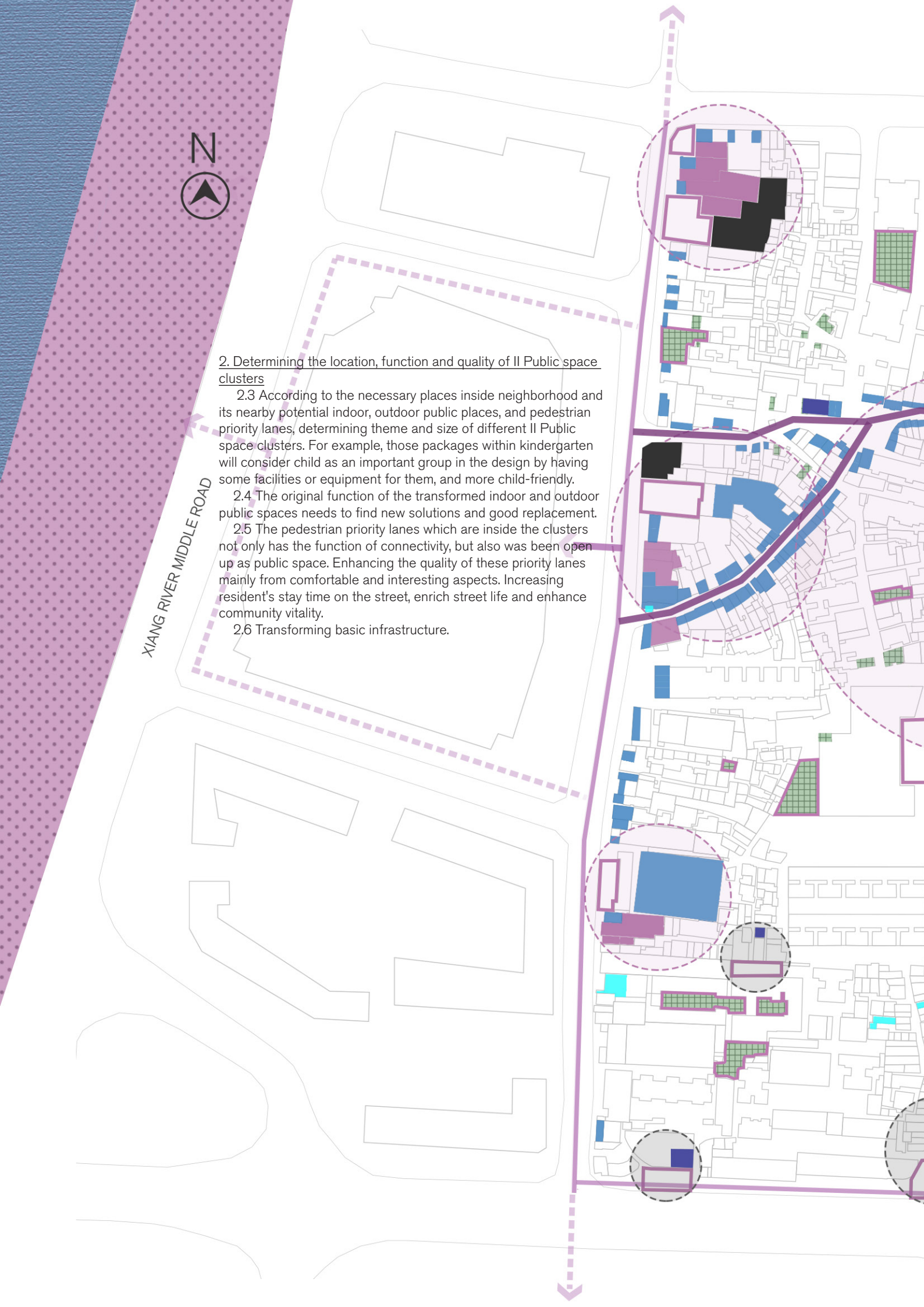


Image xx: Photo of the business pattern in the site

Source: Author


XIANG RIVER MIDDLE ROAD
XICHANG STREET
N


ZHONGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
Basketball court
Empty space
Bicycle parking area
Vehicle parking lot
Green space
0
25
50
100m



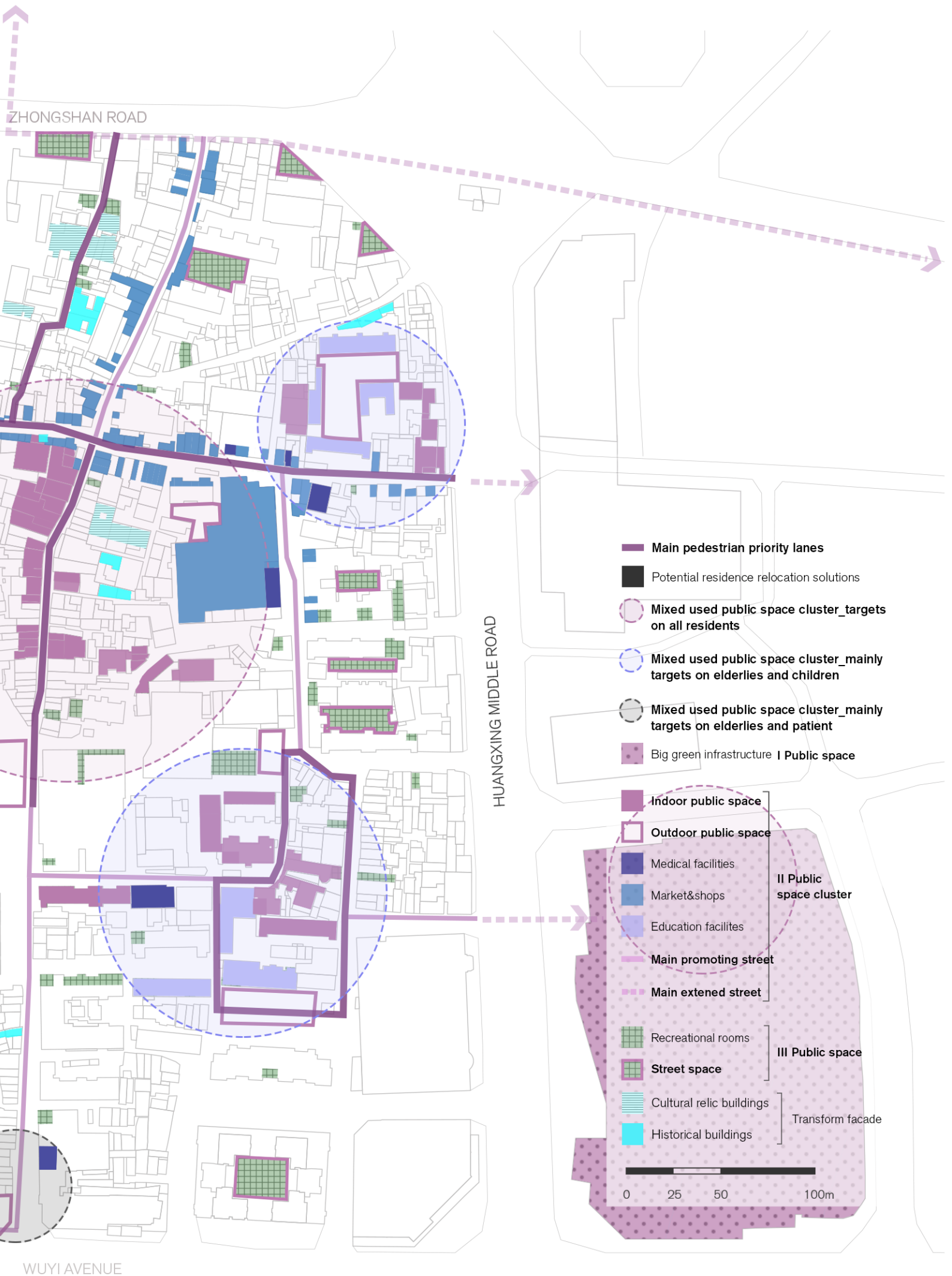
2. Determining the location, function and quality of II Public space clusters

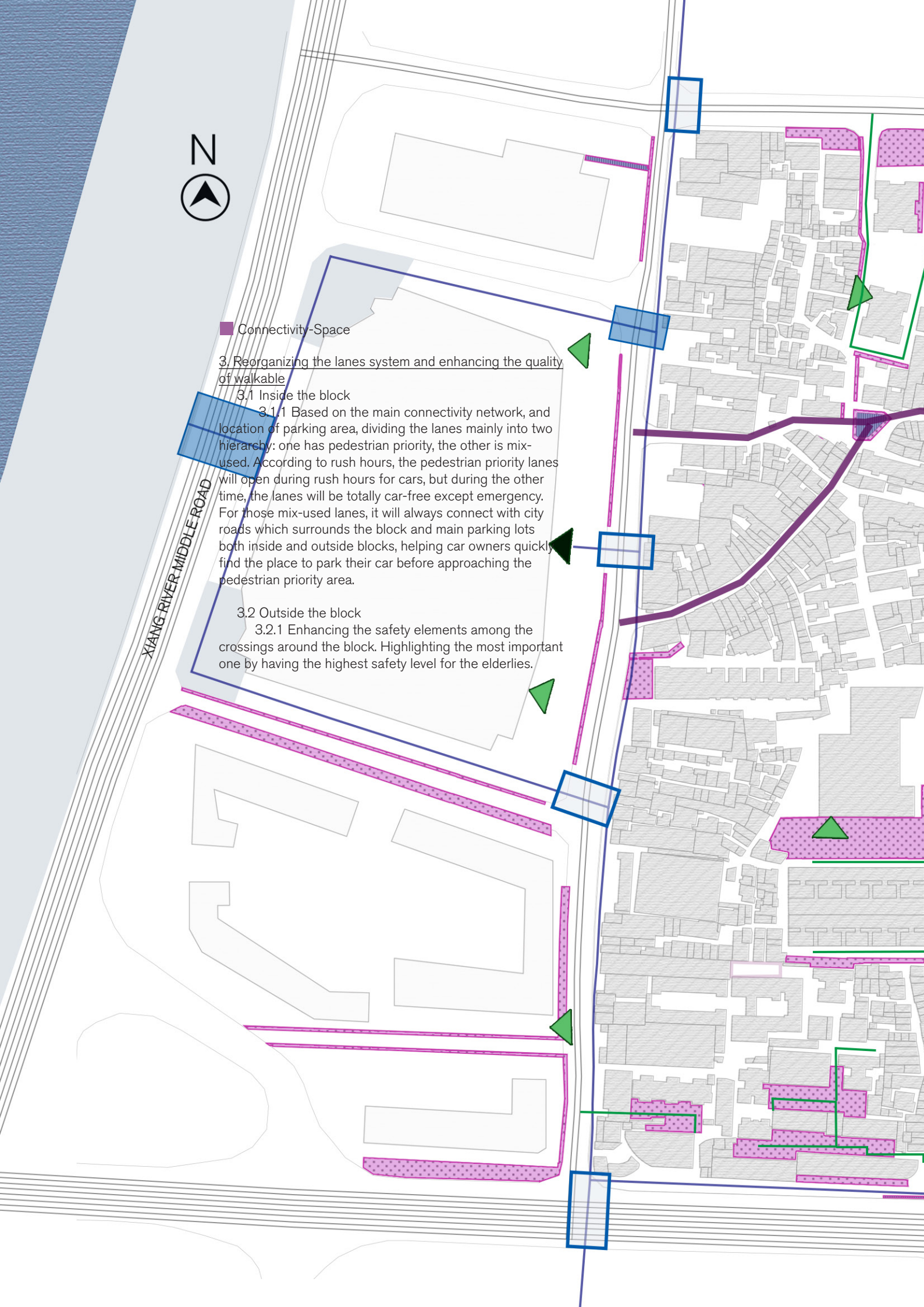
2.3 According to the necessary places inside neighborhood and its nearby potential indoor, outdoor public places, and pedestrian priority lanes, determining theme and size of different II Public space clusters. For example, those packages within kindergarten will consider child as an important group in the design by having some facilities or equipment for them, and more child-friendly.

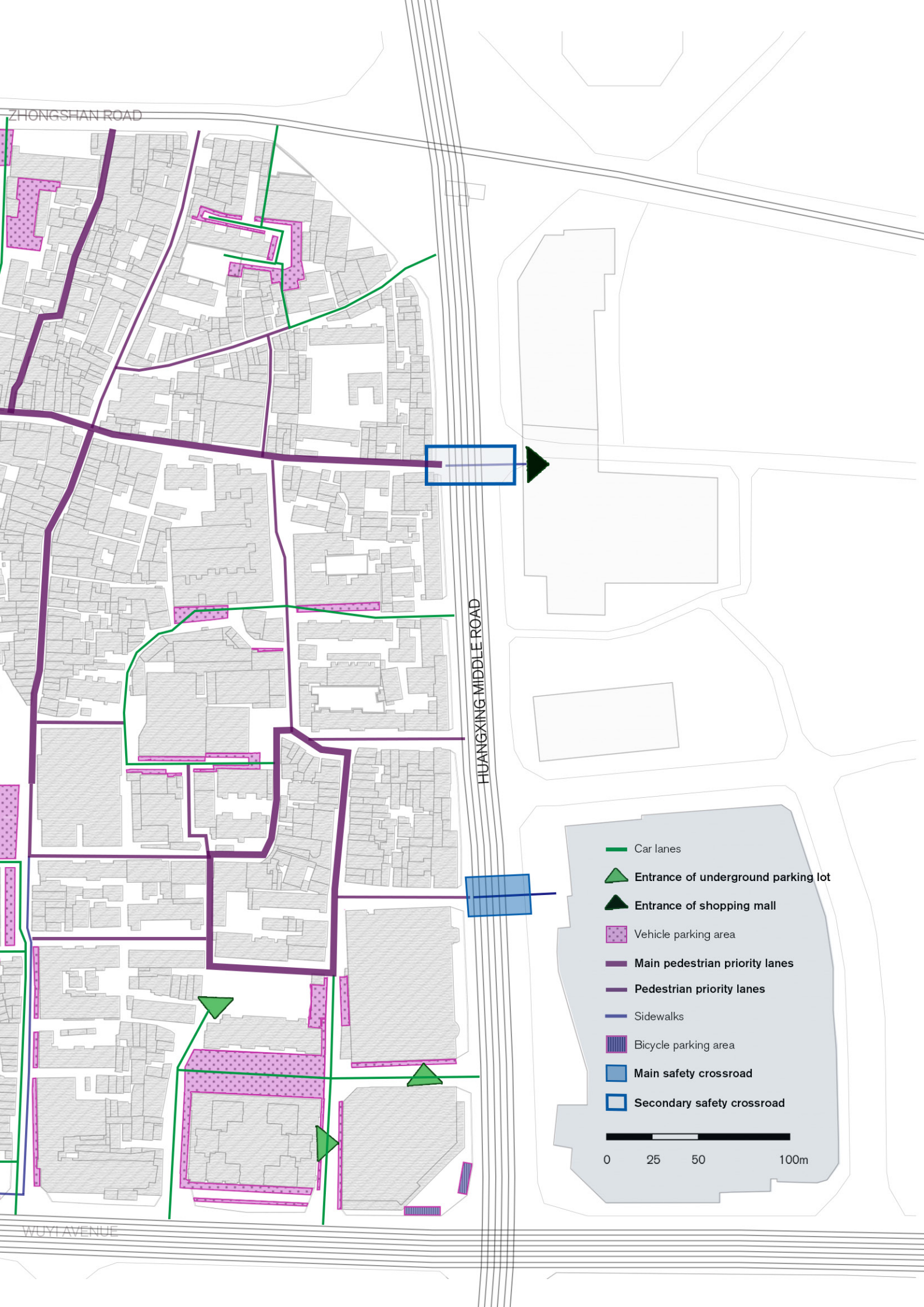
2.4 The original function of the transformed indoor and outdoor public spaces needs to find new solutions and good replacement.

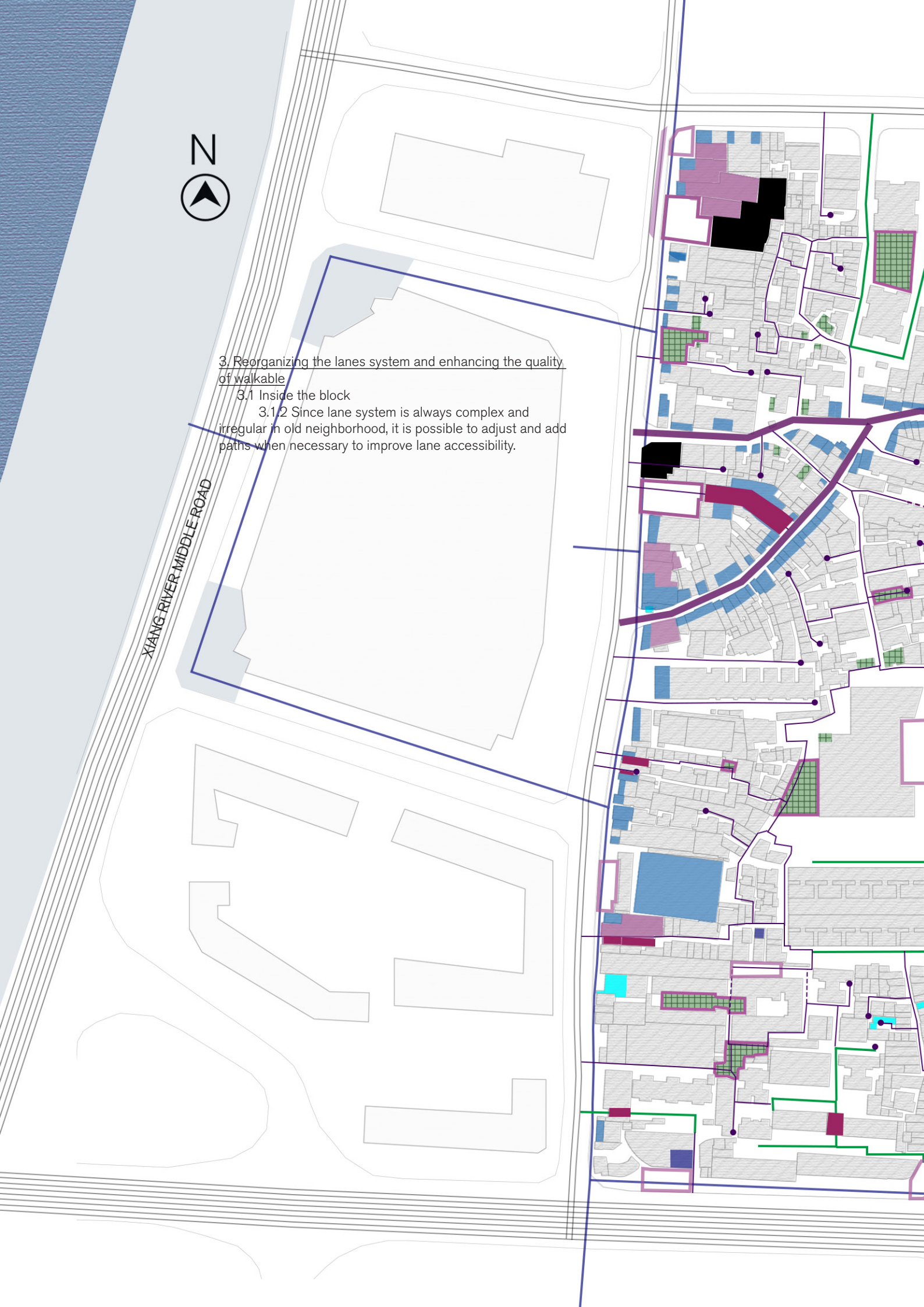
2.5 The pedestrian priority lanes which are inside the clusters not only has the function of connectivity, but also was been open up as public space. Enhancing the quality of these priority lanes mainly from comfortable and interesting aspects. Increasing resident's stay time on the street, enrich street life and enhance community vitality.

2.6 Transforming basic infrastructure.


ZHONGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
Main pedestrian priority lanes
Potential residence relocation solutions
Mixed used public space cluster_targets on all residents
Mixed used public space cluster_mainly targets on elderlies and children
Mixed used public space cluster_mainly targets on elderlies and patient
Big green infrastructure
I Public space
Indoor public space
Outdoor public space
Medical facilities
Market&shops
Education facilites
II Public space cluster
Main promoting street
Main extened street
Recreational rooms
Street space
III Public space
Cultural relic buildings
Historical buildings
Transform facade
0
25
50
100m


N
XIANG RIVER MIDDLE ROAD
Connectivity-Space
3. Reorganizing the lanes system and enhancing the quality of walkable
3.1 Inside the block
3.1.1 Based on the main connectivity network, and location of parking area, dividing the lanes mainly into two hierarchy: one has pedestrian priority, the other is mix-used. According to rush hours, the pedestrian priority lanes will open during rush hours for cars, but during the other time, the lanes will be totally car-free except emergency. For those mix-used lanes, it will always connect with city roads which surrounds the block and main parking lots both inside and outside blocks, helping car owners quickly find the place to park their car before approaching the pedestrian priority area.
3.2 Outside the block
3.2.1 Enhancing the safety elements among the crossings around the block. Highlighting the most important one by having the highest safety level for the elderlies.

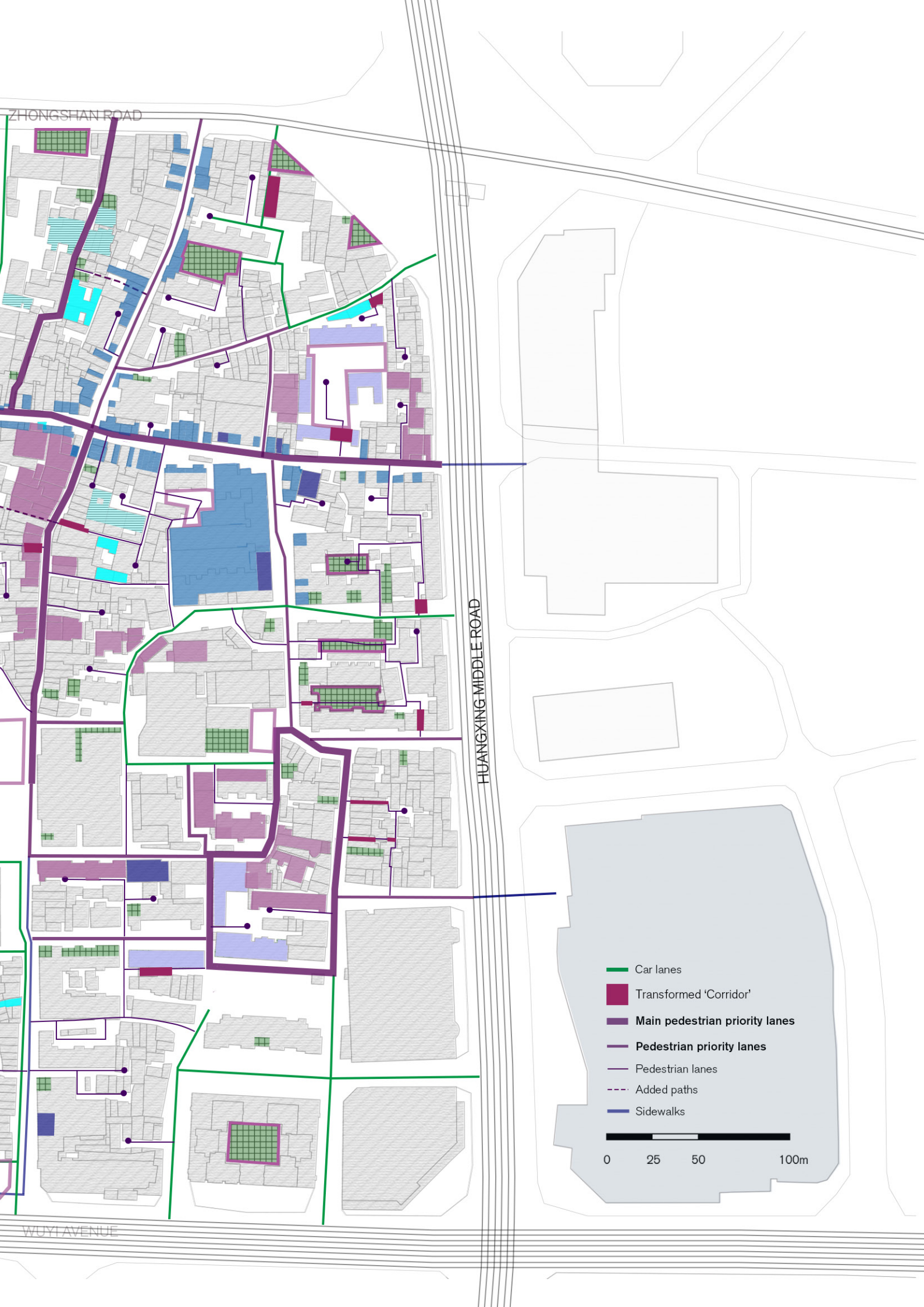

ZHONGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
Car lanes
Entrance of underground parking lot
Entrance of shopping mall
Vehicle parking area
Main pedestrian priority lanes
Pedestrian priority lanes
Sidewalks
Bicycle parking area
Main safety crossroad
Secondary safety crossroad
0
25
50
100m



3. Reorganizing the lanes system and enhancing the quality of walkable

3.1 Inside the block

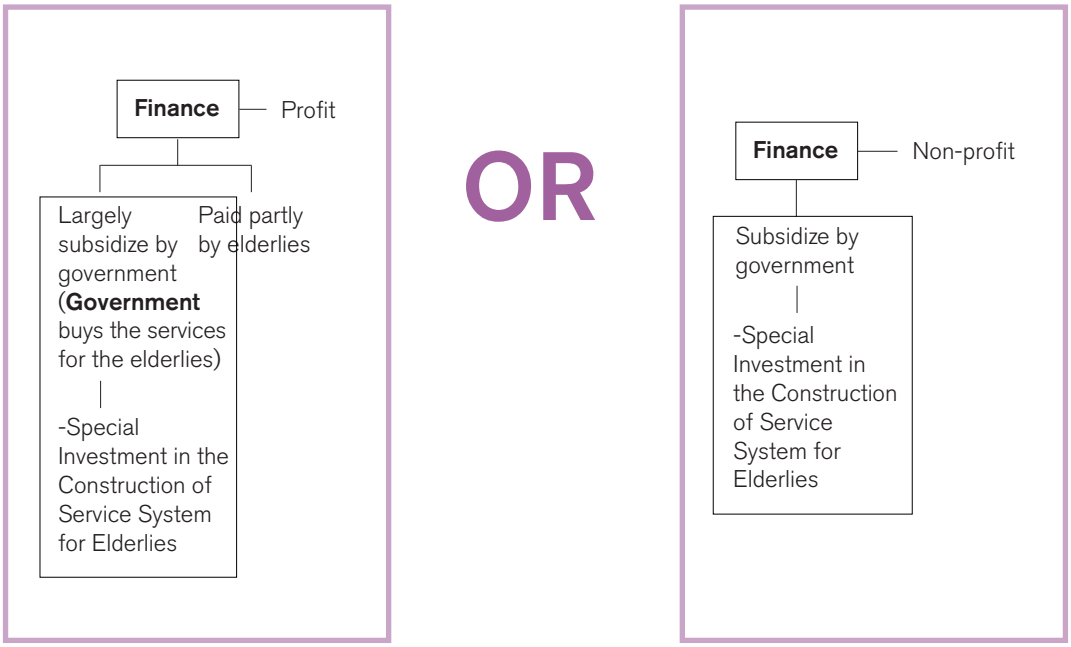
3.1.2 Since lane system is always complex and irregular in old neighborhood, it is possible to adjust and add paths when necessary to improve lane accessibility.


ZHONGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
Car lanes
Transformed 'Corridor'
Main pedestrian priority lanes
Pedestrian priority lanes
Pedestrian lanes
Added paths
Sidewalks
0
25
50
100m

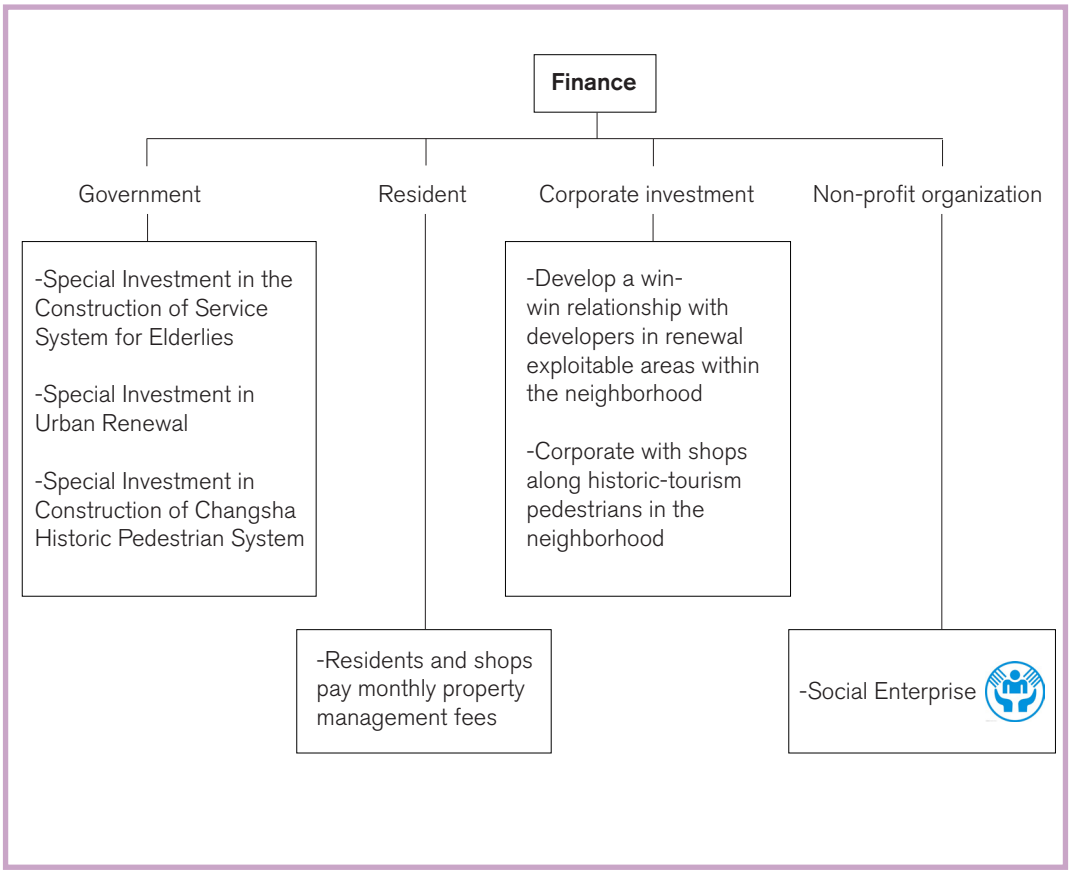
5. Broadening investment channels

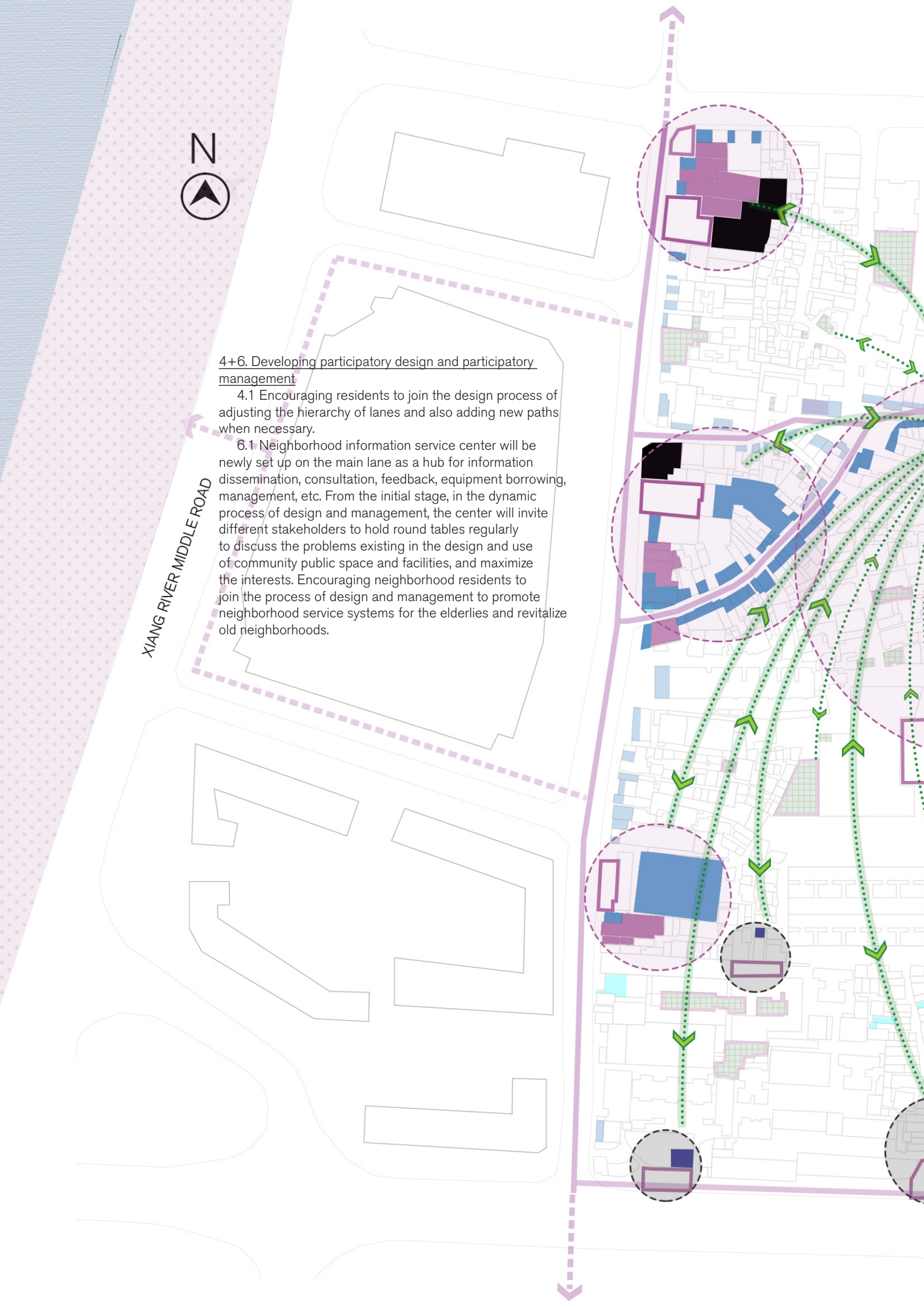
5.1 The new economic model does not rely solely on government investment, but on the development of multi-pillar support and broadening investment channels mainly from four aspects: government support, resident support, corporate investment and non-profit organization.

Existing:



Proposal:

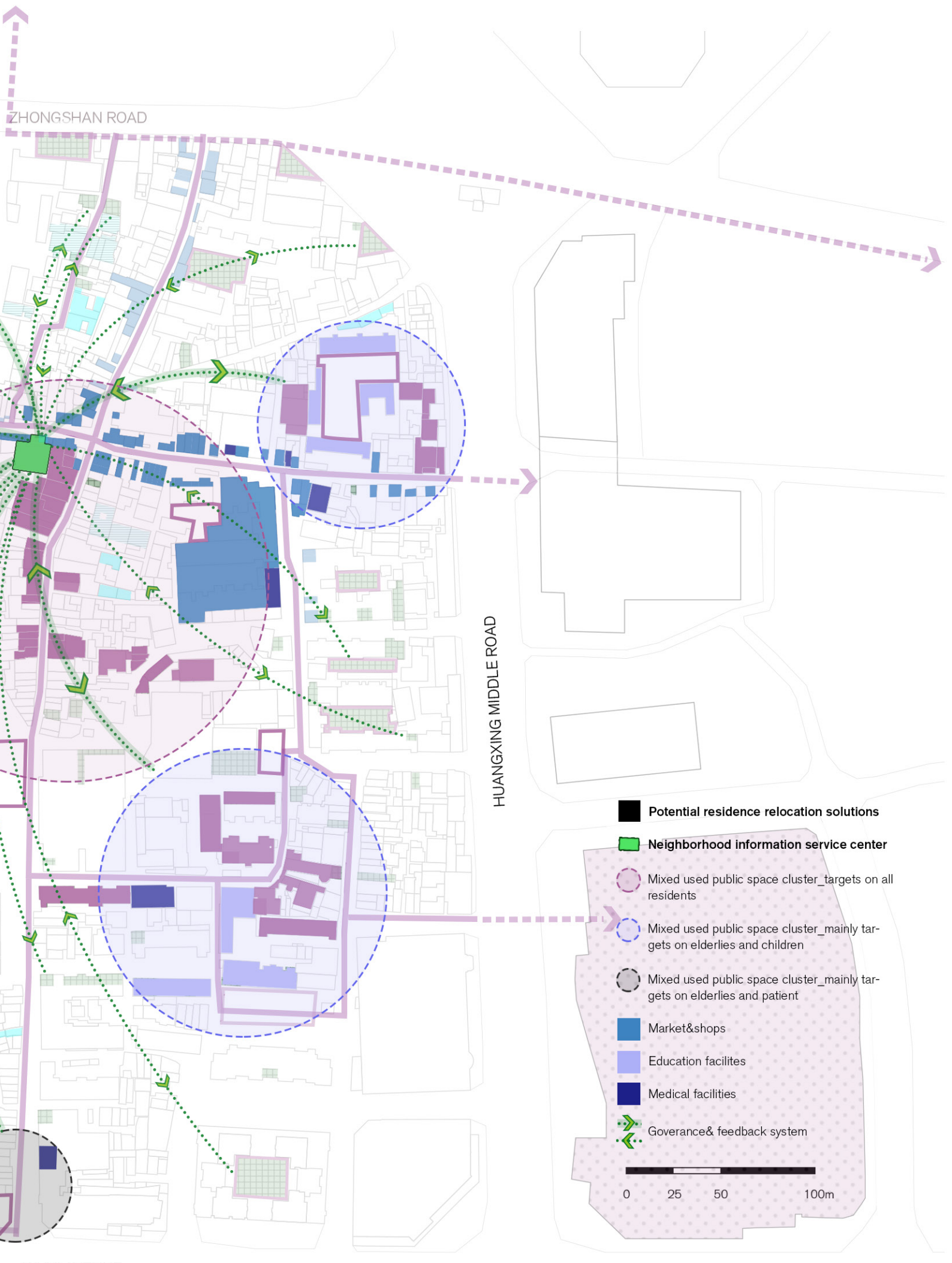

Finance
Government
Resident
Corporate investment
Non-profit organization
-Special Investment in the Construction of Service System for Elderlies
-Special Investment in Urban Renewal
-Special Investment in Construction of Changsha Historic Pedestrian System
-Develop a win-win relationship with developers in renewal exploitable areas within the neighborhood
-Corporate with shops along historic-tourism pedestrians in the neighborhood
-Residents and shops pay monthly property management fees
-Social Enterprise



4+6. Developing participatory design and participatory management

4.1 Encouraging residents to join the design process of adjusting the hierarchy of lanes and also adding new paths when necessary.

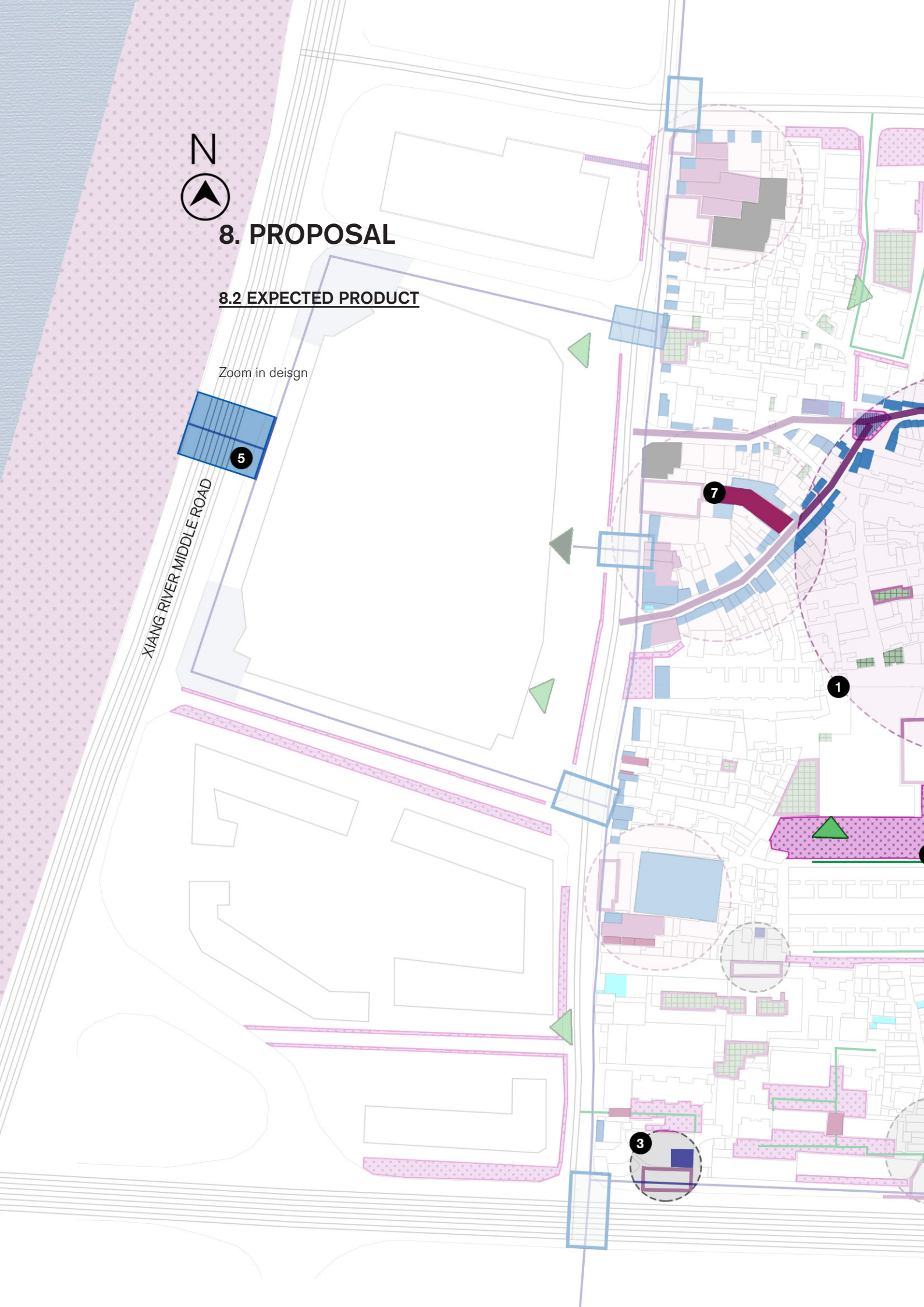
6.1 Neighborhood information service center will be newly set up on the main lane as a hub for information dissemination, consultation, feedback, equipment borrowing, management, etc. From the initial stage, in the dynamic process of design and management, the center will invite different stakeholders to hold round tables regularly to discuss the problems existing in the design and use of community public space and facilities, and maximize the interests. Encouraging neighborhood residents to join the process of design and management to promote neighborhood service systems for the elderlies and revitalize old neighborhoods.


ZHONGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
Potential residence relocation solutions
Neighborhood information service center
Mixed used public space cluster_targets on all residents
Mixed used public space cluster_mainly targets on elderlies and children
Mixed used public space cluster_mainly targets on elderlies and patient
Market&shops
Education facilites
Medical facilities
Goverance& feedback system
0
25
50
100m

8. PROPOSAL

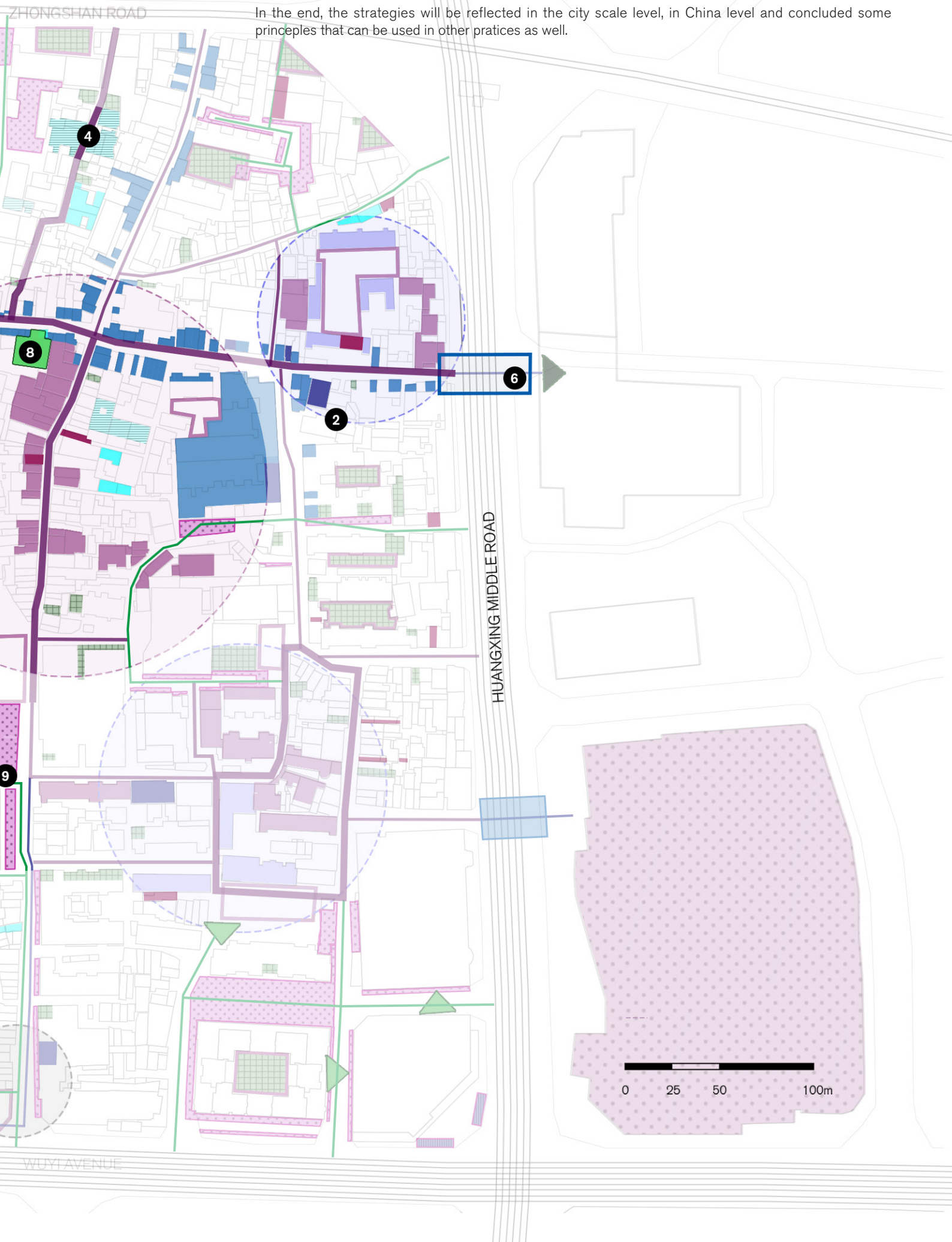
8.2 EXPECTED PRODUCT

Zoom in deisgn



Based on the vision that proposed above, connected with the knowledge of the following chapter--theoretical framework, detail the strategies in the neighborhood scale. The strategies may mainly focus on the location of the facilities, reorganization of the slow and fast transports, creation of activities places, etc.

In the end, the strategies will be reflected in the city scale level, in China level and concluded some princeples that can be used in other pratices as well.



ROOF

Smart Ideas
for Smarter
IBM

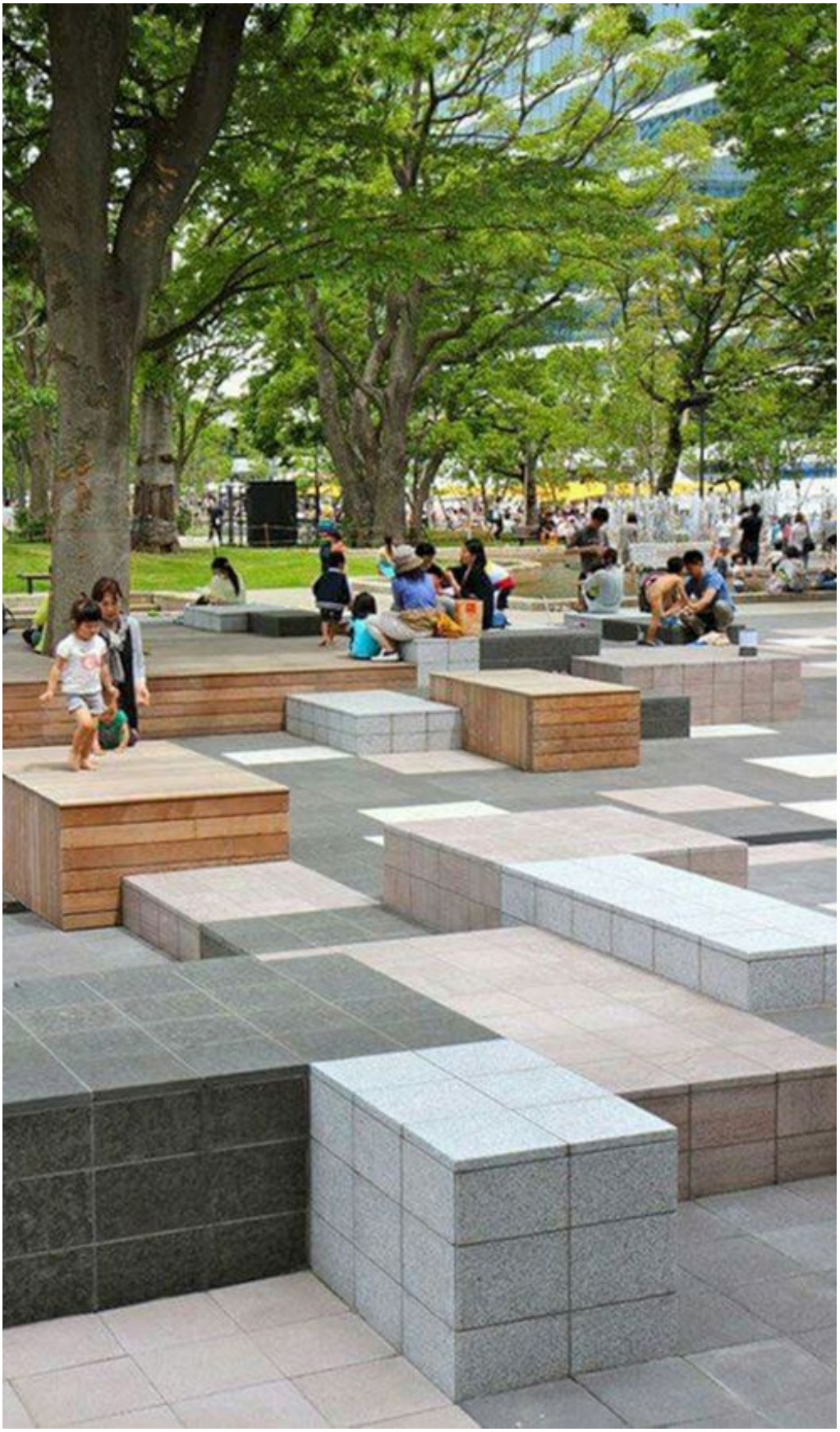
Smart Ideas
for Smarter
IBM

Smart Ideas
for Smarter
IBM

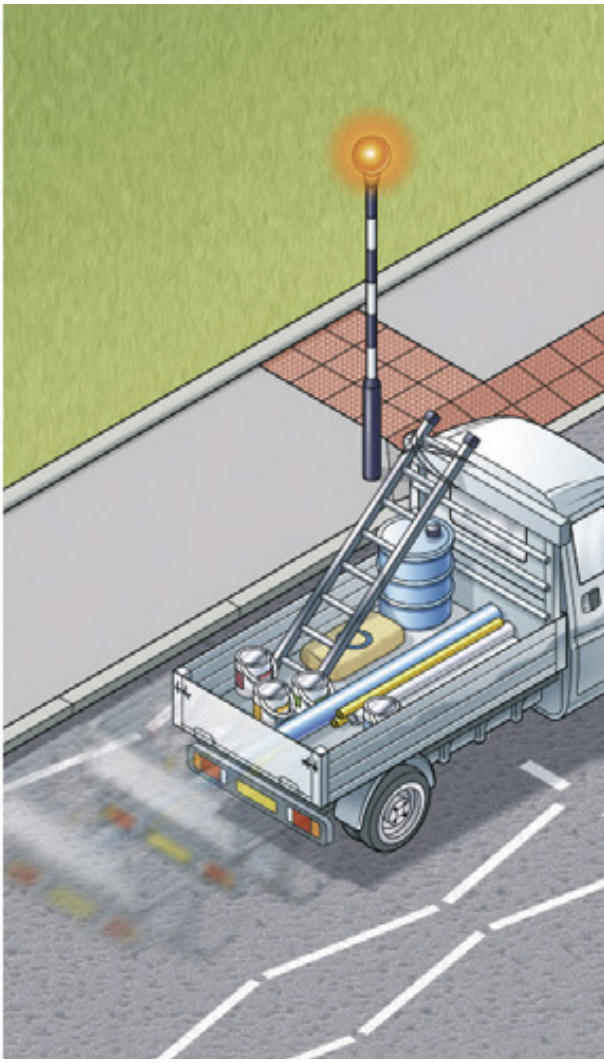
ities

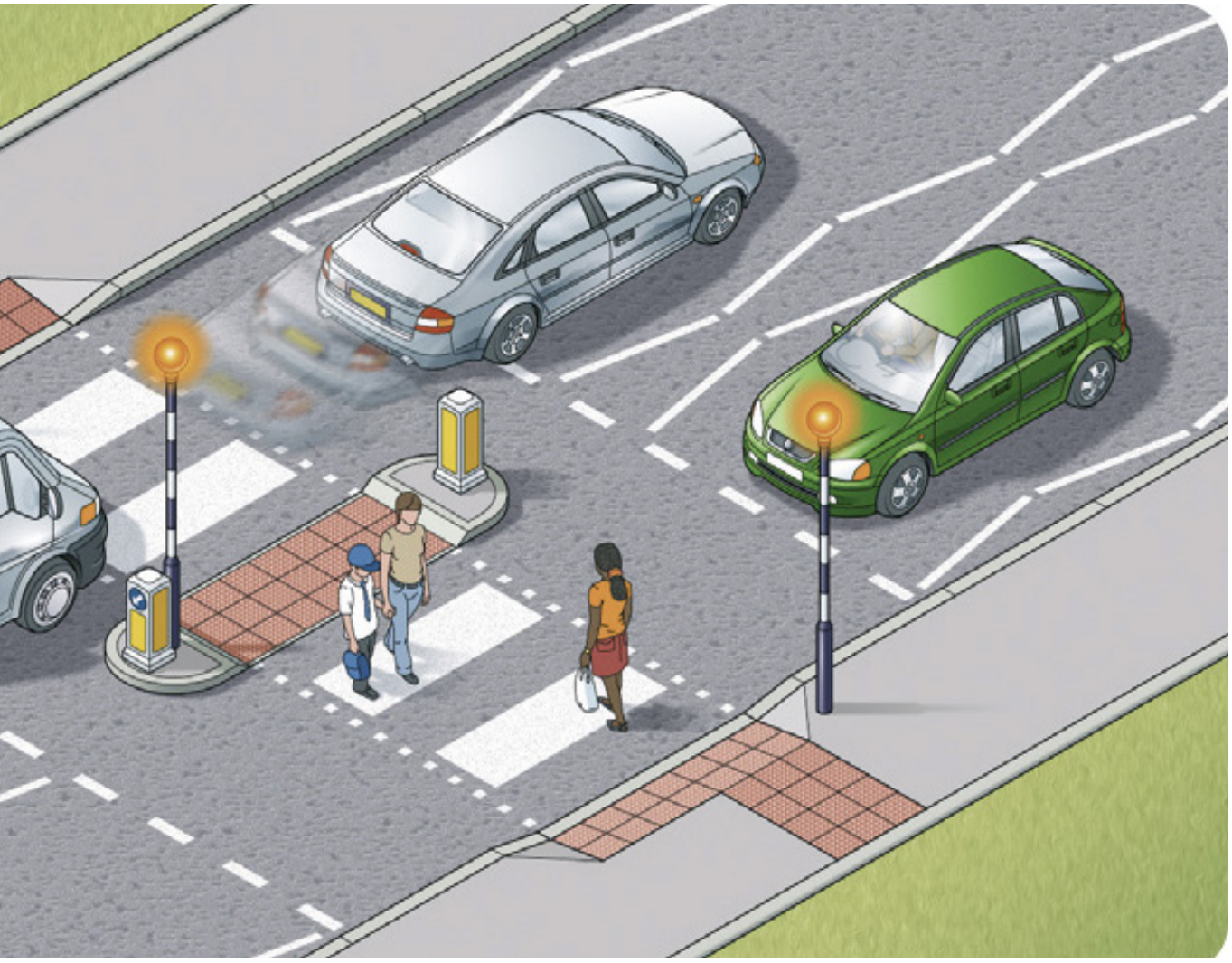
Cities

ities



Rule 20
Zebra crossings with a central island are two separate crossings





9. PROPOSAL

9.1 STRATEGY OF VISION-STEP 1

■ Middle scale public space package

1. Distribution of necessary places
   1.1 Markets/Supermarkets/Shops

PHOTOS

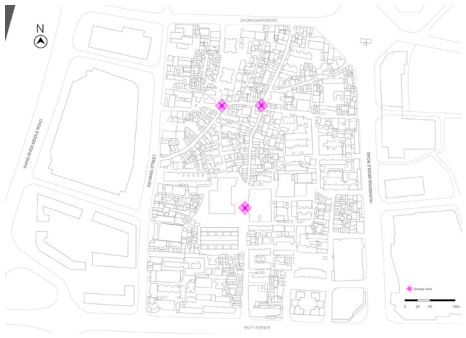
DISTRIBUTION	TYPOLOGY	FEATURE
		1. Ground floor used as the market, upper floor used as the residence of the merchants downstairs. 2. The environment inside is relatively not good, airless, poor lighting, and slippery.
		1. Ground floor shops, upper fllor used as the residence of the merchants downstairs 2. Always extend the goods on the sidewalks 3. Compared with the indoor market, the shops along the lane have relatively good environment.
		

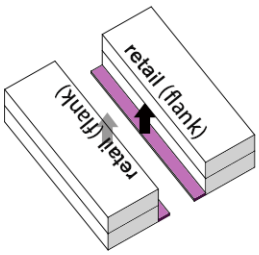
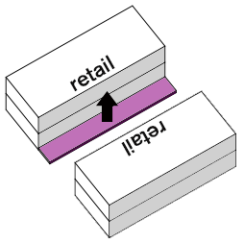
Image xx: Photo of the business pattern in the site

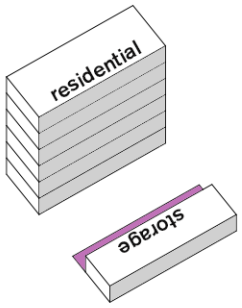
Source: Author

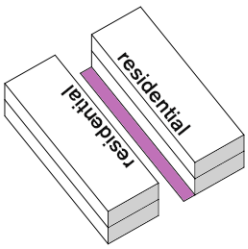
10. STRATEGY

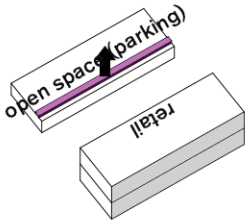
8.6 MAPPING-POTENTIAL PLACES

Outdoor places——small scale public place

Small Scale Public Space		
Site Photos		
Space Model		
Function (Nowadays)	-Goods placed -Parking of motor vehicles	 -Selling







-Parking of motor vehicles

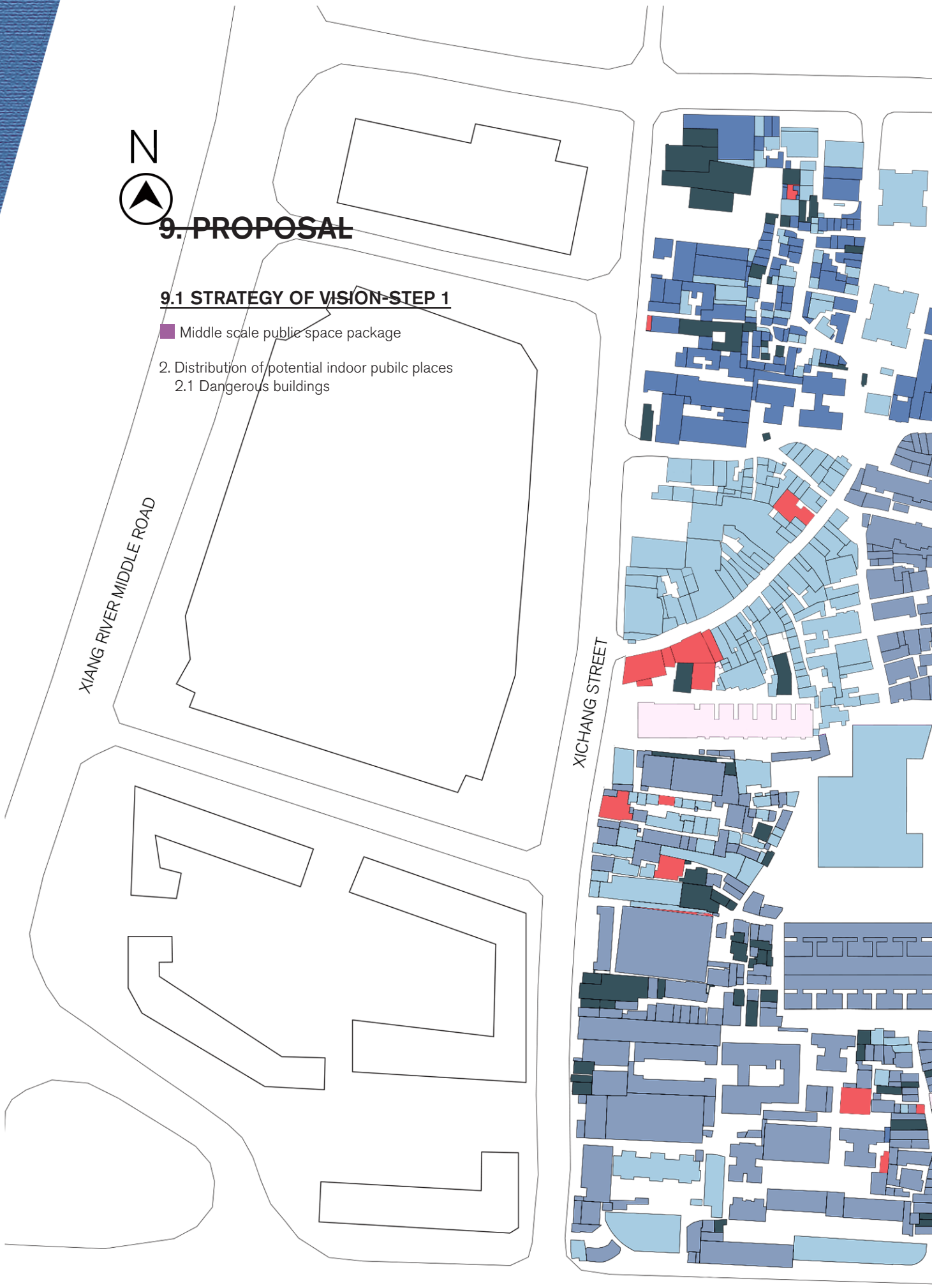
-Debris display

-Gardening

-Card games

N
ZHONGSHAN ROAD
XIANG RIVER MIDDLE ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
0 25 50 100m

N
ZHONGSHAN ROAD
XIANG RIVER MIDDLE ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
0 25 50 100m

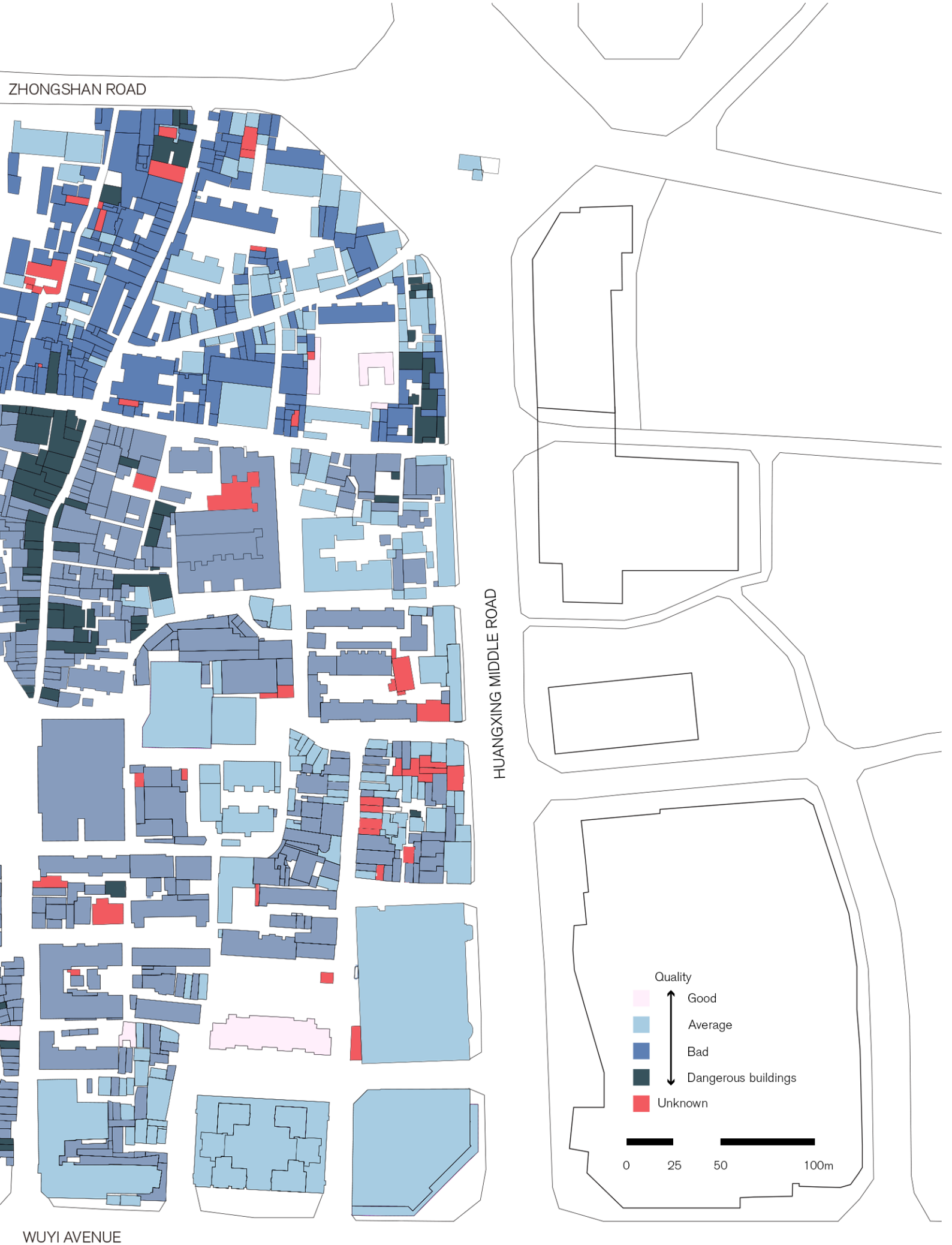


9. PROPOSAL

9.1 STRATEGY OF VISION-STEP 1

Middle scale public space package

2. Distribution of potential indoor pubilc places
   2.1 Dangerous buildings


ZHONGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
Quality
Good
Average
Bad
Dangerous buildings
Unknown
0
25
50
100m

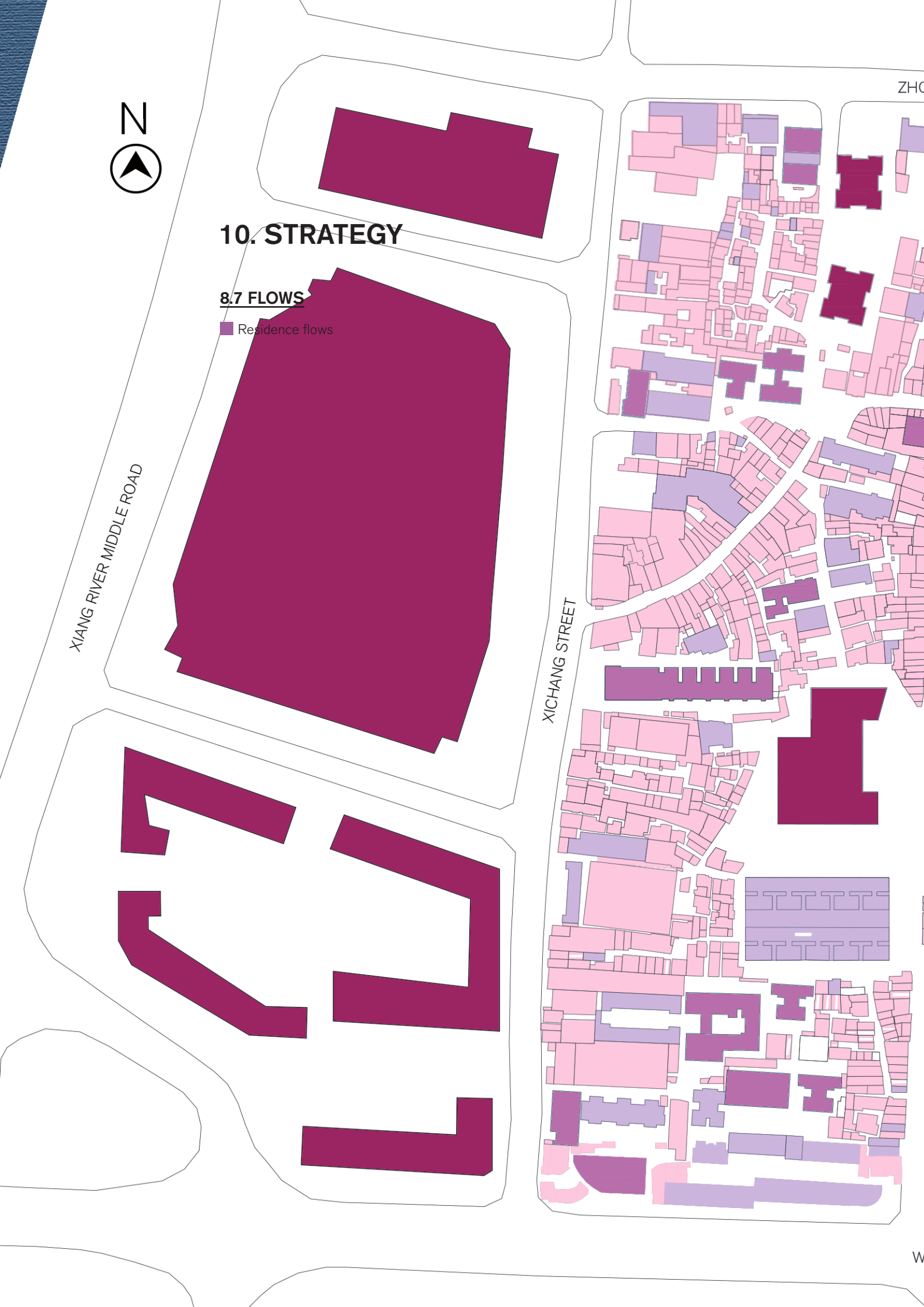
XIANG RIVER MIDDLE ROAD
N

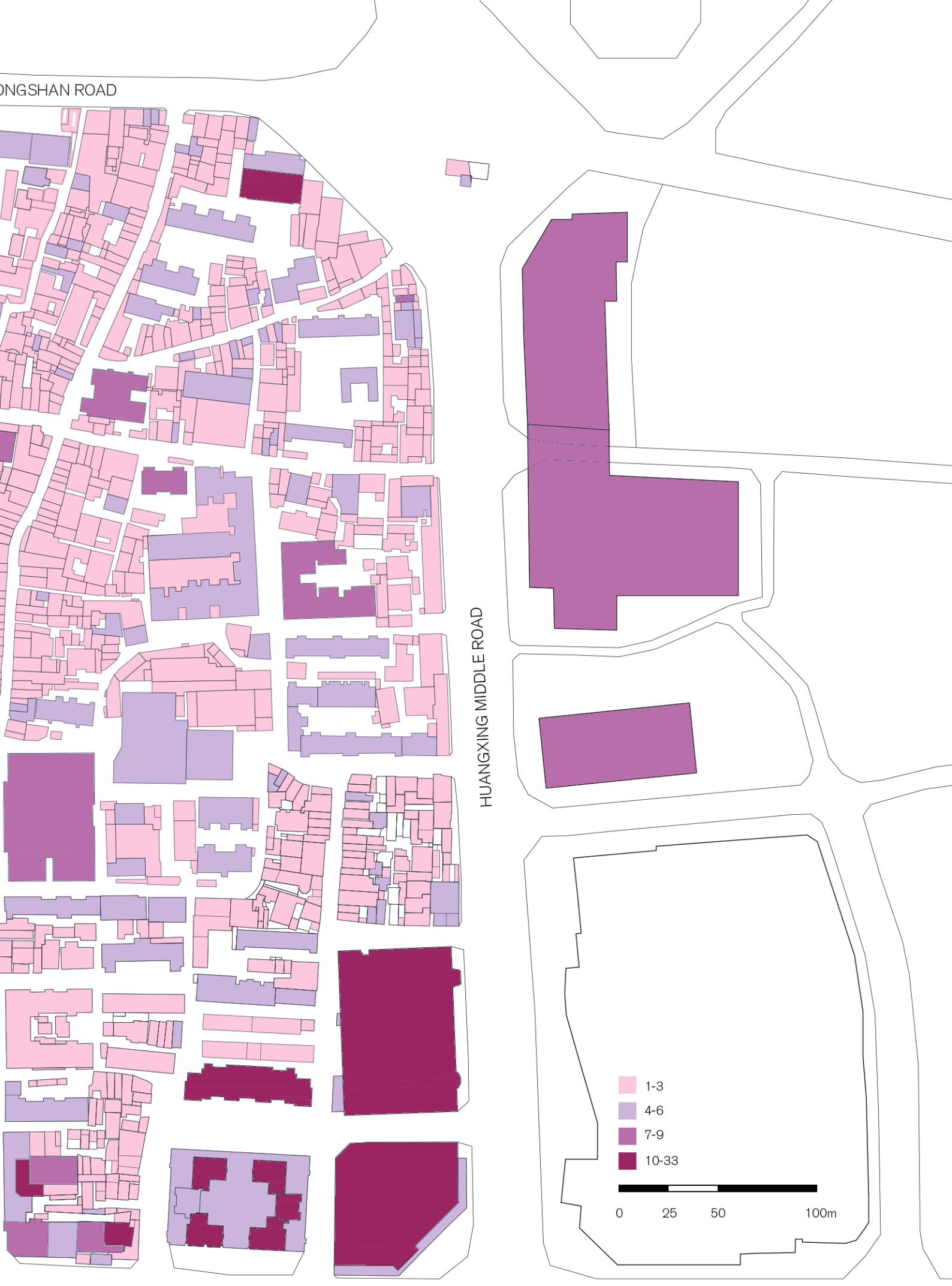
ZHONGSHAN ROAD
HUANGXING MIDDLE ROAD
WUYI AVENUE
Recreational rooms
0
25
50
100m

10. STRATEGY

8.7 FLOWS

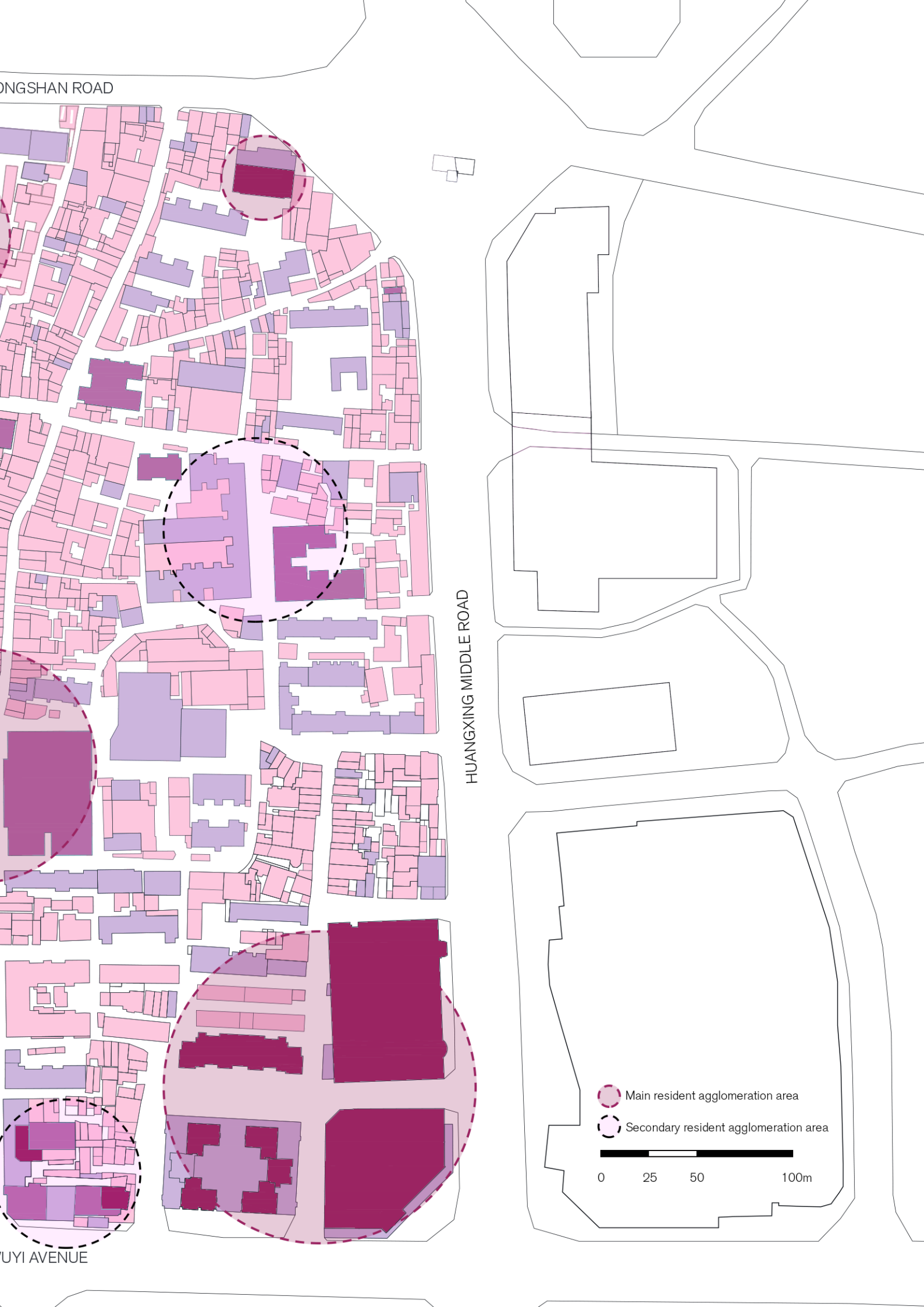
Residence flows




ONGSHAN ROAD
HUANGXING MIDDLE ROAD
UYI AVENUE
1-3
4-6
7-9
10-33
0
25
50
100m

N

XICHANG STREET


ONGSHAN ROAD
HUANGXING MIDDLE ROAD
UYI AVENUE
Main resident agglomeration area
Secondary resident agglomeration area
0
25
50
100m

8. SOLUTIONS PROPOSAL

7. SOLUTIONS PROPOSAL

7.8 EXISTING PHYSICAL ENVIRONMENT CONDITION

Sunshine

7.1 VISION

Principles

INFORMAL DECENTRALIZED
FORMAL CENTRALIZED

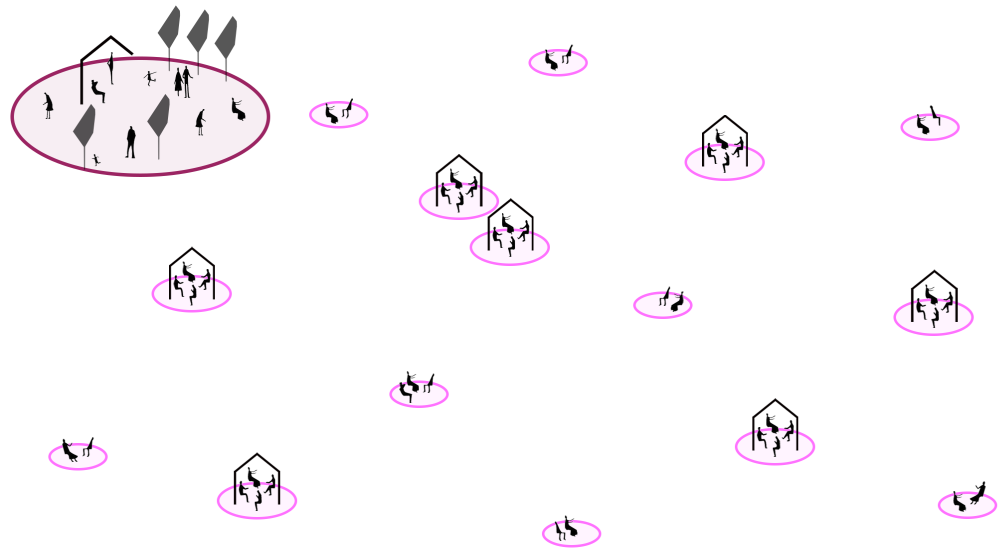


Figure 13:Relationship of multiple stakeholders

Source: Author

FORMAL DECENTRALIZED+CENTRALIZED

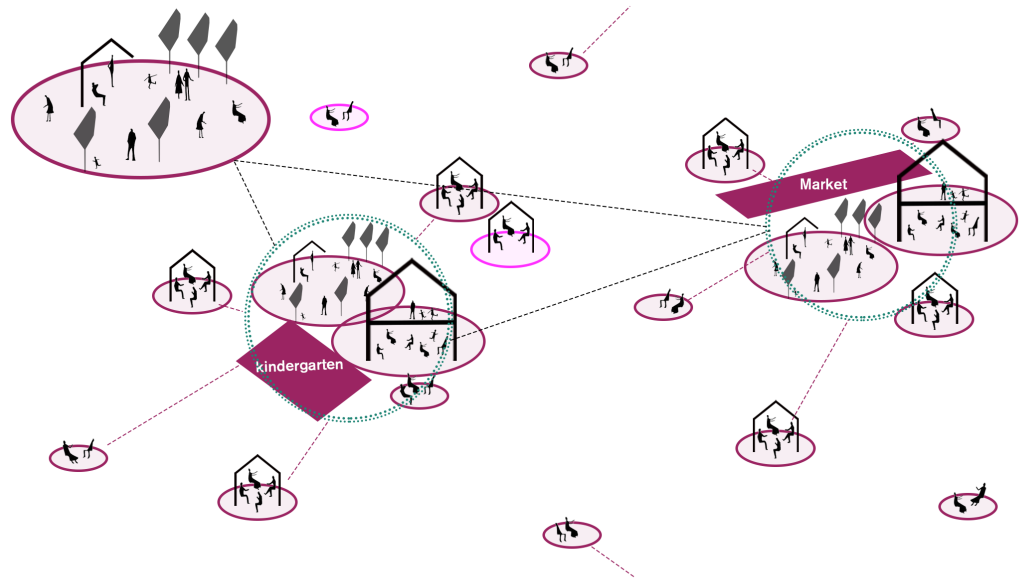


Figure 13:Relationship of multiple stakeholders

Source: Author

China's ageing population

Principles

Spatial condition - Social environment

Spatial condition - Governance

- Urban morphology& Public space& Aged facilities
(-Environmental psychology/ -Mixed use / -Aged-friendly environments/ -Organic renewal/ -Participatory design/ Community-driven)

1. Keep the coverage and imporve the quality of the original indoor recreational rooms in the neighborhood
   1.1 facade design
   1.2 good lighting conditions
   1.3 barrier-free facilities
2. Keep and improve the quality of separate street sitting space in the neighborhood
3. Add midsize and mixed-used indoor recreational rooms in the neighborhood
   3.1 near the necessary facilities, such as market, kindergarten, etc.
   3.2 multiple functions, also works for other groups of people
   3.3 has large and complete space, users can partition the space themselves
   3.4 good accessibility
   3.5 the equipments and space for the elderlies are on the ground floor
4. Add midsize outdoor /semi-open public space in the neighborhood
   4.1 near the necessary facilities, such as market, kindergarten, etc.
   4.2 good quality landscape combines with mixed-used (transformable) furnitures
   4.3 multiple functions, also works for other groups of people
   4.4 has large and complete space, users can partition the space themselves
   4.5 good accessibility

- Accessibility/Transportation
(-Walkability/ -Aged-friendly environments/ Organic renewal)

1. Reorganize the lanes system from vehicles and pedestrian aspects in the neighborhood, reduce the time that vehicles stay on the site, reduce traffic jam.
2. Reorganize the parking system in the neighborhood, setting parking sign.
3. Imporve walking environment quality
4. Improve the safety and convenience for going outside the neighborhood
   4.1 cross the street
   4.2 take public transport

- Environment
(Organic renewal/-Aged-friendly environments)

1. Good lighting conditions
2. Night illumination
3. Noise control
4. Improve the infrastructure like pipelines, electronic wires, etc.

8. SOLUTIONS PROPOSAL
7. SOLUTIONS PROPOSAL

8.8 EXTRA PHYSICAL ENVIRONMENT CONDITION
7.1 VISION

~~Aims~~

Principles

Informal decentralized
Formal centralized

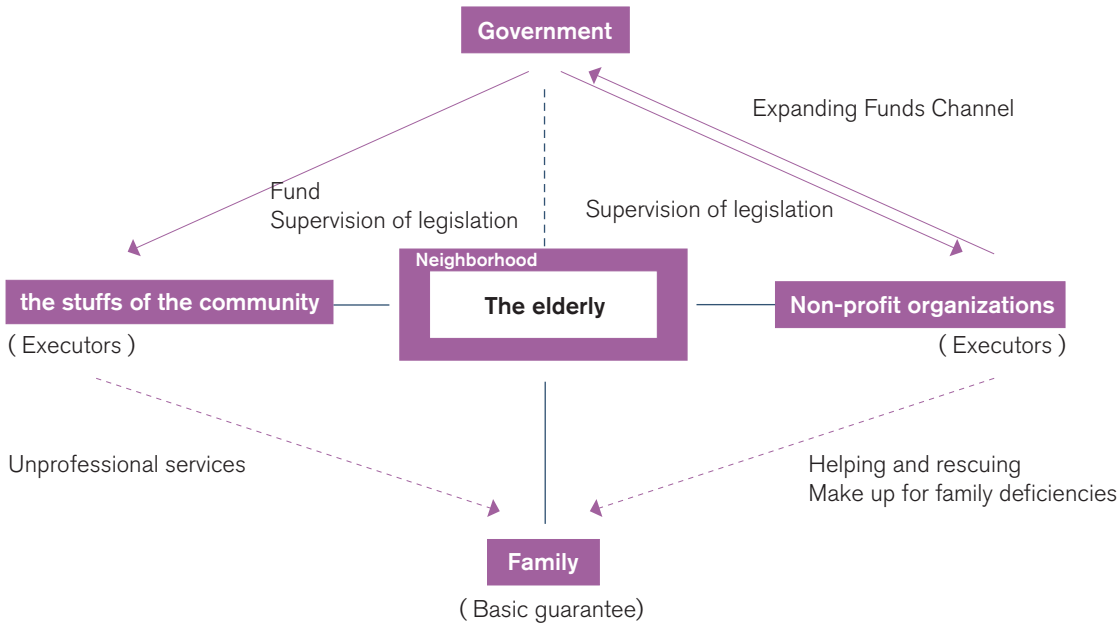
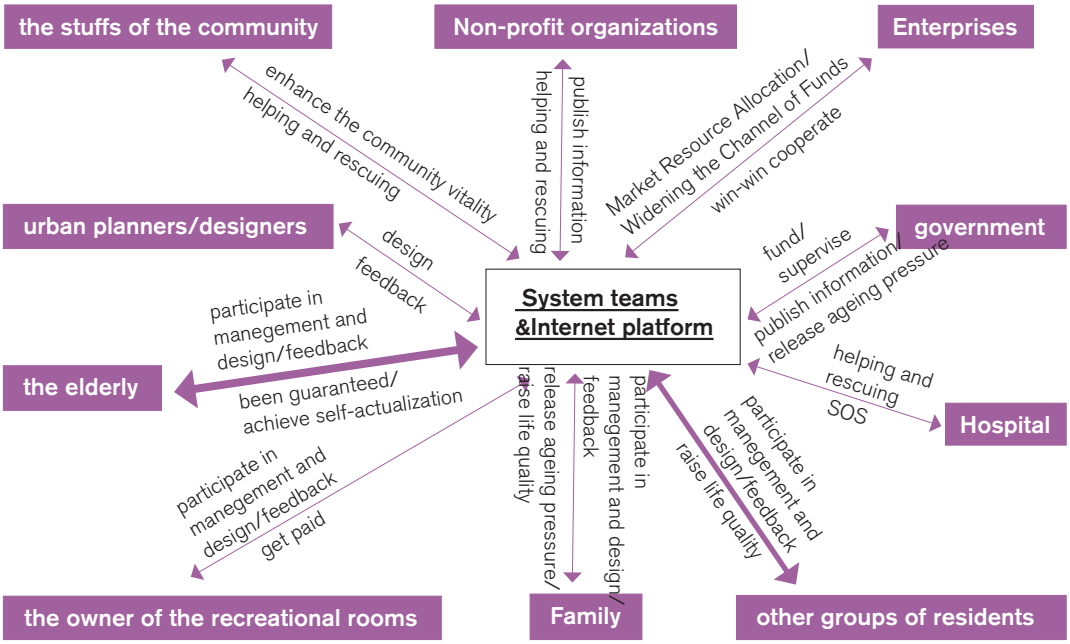


Figure 13:Relationship of multiple stakeholders

Source:Zhu, H. (2013).



China's ageing population

Principles

Governance - Social

Governance - Spatial condition

- Finance/ Business model/ Stakeholders involved
(-Silver economy/ -Participatory management)

1. Turn the single government-funded model to multi-support model
   1.1 Government rational subsidy
   1.2 Charge rational money not only from the elderlies but also from other groups of residents in the community each month (encourage them to use the facilities, at the same time, charging can raise their consciousness of maintaining community facilities and equipments)
   1.3 Sponsor
   1.4 Build up long-term cooperation with other institutions or company, such as develop and selling mating elderlies products
2. Individual team take charge of the system operation
   2.3.1 Finance
   2.3.2 Internet platform/information publish
   2.3.3 Cooperate with other institutions or company
   2.3.4 Intermediary of all the stakeholders
   2.3.5 Promotion
   2.3.6 Activities organizer
   2.3.7 Emergency
3. Provide more 'formal/informal' jobs oppoturnities, encourage more people to join the system, also open for the elderlies to apply
   3.1 The job provided in the system operation team
   3.2 Informal jobs like repair the equipments, build the facilities and put the stuffs back after using them.
4. Stakeholders will consist of the elderly, urban planners/designers, other groups of residents in the neighborhood, the stuffs of the system teams for the elderlies, government, Non-profit organizations, the stuffs of the community, the owner of the recreational rooms, hospital (health care center), family, enterprises. Besides face-to-face meetings, these stakeholders will be connected by the Internet+. All the information will be published on the Internet, which helps the systems to be efficient and transparent. For example, the stuff of the system teams can publish the information of volunteers needed immediately online, the cooperative volunteer teams can receive the information and act.

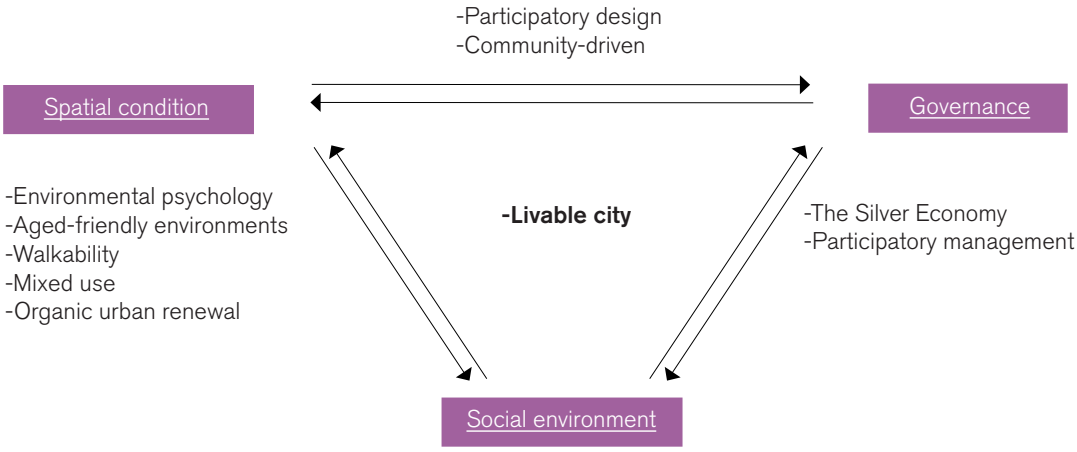
- Operation& Activities
(-Community-driven/ -Participatory design)

1. Invite the residents in the neighborhood to build the equipments and facilites together, so that to enhance the neighborhood cohesion.
2. Urban planners hold round tables meetings with all the stakholders regularly, especially invite the different eldelries and residents to participate, to hear the feedback directly from the users, so that to revise the facilities and systems dynamically.
3. Regularly hold neighborhood activities in the centralized recreational rooms or centralized outdoor public space for all groups of people to enhace the neighborhood cohesion and stimulate neighborhood vitality. At the same time, promoting the usage of the facilites.

8. SOLUTIONS PROPOSAL

8.1 VISION

Principles



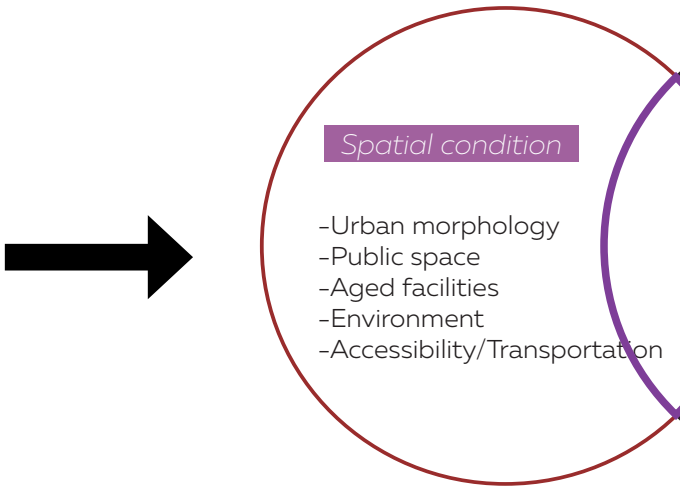


Figure: xxx

Source: Author

PROBLEMS OF NEIGHBORHOOD SERVICES SYSTEMS

PROBLEMS OF CITY RENEWAL

Governance

-Policy& Regulations
-Finance
-Operation& Activities
-Business model
-Stakeholders involved

7. PROBLEM ANALYSIS II

8.3 ANALYSIS-QUALITY OF THE SITE

Strengths (from the aspects of the elderly)

2. Prices of housing rents and daily uses and are relatively low.

XIANG RIVER MIDDLE ROAD

XICHANG STREET

Yandaoping 3rd R
Selling: **13187** RMB
Renting: **23** RMB/m
(Price Source: cs.lianji
(Image Source: baidu.s

SELLING RENTING

Wanda Residence
Selling: **20813** RMB/m² (Average)
Renting: **96** RMB/m² /per month (Average)
(Price Source: cs.lianjia)
(Image Source: baidu.streetmap)

SELLING RENTING

ONGSHAN ROAD

esidence
B/m² (Average)
m²/per month (Average)
a)
streetmap)

Tongrenli Residence
Selling: **9019** RMB/m² (Average)
Renting: **19** RMB/m²/per month (Average)
(Price Source: cs.anjuke.com)
(Image Source: baidu.streetmap)

SELLING RENTING

HUANGXING MIDDLE ROAD

Sanjiao Garden Residence
Selling: **12291** RMB/m² (Average)
Renting: **40**RMB/m²/per month (Average)
(Price Source: cs.anjuke.com)
(Image Source: baidu.streetmap)

SELLING RENTING

Hongyunhuayuan Residence
Selling: **13473** RMB/m² (Average)
Renting: **30** RMB/m²/per month (Average
(Price Source: fangtianxia/cs)
(Image Source: baidu.streetmap)

SELLING RENTING

Canghoujie Residence
Selling: **?** RMB/m² (Average)
Renting: **7.7** RMB /m²/per month (Average)
(Price Source: qingyuan.baixing)
(Image Source: baidu.streetmap)

SELLING RENTING

0 25 50 100m

UYI AVENUE

7. PROBLEM ANALYSIS II

8.3 ANALYSIS-QUALITY OF THE SITE

Strengths (from the aspects of the elderly)

2. Prices of housing rents and daily uses and are relatively low.

Figure 17: The location of Liansheng Street

Source: shejiben.com

Figure 17: The location of Liansheng Street

Source: Author

3.2 国内历史街区有机更新现状及模式

3.2.1 “有机更新”现状

我国历史街区改造最早一直被长期解读为“物质空间改造”，在提出了历史街区保护的概念之后，历史街区的改造又一度被解读为“立面改造”。无论是物质空间改造还是立面改造均造成历史街区的各种问题。之后在20世纪80年代，一些建筑师针对历史街区传统历史文化价值如何保留的问题展开的一阵思潮讨论。在这次思潮中，吴良镛教授提出了“有机更新”论，并在北京“菊儿胡同”改造中成功实践了这一理论。在北京“菊儿胡同”的项目中，吴教授维护保留了原有的四合院院落体系，再其原空间形态的基础上进行演进，使得“有机更新”得以真正体现在空间形态中。此后，“有机更新”理论开始引领国内历史街区的保护的发展，同时相继在北京，苏州等历史文化保护区中实践应用。

“有机更新”理论是吴良镛教授基于对中西方城市发展与城市保护研究的基础之上提出，强调“探究城市发展趋势，融入城市表皮，以可持续发展为落脚点，推动城市的量变与质变[37]”。无论是北京菊儿胡同的改造，还是苏州历史文化名城的更新，其有机更新的核心都是讲究街区的整体性与有机可持续性。

目前有机更新已成为我国历史街区保护与更新的主流。现今的历史街区更新中，重建式更新方式几乎已经消失，设计师更多的是以整治维护为主，更新创造为辅的方式进行更新设计。例如：北京的菊儿胡同，作为有机更新理论的初探，以历史建筑整治保护为主，营造街区的原有生活氛围。以居住功能为主的历史街区，街区更新均讲究达到“原历史，原住民，原生活风味，新活力”的效果。

新场古镇是我国保护的相对成功的历史文化名镇，街区的更新方式以整体性

有机更新为主，对古镇的历史建筑基本不拆迁，以修整为主，并保留原住民。由于远离市中心，整体性的更新手法在乌镇就显得切实可行，更能完全彻底的体现历史街区的真实性。

综上，我国有机更新现状呈现地是百花齐放的状态，事实证明吴良镛教授的有机更新理论并不是一套万能的钥匙，对于不同地区不同功能的历史街区，适合自身街区状况的有机更新的方式不同。无论是何种有机更新模式，其更新的的核心和其最终的目标都是一致的，即：“保留历史风貌，还原历史生活环境，传承历史传统文化，延续历史生活氛围”。下面就不同的历史更新模式进行案例分析。

3.4.3 长沙历史街区有机更新的原则

长沙历史街区有机更新保护的原则，和其他城市一样，以保护历史文化资源为主，同城市整体风貌和谐共存，期望构建一个楚汉名城风貌和山水洲城的历史文化名城的形象。

首先，长沙市历史街区保护和为他城市一样，遵循阮仪三教授著名的“四性”原则：

原真性。原真性是阮仪三教授理论实践中，最坚持遵循的原则。在长沙历史街区中有机更新中，对待历史遗迹，历史文化遗产要求要保持其历史的原真性，做到“修旧如旧”的感觉。所以尤其的对于以居住性功能为主的历史街区，一定尽可能的保留原住民，来还原历史街区的历史生活氛围。

可读性。可读性和原真性在某些程度上具有相似的意义。可读性即一定要在历史街区中的历史遗迹里读出历史的真实信息。这就要求绝对禁止拆真历史遗迹建假古董的行为。

永续性，及可持续性。这一点是很能体现有机更新的原则，前面两条更多的

40

是属于历史建筑保护的原则规定。可持续，顾名思义要保证历史街区一直延续下去，不断更新不断保护不断健康发展。

整体性。这其实也是吴良镛教授有机更新的原则，在历史街区更新中一定要保证历史遗迹及环境的统一整体性，以及历史风貌的整体性。不可以用一个个点式改造的视角来看历史街区有机更新。

除了以上四条常规的原则，目前长沙市历史街区有机更新设计还补充了一些可持续，有机共生融合的原则。例如：一.注意历史街区中保护与开发的关系，不但要保证历史遗迹保留传承，还要与环境结合，并且一定要助于街区内基础设施改善的原则。二.一定要合理的开用历史文化资源，一定要将历史街区的更新与整个城市形象，景观风貌等相结合。

综上所述，长沙市历史街区，尤其是以居住为主的历史街区，其有机更新原则开始不断的喜欢其重要的可持续性，有机性，并开始探讨社会空间的融合层面的原则意义。

3.3.2 资金投入不足

在政府方面，杭州 2001 行政区划框架调整后，城市的发展从“西湖时代”转向“钱江时代”。在“有机更新”的发展理念下，杭州城市改变扩张方式，从以前的以旧城为中心向外无序扩张转变为组团式发展，新的城市中心也从西湖转变为钱江新城。由于居住性历史街区具有历史价值的建筑和实体规模小而分散，在城市总体形象中并不突出，而对于居住性历史街区的改造要以保护整体风貌为主，保护更新难度大，政府更愿意将资金投入新城建设。

在街区内部居民方面，历史街区无论是外迁或是保护修缮都需要大量的资金成本，居民对该部分的搬迁补偿都有较高的期望值，搬迁的资金的激增给到政府的压力巨大。由于居民以中老年人群及低收入人群为主，基本没有自我进行旧房更新的能力。

三方面的资金投入不足使居住性历史街区保护更新面临困境，街区逐渐衰落。

3.3.3 错误的价值观导向

历史街区作为城市发展的源头，不仅是大量居民生活的载体，更是城市历史文化和生活方式的载体。随着城市化发展，传统的居住区不论是街区格局还是建筑质量都不能满足现代化的生活需求，居住生活质量较差，居民有迫切的改善要求。为满足现代化基本生活需求，同时为了降低成本，加快建设效率，在没有公布明确的历史街区的保护与更新之前，杭州市政府采取了“拆旧建新”的改造方式，

针对城市旧社区公共环境问题，城市在浩荡的更新运动中，将大批老住宅连同整个街区推倒重建，城市社区长时间所形成的空间结构和地域特征在建设运动中消亡，缺少对居住者公共空间需求的研究，也忽视了对区域文化的延续。针对这些问题，本文以人群分析和区域文化为改造策略，思考了城市旧社区公共环境中的改造

人群分析与区域文化在城市旧社区公共环境设计中的思考.pdf (SECURED) - Adobe

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烟台历史文化街区保护开发中的微循环有机更新模式研究.pdf (SECURED) - Adobe Read

le Edit View Window Help

与国内很多历史悠久的城市一样，烟台历史文化街区的改造随着时代变迁也呈现出不同的发展路径和特点。改革开放初期，百废待兴、百业待举，城市发展突飞猛进，烟台也逐渐兴起了大规模“城市运动”。除“造新城”外，旧城改造大多采取“大拆大建、推倒重来”的简单模式，这种模式对城市面貌改善和环境提升、区域经济社会发展的拉动效应“立竿见影”，在一定时期有效满足了城市人口集聚膨胀、居住条件改善、公共服务及商业娱乐设施提升的多种需求，但弊端也显而易见，比如资金需求量大、拆迁成本高、历史遗留问题多等，而且由于改造初期开发者和参与者们的历史文物建筑保护、“以人为本”改造建设的意识相对薄弱，导致了历史文物破坏、房屋征迁、居民安置及生活保障等一系列经济和社会问题。随着旧城改造问题的逐步凸显，国内相关法律法规日益完善，旧城保护尤其是历史文化街区、历史文物建筑保护的观念深入人心，烟台历史文化街区改造的模式也开始了重新的摸索尝试。

China's ageing population

这种大规模改造模式，主要以开发者的意愿为主导，虽然在城市面貌改善、经济拉动效应等方面的作用“立竿见影”，但带来的负面效应也很多，总结各个地区的教训，主要的问题体现在以下方面：

1. 切断了地方文脉的传承。许多原有的建筑被摧毁，城市的脉络被破坏，历史文化传承受到阻断，在城市发展中延续下来的建筑特色、文化环境和居住环境丧失，导致全国各地城市建筑都趋于高楼大厦，“千篇一律”，同质化。

2. 留下了社会稳定隐患。大拆大建模式，对街区改造实行“一刀切”，难以满足当地居民各种个性化的需求，特别是到了征迁工作的后期，一般采取行政强拆或暴力强拆等方式，遗留下诸多社会稳定隐患，以烟台老城区为例，目前信访案件中 40%以上涉及征迁问题。

3. 容易造成经济纠纷。大规模改造一般工程量大，一次性投资强度大，资金周转时间长，对开发商的资金实力和管理能力要求非常高。一旦企业运营环节出现问题，就可能导致工程停止甚至“烂尾”，给地方经济社会发展造成重大影响。

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

- Global ageing population

theory combine ---problem
vision

monday 8 号

3.4 更新策略

1、整体保护策略

保护长沙文化基因，把控城市整体风貌，传承历史文化，延续历史

2、功能完善策略

采取以“疏”为主的城市更新策略，通过科学的选址将历史城区内功能外迁到周边地区。

3、空间优化策略

保证历史城区内的建筑与周围城市空间形态的延续，与城市肌理的

4、基础设施先行策略

开展历史城区配套服务设施承载能力研究。交通先行，优化控规路史城区慢行系统，倡导绿色出行。完善基础设施，改善人居环境。

5、城市活力策略

以生活为导向，留住原住民，保留历史街区传统的生活与行为方式为导向复兴历史街区，开展丰富多样的传统历史文化活动、新建和修复打造历史城区和城市名片。

6、公众参与策略

树立公众主动参与观念，引导成立社区自治组织，搭建公共议事会

7. PROBLEM DESCRIPTION---CHINA

2.3 NOUN DEFINITION

Second ring area& Historic pedstrian planning area& Historical cultural area& Street

PHOTOS	SERVICES
Source: songjiang.gov.cn	Spiritual Consolation Services
Source: hailizi.com	Medical and Nursing Services
Source:mzyfz.cn	Legal Rescue Service
Source: cri.cn	Day Care
Source: sxgov.cn	Cultural and Recreational Activities

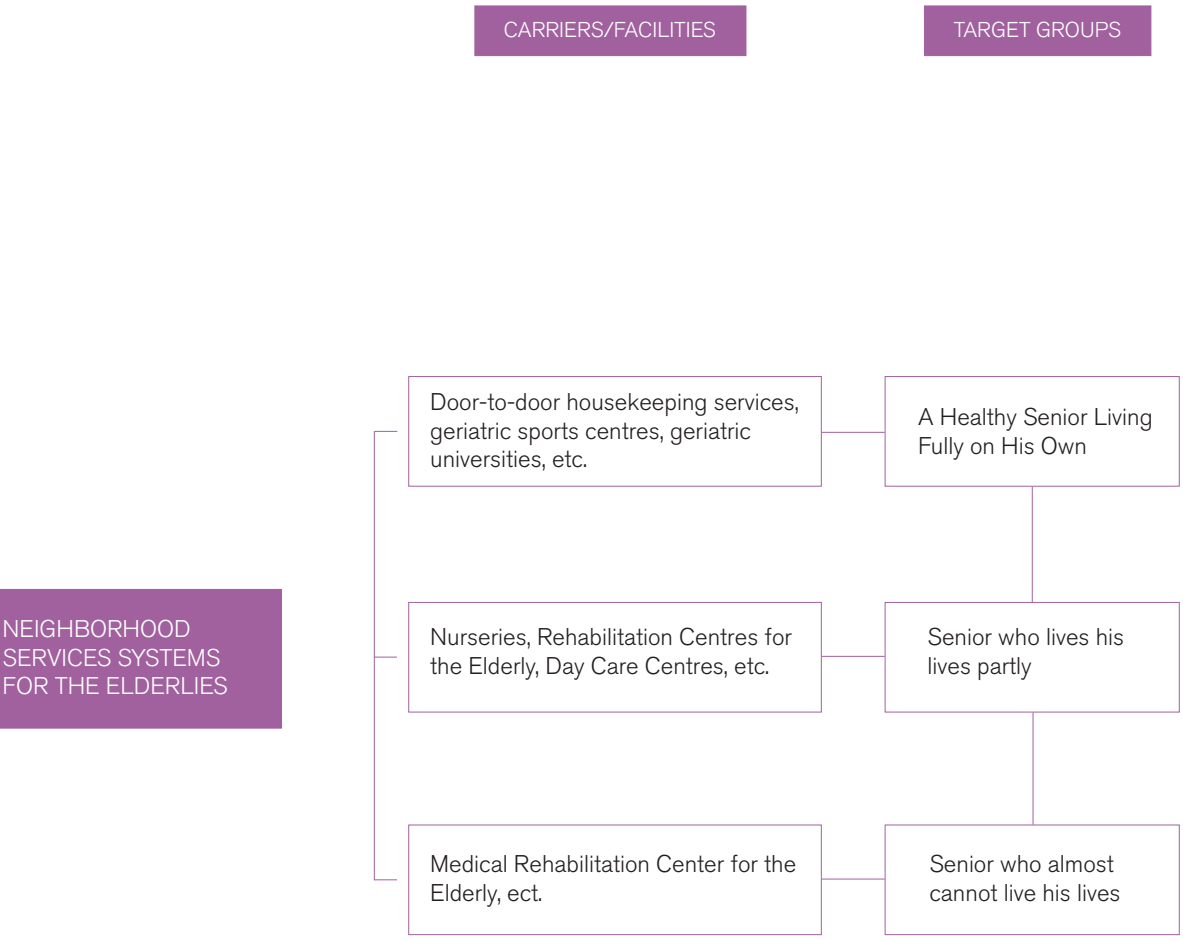


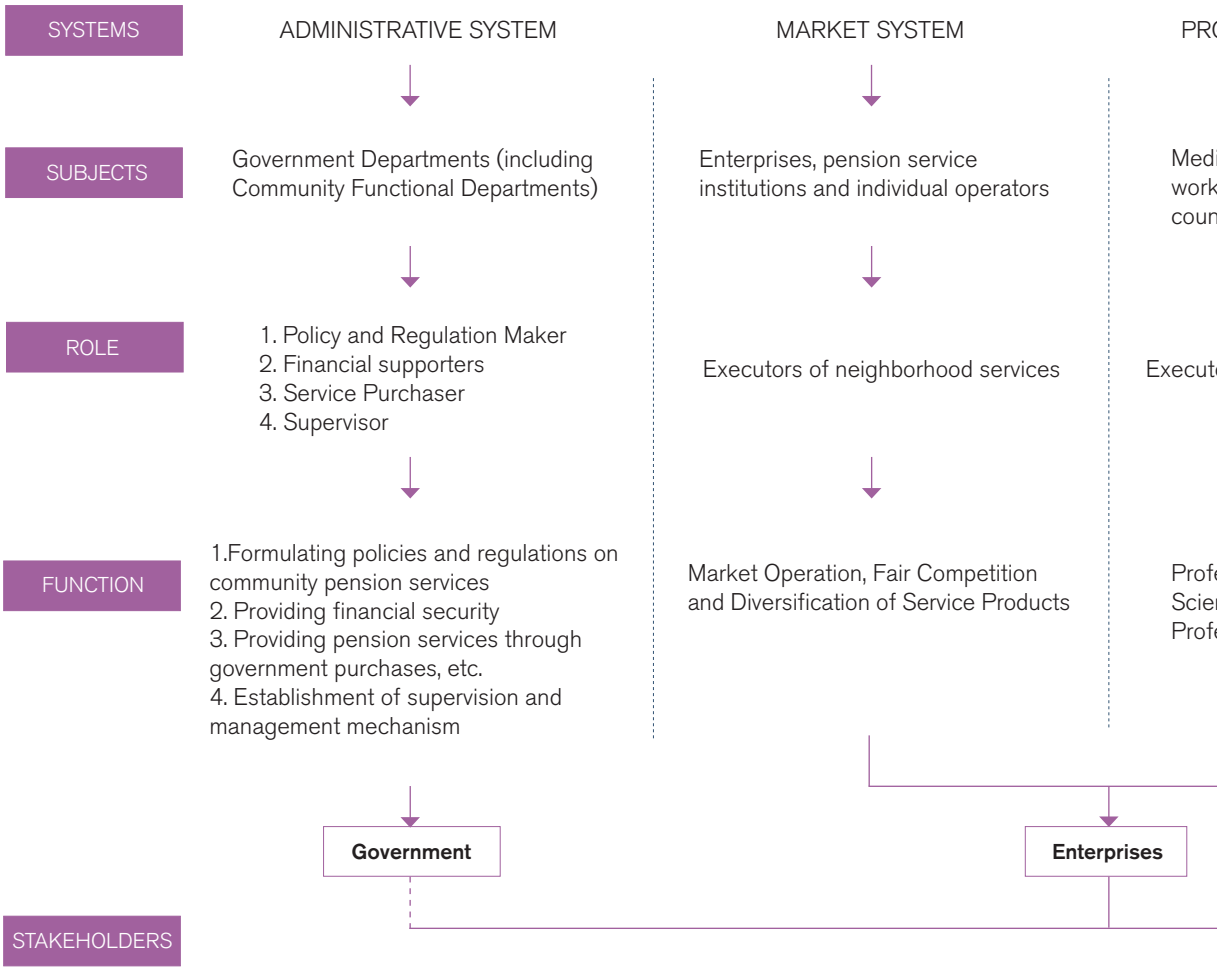
Figure 16: The composition of Neighborhood services for the elderlies

Source:Qian, H. (2016)& Zhu, H. (2013).

7. PROBLEM DESCRIPTION---CHINA

2.3 NOUN DEFINITION

Second ring area& Historic pedstrian planning area& Historical cultural area& Street



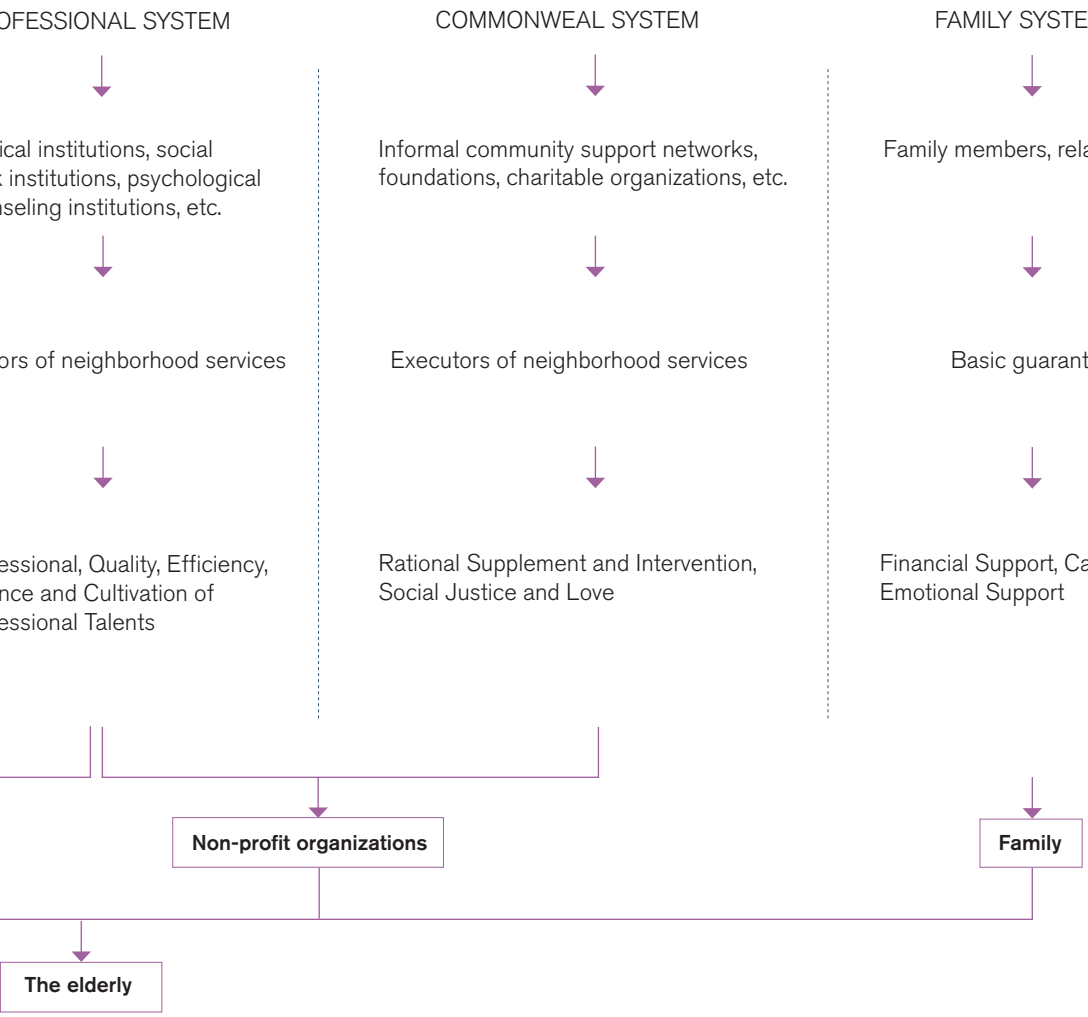


Figure 13:Different subjects' role and function

Source:Zhu, H. (2013).& Chen, Y. (2015).

7. PROBLEM DESCRIPTION---CHINA

SQ1 "HOW DOES THE NOWADAYS NEIGHBORHOOD SERVICES SYSTEMS FOR THE ELDERLIES WORK?"

- Operation
- Business model&Finance
- Stakeholders involved

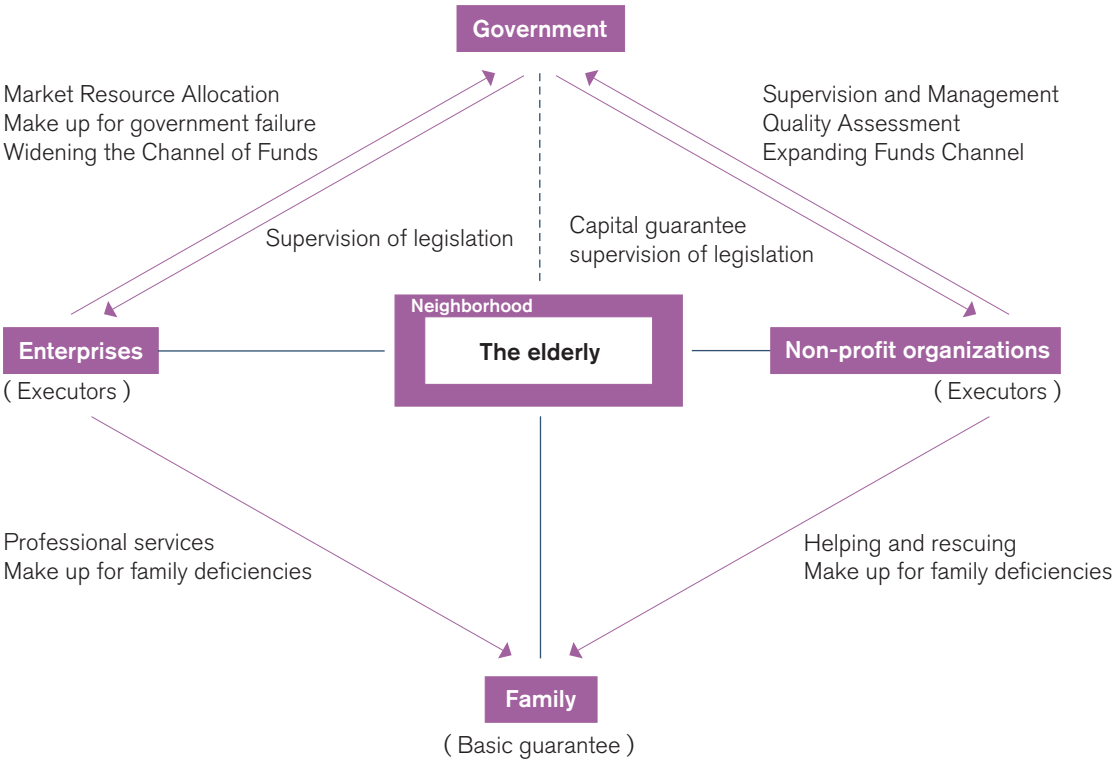


Figure 13:Relationship of multiple stakeholders

Source:Zhu, H. (2013).

1.2.2　欠发达城市社区居家养老服务体系构建存在资源限制和意识欠缺，社区自身潜力与社区能动性受限之间矛盾显著，亟待解决　我国东西部各地经济发展水平不一，城市建设发展速度和居民需求层次存在很大差异，欠发达城市社区开展居家养老服务较为局限，尚未建立健全的居家养老服务体系。社区居家养老服务资源在数量和质量上都不能很好的满足老年人的需求。社区自身具有一定的潜力但与社区能动性受到限制之间矛盾显著。当前大多数社区名为自治，实际上，所谓社区自治已经被明显虚化，社区本身并没有实权；社区疲于应付各种事务，在真正自治的养老环节，难以投入大量精力，社区养老的管理人员一般一个社区只有一人，大多数是兼数职于一身，社区工作量大、繁、杂，很多时候，他们还得从事许多“份外之事”，一件事务，两地奔走，三处盖章，四处询问，多地开花。直接提供服务的工作人员目前也极少有专职性质的，基本上属于家政范畴。另外，政府在调动社会资源，发挥社会资本服务社区养老方面显然不足；同一区域各个社区之间在养老服务中基本上处于“孤立”状态，几无交集，资源共享成空谈。老年人对目前欠发达城市社区养老服务的整体满意度不高，主要问题是欠发达城市社区居家养老服务资源和设施参差不齐，社区自身资源

7. PROBLEM DESCRIPTION---CHINA

SQ3 **"WHAT IS THE AGED-FRIENDLY SPATIAL CONDITION IN THE HISTORICAL NEIGHBORHOOD?"**

The mental and physical demands of elderlies

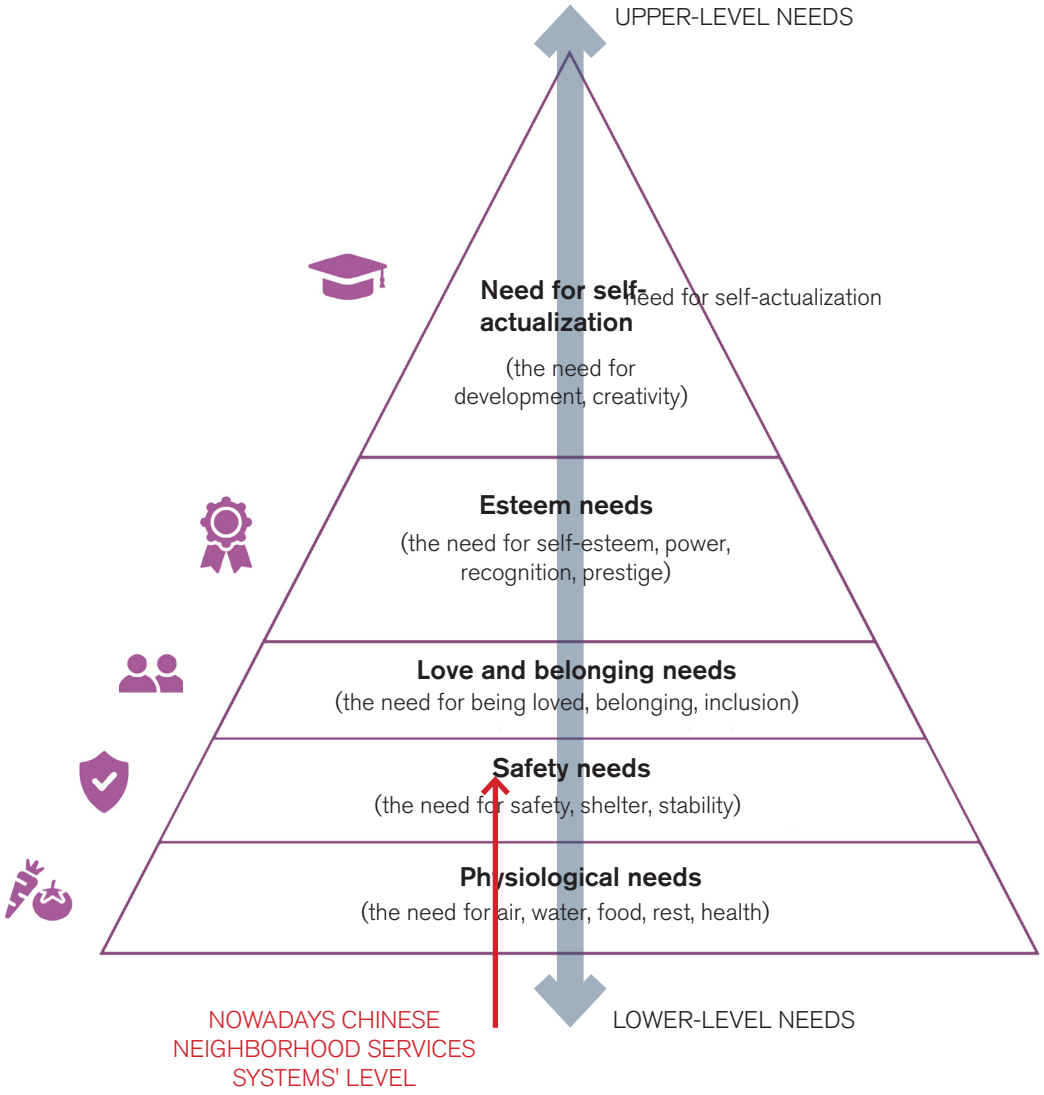


Figure 16: Maslow's hierarchy of needs

Source: Author

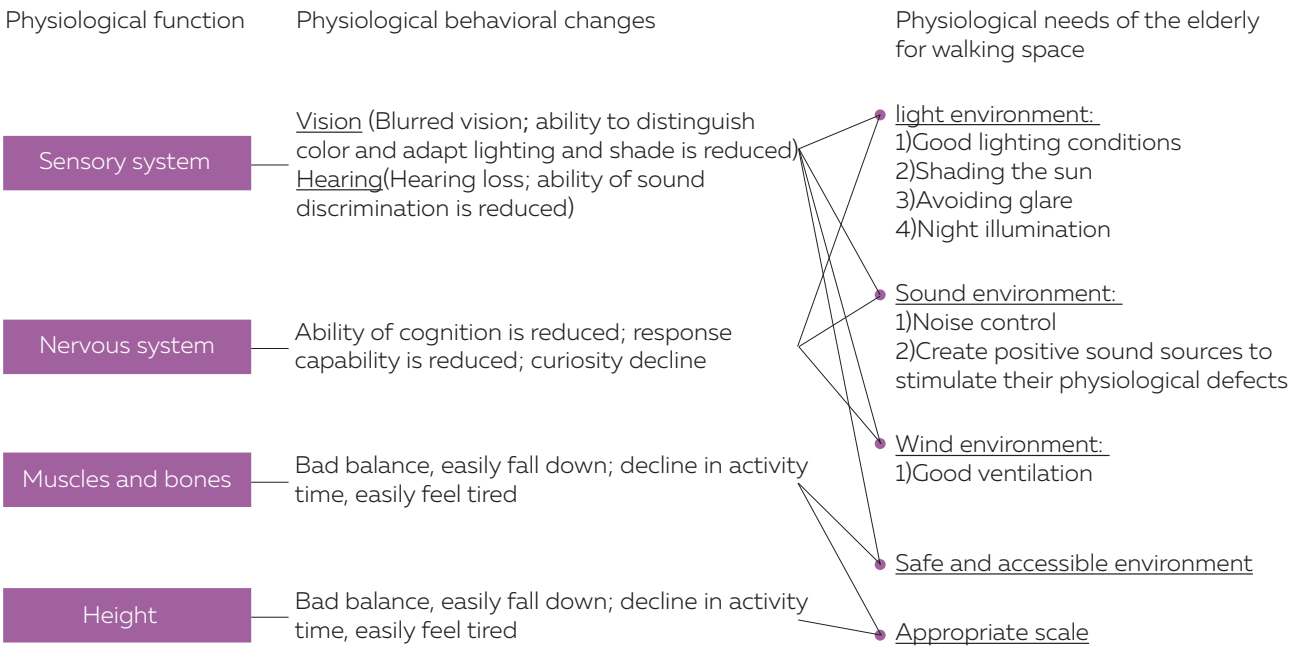


Figure 16: Relationship between behavioral characteristics of the elderly and special needs

Source: Fang, Q., & Wang, X. (2014)

8. PROBLEM DESCRIPTION---CHANGSHA

SQ1 "HOW DOES THE NOWADAYS NEIGHBORHOOD SERVICES SYSTEMS FOR THE ELDERLIES WORK?"

Neighborhood services systems for elderlies

【2006年】
《湖南省人民政府关于加快发展养老服务业的意见》湘政办发〔2006〕28号

至2005年末，全省60岁以上老年人口已达819.7万，占总人口的12.2%

一、充分认识发展养老服务业的重要意义
二、进一步明确指导思想、基本原则、发展目标
指导思想：政府引导、社会参与、多元投入、市场运作
逐步形成居家养老社会化、机构养老规模化、社区养老专业化格局

基本原则：坚持养老服务水平与国民经济发展相适宜，坚持注重社会效益和提高经济效益相结合，坚持鼓励社会投入和加快体制创新相促进，坚持实行全面发展与突出重点相兼顾

发展目标：基本形成社会养老和居家养老、社区养老和异地互动养老、综合型养老与专业型养老相结合、城乡统筹协调的养老服务产业体系。
三、改革养老管理体制、机制
（一）创新国有养老服务机构管理体制
（二）改善国有养老机构运行机制
四、创新养老方式
（一）拓展养老模式
（二）创新经营方式
（三）探索新型服务
五、完善政策保障措施

【2007年】
《长沙市人民政府关于加快养老服务业的若干意见》长政办发〔2007〕8号

2007年，湖南省60岁以上老年人口增加到866.22万人。老龄人口的增长幅度大大高于总人口的增长幅度

一、发展养老服务业的目标、原则和任务
（二）按照“政策引导、政府扶持、**社会兴办、市场推动**”的原则，逐步建立和完善以居家养老为基础、社区养老为依托、机构养老为补充的服务体系，以达到服务老人、服务社会与发展产业的目的。
（四）继续充实和完善办公养老设施。重点办好农村“五保”人员和城镇“三无”人员集中供养的敬老院和示范性、窗口性社会福利机构，各区、县（市）要建设一个社会福利中心，并相应建立社区居家养老工作站。
二、创新养老机制，放宽政策限制
（一）积极探索**“公办民营”和民办公助“**的形式。
（二）鼓励养老机构采用多种经营方式，扩大经营规模。
（三）对符合规划的养老服务设施项目，有关部分要简化审批手续。
（四）鼓励福利机构对外开展老年人护理、康复、医疗服务，并同意纳入社区医疗机构设置规划。
三、加大资金投入，促进行业升级
（一）建立政府购买服务机制

【2008年】
《雨花区发展老年社会福利事业暂行办法》雨民发〔2008〕27号
《雨花区大力发展居家养老服务暂行办法》雨民发〔2008〕28号

本研究选择的课题

雨花区：
老年福利机构事业暂行办法：
1、加大对区属福利机构的投入。
2、鼓励社会力量兴办养老机构。
4、居家养老机构的补助。

居家养老主要目标为：坚持政府、社会、家庭和个人相结合，以保障分散供养的“三无”老人、低保老人和重点优抚老人为重点，面向社区所有老年人，构建适应雨花区经济社会发展水平的、以家庭为核心、社区为依托、以专业化服务为主要形式，基本满足老年人服务需求的，具有雨花区特色的居家养老服务体系。

【2009年】
《长沙市人民政府办公厅关于推进城乡社区居家养老服务工作的实施意见》长政办发〔2009〕13号
《开福区推进城乡社区居家养老服务工作的实施办法（试行）》开政办发〔2009〕64号
《郴州市人民政府关于大力发展养老服务业的意见》郴政发〔2009〕26号

重要时间节点：09年管理制度、补助制度逐步完善、服务志愿者队伍建设

长沙市：
（一）建立完善居家养老服务网络
“十一五”，市内五区每个街道（乡、镇）社区（村）均应建立居家养老服务中心、站。
（二）将居家养老服务用房统一纳入社区公共服务设施配套。
（三）建立持续增长的公共财政投入机制。
1.建立政府购买机制
2.建立对居家养老服务组织的资助机制。
（四）落实养老服务优惠政策
（五）加强居家养老服务的专业化队伍建设。
（六）大力发展居家养老服务志愿者队伍。
（七）建立健全居家养老服务工作的各项管理制度。
（八）开发并完善居家养老服务管理信息系统

8. PROBLEM DESCRIPTION---CHANGSHA

SQ1 "HOW DOES THE NOWADAYS NEIGHBORHOOD SERVICES SYSTEMS FOR THE ELDERLIES WORK?"

-Finance
-Operation& Activities
-Business model
-Stakeholders involved

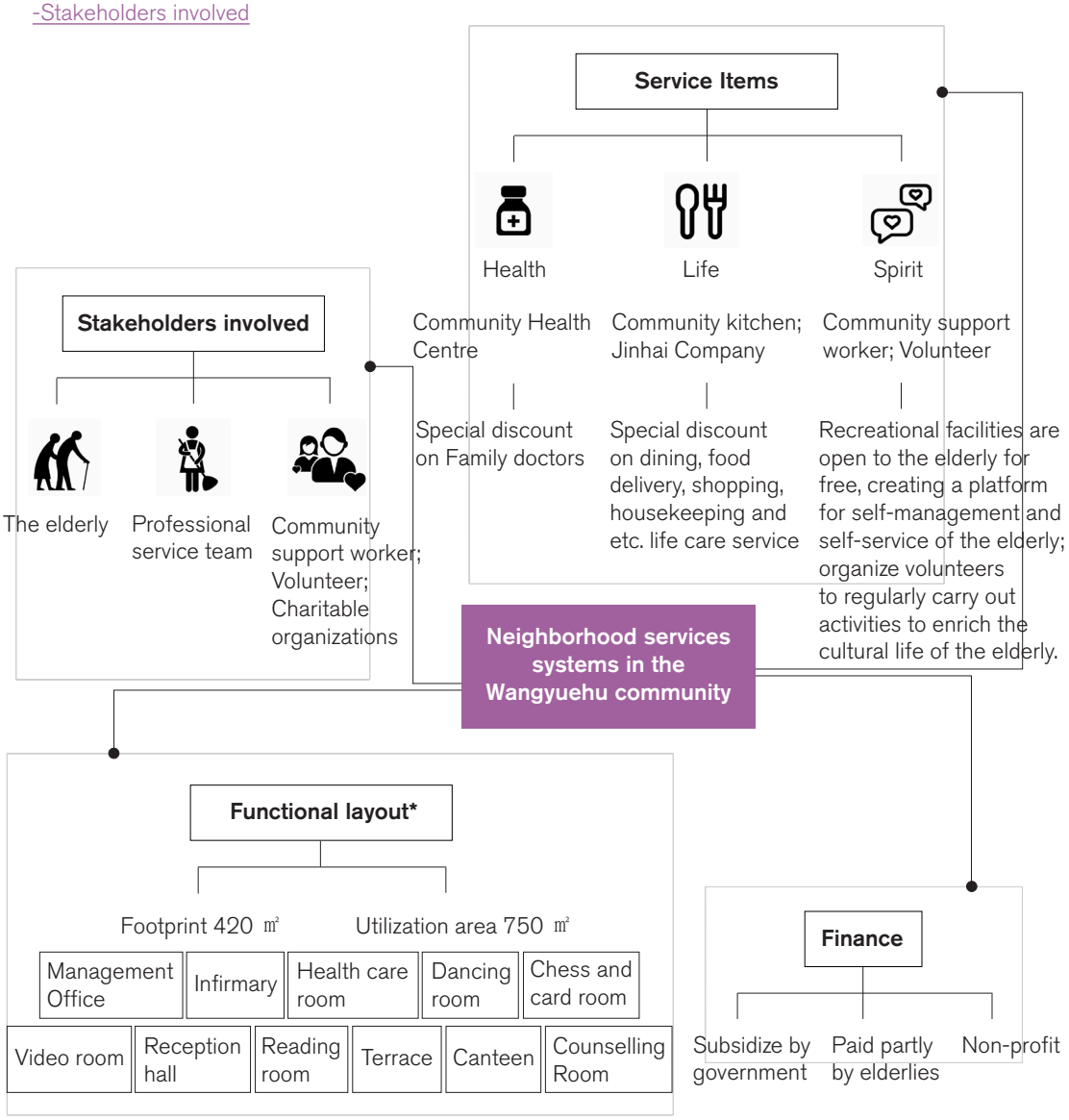


Figure 13: Neighborhood services systems in the Wangyuehu District

Source:Author

Functional layout*: All of these functions are centralized in one building

-Finance
-Operation& Activities
-Business model
-Stakeholders involved

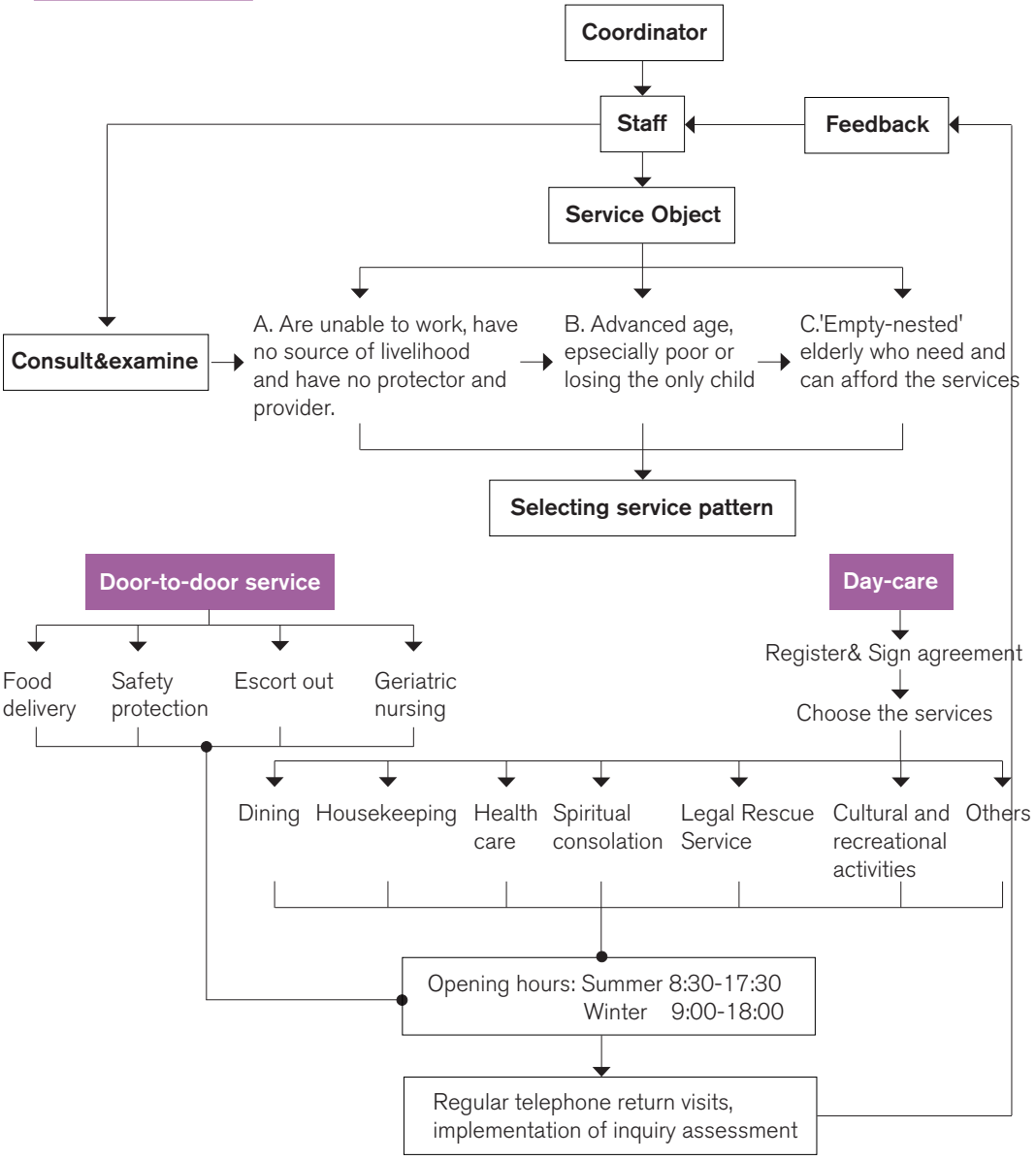


Figure 13:Service flow chart of Wangyuehu District

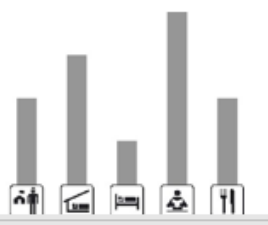
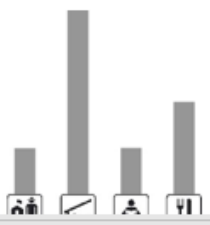
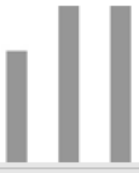
Source: Author

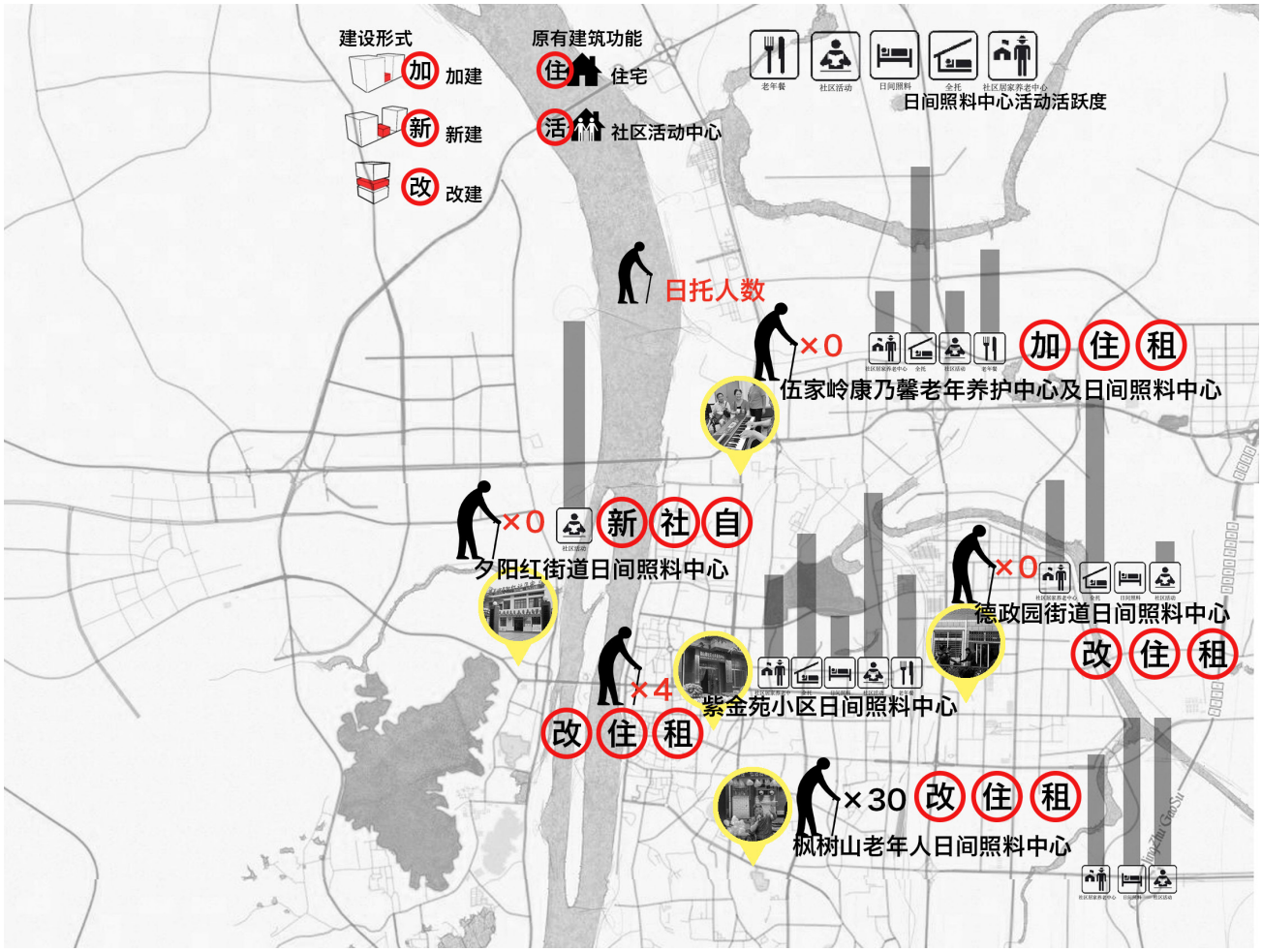
8. PROBLEM DESCRIPTION---CHANGSHA

SQ1 **"HOW DOES THE NOWADAYS NEIGHBORHOOD SERVICES SYSTEMS FOR THE ELDERLIES WORK?"**

-Systems Distribution

绘图 编辑

金苑小区日间照料中	C望月湖社区夕阳红街道日间照料中心	D伍家岭康乃馨老年养护中心及日间照料中心	E枫树山老年人日间照料中心
社区	望月湖社区	枫林社区	枫树山社区
馨公司	夕阳红公司	康乃馨公司	康乐年华
公助	民办公助	民办公助	民办公助
理方。政府支持，政买服务	被管理方，街道支持	被管理方，政府支持，社区共建	被管理方，民政局与街道共建
以社区活动中心为基点，多项服务	1、社区活动中心为主，开展各项老年活动2、由于无人参加日间照料服务，已取消	1.全托服务为中心（初期为日托，后期转成全托） 2.辅以社区活动，小病医疗	1、日间照料，社区活动，上门服务。2、其他多项服务，企业可进驻3，加盟收费
及配餐等其他配套服 主要经济来源，总部补助，政府补贴	不盈利 政府补助	盈利 政府补助	非盈利机构，作为品牌宣传的形象门店 政府补贴，总部补贴
社区老人	所有社区内老人	失能失智老年人	所有社区内老年人
	0 	23 	0 日均30~40，会员人数700~800人 


建设形式
加 加建
新 新建
改 改建
原有建筑功能
住 住宅
活 社区活动中心
老年餐
社区活动
日间照料
全托
社区居家养老中心
日间照料中心活动活跃度
日托人数
×0
加 住 租
伍家岭康乃馨老年养护中心及日间照料中心
×0
新 社 自
夕阳红街道日间照料中心
×0
德政园街道日间照料中心
改 住 租
×4
紫金苑小区日间照料中心
改 住 租
×30
改 住 租
枫树山老年人日间照料中心

我们将调研范围集中在长沙市的老城区。老城区老龄化程度比中心城区以外的
并且由于老城区的尺度区别于新城区，建筑密度高，建筑层数低、建筑间距窄、再
筑保护等问题更难以进行新建养老设施，用地情况也要比长沙市其他地区更加复杂。

面对混杂的养老设施建设现状与快速增长的养老设施需求，我们对长沙市中心
现状进行深入的调研与分析，大胆的提出了社区养老设施发展模式的构想。

2.1 CONTEXT

Conclusions

Policy& Governance

Policy& Regulation

-The content and model of neighborhood services systems do not fit the needs of the nowadays elderlies.
-Imperfect feedback mechanism
-The target groups of the systems still mainly target on the relatively vulnerable groups among the eldelries
-Facing the different situation in the neighborhood, lack of flexible and practice guidance

Governance

-Imperfect governance mechanism
-Imperfect supervision mechanism
-Imperfect feedback mechanism

Main stakeholders

Government

-Not acting as the intermediary in the systems
-Not enough staffs
-Lack of propaganda
-Lack of feedback mechanism

Enterprises

-Not enough professional staffs
-In the process of exploring the service model
-Not enough money to launch other services
-The business model is not sustainable

Non-profit organizations

-Lack of platform to connect the non-profit organizations with the needed neighborhood
-Lack of propaganda

Family

-Lack of participation in the services systems

The elderly

-Lack of participation in the neighborhood services systems
-Know few about the services systems

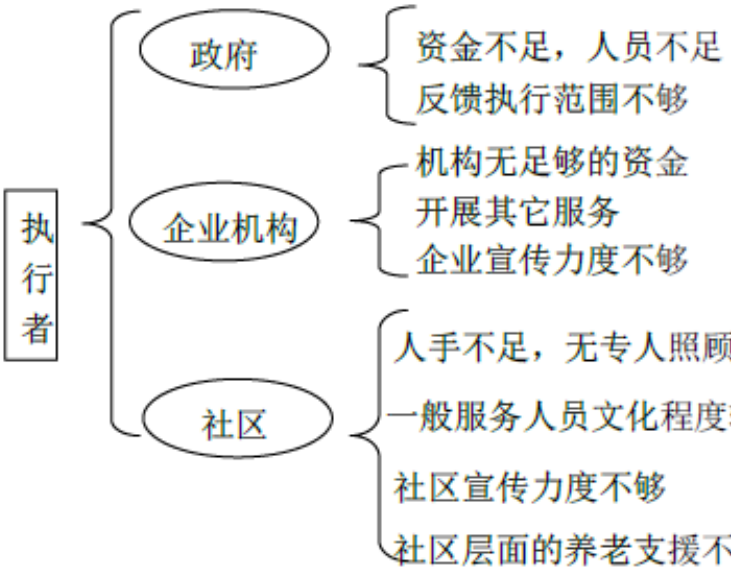
地区严重，
加上历史建

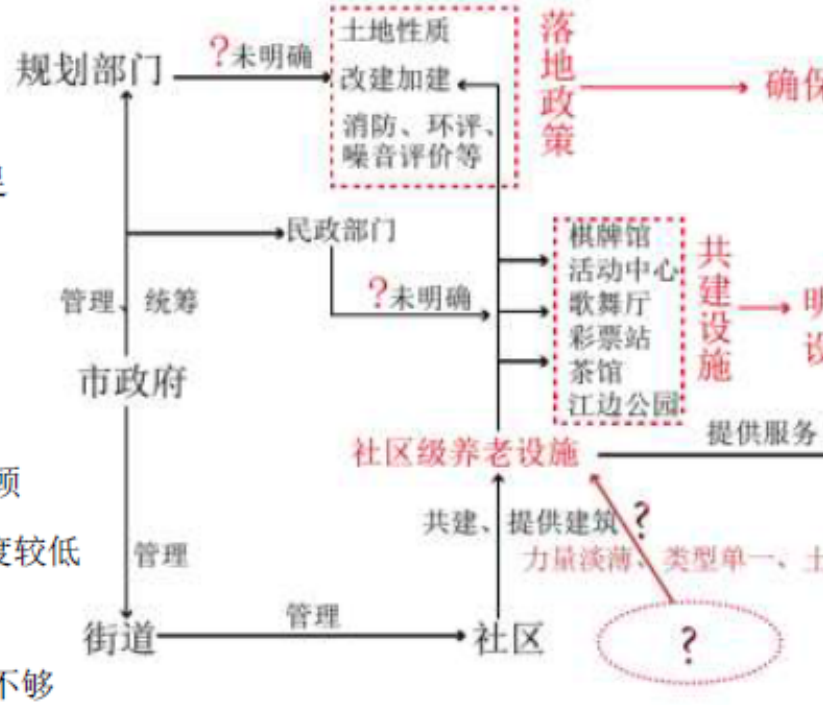
城区的养老

管理的多样化。

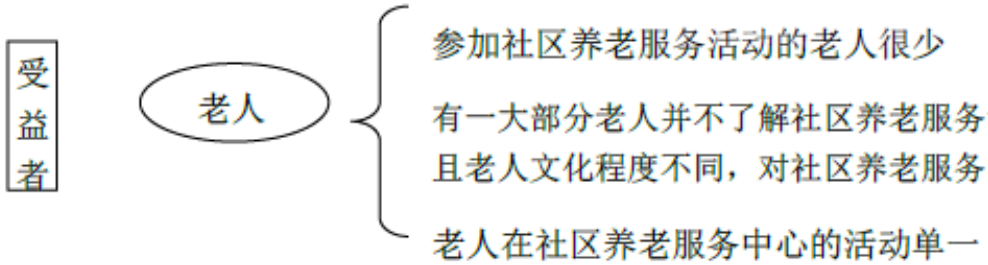
式与运营、参与与管理调

研及分析图



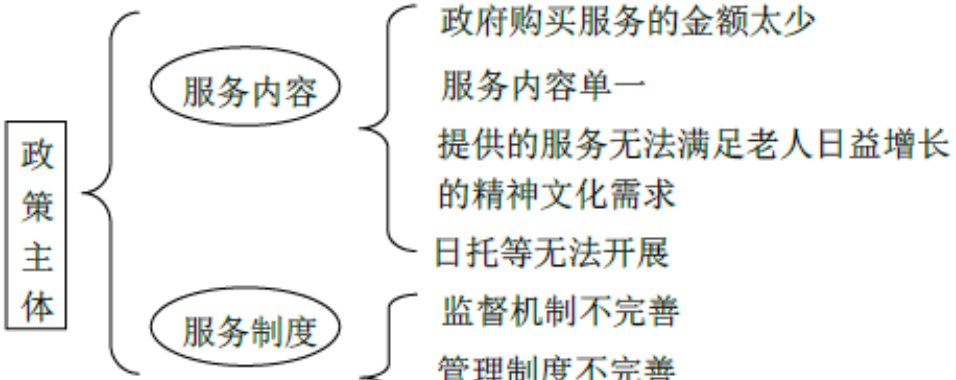


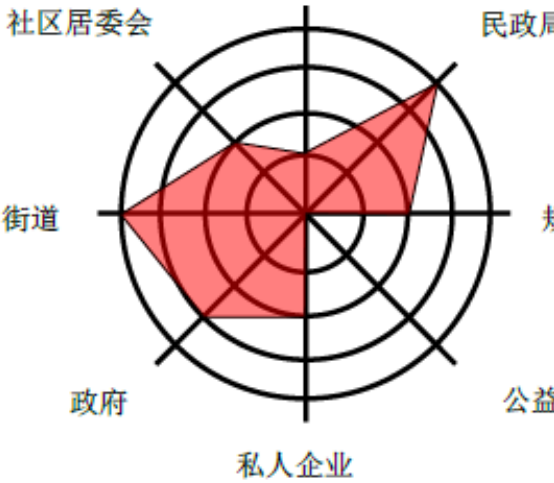
社区养老设施参与与



原有的社区级养老服

关者关联度





8. PROBLEM DESCRIPTION---CHANGSHA

SQ2 "HOW DOES THE NOWADAYS CITY RENEWAL PROCESS CARRY OUT IN THE HISTORICAL NEIGHBORHOOD?"

Current city renewal process in the historical neighborhood

Micro-renovation,
comprehensive renovation,
environmental upgrading,
demolition and reconstruction

1. Overall protection strategy
Protect the cultural gene of Changsha, control the overall characteristic of the city, inheriting the history and culture.

2. Function Improvement Strategy
The urban renewal strategy mainly keeps "sparseness" as the main method, relocating some functions of the historic urban areas to the surrounding areas through scientific site selection.

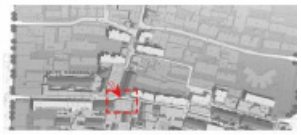
3. Spatial optimization strategy
Ensure the continuity of the spatial form of the buildings and the blocks in the historic urban area. At the same time, coordinate them with the urban texture.

4. Infrastructure Pioneer Strategy
To carry out research on carrying capacity of supporting service facilities in historic urban areas. Traffic first, optimize the regulatory road network, improve the slow travel system in historic urban areas, and advocate green travel. Improve infrastructure and improve human settlements.

5. Urban Vitality Strategy
We should take life as the orientation, retain the aborigines and the traditional ways of life and behavior of historical blocks, revive historical blocks with culture as the orientation, carry out rich and varied traditional historical and cultural activities, build and repair cultural facilities, and create historical urban areas and city business cards.

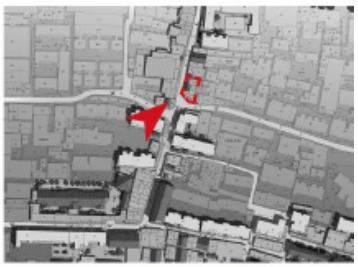
6. Public Participation Strategy
Establish the concept of public participation, guide the establishment of community self-governing organizations, and build a platform for public meetings.

建筑屋顶结构筒陋部分承重结构承载力不能满足正常使用要求，局部出现险情，构成局部危房，需要加固及翻新屋顶。



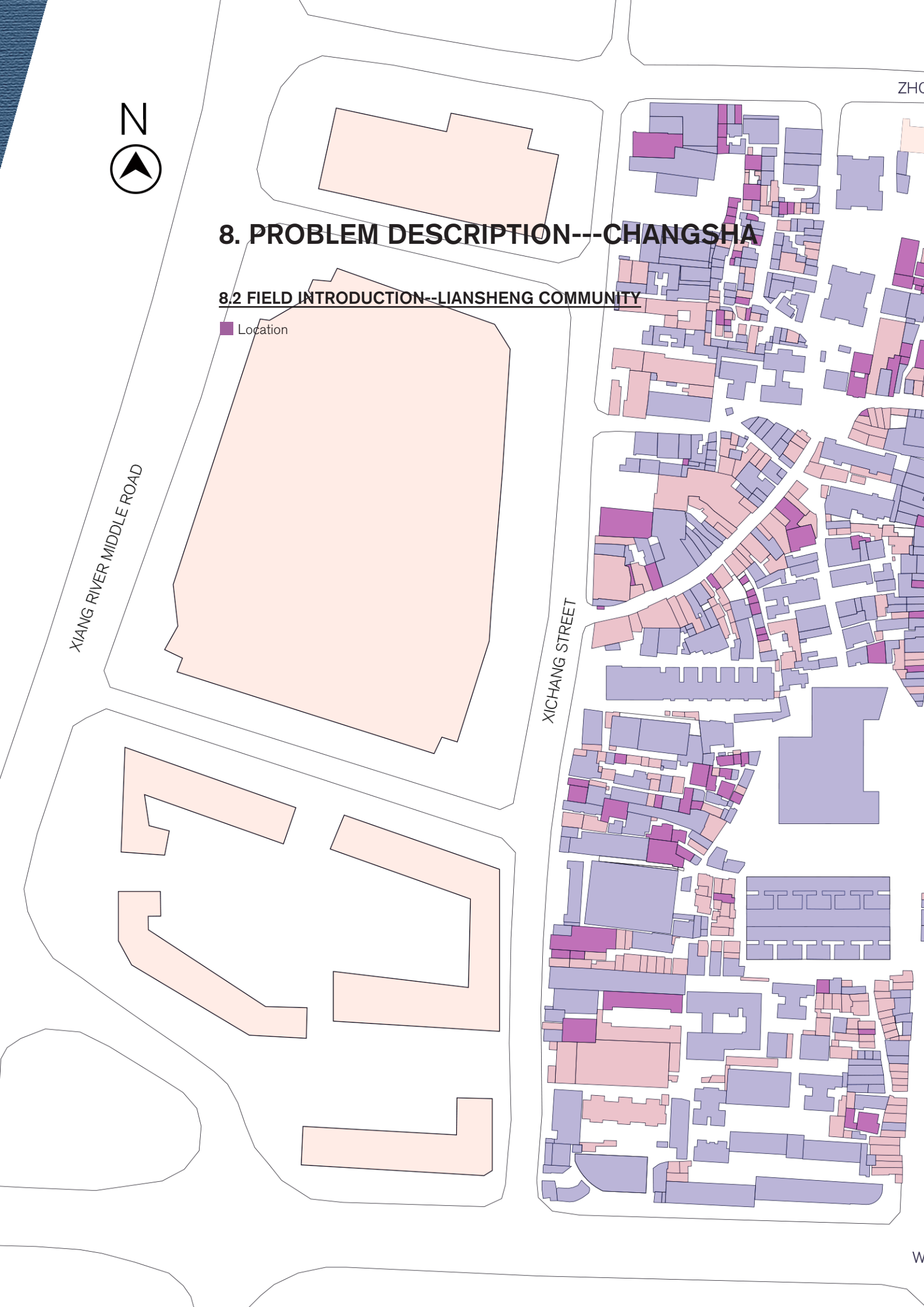
现状照片

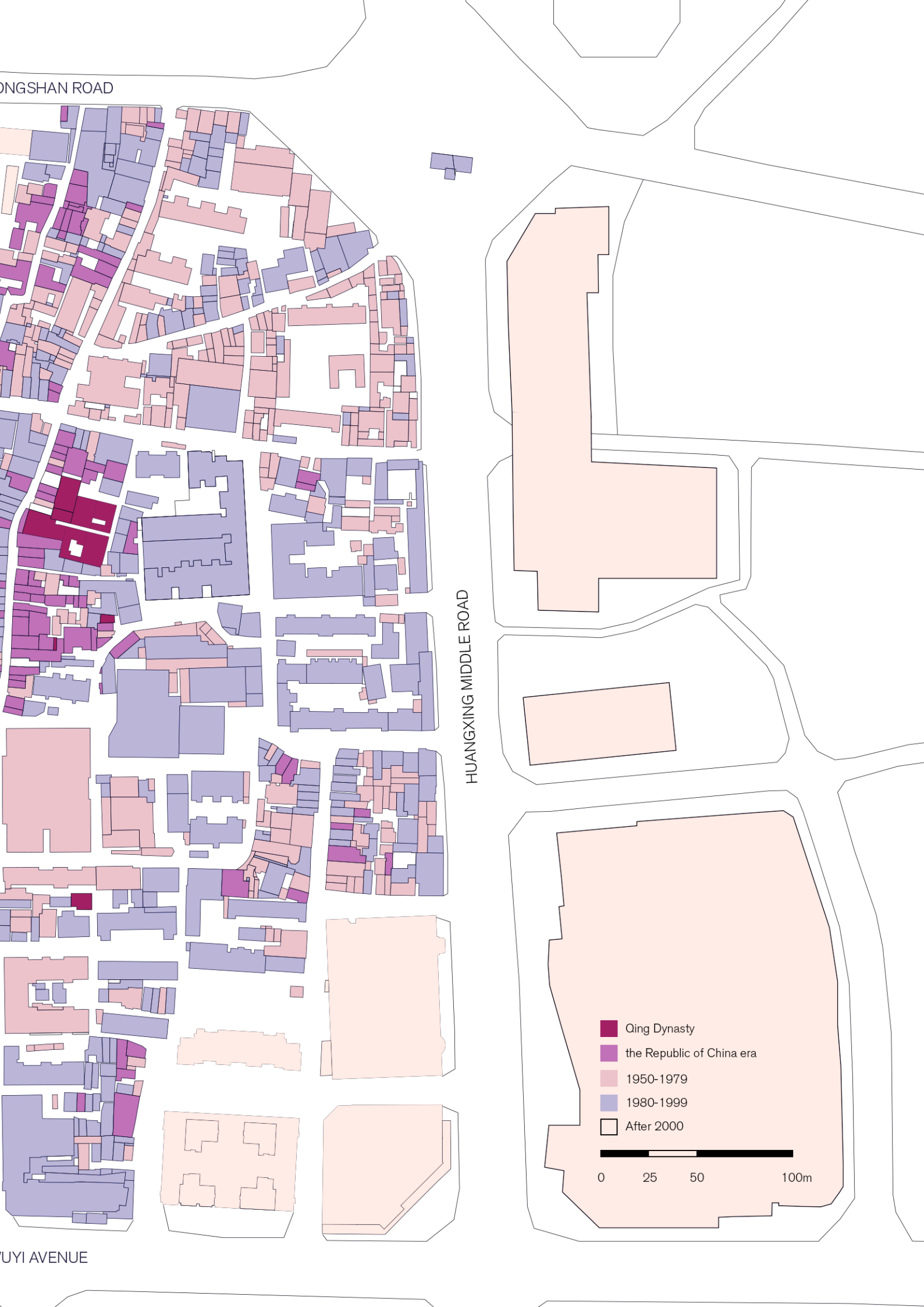
保持原有结构不变，设置空调机位，梳理广告位，对立面造型材质进行设计和更改。



8. PROBLEM DESCRIPTION---CHANGSHA

8.2 FIELD INTRODUCTION--LIANSHENG COMMUNITY




ONGSHAN ROAD
HUANGXING MIDDLE ROAD
UYI AVENUE
Qing Dynasty
the Republic of China era
1950-1979
1980-1999
After 2000
0
25
50
100m

7. PROBLEM DESCRIPTION---CHINA

SQ3 "WHAT IS THE AGED-FRIENDLY SPATIAL CONDITION?"

The mental and physical demands of elderlies

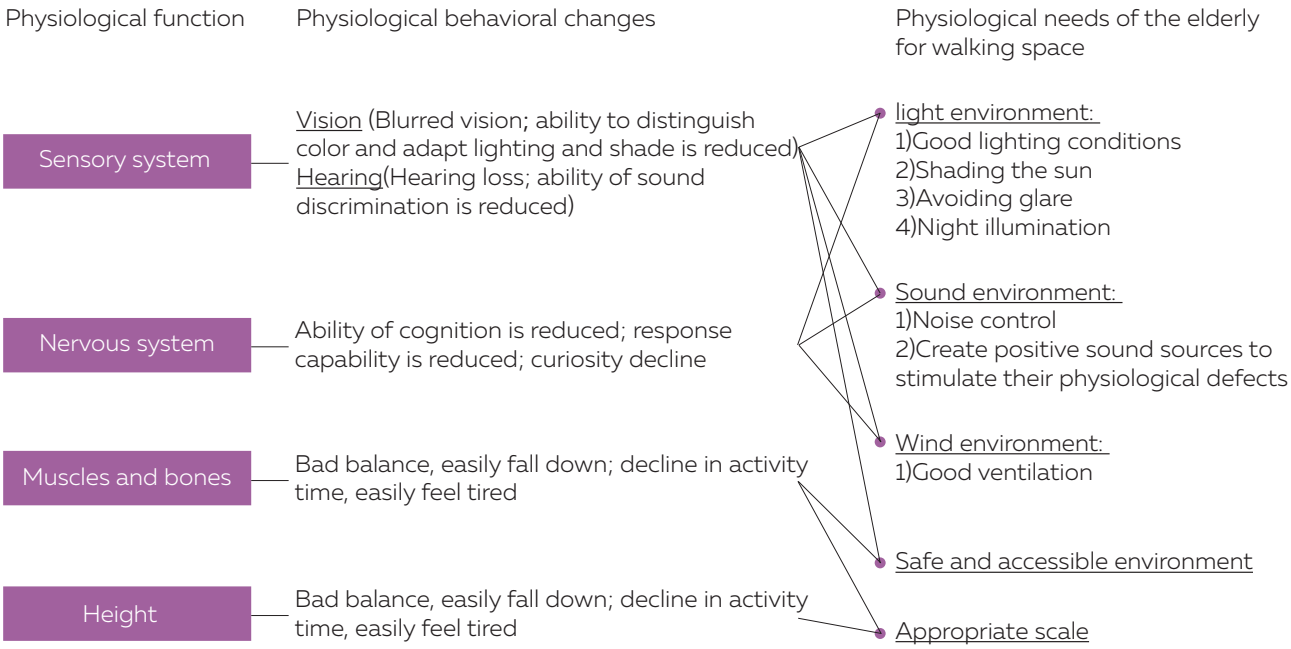


Figure 16: Relationship between behavioral characteristics of the elderly and special needs

Source: Fang, Q., & Wang, X. (2014)

老人的精神需求有哪些 大尺度 小尺度 买菜做饭 带孩子 交友

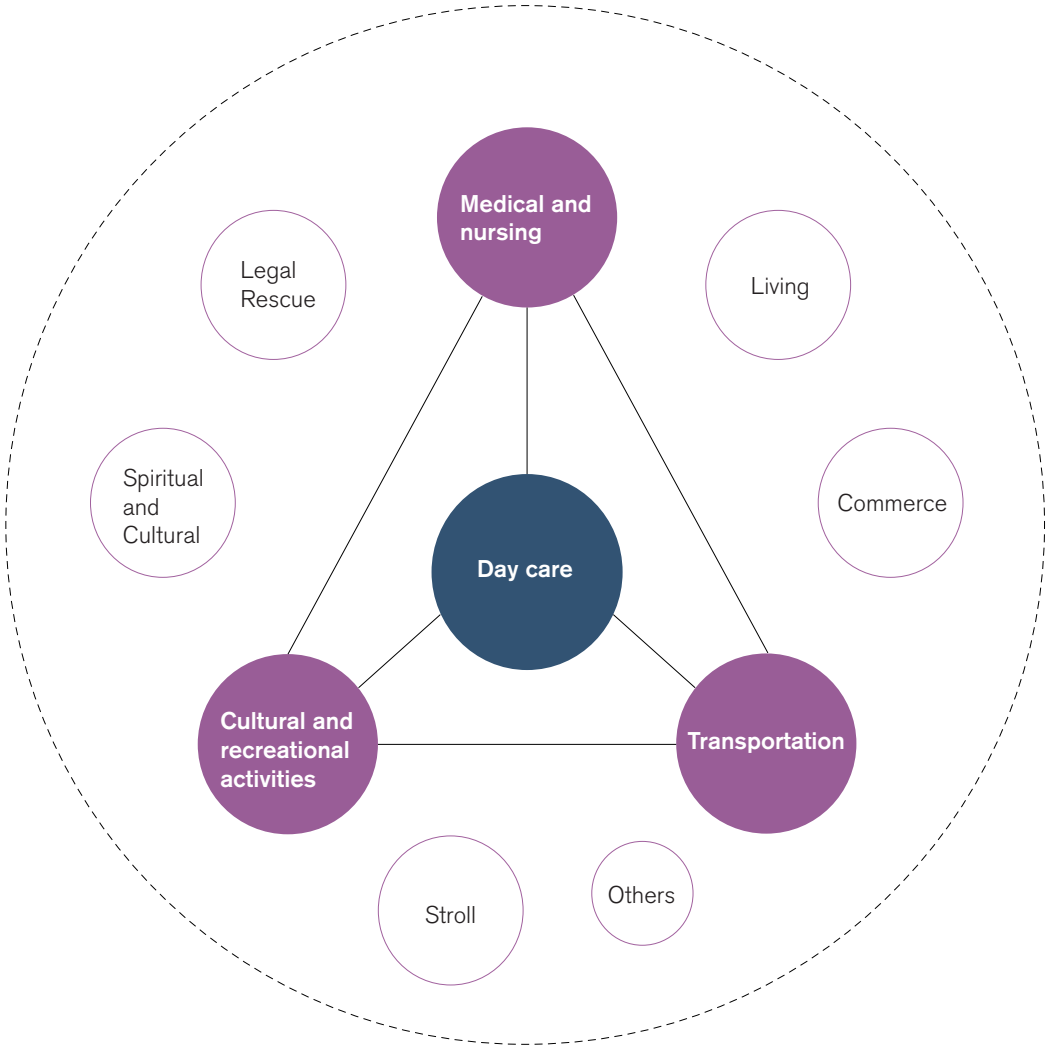


Figure 13:Everyday needs of the senior citizen based on community life circle

Source:Zhan, Y., & Wu, F. (2014).

西长街片区历史文化

轩辕殿社区

轩辕殿社区位于藩城堤东侧，因其西南角轩辕殿巷内建有一轩辕殿，故名。

1872 同治十年

1877 光绪三年

湖南土地肥沃，气候温和，雨水充沛，是重要的产粮地区。明清时期，长沙成为全国四大米市之一。调运粮食出省是湖南官府的大事。清代一批修建的粮仓均集中在今五一广场周边。这一批带“仓”字的街道因粮仓而得名。

建国后修建五一路，从此皇仓坪、皇仓街、永丰巷消失，皇仓后街由于是南北向街道，得以保留至今，只是除去“皇”字，今名为“仓后街”。

1938 民国

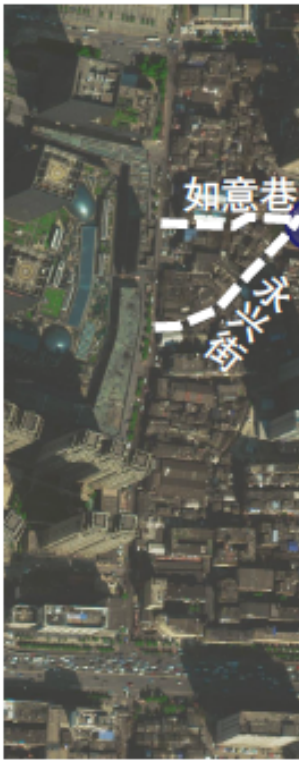
1938年地图

西长街片区历史文化

盐道坪社区

盐道坪，位于开福区藩城堤西侧。清同治《长沙县志》载，雍正十二年（1734年）设驿盐长宝道于此街，故名。

盐道坪是一个清代的盐道衙门，盐道衙门曾经就是专门管理食用盐的运输和购销的衙门。盐道衙门当年是个特别富裕的地方，旁边所有的街道取名都要围绕着衙门的富贵吉祥来取名。盐道衙门对面的那条路叫“丰裕街”，盐道衙门后面的（现在被中山路隔开的一部分），名字叫“连升街”，盐道衙门靠南边临接的是“如意街”，往上走的那条路，被命名成“吉祥巷”以及分支叫“永兴街”，靠东面的叫“接贵街”，跟连升街相交的，在西边西长街过去的叫“福庆街”。



盐道衙门有一个坪，曾堆满了盐。那些马车、板车、担子等等混杂在一起，充斥着南腔北调。

2011年

1938年地图

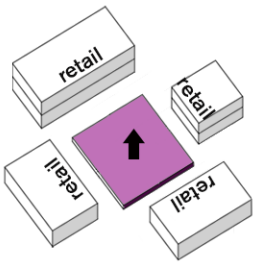
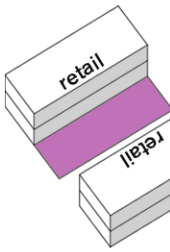
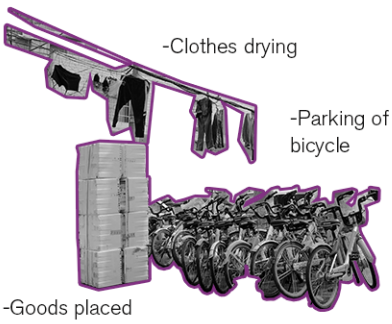
Keywords: aging; facilities for the elderly; megacity; strategy

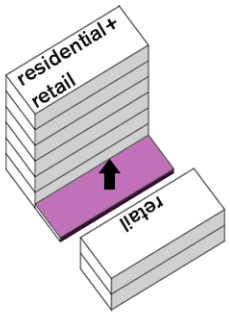
9. PROPOSAL

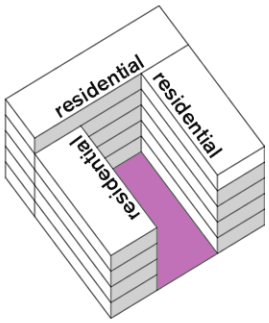
9.1 STRATEGY OF VISION-STEP 1

Middle scale public space package

3. Distribution of potential outdoor pubilc places
3.1

Large Scale Public Space		
Site Photos		
Space Model		
Function (Nowadays)		





vehicles

-Parking of motor vehicles
-Clothes drying

-Parking of motor vehicles

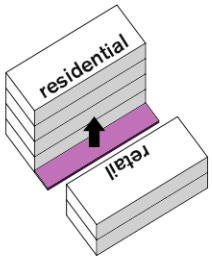
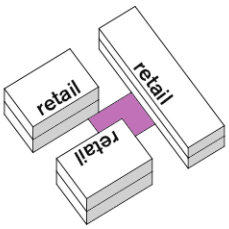
Image 17: xxxxx

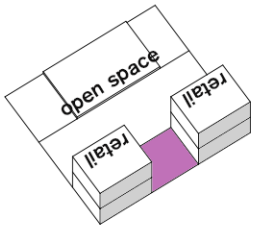
Source: Author

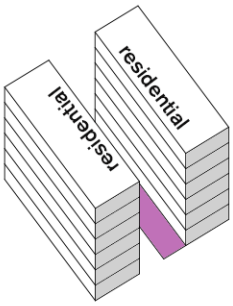
10. STRATEGY

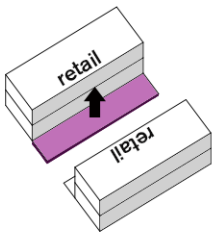
8.6 MAPPING-POTENTIAL PLACES

Outdoor places——middle scale public place

Middle Scale Public Space		
Site Photos		
Space Model		
Function (Nowadays)	-Parking of motor vehicles -Selling	 -Selling







-Selling

-Parking of motor vehicles

-Goods placed

-Parking of motor vehicles

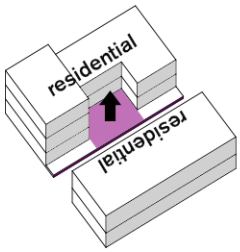
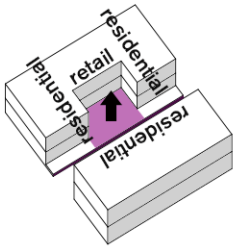
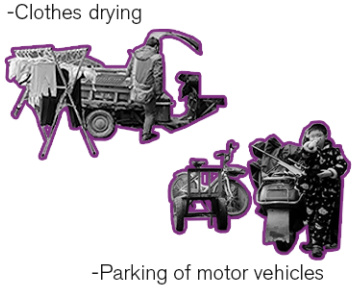
Image 17: xxxxx

Source: Author

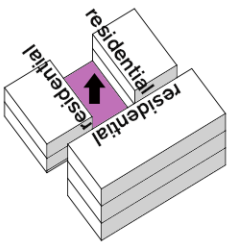
10. STRATEGY

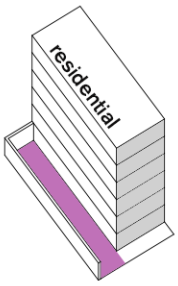
8.6 MAPPING-POTENTIAL PLACES

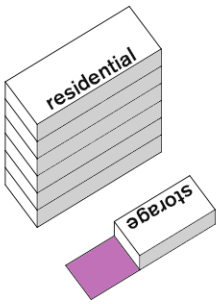
Outdoor places——middle scale public place

Middle Scale Public Space		
Site Photos		
Space Model		
Function (Nowadays)	-Clothes drying  -Parking of motor vehicles	 -Selling

China's ageing population







-Clothes drying

-Debris display

-Parking of motor vehicles

-Debris display

-Debris display

三、
1. 老

7. PROBLEM DESCRIPTION---CHINA

SQ3 **"WHAT IS THE AGED-FRIENDLY SPATIAL CONDITION?"**

-Urban morphology

表8 老年个体生活历程不同阶段的宜居环境需求

Tab.8 Elderly's demands for livable environment in different life stages

阶段	主观感知或体验	空间供给	宜居环境需求
低龄—日常活动空间拓展阶段	追求更高质量的生活；生活满意度较高；老年病导致乘坐公交不便	小区周边分布有市级休闲设施和多样化的购物场所	居住区周边较高质量的城市休闲设施；分布有多样化的购物场所；更优质、适老化的公共交通服务
年龄增长—日常活动空间收缩阶段	难以承受远距离出行；家务劳动开始感到困难；部分意愿与需求(主要为休闲活动)不能满足；生活满意度降低	小区附近分布有低质量的购物设施和非正式的休闲场所	社区级配套齐全的购物、休闲设施；更人性化的出行环境设计(如与外部公共交通的连接性)；提供一定的老年服务
高龄—日常活动空间严重局限阶段	移动出行感到困难，特别是风雨天、上下楼、以及一定距离的步行，已成为首要难题；对钟点工及老年食堂等的服务满意度差	小区内有老年食堂、社区卫生站、图书馆；道路与设施未进行无障碍设计	小区内部道路等微观环境的移动便利性设计；齐全、优质的老年服务

Stage	Subjective perception or experience
-Expansion stage of daily activity space	
-Contraction stage of daily activity space	
-Severe limited stage of daily activity space	

表2　大城市老年人的社会空间类型

Tab.2　Social space types of the elderly in the metropolis

圈层	区位特征	老年人口社会类型	职业特征	收入特征	年龄特征
第一圈层	中心城区	“弱势无助”、“安稳乐观”	“三无”人员、单位退休人员	低收入与中等收入	中高龄老年人
第二圈层	近郊区	“动迁依附”	普通退休职工	中等收入	中低龄老年人
第三圈层	远郊区	“生活美满型”、“城镇安稳型”	上层社会人员、城镇及农村人口	高收入与低收入	中高龄老年人

资料来源：作者自绘.

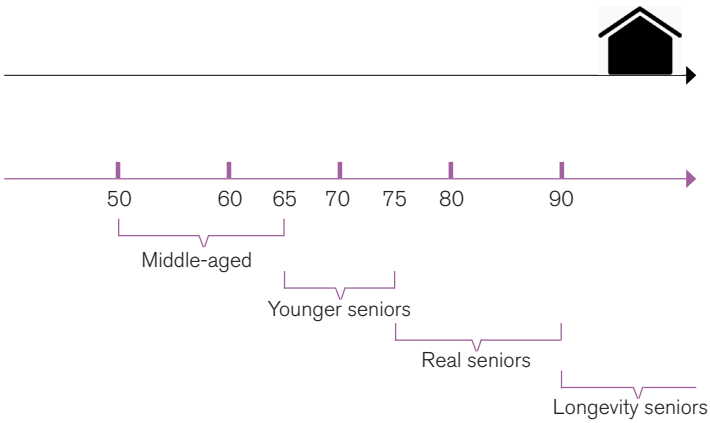


Image 10: Definiton of elderlies

Source:author

城市老年人的移动性变化及其对日常生活的影响
——基于社区老年人生活历程的叙事分析

谷志莲[1,2],柴彦威[2*]

(1. 深圳市规划国土发展研究中心,广东 深圳 518040; 2. 北京大学城市与环境学院,北京 100871)

摘 要:就地养老日益受到中国城市老年人的欢迎,其中个体移动性对老年人日常生活尤具重要意义。本文从微观个体的视角出发,运用质性研究方法,选取一对空巢的高龄老年夫妇作为典型案例,对其退休以来的移动性变化与日常生活历程进行叙事分析;以期揭示移动性对老年个体生活的重要意义、移动性的变化特征与日常生活的密切关联,从而为中国城市老年服务与宜老环境建设提供科学支持。结果表明,老年个体移动性具有日常活动空间向外拓展、逐渐向社区及周边收缩、局限于家及住所附近3个阶段;随年龄增长而不断下降的身体机能与健康状况,和家庭因素共同促使老年人移动性与日常生活发生阶段性演变;个人、家庭、所在社区的资源分别构成了各阶段的核心影响因素。个体的移动性空间应成为中国城市宜老社区与环境建设以及老年规划与服务的关键命题。

关 键 词:城市老年人;移动性;日常生活;叙事分析

4.4 老年人不同阶段宜居环境启示

结合老年个体不同阶段的移动性特征,通过对其生活历程中不同阶段移动性主观感知与所居住社区空间环境情况的分析,可得出老年个体在生活历程不同阶段对宜居环境具有不同的需求(表8)。

老年人在低龄—日常活动空间拓展阶段,表现出对居住区周边高质量休闲设施的追求;购物也倾向于较远距离、更能满足个体偏好的购物场所,一

表8 老年个体生活历程不同阶段的宜居环境需求

Tab.8 Elderly's demands for livable environment in different life stages

阶段	主观感知或体验	空间供给	宜居环境需求
低龄—日常活动空间拓展阶段	追求更高质量的生活;生活满意度较高;老年病导致乘坐公交不便	小区周边分布有市级休闲设施和多样化的购物场所	居住区周边较高质量的城市休闲设施;分布有多样化的购物场所;更优质、适老化的公共交通服务
年龄增长—日常活动空间收缩阶段	难以承受远距离出行;家务劳动开始感到困难;部分意愿与需求(主要为休闲活动)不能满足;生活满意度降低	小区附近分布有低质量的购物设施和非正式的休闲场所	社区级配套齐全的购物、休闲设施;更人性化的出行环境设计(如与外部公共交通的连接性);提供一定的老年服务
高龄—日常活动空间严重局限阶段	移动出行感到困难,特别是风雨天、上下楼、以及一定距离的步行,已成为首要难题;对钟点工及老年食堂等的服务满意度差	小区内有老年食堂、社区卫生站、图书馆;道路与设施未进行无障碍设计	小区内部道路等微观环境的移动便利性设计;齐全、优质的老年服务

般物美价廉、物品种类齐全的农贸市场或购物超市更符合老年个体的偏好；出行方式一般以乘坐公交为主，案例样本由于患有老年病乘坐公交不便，出行便利在一定程度上受到了影响；此阶段对较大环境尺度下设施与服务的供给，更优质的公共交通服务，尤其是公交系统对老年人具有显著影响。

随着年龄的增长，老年个体日常活动空间逐渐收缩，移动能力明显下降，移动出行开始感到困难；出行方式逐渐减少对公共交通的利用，转为步行为主。此阶段较小范围内社区级齐全的购物、休闲设施配套，及便利、人性化的出行环境，尤其是与外部公共交通的连接性或可达性，将极大地影响老年人的日常活动空间范围，决定了个体移动能力与生活质量的维持，并且居住地需提供一定的老年服务。

在高龄—日常活动空间严重局限于家附近的阶段，个体移动出行已成为生活首要困难，需他人替代性劳动或依赖社区养老服务。此阶段居住小区内部的资源环境对老年人生活质量的影响最大，小区内部微观环境的移动性便利设计、优质齐全的老年服务是关键影响因素。

总体上，随着年龄的增长，老年个体由低龄迈入高龄阶段，由广泛的日常活动空间日益局限到社区内部的日常活动空间，其对社区资源环境的依赖性越来越高，对微观环境的移动便利性越来越敏感，对老年服务的需求越来越多。

7. PROBLEM DESCRIPTION---CHINA

CONCLUSION

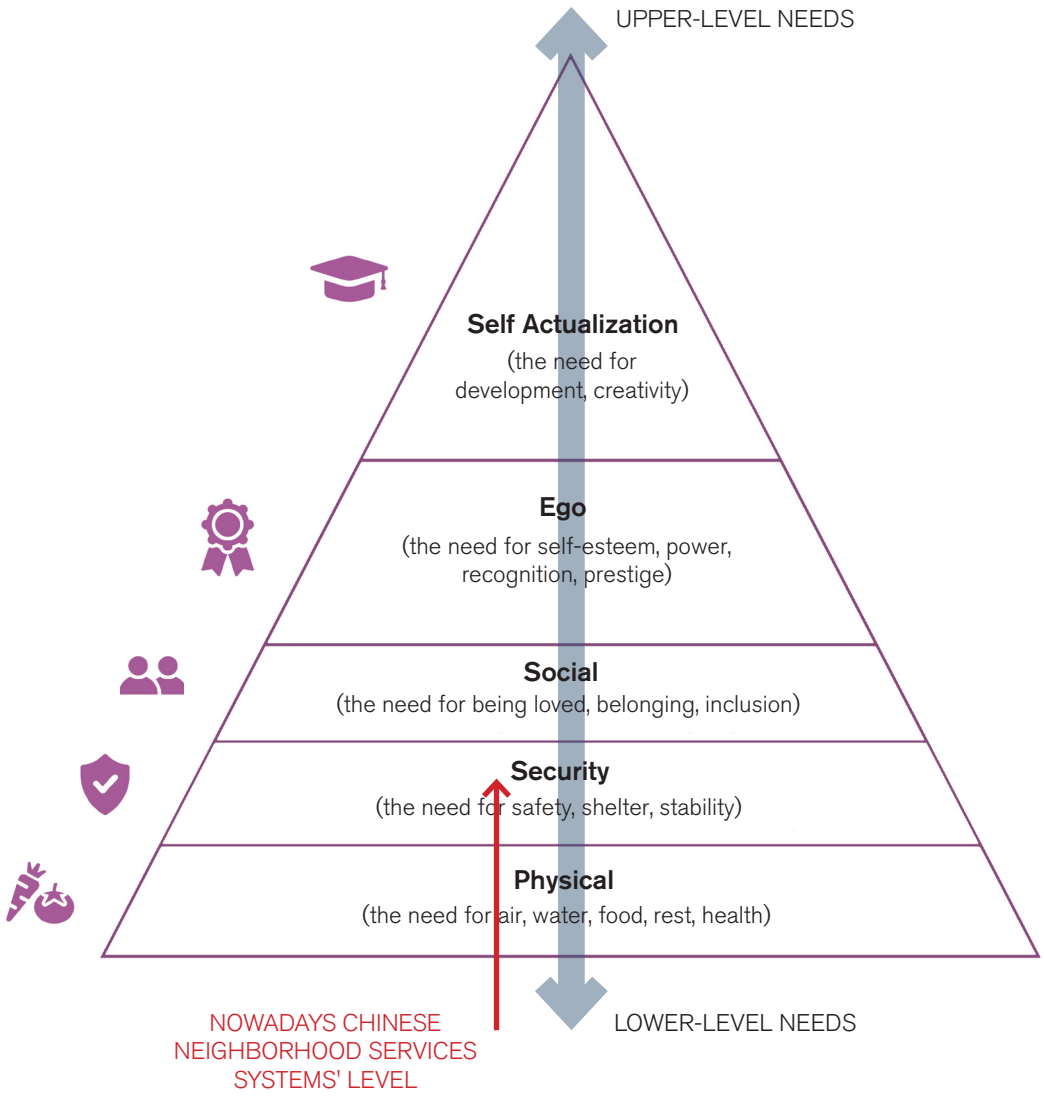


Figure 16: Maslow's hierarchy of needs

Source: Author

China's ageing population

The overwhelming majority of communities still focus on the basic needs of the elderly, failing to implement high-level services universally, single and low-level services. According to Maslow's basic needs hierarchy theory, the content of nowadays neighborhood services systems for the elderlies mainly concentrate on two aspects: physiology (life care) and safety (prevention of accidents). There are many contradictions between the supply and demand of neighborhood services and the needs of the elderly themselves, and it is difficult to reconcile them. For the elderly who can take care of themselves or some of them can take care of themselves, they hope to get more social services, such as health care, rehabilitation, mental problems, education and legal aid; but they need help from others to maintain their daily life, old people living alone and life. Difficult elderly people in particular need community home care services to meet basic living needs. Thus, the objects of home-based pension services in underdeveloped urban communities are diverse. At present, there is a certain gap between the supply and demand of the services provided by the underdeveloped urban communities and the actual needs of the elderly, which may become more and more obvious in a short time. (Yang, Y., Yang, L., Hu, Y., Lu, H., Zhang, Y., & Chen, L. (2015).)

出行难

说明为什么老人都是无组织五纪律的在活动

8. PROBLEM DESCRIPTION---CHANGSHA

8.1 FIELD INTRODUCTION--CHANGSHA

Location

Image 17: Satellite of the main second ring area of Changsha

Source: Google earth

Image 17-25: The impressions of Changsha

Source:Baidu

Source:Baidu

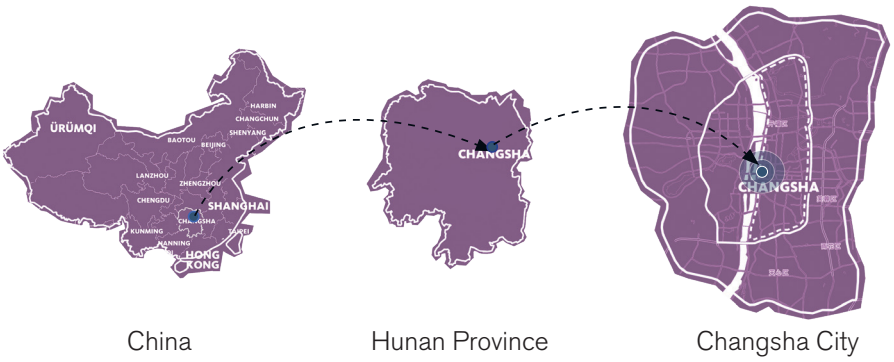
Source:Author

Source:Author

Source:Baidu

8.1 FIELD INTRODUCTION--CHANGSHA

Location



China Hunan Province Changsha City

Figure 17: Location of the field

Source: Mapbox

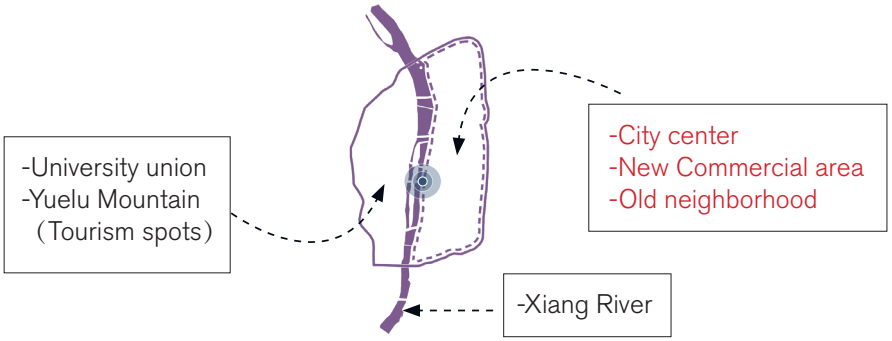


Figure 17: Second ring area of Changsha

Source: Author

Changsha (Area: 11819 square kilometers) , is the capital city of Hunan Province, locating in the middle-south of China. Changsha is one of the most important central cities in the middle areas of the Yangtze River. It is also the political, economic, cultural, transportation, science and technology, finance and information center of Hunan Province. (Baidu, web)

The main city area is inside the second ring, while been divided into two parts by the Xiang River. The west part has the famous tourism spot Yuelu Mountain. At the same time, three well-known universities and some Hi-tech industrial parks surrounds at its foot. City center locates in the east part, with rapid developing commercial area and original old neighborhoods.

This project mainly focuses on the old community named Liansheng and its nearby area, which locates in the east part of the Second ring area in the city center and next to Xiang river.

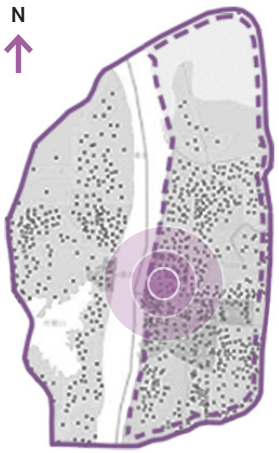
8. PROBLEM DESCRIPTION---CHANGSHA

8.2 FIELD INTRODUCTION--LIANSHENG COMMUNITY

Image 12 & 13:
The street map of Liansheng community
Source: Baidu. streetmap

8.2 FIELD INTRODUCTION--LIANSHENG COMMUNITY

Population information



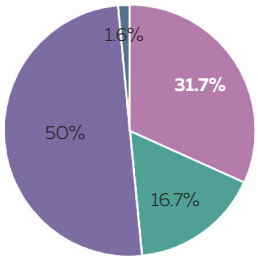
Community: Liansheng

Area: 0.1 square kilometers

Families: 2100

Population: 6300+

Elderlies: 2000+



Elderlies
White collars
Students
Others

The Population composition in the community

Figure 18: Elderly population distribution in Changsha

Source: Changsha Census 2016

Figure 19: The population composition of the target community

Source: Changsha Census 2016

In the Elderly population distribution image of Changsha, it shows that most of the elderlies are concentrated in the second ring area of Changsha, especially in the east side next to Xiang River. The main field of the project is selected in the concentrated area of the elderlies, named Liansheng community. (Figure x)

Half of the population in the community is white collars because of its low house-renting price (compares to the nearby new neighborhoods) and short distance with the business districts. Elderlies is the second largest group which counts 31.7%, most of them are the original residents of the community. The rest are the students group which is mainly below 10 years old.

8. PROBLEM DESCRIPTION---CHANGSHA

8.2 FIELD INTRODUCTION--LIANSHENG COMMUNITY

Location

Riverside Scenic Belt

Main commercial loop of the city

Target community

Historic Trail Network

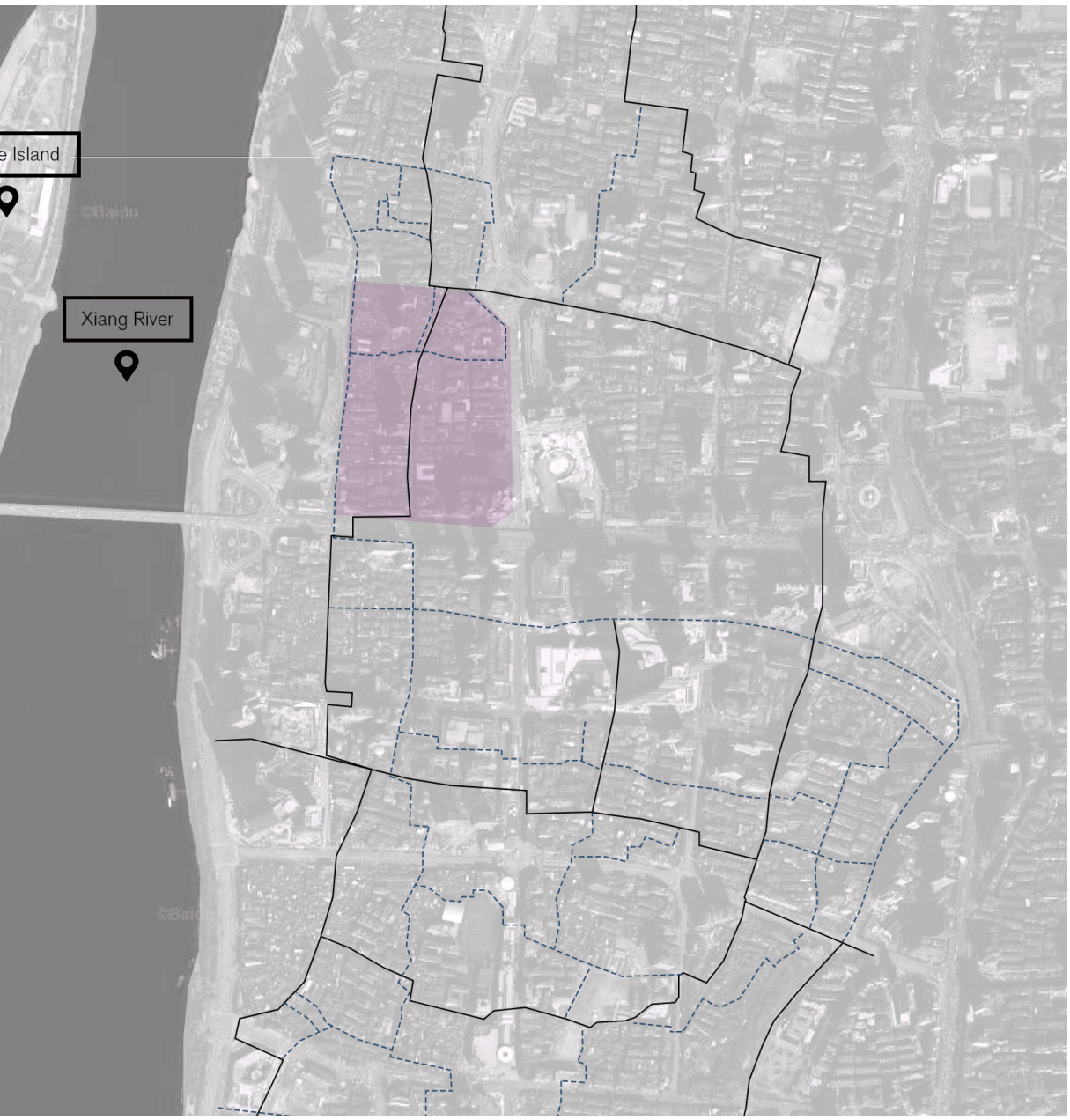


Image 17: Satellite of Liansheng community and its surrounding

Source: Google earth

8. PROBLEM DESCRIPTION---CHANGSHA

8.2 FIELD INTRODUCTION--LIANSHENG COMMUNITY

Location

0
25
50
100m

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

- Global ageing population

孟岩主张分期、分批，甚至分个儿地对前门东区进
域改造的案例颇为相似，“旧城改造的本质其实是
民实现自然代际更替。比如日本东京六本木这改造
的老人过世之后，他们的子女可能早就不在当地居
造，是一个自然的过程。”

China's ageing population

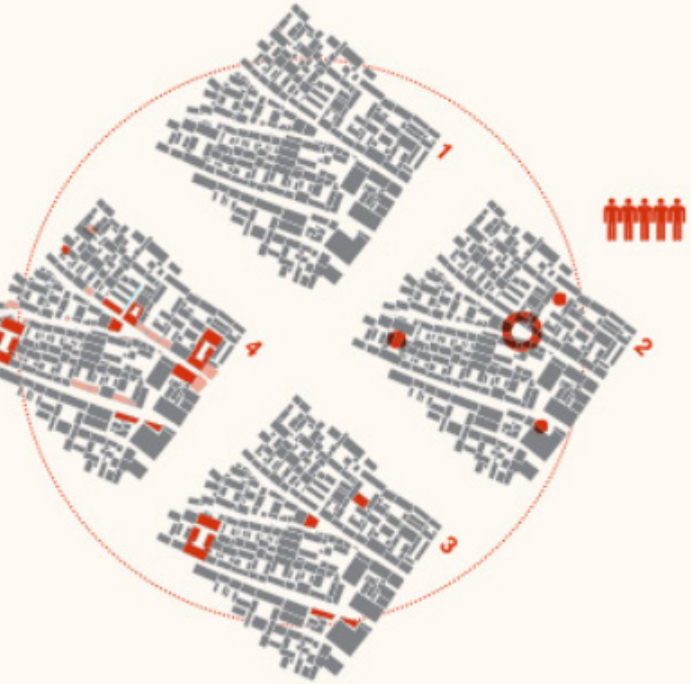
进行改造，这与刘宇扬提到的日本六本木区
是代际更替，点状改造更有利于区域内的居
造过程花了将近 20 年。很多原本住在里面
居住，就主动把房子退掉，那么就进去改

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

- Global ageing population

节点式开发模式



1. 开发区固有的社会/文化/空间特质
2. 实施主体根据市场价格赔偿希望搬迁的居民
3. 按照“节点”更新计划吸引新业态和事件活动，激活辐射整个区域
4. 区域有机更新，通过更新计划平台，支持丰富独特的业态混合共存

出结论是我们所需要的不是另一个计划，而是一个平台，所有的知识因为参与者拥有共同的目标而被共享和利用。该平台将积极主动地找的合作伙伴去解决特定的问题。大棚栏平台便是这样一个平台：收集这些相关信息，并为实现这一共同目标而实施，平台开放给任何对大兴有兴趣的人。

划者像商业、政府和社区一样都拥有自己的信息及诉求。从某种程度而言，如政策所规定的相同的最终目标，而并非只是投机性参与。一旦投机性和不可持续的力量被移除，这个目标建筑和房屋的质量有待提高；二，作为区域的一种传统文化特质，无论是有形的和无形的，都心知肚明其在这一过程中所能发挥的最佳效果，尽管效果和认识可能是非常有限的。达成的问题，如果效果与认识不能有机结合，不出意外，平庸主义会是最终结果。

并没有丰厚到去运用它缺乏的知识库和技能来与它一贯的合作伙伴进行交易。拥有这些能要仔细核实。我们很难按照常规的做法找到这些替代的合作伙伴，也不具备企业结构和文

作为北京老城区内保留相对完整的历史文化街区之一，和北京其他旧城
密度高，公共设施不完善，区域风貌不断恶化，产业结构亟待调整，复
难以找到一种合适的路径引导在地居民参与改造，没有形成有效运作模
城市可持续发展之间的矛盾在很长一段时间内难以取得平衡——这也使
后的生活、社会与经济环境条件继续恶化。

在此背景下，亟需采取一种新的模式对大栅栏进行保护与更新。新模
设”的刚性方式，转变为“区域系统考虑、微循环有机更新”的方式进
为互相关联的社会、历史、文化与城市空间脉络。散布其间的院落、街
造，并产生网络化触发效应，不同节点的改造形成节点簇、逐步再连成
间，更重要的是，将“单一主体实施全部区域改造”的被动状态，化为
前景，将大栅栏建设成为新老居民、传统与新兴业态相互混合、不断更

动，是在北京市文化历史保护区政策的指导和西
京大栅栏投资有限责任公司作为区域保护与复兴
主导、市场化运作的基于微循环改造的旧城城市

区一样，大栅栏的保护、整治与复兴面临着种种难题：人口
杂严格的历史风貌保护控制，无法成规模的进行产业引入，
式支撑区域保护与发展。改善民生、社区共建、风貌保护、
得原住民在保护和发展区域过程中缺乏主动性，区域本已落

式的重要特点之一，即改变“成片整体搬迁、重新规划建
行更加灵活、更具弹性的节点和网络式软性规划，视大栅栏
巷，按照系统规划、社区共建的方式进行有效的节点簇式改
片。这样不仅可以尊重现有胡同机理和风貌、灵活的利用空
“在地居民商家合作共建、社会资源共同参与”的主动改造
新、和合共生的社区，复兴大栅栏本该有的繁荣景象。

1.INTRODUCTION &MOTIVATION

一期调研：时间：4.21 -4.29　地点：长沙市老城区　调研人员：4 名
调研内容：长沙市老城区基础养老设施调查（图中框出的范围包括七个街道）

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

	望麓园街道北正街社区居家养老服务中心	楚湘社区居家养老服务站	中山西路社区居家养老服务站	荷花池居家养老服务中心
政府主导	社区	万众和	社会	社区
		民办公助		公办
	非盈利性	非盈利性	非盈利性	非盈利性
的房子	与社区居委会在一起，挂牌	共建	独栋建筑为社区居委会 挂牌 2 层	独栋建筑，一层为社区业务办理，二层为办公，三层为活动中心，四层开会
		80		老年活动室仅两个小房间，30 平米左右
四层，一层是开这营者的自机构养老		80 一层	独栋建筑 两层	
		租的社区的房子		
		社区公共服务用地		

模式总结	坡子街道老年服务中心	天心区白沙泉老年公寓	青山居家敬老院	望麓园街道北正街社区居家养老服务中心	楚湘社区居家
是否满足消防规范	否	否	通过	否	否
服务对象	全有	失能老人	自理为主		自理
入住老人	37 个	126 人	39 个（其中日托 8 个）		0
床位数	60	200	60		0
内部功能空间			活动室 小厅 大厅		整个就一个
无障碍设施情况	有 不全	有 不全	有 不全		有
是否有日间照料中心	以前有 现在没有	有	有		无 但以后 发展成为
提供服务的类型	全托	餐饮 日托 全托	餐饮 日托 全托		活动
周围配套设施	医院 社区诊所	诊所 医院	诊所 社区 医院 三医院		社区中心 医
服务 人员	12 个	40 个	9 个		2
土地出让方式	自己的地	租	自己的地		租

（5）支路2：长度100.5米，道路红线宽度9米；

（6）潮宗街小学支路：长度192.1米，道路红线宽度5米；

（7）茅棚街：长度300.1米，道路红线宽度7米；

（8）毛家桥巷：长度190.2米，道路红线宽度20米。

原线位拓宽支路情况如下：

希贤里：长度226.7米，原宽度3.5-6米，拓宽至7米。

1

2

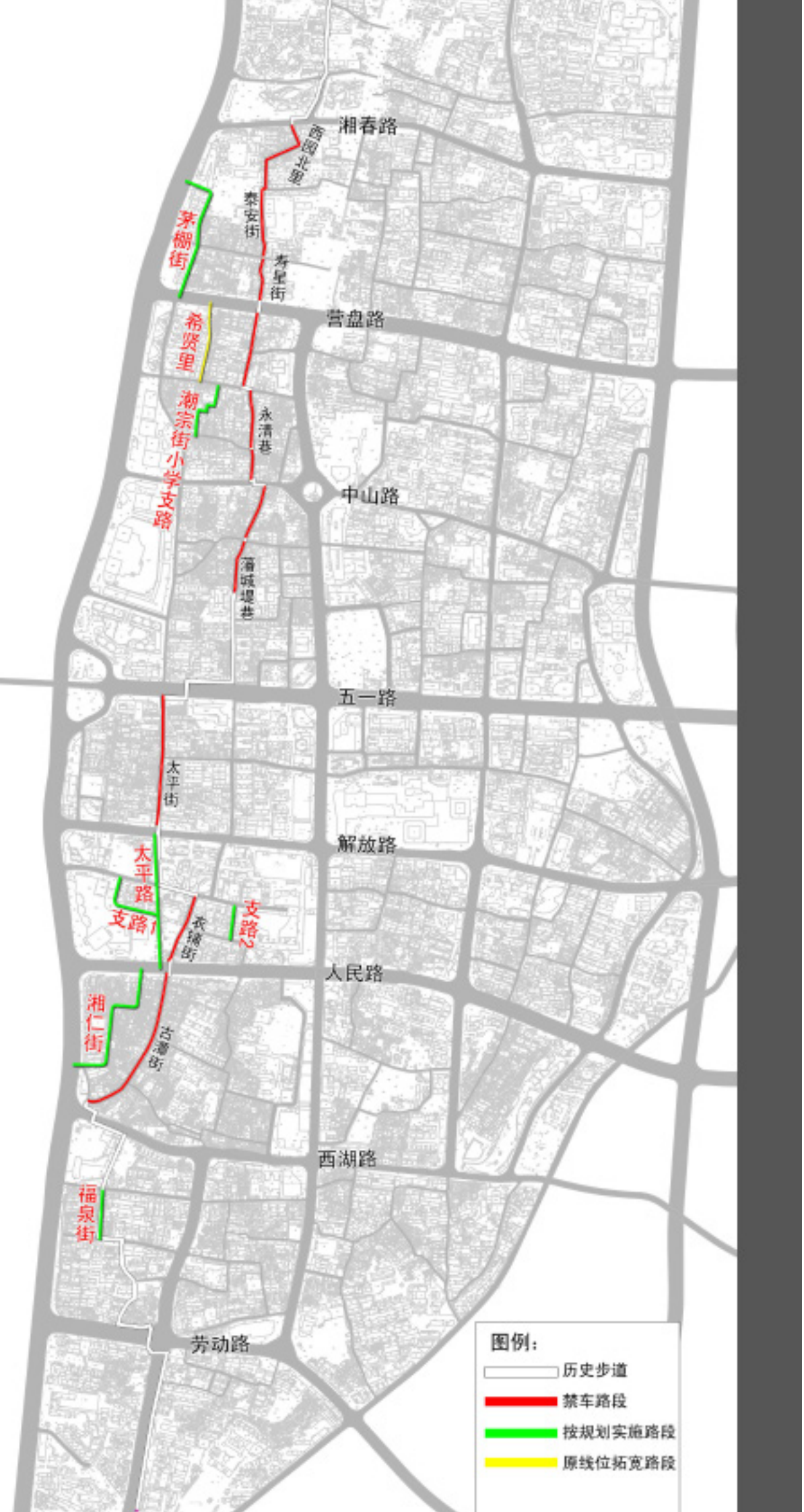
● 实施顺序及交通组织

考虑到项目周期较短，消减措施实施难度不一，且周期较长，建议分阶段实施历史步道交通组织：

（1）周边路网及停车场未实施的情况下，暂时保留禁行路段机动车通行功能；

（2）周边路网已实施，停车场未实施的情况下，在卡口处（即隔断设施位置）设置车牌识别+栏杆，只允许社区内部车辆通行；

（3）在周边路网及停车场实施的情况下，禁行路段全面禁行。


湘春路
西阳北里
泰安街
寿星街
茅棚街
营盘路
希贤里
潮宗街小学支路
永清巷
中山路
滑城堤巷
五一路
太平街
解放路
太平路支路1
支路2
衣锦街
人民路
湘仁街
古潭街
西湖路
福泉街
劳动路
图例：
历史步道
禁车路段
按规划实施路段
原线位拓宽路段

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

- Global ageing population

通分析

交通现状——内部

1类、两车道，能供双向车流通行

2类、一车道，车流通行困难

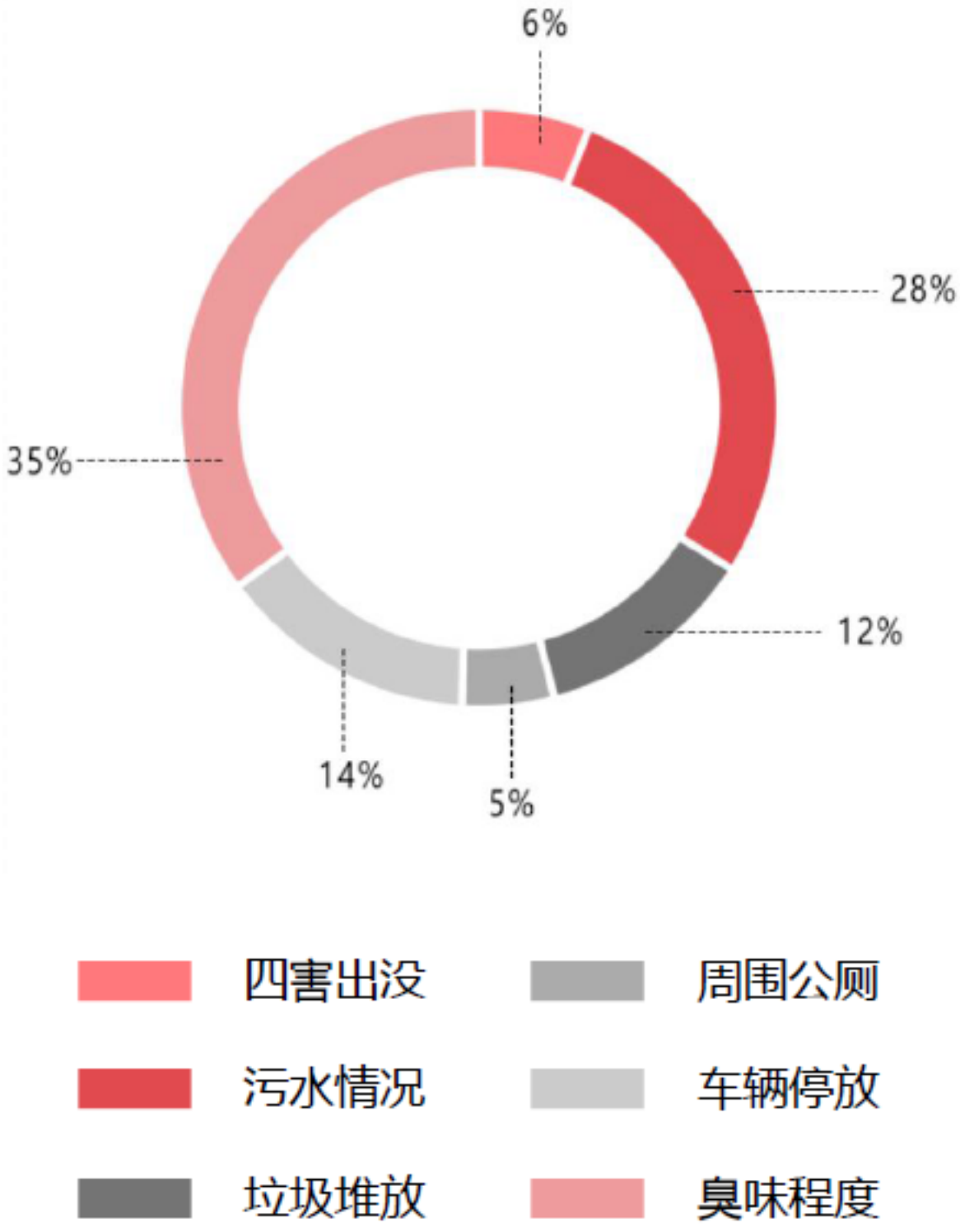
3类、车辆无法通行，仅限人行流线

街道环境评价

Matrix		1 四害出没	2 污水情况	3 垃圾堆放	4 周围公厕	5 车辆停放	6 臭味程度	7 0	8 0	9 0	10 0	normalized principal Eigenvector
四害出没	1	-	1/5	3/8	1 1/4	5/6	1/8	-	-	-	-	6.08%
污水情况	2	5 1/3	-	3 7/9	4 1/2	1 3/5	5/7	-	-	-	-	27.94%
垃圾堆放	3	2 5/8	1/4	-	3 2/3	1 1/7	2/7	-	-	-	-	12.67%
周围公厕	4	4/5	2/9	2/7	-	1/4	1/6	-	-	-	-	4.54%
车辆停放	5	1 1/5	5/8	7/8	4 1/8	-	5/9	-	-	-	-	14.02%
臭味程度	6	8	1 4/9	3 2/7	5 6/7	1 5/6	-	-	-	-	-	34.76%
0	7	-	-	-	-	-	-	-	-	-	-	0.00%
0	8	-	-	-	-	-	-	-	-	-	-	0.00%
0	9	-	-	-	-	-	-	-	-	-	-	0.00%
0	10	-	-	-	-	-	-	-	-	-	-	0.00%

AHP法得出权重结果

为对场地内一些主要道路进行环境评价，以便在之后的设计中作为参考，采用AHP法对总结出的道路环境因素进行权重的评价，再采取专家打分法进行综合打分并计算。


6%
28%
12%
5%
14%
35%
四害出没
污水情况
垃圾堆放
臭味程度
周围公厕
车辆停放

1
7
8
9
10

街道环境评价

很差

较差

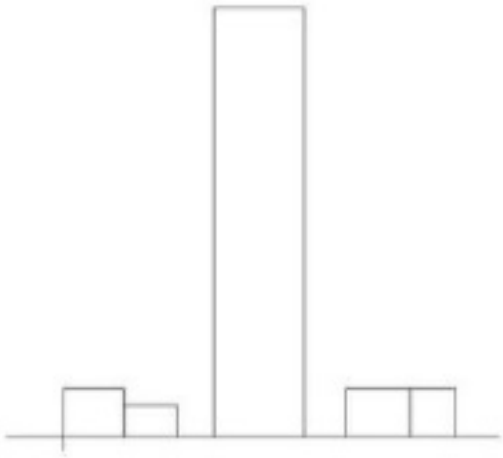
较好

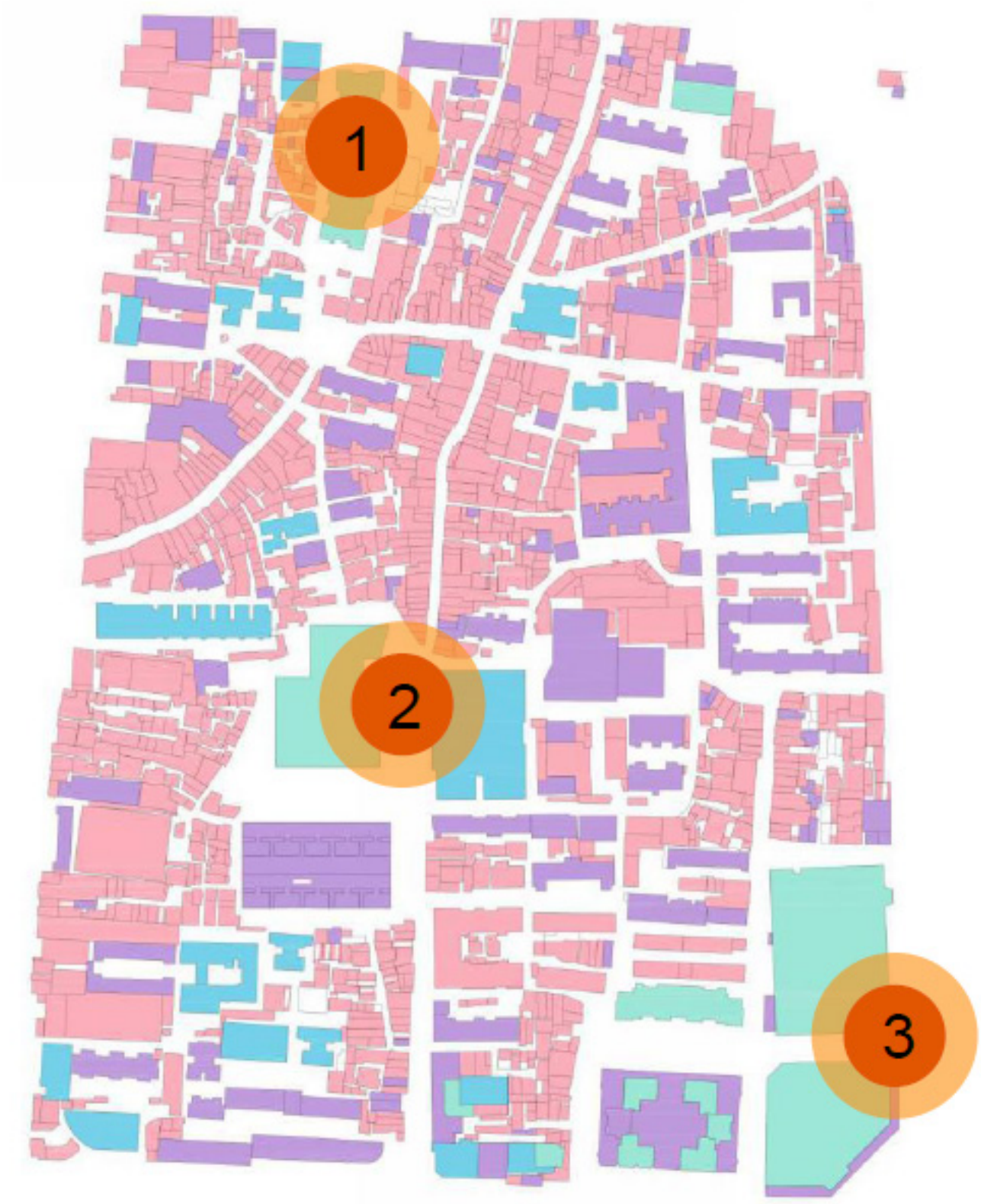
良好

区域内建筑层高分析

1.长宝佳园公寓楼

层数28层，约80米

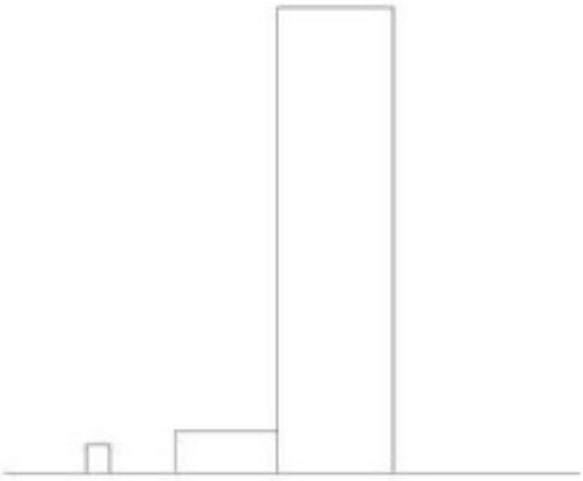


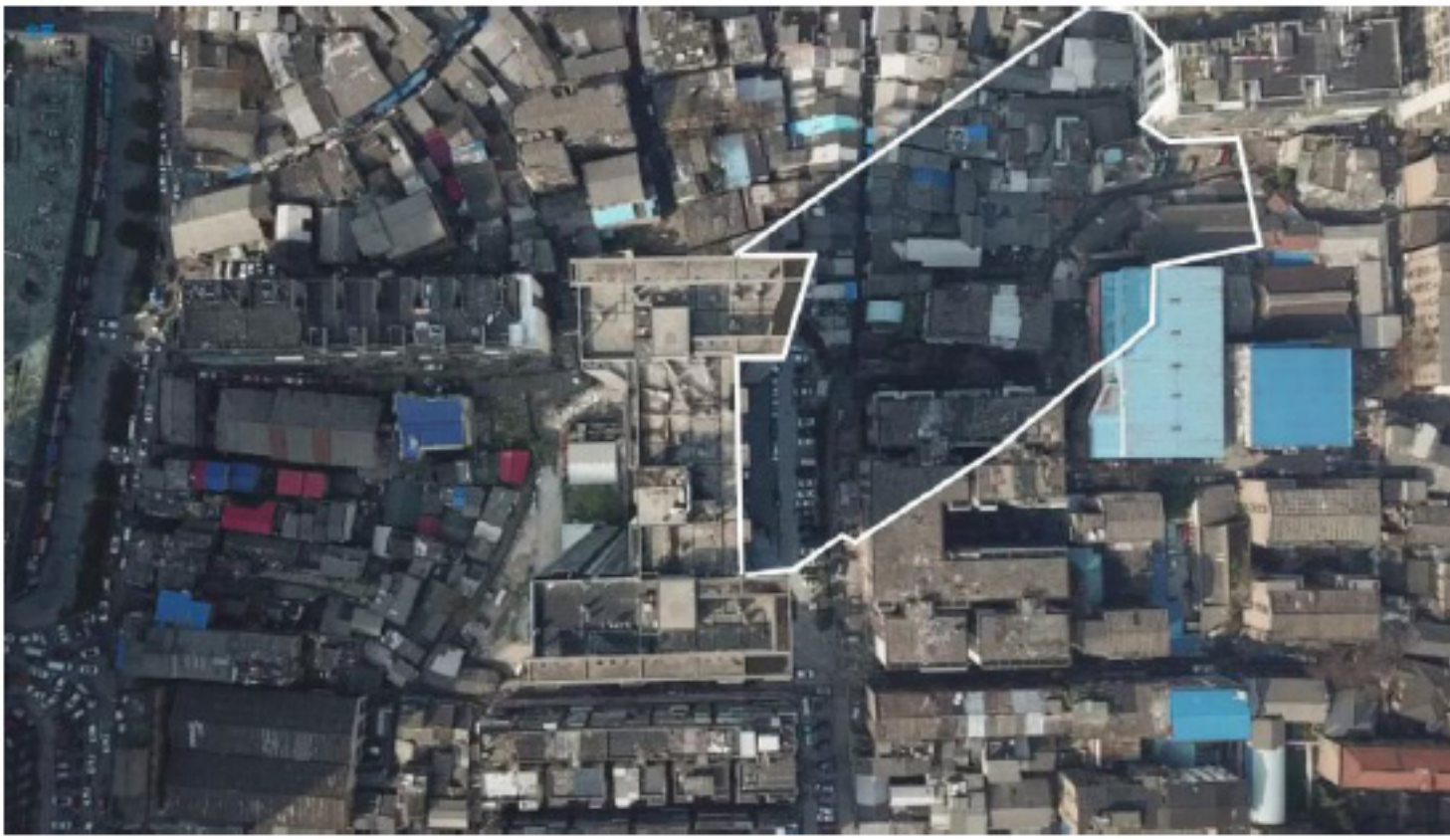

1
2
3

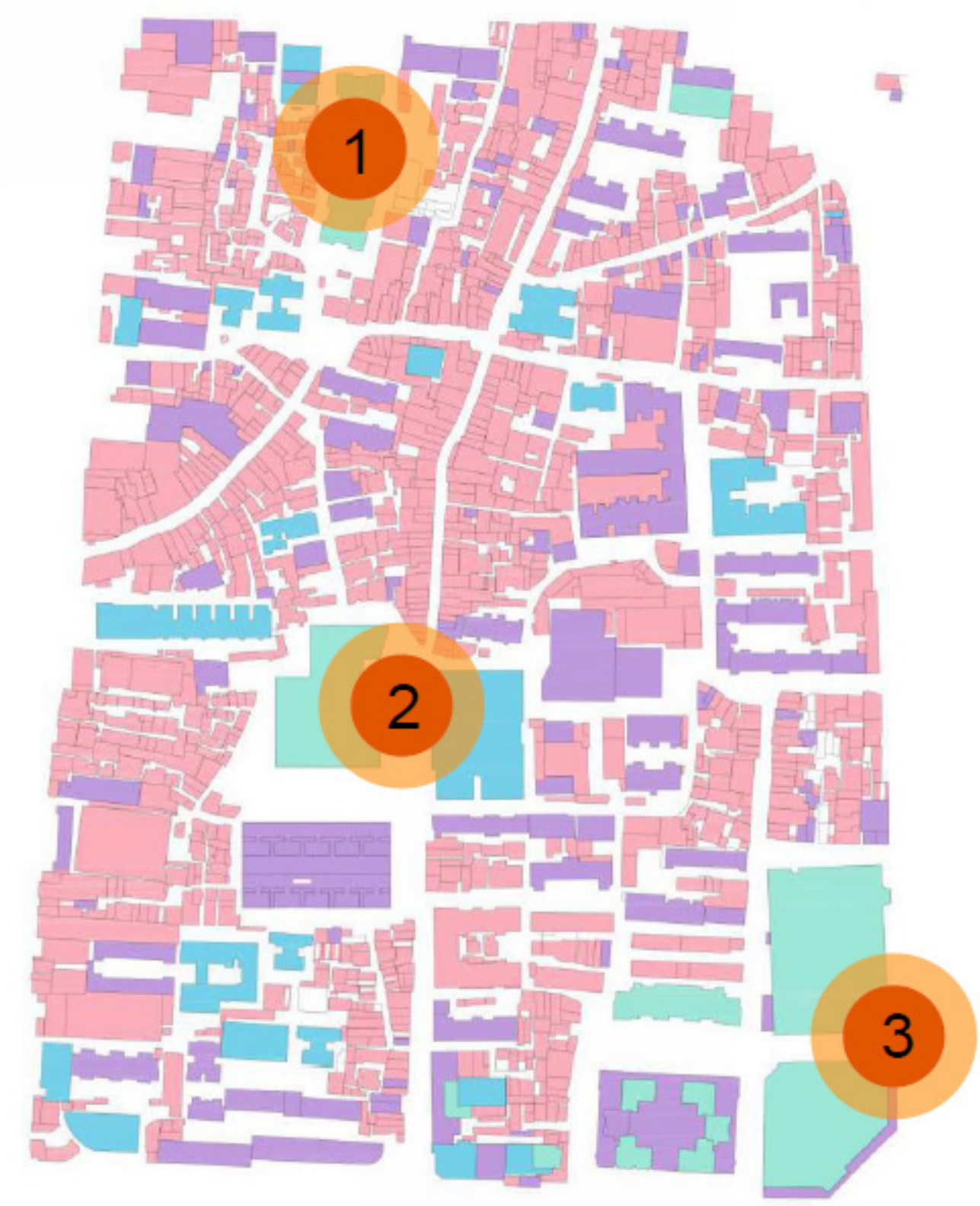
区域内建筑层高分析

2.五一·中央领御公寓楼

层数33层，层高约100米



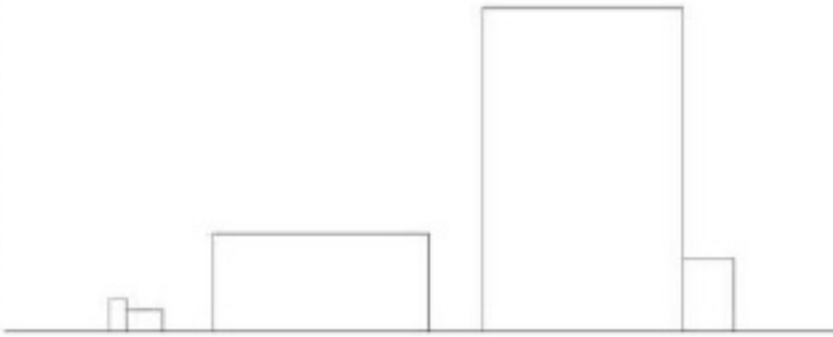


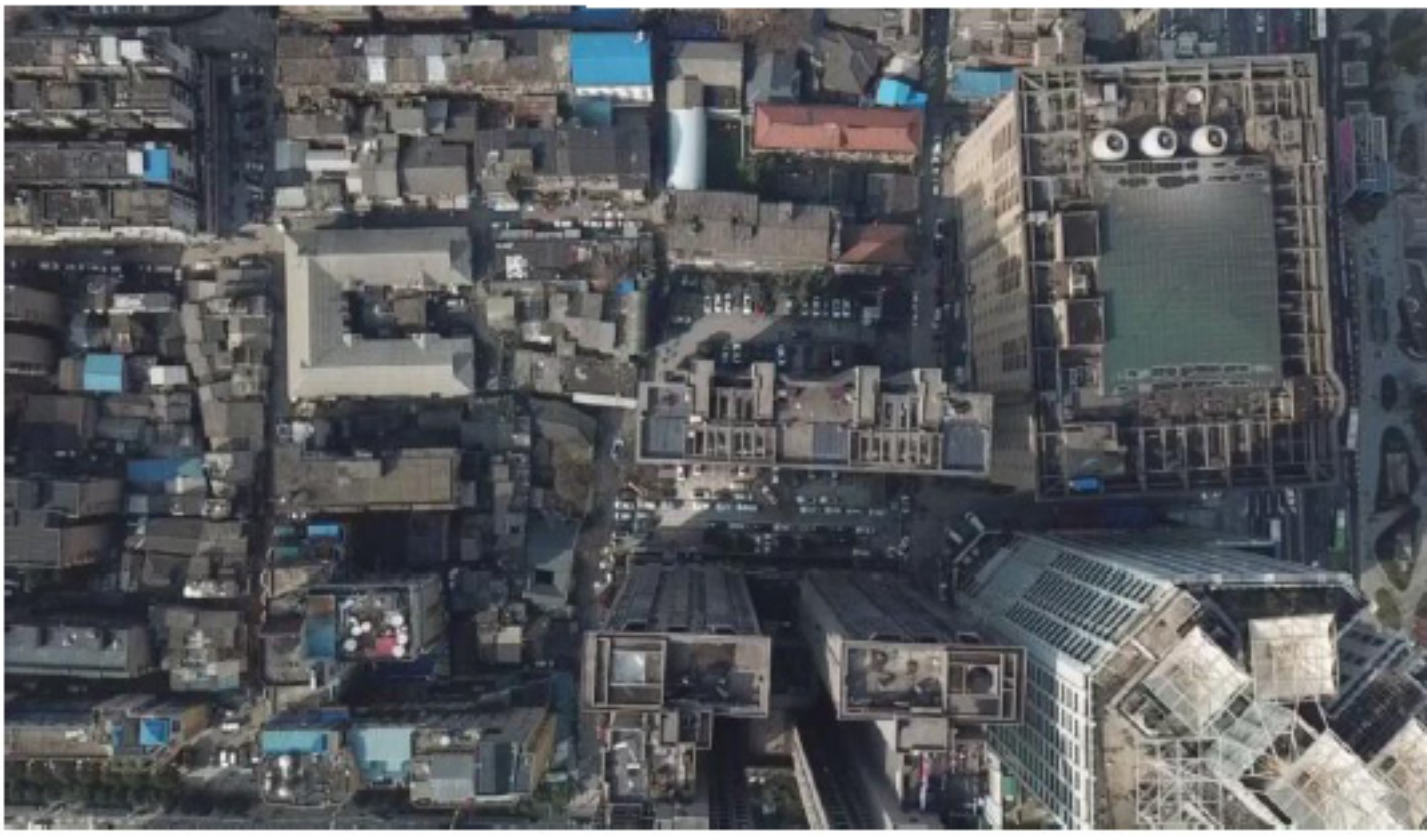

1
2
3

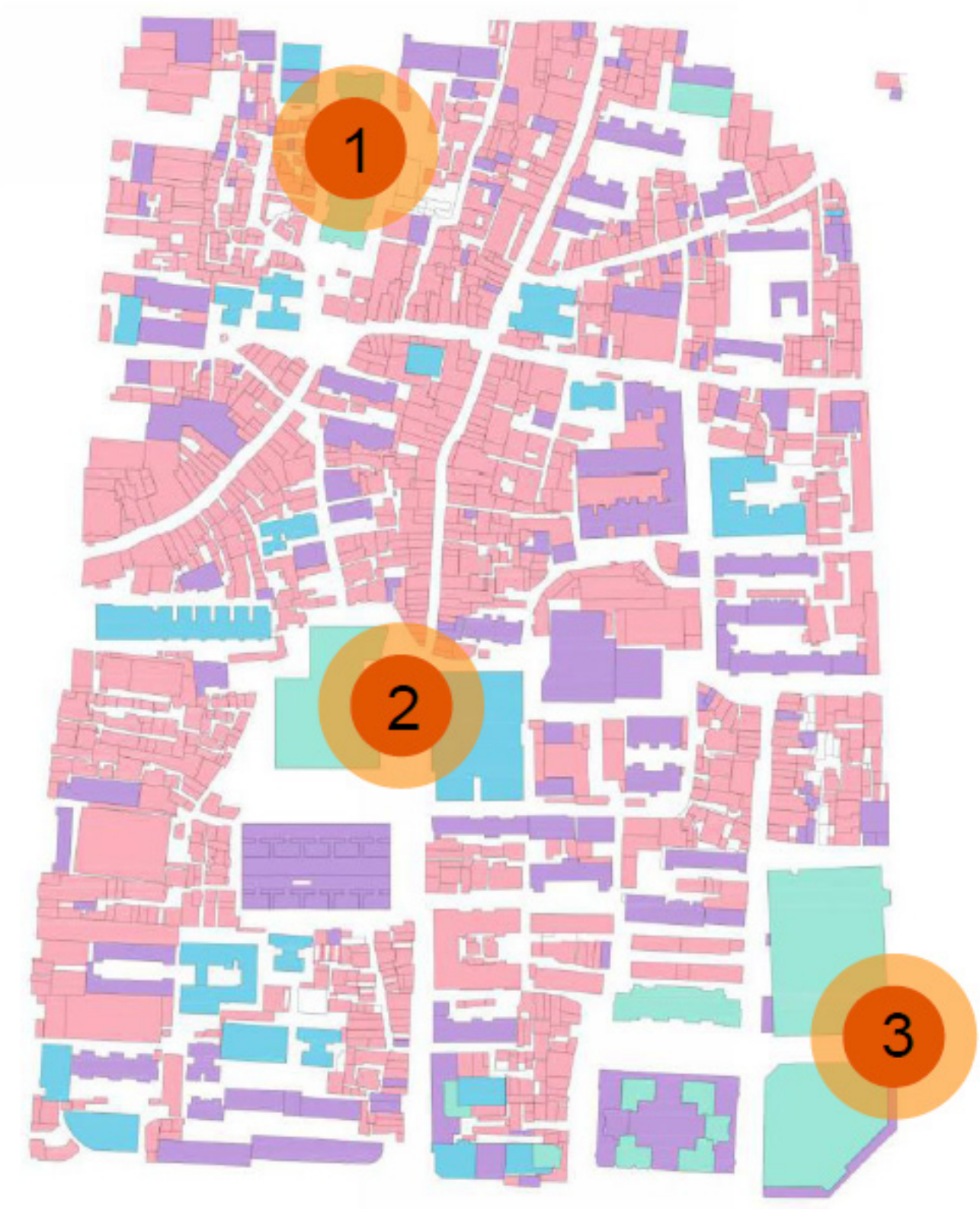
区域内建筑层高分析

3.五一大道高层建筑

层数10—29层左右






1
2
3

8. PROBLEM DESCRIPTION---CHANGSHA

SQ3 "WHAT IS THE AGED-FRIENDLY SPATIAL CONDITION?"

The mental and physical demands of elderlies

老人需求是什么实际情况是什么有什么不足

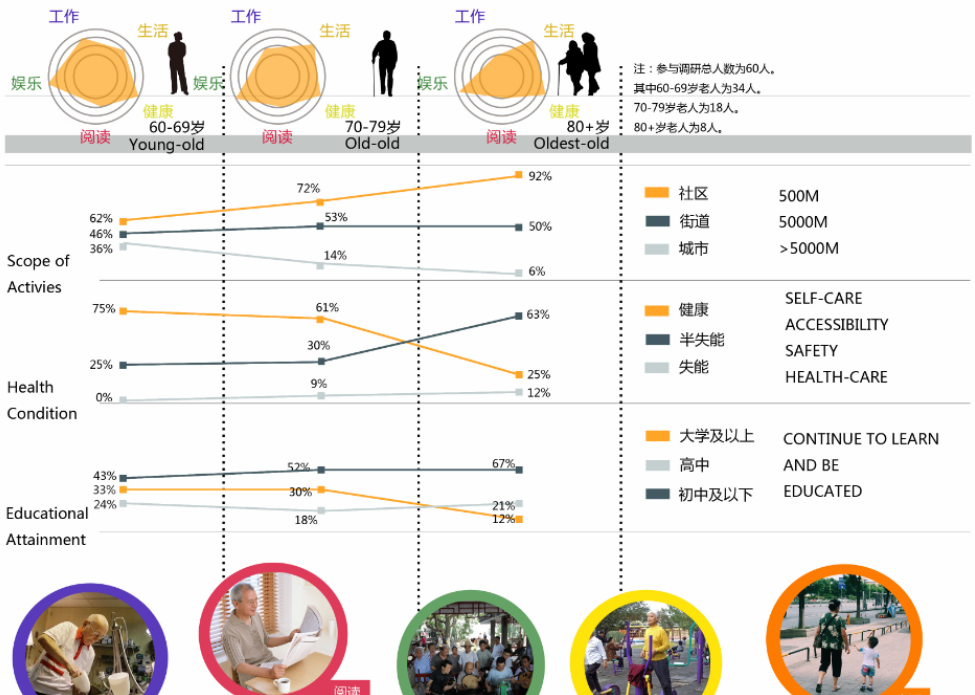
2、2013年长沙市各区（县）老年人口结构数据

长沙市老年人口年龄构成分区数据表

区名	总人口数	老年人口		60—69周岁		70-79周岁		80-89周岁		99周岁以上	
		人数（人）	占总人口比例（%）	人数	占总人口比例	人数	占总人口比例	人数	占总人口比例	人数	占总人口比例
芙蓉区	533357	78062	14.6	45129	8.46	24301	4.56	7989	1.50	643	0.12
开福区	588486	80308	13.6	46721	7.94	25127	4.26	7577	1.29	883	0.15
天心区	481695	65064	13.5	38717	8.04	20847	4.33	4790	0.99	710	0.14
雨花区	748279	85912	11.5	49784	6.65	26807	3.58	8604	1.15	717	0.10
岳麓区	737799	88223	12.0	51442	6.97	27699	3.75	8329	1.12	753	0.10
高新区	128734	9753	0.76	5764	4.48	3104	2.41	833	0.65	52	0.04
望城县	492846	93058	18.9	52707	10.69	28380	5.76	11182	2.27	789	0.16
长沙县	1008677	149972	14.9	84402	8.37	45448	4.51	18511	1.84	1611	0.16
总计	4719873	650352	13.78	374666	7.94	201713	4.27	67815	1.44	6158	0.13

2013年末，全市60周岁及以上老年人口数排在前三位的是**长沙县、望城县、岳麓区**，分别是14.99万人、9.3万人和8.8万人。

2013年末，60周岁及以上老年人口占所在区县（市）总人口比重前三位的是**望城县、长沙县、芙蓉区**，分别是18.9%、14.9%、14.6%。



每天生活轨迹是什么

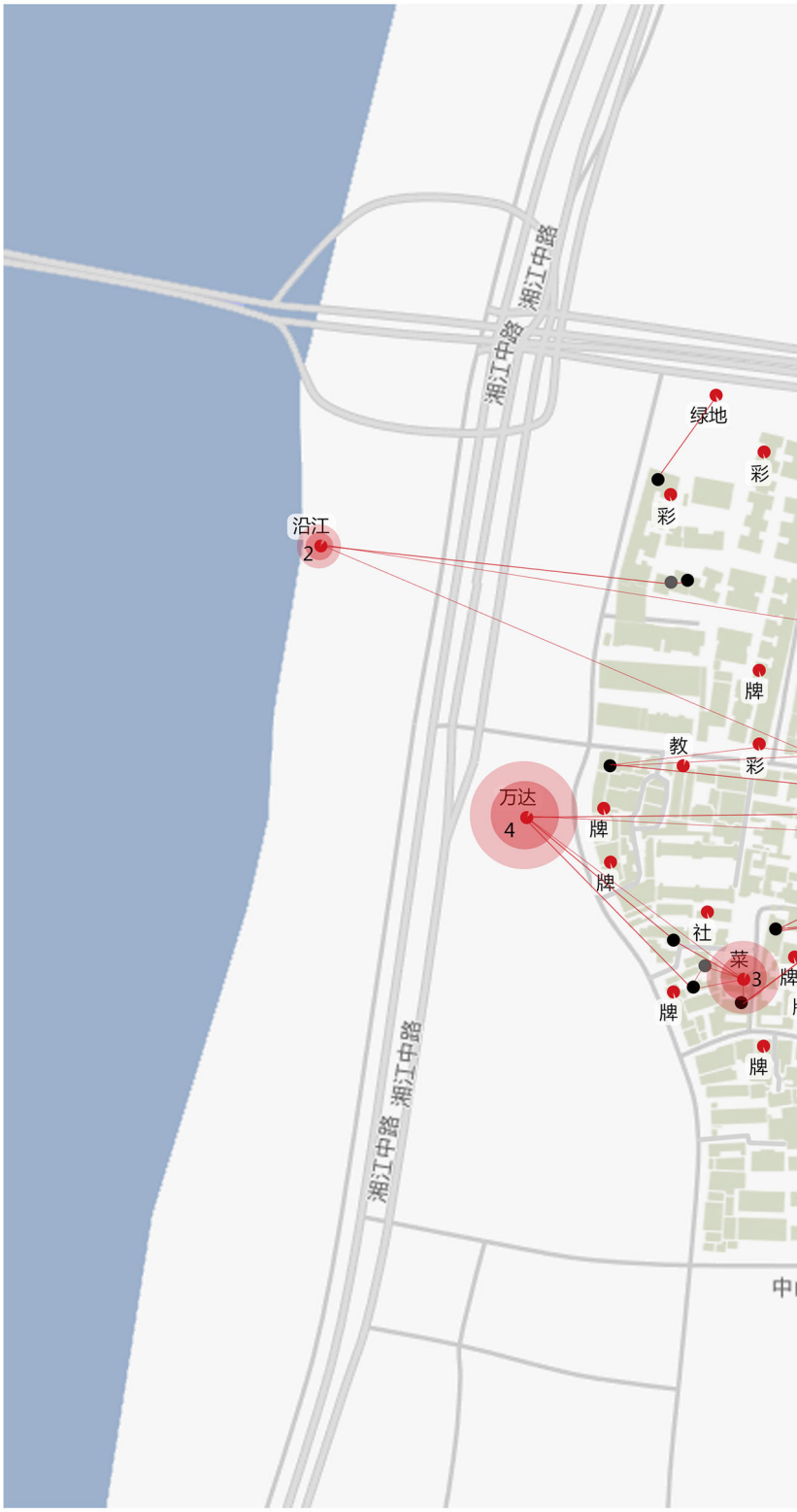
- -Urban morphology
- -Public space
- -Aged facilities
- -Accessibility/Transportation

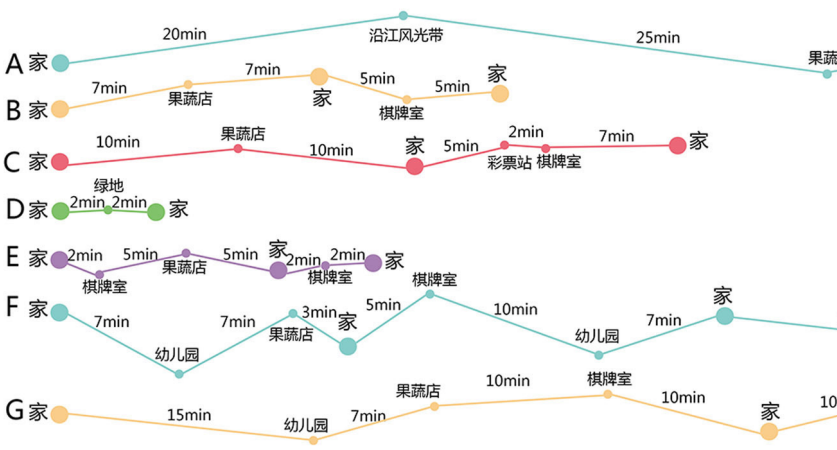
老人活动的多样性
1、麻将
2、彩票站
3、公园聚集自发性活动-戏曲聚会
4、花鸟市场
5、围绕儿童
6、自发性的搬椅子聊天
7、下棋
8、广场舞

老人活动分散性

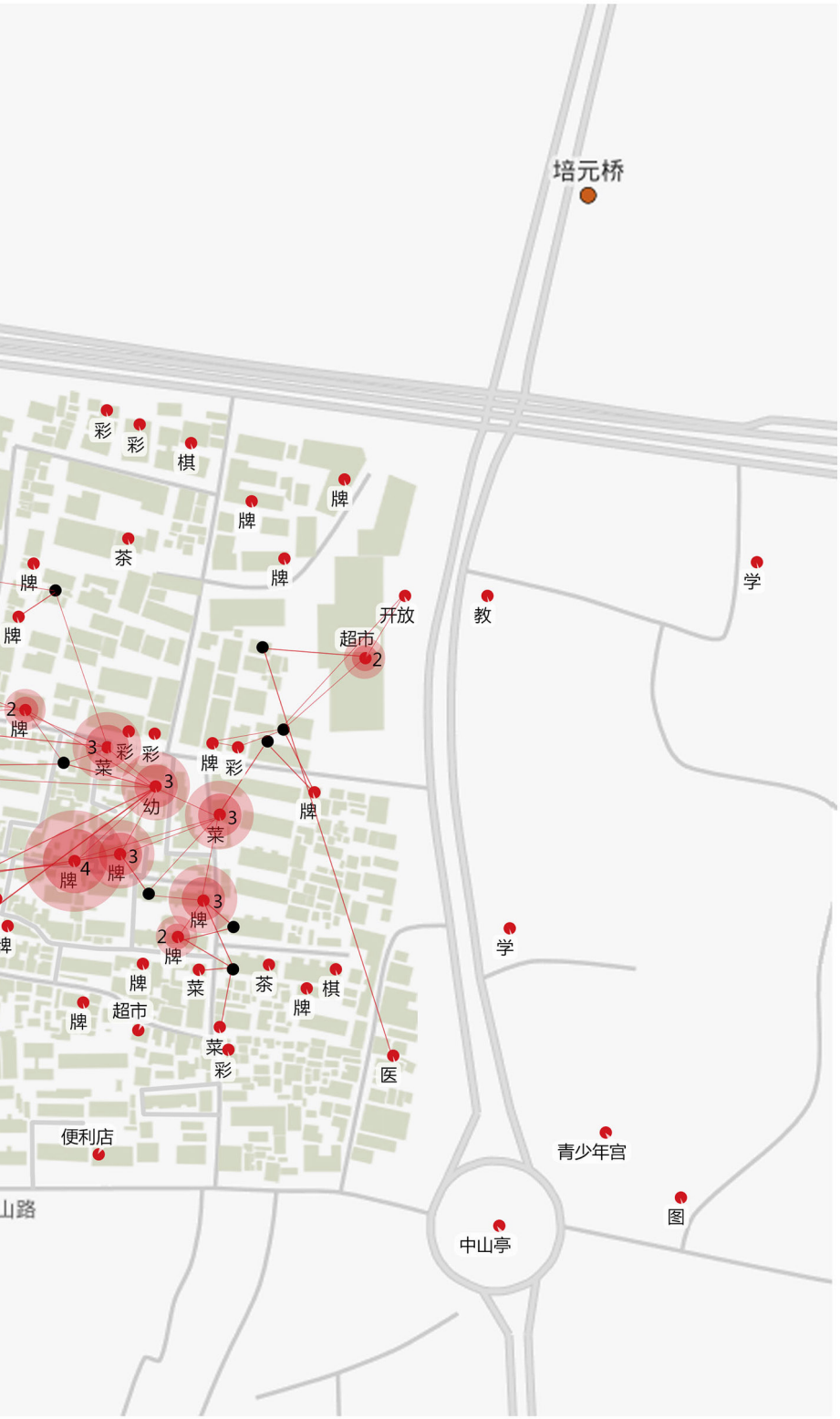
调研【E】常路径跟踪

-Urban morphology
-Public space
-Aged facilities
-Accessibility/Transportation
-Walkability

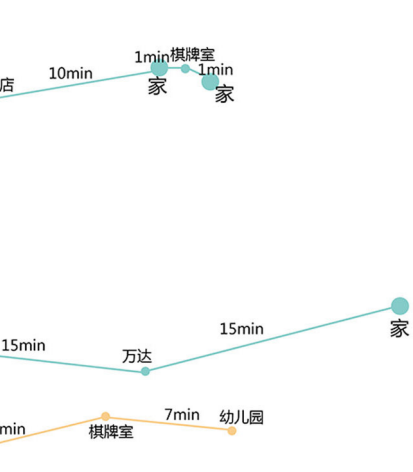


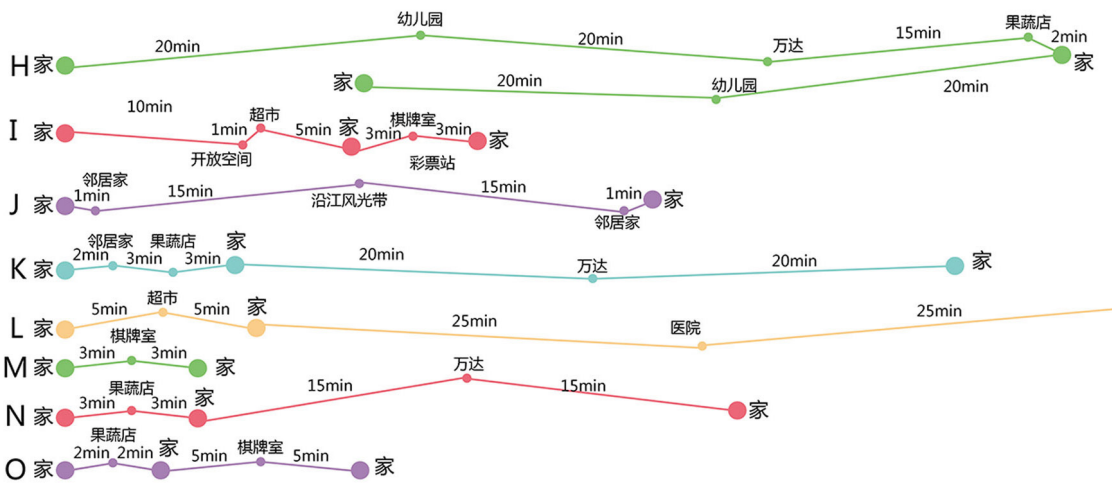


区域一



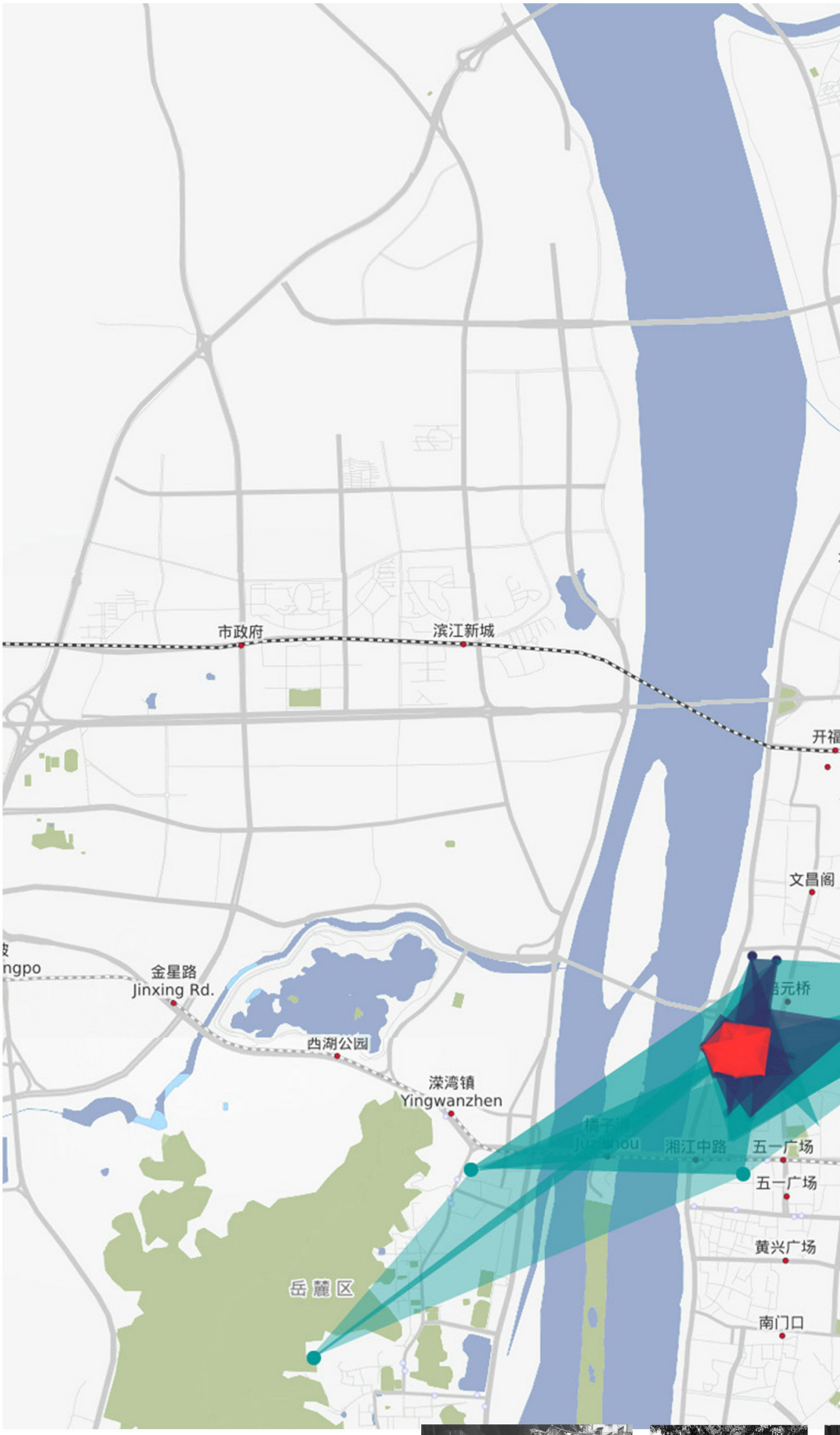
果蔬店、棋牌室和开放空间（包
沿江风光带、万达广场、绿地等
最受社区老人欢迎，究其原因，
别为：果蔬店满足老人日常需求
棋牌室能够缓解老人孤独寂寞感
而开放空间则能够给老人一个便
散步的场所。





区域一

分析【活动地点频率】



- 高频（至少一天去一次）
- 中频（一天至一周去一次）

开福区政府
马厂
北辰三角洲
思茅冲
Simaochong
长沙北（废弃）
迎宾路口
芙蓉广场
Yinbing Road
袁家岭
老长沙站（大致）
长沙火车站
锦泰广场
万家丽广场
长沙市
CHANGSHA
长沙东

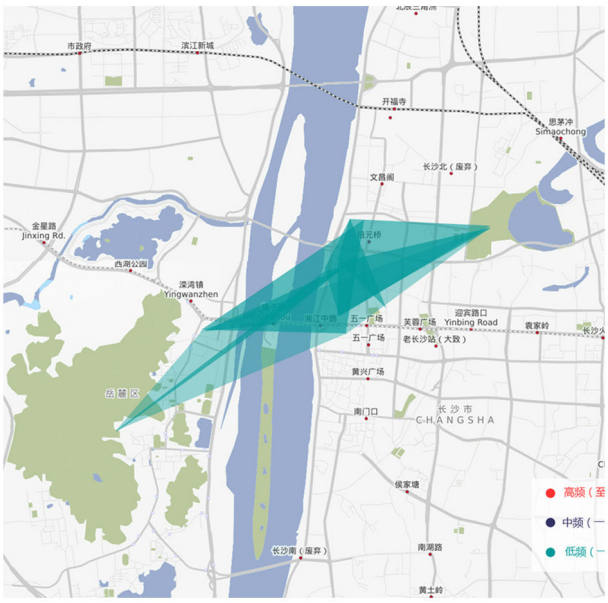
高频

长沙北（废弃）
文昌阁
培元桥
橘子洲
Juzizhou
湘江中路
五一广场
芙蓉广场
迎宾路口
Yinbing Road
五一广场
老长沙站（大致）
黄兴广场
南门口
长沙市
CHANGSHA

中频

长沙北（废弃）
文昌阁
培元桥
橘子洲
Juzizhou
湘江中路
五一广场
芙蓉广场
迎宾路口
Yinbing Road
五一广场
老长沙站（大致）
黄兴广场
南门口
长沙市
CHANGSHA

低频


市政府
滨江新城
开福寺
思茅冲
Simaochong
长沙北（废弃）
文昌阁
金星路
Jinxing Rd.
西湖公园
深湾镇
Yingwanzhen
五一广场
芙蓉广场
迎宾路口
Yinbing Road
袁家岭
老长沙站（大致）
黄兴广场
南门口
长沙市
CHANGSHA
俊家塘
南湖路
高频（至
中频（一
低频（一

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

6. FIELD INTRODUCTION

6.3 Definition of 'Neighborhood scale' and 'city scale' in the thesis

Figure 21: Abstract concept of neighborhood scale and city scale in the thesis

Source: Author

Based on the interviews with 15 elderlies' who lives in the Liansheng community (the author done in 2016), concludes an activities range map clearly showing the different usages' frequency of different places. (Figure x)

In China, "community" is a political word defined by governments for governance. The definition of these community is irregular and less connected with people's daily life.

In the thesis, the elderlies in Liansheng community is the target group.

Based on the daily route and usages' frequency of the elderlies in Liansheng community, defined the neighborhood scale, city scale I and city scale II. (Figure x)

In the thesis, the design field is not only Liansheng community, but also including the area of neighborhood scale, city scale I and city scale II.

China's ageing population

Figure 22: Different scales in the field

Source: Google earth

For the places where elderlies go every day, it can be seen as the most important places. According to the local condition and the furthest distance of these places, drawing the draft boundary of the neighborhood scale. Draft city scales are also drawing in the same way. In the thesis, it set two different city scales because of its special geography and demands for the elderlies there.
The defining criteria is settled, but the boundary of the different scales will adjust through the process of design.

关于2017年吴家坪社区提质改造项目的立项批复

来源：区发改局　　发布日期：2017-03-01 15:57:43

天发改[2017]50号

关于2017年吴家坪社区提质改造项目的立项批复

长沙市天心区城南路街道办事处：

你单位报来的《关于吴家坪社区提质提档改造项目立项的请示》及相关资料收悉。为改善居民生活环境，根据天办发[2017]11号文件精神,经研究，同意该项目立项。该项目拟对城南路街道吴家坪社区进行提质改造，主要建设内容：1、建筑提质改造：建筑外墙清洗及粉刷、广告招牌改造、增设垃圾箱及晒衣架；2、道路改造：路面修补、管线整理；3、绿化改造：绿化提质、围墙修补、增设景观椅等。计划投资600万元，资金来源为区、街财政。请据此抓紧办理相关手续。

此复。

社区动态　社区概况　我要投稿

吴家坪社区地处长沙市繁华商业老城区南门口的东南角，是典型的棚户区，社区北至城南西路，西至黄兴南路，南至栗茂巷--冯家湾--六十码头--马厂巷与燕子岭社区相邻，东至白沙街与熙台岭社区相邻，占地面积约0.2平方公里。截止目前，现有居民住户1556户3792人，常住居民户826户2482人，流动人口1940人；四层以上楼栋33栋，居民小组23个，居民代表55名；人大代表2人，政协委员1人。社区党总支下设三个支部，现有直管党员93人，社区工作人员13人。辖区低保户64户，三无空巢老人14人，90岁以上高龄老人9人，残疾人91人。...

China's ageing population

7. PROPOSAL PRODUCTS

7.1 Principles

In the neighborhood scale

1.INTRODUCTION &MOTIVATION

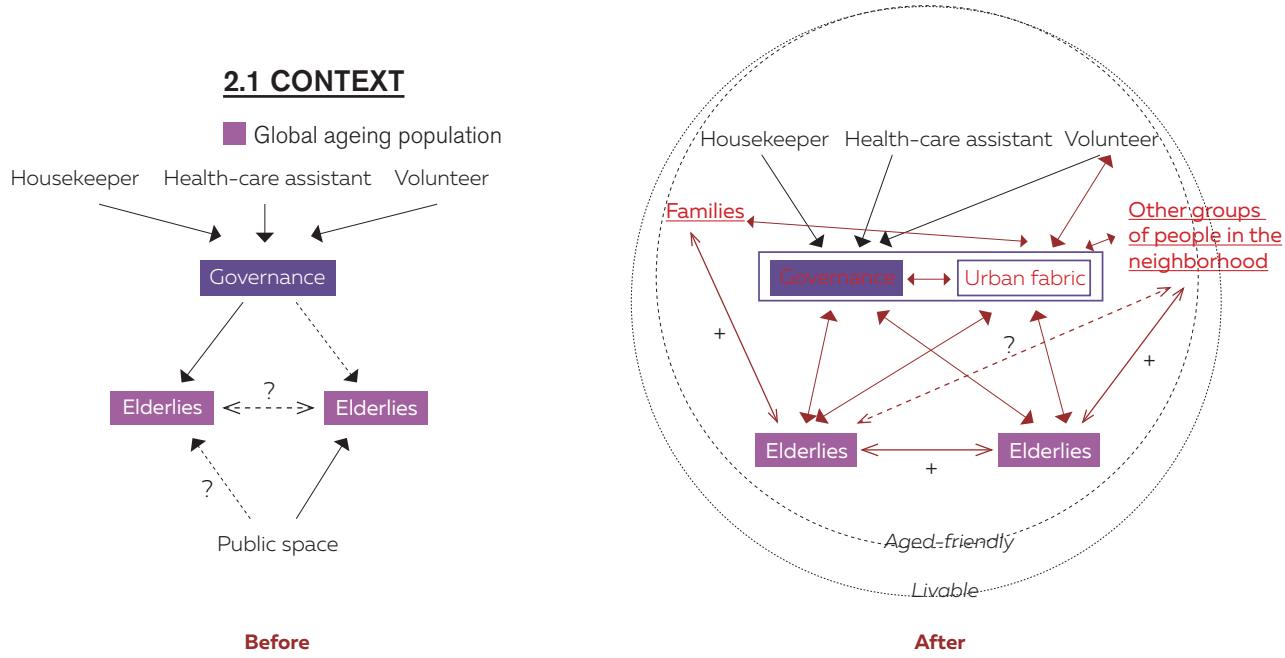


Figure 23: Proposal outcomes in the neighborhood scale

Source: Author

7. PROPOSAL PRODUCTS

7.1 Principles

In the city scale

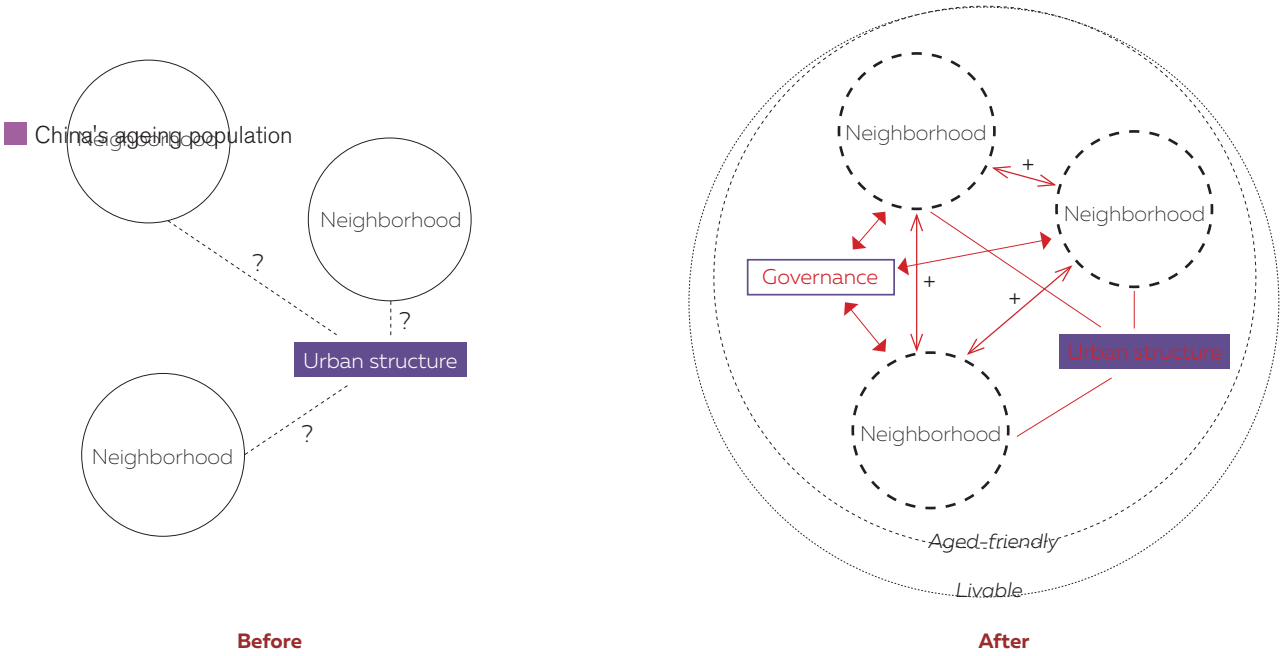


Figure 23: Proposal outcomes in the city scale

Source: Author

The pilot project in Changsha can be seen as the special case, because every city, every neighborhood or even every elderly have its own identity. However, the practices, the processes and the feedbacks from the polite project can help to conclude the feasible principles that can be used in other places adapting to local conditions to develop its own neighborhood services systems for the elderlies to grow its own aged-friendly and livable city. This is the main proposal of the project.

The principles have been divided into two scales, the community scale and city scale.

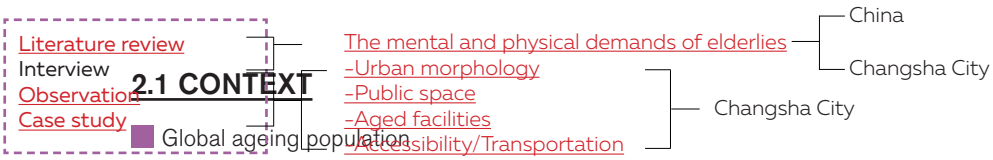
In the principles of community scale, improving the spatial condition is the most important step. Based on urban fabric (including public space, transportation, etc.), to gradually improve the policy &regulation for the services systems for the elderlies; to build up the sustainable economic model and decrease the subsidies from government; to organize more activities which is fit with both the mental and physical demands of the elderlies and build the corresponding facilities or goods; to advice feasible regulations for management in the whole systems and clear the different responsibilities for different stakeholders.

In the city scale, it is important to build up both physical and invisible networks among different neighborhoods for the elderlies. Besides, adjusting the spatial condition is also the most important step. Based on the urban structure, to create the matching policy& regulation, economic flows model, operation& activities and stakeholders involved.

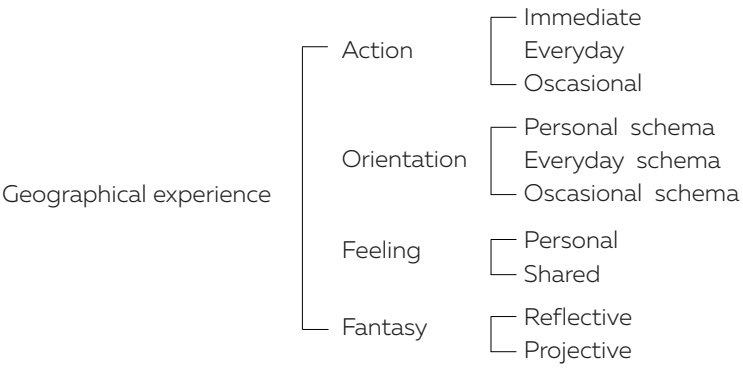
SQ3

"What is the aged-friendly spatial condition?"

1.INTRODUCTION &MOTIVATION



reflect in China:



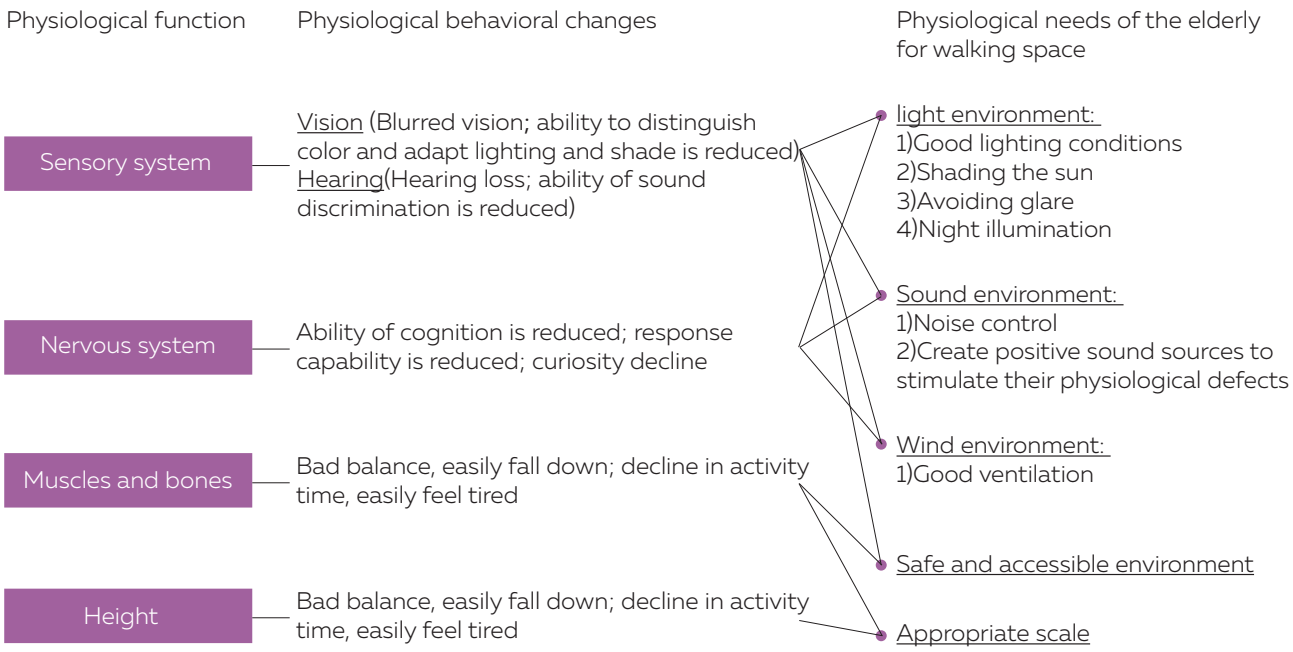


Figure 16: Relationship between behavioral characteristics of the elderly and special needs

Source: Fang, Q., & Wang, X. (2014)

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基于老龄群体特殊行为的居住小区步行空间设计

方群莉,王小莉

(黄山学院 建筑工程学院,安徽 黄山 245041)

摘　要:在日益严峻的老龄化背景下,基于对合肥市居住小区实地调研和问卷调查的基础上,分析了老龄群体的居住小区步行空间存在的问题,提出了满足老龄群体特殊需求的居住小区步行空间设计要点。

关键词:老龄群体;步行空间设计;行为特征及需求

中图分类号:TU984.12　　**文献标识码**:A　　**文章编号**:1672-447X(2014)05-0083-04

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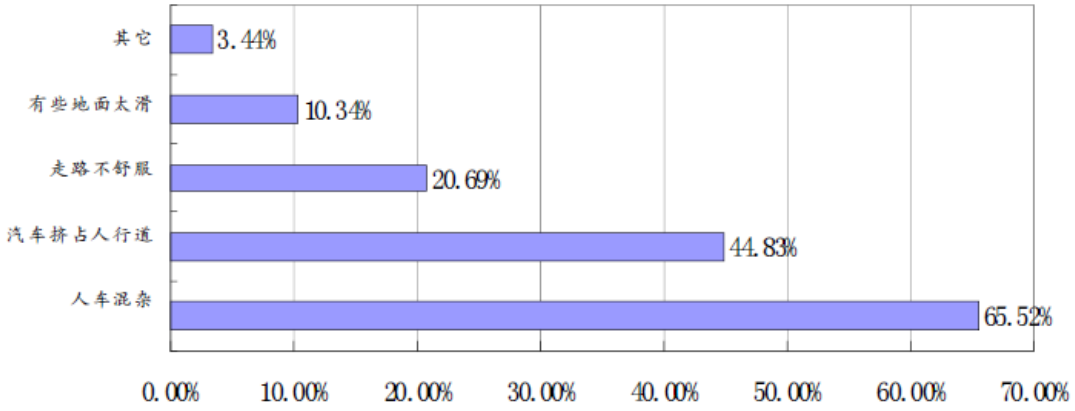


图 5　老龄群体对道路不满意度分析

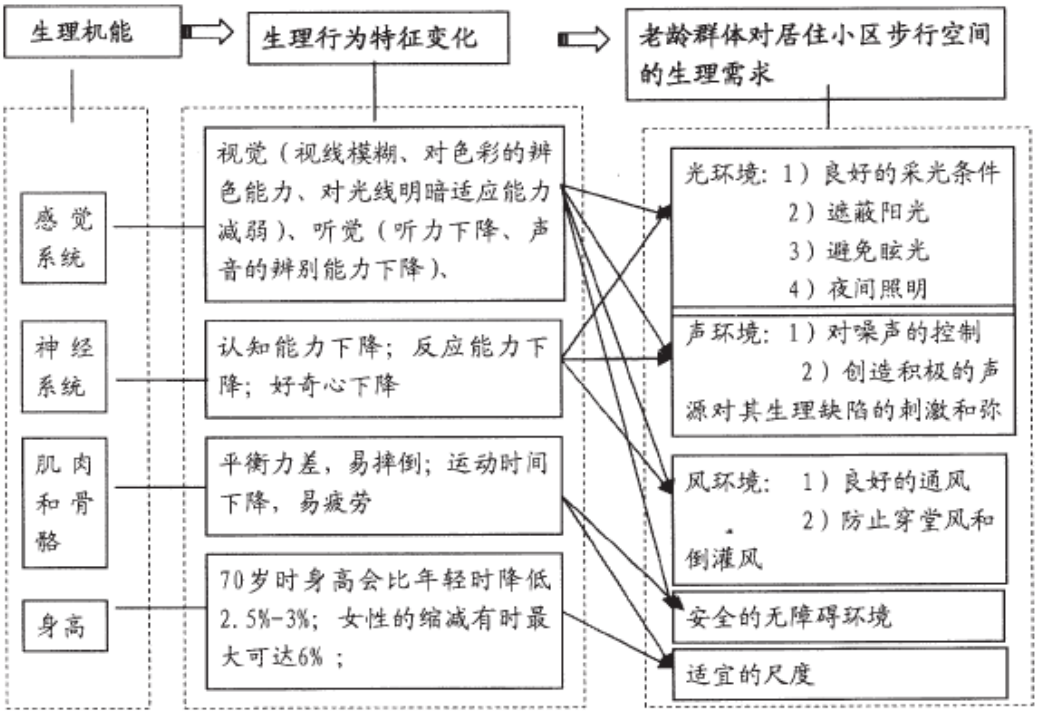


图 2　老龄群体行为特征变化与特殊需求关系图

4 基于老龄群体的居住小区步行空间设计策略

4.1 构建点、线、面完整、具有层次性的步行系统

步行系统除了布置流动的线性空间外，在适宜的位置更需要引入“点”、“面”的元素，这些“点”和“面”在步行系统中起着停留、停顿的作用。小区中广场、公共绿地构成了步行空间系统中“面”，而停留、驻足的小型空间构成空间系统中“点”。而在步行空间塑造中，易被忽视的往往是“点”空间的创造。由于老龄群体体力不支、腿脚不灵便的生理特点，步行距离和时间应比普通人短很多。因此在“线”型空间系统需要布置供老年人停留、休息、观赏的小型“点”的空间，构建点、线、面完整、具有层次性的步行空间系统。

4.2 步行路线的合理设计

4.2.1 采用蜿蜒、富于变化的道路

散步是老龄群体最喜欢的运动方式之一，蜿蜒、富于变化的道路能提供更多的风景和减少不利气候(如大风)的影响，并能诱导更多老龄群体参与其中。步行道的设计要求与各个空间应有便捷的联系，沿途布置丰富的绿化景观小品外，路径的选择要尽可能多的让老龄群体获得最广泛的场景，如步行道沿儿童活动场所的边界设置时，老龄群体除了享受边界空间的细微末节，还能透过花草的缝隙看到孩童嬉戏玩耍的欢快场景和听到儿童欢快的笑声，既可以享受自身可控空间的自由、舒适外，又可以享受其他空间中的情趣。

4.2.2 适当的步行距离和足够数量的休息设施

考虑老龄群体的行走距离舒适度，建议超过450m开辟一些精致的小空间，设置座椅供他们休息、驻足观望和聊天，同时15m左右需设置一个座椅，弥补坐息不足，保证老龄群体在室外活动的时间。

4.2.3 步行道的宽度

主要的人行道应保证两辆轮椅并排通过或一辆轮椅和拐杖使用者可错位通过，其宽度不应小于180cm，次要的人行道应保证一辆轮椅和一个行人可以并排通过，其标准宽度为135cm，当场地有限时，应能保证一辆轮椅和一个行人可以错位通过，其最低宽度为120cm，小路应能保证一个自理的轮椅通过，其标准宽度为90cm[7]。

4.2.4 处理好空间的高度变化

古语“宁可十个弯，不上一个坎”可看出超过70岁的老龄群体在面对上上下下的阶梯，会产生抗拒心理，而宁愿选择附近平坦但有些迂回的园路。他们对坡度、平坦、阶梯三者的喜爱程度为平坦>坡度>阶梯。因此，设计时应以平地为主，适当用坡道，少用阶梯。在合适的路段设置长度、难度不同的坡道有助于激发老龄群体的活动能力和刺激他们不断挑战自我，从而体验运动带来的乐趣。

4.3 保证步行空间的安全性

在以人为本思想的指导下，营建人车分行的道路系统，创造舒适宜人、安全性高的步行空间环境。步行路面的处理必须保证老龄群体行走的方便、安全。在材质选择方面，根据老龄群体和残疾人对不同地面适应情况的差异[8]，应避免选择光滑、湿滑、易反光的地面，不宜大面积采用碎石、沙子、如今流行的卵石或凹凸不平的铺装材料；同时，砖缝的衔接不宜过大和避免地面其它的突起物、障碍物。

4.4 步行道的重要节点设置标志物，增强识别性

由于老龄群体的认知能力、反应能力衰退，因此更易迷路。在步行道的开始处、转弯处、景观节点、终点处设置明显的标志，方便老龄群体室外活动的方位、方向的辨识。

住区老年人步行空间设计研究

刘永黎

(西南交通大学艺术与传播学院，四川成都 610031)

【摘　要】 随着我国人口进入老龄化，住区建设在追求居住品质的同时注入了更多的内容和要求。老年人对住区户外活动的需求是多方面的，而步行作为简单易行的方式，是老年人户外活动的主要形式之一。论文作为研究住区空间环境的一部分，从老年人对步行空间的需求、步行距离、步行路线以及人行道等方面作了分析，以期在不断的探索中为创造良好的住区环境而努力。

【关键词】 老龄化；　户外活动；　步行空间

【中图分类号】 TU984.12　　【文献标识码】 A

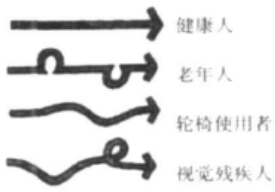


图 1　老年人与其他人群的步行特征[2]

2.1.1　安全便捷

老年人对安全有着强烈的需求，当穿越街道、爬坡时都可能感到吃力，对行动不便的老年人更显得困难。为了鼓励他们参与户外交往，就要充分考虑消除障碍以及因此而产生的安全顾虑。设计中应注意相对平坦、防滑的路面可促进老年人的步行活动；尽可能减少又陡又斜的走道或者踏步。同时便捷、易达的步行路线是必不可少的，这源于人们“抄近路”的心理，所以尽可能以最短的路程连接不同的空间，否则道路可能因此失去活力甚至对道路附近的绿化造成破坏。

2.1.2　无障碍

老年人由于衰老或病痛，在行动、视觉、听觉等方面存在一定障碍。而无障碍的生活环境，创造了更为安全、方便和平等参与社会的整体环境，是老龄社会应该采取的有效措施之一。体现在路面、坡道、标识等多方面的细部设计中。

(1)路面。对于路面应尽量减少高差变化，若需要变化时，应增强高差感，让老年人能容易察觉。路面铺装是为了便于交通和活动而铺设的人工地面，通常应具有耐损防滑、防尘排水、容易管理的性能，并以其导向性和装饰性服务于住区环境。设计中，应根据场地用途和空间特征选择适合的铺装形式、铺装材料与色彩，以达到其功能性和装饰性的统一。若步行道的路面大量采用卵石、砂子、碎石等凹凸不平的材料，这对那些行动不便的老年人在多数情况下是不适合的，只能局部使用。而水泥混凝土虽然平坦，夜间步行及车行亦较好，但摔倒时容易引起受伤，而且阳光反射强，影响视觉判断，应用时可考虑添加颜料做出彩色水泥路面或者通过水洗、表面镶嵌、表面模压等多种表面处理工艺来提高其装饰功能与识别性。对住区道路特别是居住区级道路设置盲道时，应严格执行相关设计规范。

(2)坡道。老年人中有很多行动不便者，所以有高差的地方要同时设置坡道。通常在坡道的入口或醒目地段应安装国际无障碍通用标志；室外坡道的坡度不应大于 1/12 宽度不应小于 1.5 m 且坡道长度不应超过 10 m 否则宜增加休息平台或者将坡道做成蛇形(图 2)。

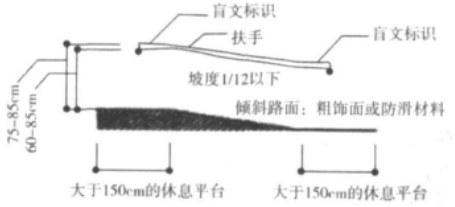


图 2　坡道示意[3]

坡面材料一般有木材、金属、混凝土等，要求坚实、平整、防滑。对于步行困难或者使用轮椅的老年人，坡道两侧还需设扶手。扶手是老年人行进中重要的辅助设施，有利于保持身体平衡、恢复体力。因此扶手须安装牢固，每个支点都能承受身体重量。当坡道侧面凌空时，在扶手栏杆下端宜设高度不小于 0.10 m的轮椅坡道安全挡台；当轮椅坡道的水平投影长度超过 9 m时，应设中间休息平台；轮椅坡道起点、终点和中间休息平台的水平长度不应小于 1.5 m。

(3)标识。标识可以简单、明了、直观地向人们传递各种信息，良好的标识系统具有较强的识别性，可以说标识在具有美感的同时是无障碍环境必不可少的组成部分。残疾和行动困难的老年人，在目标和方向不明确的空间内，尤其是面对可选择的道路常常会显得无所适从。这不仅会消耗大量体力，在精神上也会产生烦燥不安的情绪，所以树立标志物或者标志牌是一种加强景观可识别性的有效手段。比如在恰当的位置设置小区总平图，帮助使用者确定所处位置；在道路转折与终点处设置标志物使之具有指认功能，可帮助记忆力衰退的老年人少走弯路。

2.1.3 易交往

退休后的老年人，大多不再参与社会事务，逐渐与社会脱离时难免产生孤独和失落感，为了避免产生这些消极情绪，老年人需要与外界更多的交往。创造丰富、舒适的户外空间，在促进老年人多种活动发生的同时可提高他们参与意识和邻里交往热情，有益身心健康。步行空间从空间特征来看是连接各交通节点或者活动场地的必要线路，表现出线形流动的特点。当步行空间宜于驻足、小憩、观赏时，老年人与他人交往的丰富多彩的户外活动也会在此上演。

2.2 步行距离

从体力上讲，老年人能够或者乐意行走的距离要比一般人短。通常健康老年人的步行疲劳极限为 10 min 步行距离大约 450 m。当然，在特定条件下确定适当距离的关键不仅是实际的自然距离，还有感觉的距离。比如在一段 500 m长的步行道上安排各种丰富的小空间，使空间更加紧凑，老年人便能获得多种不同的感受，从而为步行创造良好的外部条件。变换的街道空间和小型广场的步行网络常常能感觉步行距离似乎变短了，相反，设计平直、单调、毫无防护的路程则会使老年人觉得漫长、枯燥而缺乏活力。

2.3 步行路线

考虑到老年人的行走特征以及对步行空间的需求，步行路线采用便捷而富于变化的同时积极创造可参与的空间环境，能使老年人的步行变得有趣和丰富，如图 3 图 4所示。

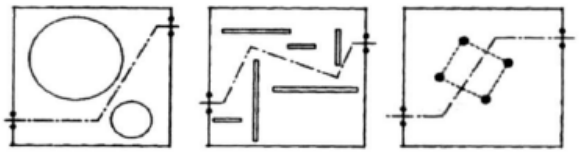


图 3 步行路线的设置形式[4]

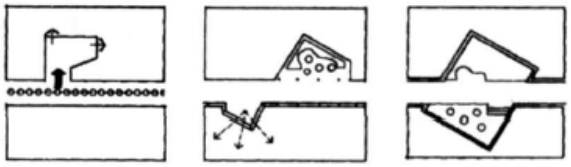


图 4 步行路线中小空间的插入方式[4]

当步行路线沿空间边缘行走时，老年人既可以体验到大空间的尺度，又能欣赏到街道或空间边界的细微之处，令人赏心悦目。在此应该注意的是当横穿开阔的空地或走进空间的中心时人们往往会感觉不自在，产生不安全感。这就需要充分考虑宜人的尺度。一般认为，宽度比 D/H 为 1 的街道空间是使人感到亲切、舒适和适宜生活的，大于 4的空间则感觉像是广场和庭院。以我国传统商业街区一般在 12～24 m为例：小于 12 m 对小区内小型步行商业街是可行的，但对居住区商业街人车共存时会感到拥挤。大于 24 m 来往过街购物不便，也会失去商业的繁华热闹氛围。

除了宜人的尺度，步行空间还需要创造丰富的感觉。人们通常有这样的体验：在一字排开、视线直通到底没有遮挡的“直胡同”里行走时，总觉得道路无穷无尽，引起精神上的疲劳，甚至心理上的恐慌。故步行路线易曲不易直，一方面创造多景观视点，另一方面弯曲的道路比笔直的道路容易减少风力干扰。当行进路线较长，尤其是有大坡度的斜路时，则需在中途设置休息椅或休息区（每隔 15 m左右应设一个座椅），以提高老年人到达目的地的可能性，同时还可以方便老年人休息、聊天、观景，从而提高他们步行的积极性和趣味性，形成“步行一休憩”整体的空间体系。当然休息椅或休息区间距过大或者根本不设，将会给行动不便的使用者带来困扰，降低使用率。

此外，利用步行道路名称、线型、标识和宽窄变化及相应道路设施，比如灯具、花台、道牙或地面材质等变化，结合周围环境形成不同的道路领域，创造人性化的步行空间也是不可缺少的。

The mental and physical demands of elderlies

老龄化社会中的居住区步行空间环境设计*

林　耕　张天宇
（天津城市建设学院建筑学院，天津　300384）

摘　要：在老龄化日益严重的今天，适宜老年人的步行空间环境设计应引起设计时 2 重视。创造一个适宜老年人的步行空间环境是建立人性化的居住场所的一个重要环节。着重探讨了当前我国老年人步行空间环境存在的问题，提出适宜老年人的步行空间环境的设计要点。

关键词：老龄化社会；居住区；步行空间环境设计

The Design of Walking Space Environment for the Aging

Lin Geng　Zhang Tianyu
(School of Architecture, Tianjin Institute of Urban Construction, Tianjin 300384, China)

Abstract: Walking is an important outside activity for the aging. A good walking space is helpful to a healthy and pleasant outside activity for old people. It is an important part in the process of building a humanizing residential space to create a walking space environment suitable to the aging. This thesis discusses the main problems of the walking space environment for the aging and provides the key points of designing a walking space environment for them.

Keywords: aging society, residential area, design of walking space environment

2　老年人步行空间环境存在的主要问题

2.1　占用行人步道

长期以来，由于对机动车道以外的道路空间缺乏统筹安排和有效管理，使得占用步行道的现象大量出现。如沿道许多单位非法占据道路红线内空间；一些设施无序占用人行步道；机动车占步道停车，一些路段的步行空间甚至被完全占据；自行车停车设施的缺乏造成自行车乱停乱放等问题。以上问题导致行人通行困难、危险，老幼病残步履艰难甚至一些路段被迫借道车行道，这既易引发交通事故，又影响车行道的通行能力。

2.2　步行道宽度不足

住区道路中有些道路没有设置人行步道，人车混行。有些干道的步道有效宽度不足一米，当行人流量较高时，一些行人不得不借用车行道，极易发生交通事故。

2.3　路面的铺装不平

有的地方路面铺装老化严重，经常有缺损的地方，由于地基变形而导致铺装材料变形，铺装的材料不合理，有的地方砖缝太大，不利于行走，有的地方由于砖面太滑，老年人容易摔跤等。

2.4　步行路线不合理

抄近道是步行行为的一个特点，如果步行道路设置的位置不合理，那么就有可能出现建好道路没有人走，而漂亮的草坪却被行人踩得面目全非。

2.5　行人过街不方便

行人过街设施包括人行横道、人行天桥、人行地道，是步行系统的重要组成部分。过街设施间距不合理、机动车交通违章以及过宽的道路等，均造成行人过街不方便。对于步行者来说最希望的过街设施不是天桥和地道的立体方式，而是人行横道的平面方式。另外，除新建道路设施外，多数步道和过街设施没有按照残疾人通行标准进行改造，造成残疾人出行困难、危险，甚至部分残疾人根本无法像正常人一样单独出行。

3 老年人步行空间设计要点

老年人步行环境由一系列的步行活动场所和路径组成。在步行活动中涉及散步和对休闲娱乐设施的使用，而老年人活动能力的不同，有着自己不同的活动方式、场所和路径的选择；并在自己的步行中形成相对的固定活动、熟识场地和路径的选择。而活动场地的位置决定着老年人对步行路径的选择；而老年人心理和环境条件的具备程度最终决定着步行环境中场地和路径的选择。

步行环境的形式和模式设计，有助于建立一个老年人易于接受的环境、文化、社会系统，这个系统在居住区中形成新的文脉和韵律，这有助于老年人生活质量的提高。

3.1 确定适当的步行距离

一般健康老年人的步行距离大约为 450 m，步行疲劳极限为 10 min，要以此来确定一段步行的距离。适当的步行距离不仅是自然距离，更重要的是感觉距离，如在一段步行之中安排各种丰富的小空间（图 1），使老人获得各种不同的感受，反而不会使老人觉得很长、很枯燥。变换的步行网络，步行的路程被自然地划分成若干，常常能产生一种心理作用，感觉步行距离似乎变短了，使老人能很轻松地走过。

图 1 步行路线中插入的小的休息空间

具有变换的步行网络常常能产生一种心理作用，感觉步行距离似乎变短了，步行的路程被自然地划分成若干，使老人能很轻松就走过，通常老人们关注的是从一个场地到另一个场地的运动，而不是步行距离究竟有多长。因此，合适的步行距离与道路的长度、道路的质量、道路的防护情况以及道路给人的空间感觉有关。

3.2 设计合理的步行路线

考虑到老人独特的行走特征，步行路线应避免漫长而笔直的线路，而采用短捷而富于变化的道路，以使老人的步行变得更加有情趣，而且弯曲的道路比笔直的道路能很好地减少风力的干扰（图 2）。

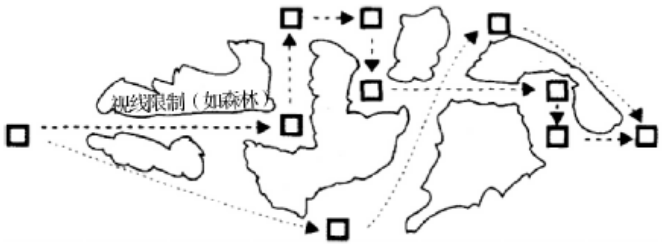


图 2 步行路线富于变化，使老人的步行变得更加有情趣

老人的步行活动具有缓慢、敏感和随人流而动的特点，其视野范围受到一定的限制，对环境的细部有强烈的感受。因此，步行道的地面材料选择、铺砌方式、植物、小品及公用设施的安排都是老年人的注意对象。为了适应老年人的视力和记忆力的减退、方向辨别力差的特殊性，道路的转折点和终点应考虑设置标志物，增强导向性。标志的文字尺度由行走速度和距离决定，为行人设置的尺寸基本上与人们从时速 25 km 的汽车上观看的尺寸相同。

步行道的设置最好经过住区内的各活动场地，位于从场地外和附近轰动去视线可达的范围内，步行空间能相互连通形成环路。同时，这些步行道可以提供难度和长度可选择路线及感官感受，如既有缓坡带扶手的步行道，又有水平步行道。这样，可以防止老人的困惑和迷路，让老人独立完成具有挑战性的活动。

3.3 建立完善的循环路线

建立完善的循环步行路线对老年人来说非常重要，循环路线的选线和设计将影响到老年人辨认目标的能力。为了给那些生活在大住区的较虚弱的老年人更多的关心，我们应该提供安全方便的循环系统。在循环系统的选线和设计中需要特别考虑的有以下几点。

1）步行是居民聚会的聚集系统；

2）循环路线应考虑路线长度和难度的选择；

3）循环路线应是易识别的；

4）循环路线也是各种路线集合、统一和愉悦的地方；

5）视线和路线安全是同样重要的。

除了这些路面细部的安全和休息设施外，地形、地势也是一个良好循环路线同样重要的一面。循环路线是一个分层次系统，从通往公共设施的主要路线到通往多个或单个建筑入口的分路线。这种分层次的道路系统也加强了进入半私密空间的控制。空间特征的布置如人行道的宽度和地形的处理也应该支持这种综合的层次系统。用于休闲和锻炼的循环路线可能作为一系列的相互连接的“行走回路”。这种布局方式提供了适用于各种人群的多种长度和难易度的路线。步行空间的连续性对于一个功能完善的步行系统来说是非常重要的，在住区中精心布置和设计每一条连线，可使整个系统具有更大的吸引力。

步行道的宽度应该足够两个人或一个人与一辆轮椅并排通行，建议最小宽度1.2m。步行道应该材质一致，防滑无反光，保证路面平坦，尽量避免道路中形状不规则的材质和地面突起物，这会威胁到老人的安全。地面的选择应考虑材料的渗水性，步行基面应易感知、不滑、不产生眩光，为避免老年人步行时发生意外，不宜选用砂子和碎石等铺地。

3.4 处理好空间的高差变化

高差变化会让老人觉得很麻烦，他们总是想绕开或避免高差变化，他们宁愿选择不太长的迂回，正所谓“宁绕十个弯，不上一个坎”。必须上下起伏时，相对平坦的坡道一般比台阶要好，而步行的节奏也不会受到太大的影响。为给老人增加锻炼的乐趣，可在适当的位置设定一些坡度。

太陡的场地对虚弱的人和老年人来说是个大问题，应尽量减少坡度对老人的影响，入口处的斜坡应通过一些技术手段使坡度最小化，入口道路的坡度最好不要超过1:20（图3）。

图3 栽植物有利于减少坡道在视觉上带来的高度差别

3.5 综合考虑步行路线与道路系统

步行空间一般与道路系统结合为一体综合考虑，道路取向及位置应易于辨别。住区的步行系统离不开人行道的参与，完善的人行道系统有助于保障住区整个步行系统的完整性和安全性。现在有的住区为了确保机动车道的宽度，往往将电线杆、标志牌、邮筒信箱、交通标志等设置在人行道上，有时车辆也停在人行道上，严重影响了住区步行系统的完整性。建议在车行道与人行道之间设置公共设备区，将电话亭、邮政信箱等道路公共设施布置其中，而不要侵占人行道的宽度。对人行道系统进行合理改良，实行人车分离方式，处理好十字路口处的安全无障碍设计，以保证整个步行空间的连贯性。

4 结 语

在老龄化社会中，老年人对户外活动的需求是多方面的，而步行提供了简单易行的方式。良好的空间环境有益于促进老年人健康、愉悦的户外活动，创造一个适宜老年人的步行空间环境是建立人性化的居住场所的一个重要环节。本文作为研究居住区空间环境的一部分，以期在不断的探索中为创造高质量的居住区环境而努力。

1 研究背景

1.1 社会背景

老年赡养应当得到重视。首先，我国目前的老龄化形势不容乐观，早已进入老龄社会，老龄人数量世界第一，老龄化速度世界第一。其次，空巢老人社会参与存在诸多问题。最后，中华传统孝道观要求注意老人赡养。加强精神赡养尤为重要。相比于经济供养，精神赡养常被忽略。随着经济的发展，物质赡养问题已不是很严重，精神赡养是老人角色和心理健康需求，应将焦点集中在老年精神赡养上。传统精神慰藉以满足老人需求为主，将其定位在“受助者”角色上。积极老龄化视阈下的精神赡养不仅努力满足老人需求，更激发其生命潜能，将其作为主体角色，更关注如何其生命主体性和主动性，是最高层面的老年精神慰藉。

1.2 理论背景

以老人为主体和调查对象，从老年人“感觉到的需要”而不是“他人认为老年人的需要”出发有创新性，有利于中国养老保障制度的完善和人口政策的制定。

2 调查结果

2.1 调查对象

以苏州南通无锡三市的中龄老人为主，低龄老人和高龄老人也有涉及，男女比分配均匀。学历分布均匀，学历较高的老人居多，职业分布广泛。

2.2 老人的精神生活状况

①烦恼多样化，精神类烦恼最多。（图 1–图 3）

老人存在的烦恼多样，需要的精神慰藉也应更全面，照顾到其各方面的需求。烦恼以精神类为主，占比最大的是精神空虚和失落感。家务繁重的问题也不能忽视。有老人抱怨家务太多难以操持又不愿和子女提，处于两难的境地。

作者简介：陈佳杰（1997–），女，江苏南通人，法学学士（本科三年级），研究方向为老年社会工作、非营利组织管理。

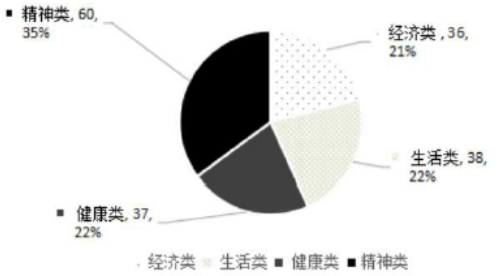


图 1 针对老人生活烦恼的调查

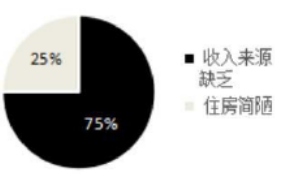


图 2 老人经济类烦恼分布

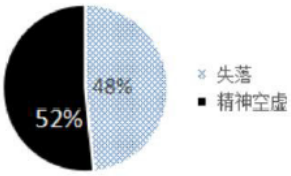


图 3 老人精神类烦恼分布

②休暇方式多样化，以休闲类和满足其自身社会需求为主。（图 4）

老人休暇方式多样，主要方式是去休闲，也有老人选择了回归家庭，做家务或照顾孙子女等，仅少部分老人选择继续接受教育。学历层次较高的老人精神满意程度较高，访谈提到“没有烦恼，经常参加党团、工会活动，邻里关系较好”，学历层次低的老人会存在“自己没有朋友”的现象。社会层次和学历层次对老人的精神慰藉存在着影响。

用马斯洛需要层次理论进行归类，老人有社会需求和自我实现需求。根据社会参与理论中的活动理论，积极地参与社会能减少老人的情绪低落。因此应当鼓励老人以积极的态度社会联系紧密，不逃避社会。尽可能地保持中年人的生活方式，用新的角色取代因丧偶或退休而失去的角色，通过新的参与、新的角色改善老人因社会角色中断所引发的情绪低落，把自身与社会的距离缩小到最低限度。

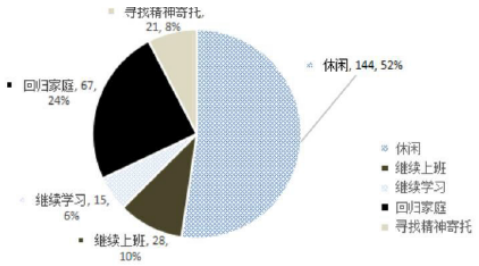


图 4 老人的休暇方式

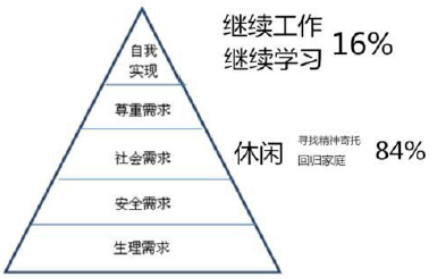


图 5 马斯洛需求层次理论

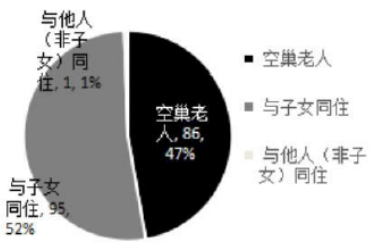


图 7 老人家庭情况

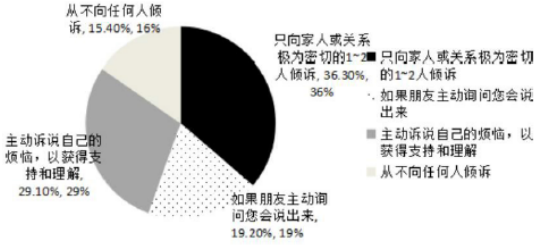


图 8 老人遇到烦恼时的倾诉方式

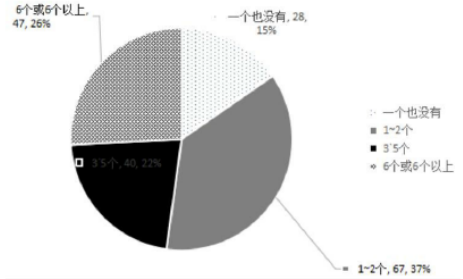


图 9 老人的朋友数量

2.3 老人的精神慰藉路径来源

访谈结果显示。老人的精神慰藉主要来自于朋友、家庭、邻里、社区/工会、老年大学五个方面。

2.3.1 家庭关系

较多老人会向家人或者关系亲密的朋友倾诉烦恼，只有少部分老人没有朋友有，甚至有老人朋友超过六个，老人朋友关系较好。老人信任自己的家人或者朋友，向其不失为老人精神慰藉的途径。访谈发现，受教育水平越高的老人，其朋友个数越多。

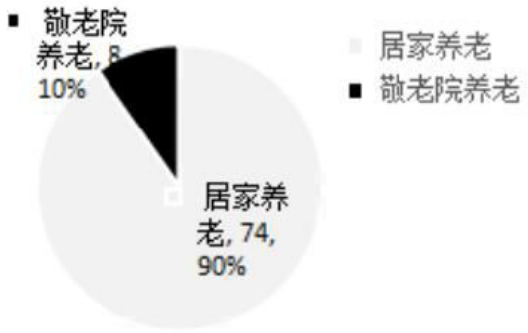


图 6 年轻人对老人养老方式的意向

空巢老人占比不少，应当更为注意空巢老人的精神情况，他们在来自亲人的精神慰藉方面相对缺乏。访谈中发现，与配偶子女同住的老人生活无烦恼的比率相对较高，对年轻人来时，也倾向于让老人居家养老。因此让老人通过和亲人交往来满足社会需要获得精神慰藉具有可行性。

2.3.2 朋友关系

2.3.3 社区活动参与度

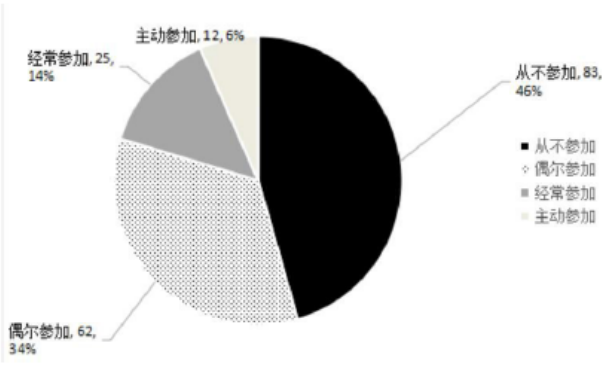


图 10 老人的社区活动参与度

有一半以上的老人（54.6%）表示“从不参加社区活动”，老人的社会参与度情况并不乐观，需要全社会的长期支持与关注，通过多种形式开展并宣传社区活动，促进老人更加积极参与社会活动。访谈得知原因有：所在社区没有组织活动；不知道社区组织活动；不想参加、不能参加、对活动不感兴趣。此外，不同层次和地区的老人精神慰藉路径的丰富度大不相同，农村老人处于弱势地位。

2.3.4 老年大学参与度

访谈结果显示，参加苏州老年大学的老人对老年大学的举办形式、举办活动比较满意，但也存在街道举办活动而老人不。，老人自评认为缺乏来自各方面的慰藉，老年大学校长希望青年志愿者能参与到老人的大学的服务中来，政府投入更多支持。

2.3.5 邻里关系

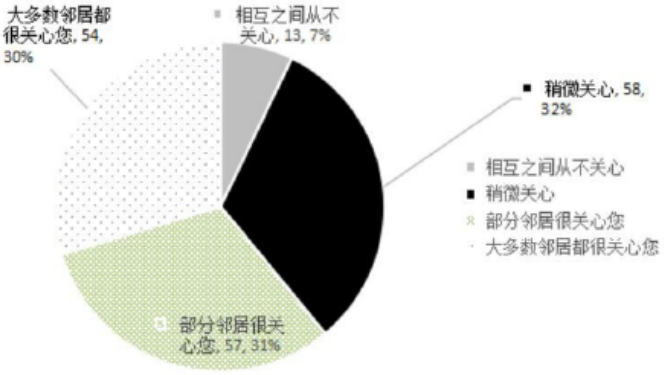


图 11 老人邻里

老人的邻里关系较好，老人自中获得相应的精神慰藉，访谈中，系来自于中国传统的“尊老敬老”年来的邻里和谐文化建设。

积极老龄化视阈下的老人精神慰藉路径分析

An Analysis of Old People's Spiritual Comfort Path Based on Active Aging

陈佳杰 CHEN Jia-jie

（苏州大学社会学院社会学与社会工作系，苏州 215513）

（Department of Sociology and Social Work，School of Social Science，Soochow University，Suzhou 215513，China）

摘要：随着我国老龄化程度不断加深，国家对老人的社会保障问题的重视程度日益加深，社会老年服务体系已初步建立，老人精神空虚成为社会热点。但家庭对老人精神慰藉的重视度还不高，会带来老人心理问题，激化社会矛盾。因此挖掘老年精神慰藉的现实性路径对促进老人幸福和缓解社会冲突有意义。因此，本文提出“积极老龄化”概念并站在这一视阈下对老人的精神慰藉路径进行分析。提出应当从社会、社区、社工组织及社工、个人四个方面引导老人更积极主动地参与社会活动。

Abstract: As China's ageing degree continues to deepen, the state attaches greater importance to the issue of social security for the elderly. The service system for social services for the elderly has been initially established, and the spiritual emptiness of the elderly has become a hot spot in society. However, the family's attention to the spiritual comfort of the elderly is still not high. It will bring about psychological problems for the elderly and intensify social conflicts. Therefore, exploring the realistic path of spiritual comfort in the elderly is meaningful for promoting the happiness of the elderly and alleviating social conflicts. Therefore, this paper proposes the concept of "active aging" and analyzes the path of spiritual comfort for the elderly under this visual threshold. It is proposed that the elderly should be guided from social, community, social worker organizations, social workers, and individuals to participate in social activities more actively.

关键词：积极老龄化；精神慰藉；社会参与；社会服务

Key words: active aging; spiritual comfort; social participation; social services

中图分类号：D669.6　　**文献标识码**：A　　**文章编号**：1006-4311(2018)24-0221-03

what is special charateristic of elderlies in Changsha

what is livable city in Changsha

长沙市老年人口预测一览表

人口指标		2009 年	2015 年	2020 年
全市	总人口	647 万	895 万	1000 万
	老年人口	103.64 万	158 万	195 万
	老年人口比重	16%	17.7%	19.5%
中心城区	总人口	242 万	520 万	629 万
	老年人口	35.76 万	88 万	113 万
	老年人口比重	14.8%	17%	18%
中心城区以外地区	总人口	405 万	375 万	371 万
	老年人口	67.88 万	75 万	82 万
	老年人口比重	16.8%	20%	22%

C

长沙市老年人口养老意愿预测一览表

人口指标		2015 年	2020 年
全市	老年人口（万人）	148	195
	愿意机构养老的老年人口比例	16 %	16.5%
	愿意入住机构的老年人口人数（万人）	23.7	32.2
中心城区	老年人口（万人）	88	113
	愿意机构养老的比例	16.5 %	17 %
	愿意入住机构的人数（万人）	14.5	19.2

注：“愿意机构养老的老年人口”是指在思想意识上不排斥机构养老，愿意在各方面条件适合时入住养老机构的老年人口。

四、长沙市居民养老意愿调查

根据调查资料统计，长沙市老年人口中瘫痪在床或半自理需要照顾约占 14%，月收入 100 元以下的约占 65%，月收入 600 元以下的约占 27%，这些老人都是公办保障型机构养老设施的主要服务对象。

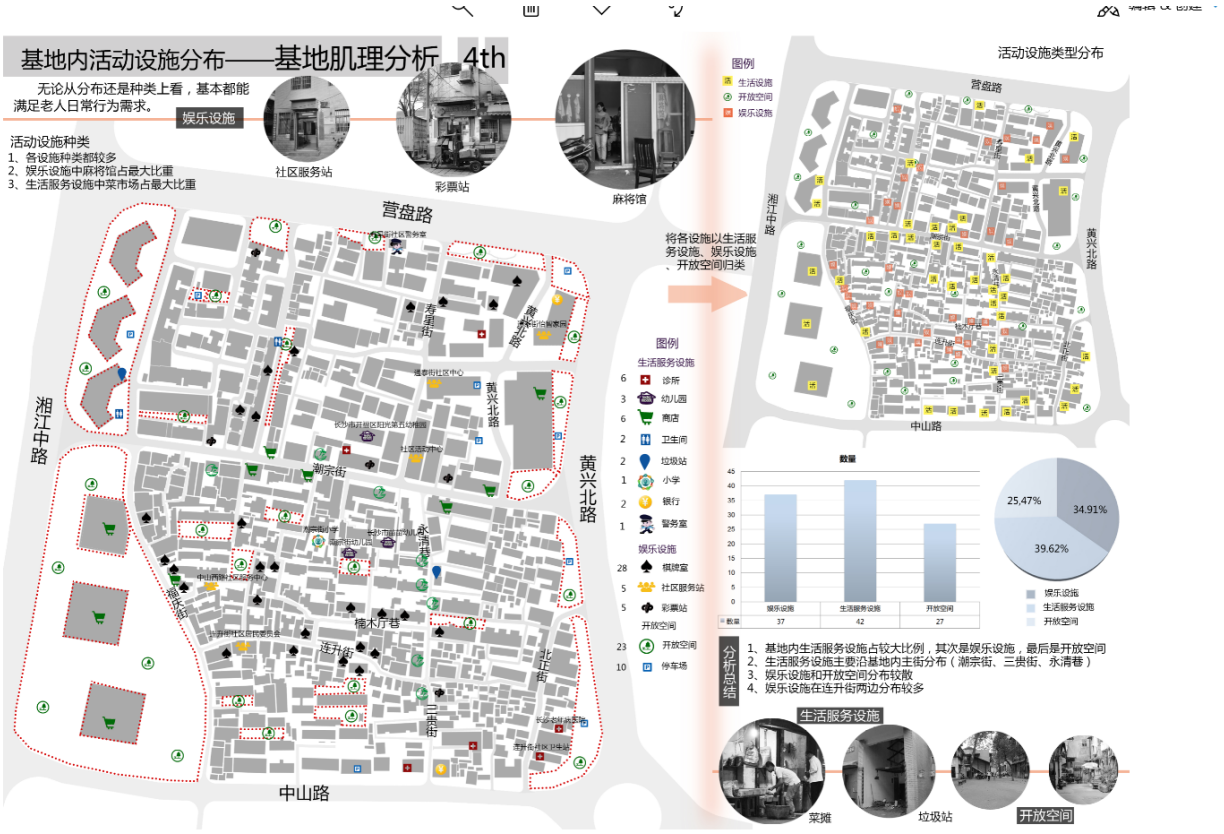
长沙市老年人口基本情况抽样调查简表

健康程度			生活自理					主要经济来源					月收入				期望养老方式			
1 完全自理	2 半自理需他人照料	3 瘫痪在床	1 完全能够自理	2 子女照料	3 请人照料	4 无人照料	5 其他	1 退休金、社保	2 子女负担	3 低保收入	4 无经济收入	5 其他收入	1 300以下（含300）	2 300-600（含600）	3 600-1000（含1000）	4 1千以上	1 居家养老子女照料	2 居家养老，护理员照料	3 社区托老中心养老	4 老年公寓
166058	26055	1014	154984	28380	2809	1095	5859	148763	23563	4977	3165	12659	28958	24891	72206	67072	149368	21685	16254	5820

长沙市193127人

6. FIELD INTRODUCTION

1.INTRODUCTION &MOTIVATION



Policy: Neighborhood services systems for elderlies

1.Finance
2.Operation& Activities
3.Business model
4.Stakeholders involved

1.Systems Distribution
2.Systems Vacancy Rate
3.Systems Satisfication

China's ageing population

"How does the nowadays neighborhood services systems for the elderlies work?"

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

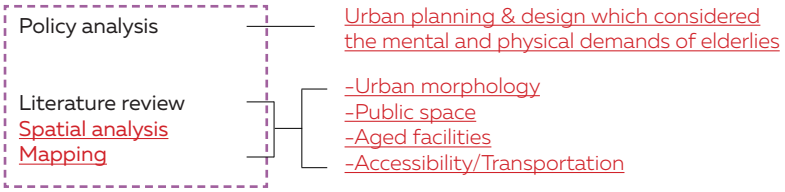
Global ageing population

长沙尺度上
（首先基础设施标注）
（道路交通设施的标注）
（老人人口比例分布）
1. 社区的老人平时活动路径、活动时间
2. 活动场所
3. 公共交通 / 道路的连接

3. 分析
3.1 分析场所共性
3.2 观察路径特征
3.3 老人的意见
3.4 综合总结：场所特性 场所不足

SQ2

"How does the nowadays urban planning & design work for elderlies in the neighborhood and city scale?"



01 配建内容及配建覆盖

配建内容及比例

覆盖率（配建率）

02 配建标准

各类设施规模（用地面积，建筑面积）

各类设施千人指标

03 配建实施及实施

各类设施的规划配建

产权主体、建设主体、经营主体

China's ageing population

SQ3

"What is the aged-friendly spatial condition?"

老年人精神文化需求及服务状况调查与思考
——以长沙市为例

蒋玉芝[1],赵 睿[2]
(1.长沙民政职业技术学院医学院,湖南 长沙 410004;2.民盟长沙市委,湖南 长沙 410004)

摘 要:良好的精神文化生活是老年人身心健康的保障。笔者以长沙市为例,结合调查走访和文献研究,就如何加强老年人精神文化服务进行思考与探讨。

关键词:老年人;精神文化;服务需求;服务状况
中图分类号:R161.7 **文献标识码:**A **文章编号:**1671-1246(2017)05-0117-02

1 长沙市老年人精神文化需求状况

在以教育需求、文化娱乐需求、情感需求、政治需求、自我实现需求为选项的调查中,老年人的情感需求最强烈。调查发现,老年人的首要精神文化需求是情感需求(72%),其他依次是文化娱乐需求(58%)、自我实现需求(52%)、教育需求(46%)、政治需求(38%)。访谈中,绝大多数老年人对子女不能经常陪伴他们表示理解,但也表示最开心的事情是有亲人陪伴。访谈发现,老年人平时打发时间的主要方式是看电视,他们反映“现在政府重视和关心老年人,生活改善了,吃得好住得好,就是缺少人说话”。养老机构工作人员对此表示心有余而力不足:“我们也知道他们要求并不高,就希望常有人说说话,哪怕只听他们说。但我们日常工作都忙不过来,没有时间陪他们聊天。”

China's ageing population

7. PROPOSAL PRODUCTS

7.1 Principles

1.INTRODUCTION &MOTIVATION

Figure 10: Win-win model proposal for services systems for elderlies in China *Source:author*

8. TIMELINE

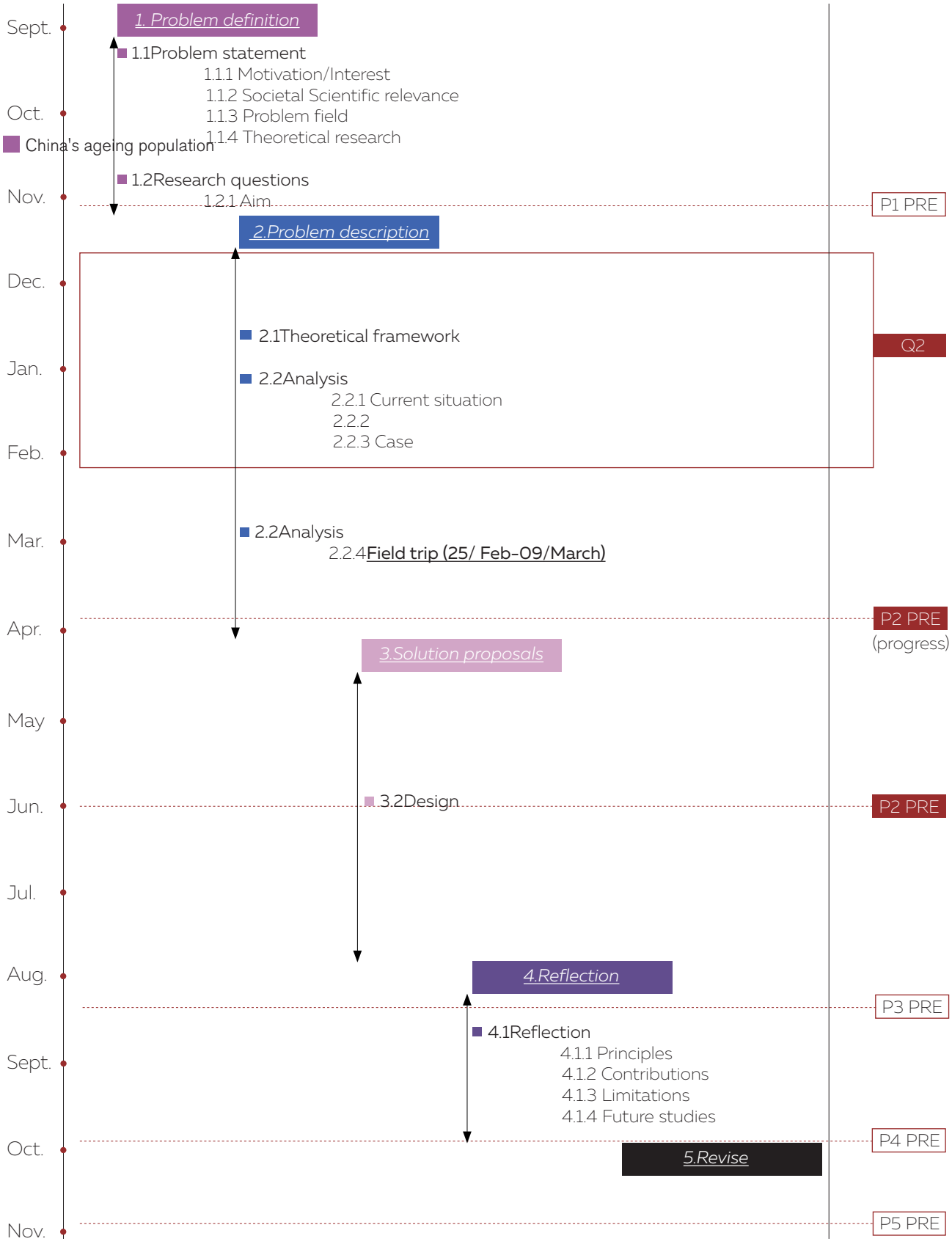

Sept.
1. Problem definition
1.1Problem statement
1.1.1 Motivation/Interest
1.1.2 Societal Scientific relevance
1.1.3 Problem field
1.1.4 Theoretical research
Oct.
China's ageing population
1.2Research questions
Nov.
1.2.1 Aim
P1 PRE
2.Problem description
Dec.
2.1Theoretical framework
Q2
Jan.
2.2Analysis
2.2.1 Current situation
2.2.2
2.2.3 Case
Feb.
Mar.
2.2Analysis
2.2.4Field trip (25/ Feb-09/March)
Apr.
P2 PRE
(progress)
3.Solution proposals
May
Jun.
3.2Design
P2 PRE
Jul.
Aug.
4.Reflection
P3 PRE
4.1Reflection
Sept.
4.1.1 Principles
4.1.2 Contributions
4.1.3 Limitations
4.1.4 Future studies
Oct.
P4 PRE
5.Revise
Nov.
P5 PRE

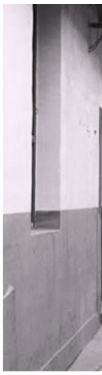
Image 1: The east side (commercial area and old neighborhood area) of Changsha city

The context of Changsha city was considered appropriate for this project. On one hand, Changsha's government has proposed m
while others were failed or resisted by residents. On the other hand, Changsha is a typical ageing city in China, with 1.38 million ag
neighborhoods with backward facilities and environment in the city center (Figure x), which is also the most rapid development area

CHINA
中国

Source:Baidu

any neighborhood scale projects, policies and subsidies for the elderlies in the last five years, some of them were very successful, ged people over 60 years old (Changsha Census 2017) and still growing rapidly. These old people mainly located in the original old with high price of land nowadays. There is a huge conflict hidden between the elderlies and the transforming Changsha city.



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CHANGSHA
长沙

Source:Baidu

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6. FIELD INTRODUCTION

6.3 Definition of 'Neighborhood scale' and 'city scale' in the thesis

Figure 21: Abstract concept of neighborhood scale and city scale in the thesis

Source: Author

Based on the interviews with 15 elderlies' who lives in the Liansheng community (the author done in 2016), concludes an activities range map clearly showing the different usages' frequency of different places. (Figure x)

In China, "community" is a political word defined by governments for governance. The definition of these community is irregular and less connected with people's daily life.

In the thesis, the elderlies in Liansheng community is the target group.

Based on the daily route and usages' frequency of the elderlies in Liansheng community, defined the neighborhood scale, city scale I and city scale II. (Figure x)

In the thesis, the design field is not only Liansheng community, but also including the area of neighborhood scale, city scale I and city scale II.

Figure 22: Different scales in the field

Source: Google earth

For the places where elderlies go every day, it can be seen as the most important places. According to the local condition and the furthest distance of these places, drawing the draft boundary of the neighborhood scale. Draft city scales are also drawing in the same way. In the thesis, it set two different city scales because of its special geography and demands for the elderlies there.
The defining criteria is settled, but the boundary of the different scales will adjust through the process of design.

9. APPENDIXES

9.1 Theory paper draft

The application of Healthy Ageing Theory in China

China's ageing population

Abstract

Since the number of the aged population (over 60 years old) in China ranks top in the world, reaching 0.241billion(National Bureau of Statistics of China, 2017) and will keep growing rapidly in the future, proposing an effective elder-caring system is of utter necessity in China (X. Wang, 2002) For instance, the current system does not catch the rapid pace of the ageing society and does not meet the mental and physical needs of the nowadays elderlies, resulting in a poor reputation in the aging population. (W. Chen, 2016) This paper aims to seek a plausible proposal for applying the healthy ageing theory in China towards the aged-friendly society and livability city. First, the paper concludes the main ideals from World Report on Ageing and Health. Besides, Cases from Japan, America, and Australia would be studied and compared with each other, especially with that of China. Then, the paper identifies the features of current ageing population in China. In this paper, there are three primary strategies on applicating healthy aging theory in China: health maintenance-oriented service system; localized health care system; and an equal system which can help the elderlies to achieve their self-worth.

Key words: Healthy Ageing, Chinese services systems for elderlies, Intrinsic capacity, functional ability, aged-friendly environment

Introduction

In the past 25 years, the World Health Organization (thereafter WHO) has been playing an important leading role in the strategy of population ageing. The concepts such as "healthy ageing", "active ageing" and "age-friendly environment construction" all originated from the initiative of WHO. On October 1st, 2015, the International Day of Older Persons, WHO released the Global Report on Ageing and Health, once again putting "healthy ageing" on the agenda with new ideas and perspectives. It interprets the rich connotation and policy from the angle of healthy ageing, corrects the current prejudice regarding ageing and health, and advocates the policy makers and service providers who provide innovative services. It develops a new model for dealing with population ageing in the 21st century.

In present times, China is having its population ageing rapidly while it does not have a satisfactory system that relieve any of the problems evolved from that. Thus, the research of "healthy ageing" can provide a theoretical basis for policy makers and service providers to improve elderly service model. While prolonging the participation of the elderlies in social and economic developments should be done as much as possible, such would also help to boost their physiological functions, (Vaillant et al., 2001; Rowe et al., 1997; Phelan et al., 2004) and would ensure that the elderlies have the ability to take care of themselves, so as to maintain both physical and mental health, and to become more socially engaged. (J. Qian, 2013)

My paper briefly divides into five sections. The first part will be brief conclusion of World report on ageing and health. The second section is examples and case studies of application of healthy ageing theory in different countries. The third part is the characteristics and challenges of China's aging. The fourth section is the proposal of healthy ageing in China. Last section will be the recommendations for further studies.

Structure

1.The main ideas of World report on ageing and health

1.1Policy systems integrate medical care, care and environment

1.2Policy systems targets on equal development of elderly's functional ability and Intrinsic capacity

1.3 Comprehensive policy actions

2.Reflections on different nations' policies and measures to achieve healthy aging

2.1Japan

2.2America

2.3Australia

3.The characteristics and challenges of China's aging

3.1 The number of elderly population is large and

9. APPENDIXES

9.1 Theory paper draft

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

grows fast
3.2 The phenomenon of empty-nested elderly is remarkable
3.3 Grows old before wealthy
3.4 45% of the disease burden is caused by the elderly
3.5 Unbalanced development of aging between regions

4.Apply
4.1 Core
4.2 Aim
4.3 Strategy
4.4 Societal/Scientific relevance

5.Futher Study

Conclusion

Healthy aging is a concept that is gradually established and improved along with the progress of society, the development of the economy, and the acceleration of the aging process of the population. (H. Sun, H. Sun, 2010) Health in the traditional sense mainly refers to the improvement of physiological functions and the normal development of physiological functions, while the health in the modern sense includes physiological, psychological and social aspects. China's healthy aging emphasizes improving the quality of life, fairness and equality of the elderly and adapting to local conditions.

The proposal of the Healthy Ageing China Program is not only based on the principle of seeking truth from facts, but also based on the international consensus and summing up its own experiences and lessons, independently and independently deploying the objective requirements of a healthy aging strategy, and also taking the path of healthy aging with Chinese characteristics inevitable choice.

9. APPENDIXES

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Methodology

The methodology of this thesis is influenced by DRM- Design Research Methodology (Blessing & Chakrabarti, 2009), and consists of four stages: Problem
Definition, Problem Description, Solution Proposal, and Reflection. The outcomes correspondingly have been divided into four sessions. They are goals, understanding, support, and evaluation.

The main aim of the thesis is to propose the neighborhood aged services systems which involves artifacts, people, tools, processes, organizations, and the environment, integrated with urban design and planning in China. Problem Definition stage includes the problem statement and research questions, which leads to the goal of the thesis. Based on the former stage, the Problem Description analyses the needs of Chinese elderlies to understand the existing situation according to case studies and field study (Changsha, China). The Solution Proposal shows the process of design in both neighborhood scale and city scale. The last Reflection stage is to reflect the whole process through the design process of the pilot project, concluding the principles that can be used in other places. And it will also reflect the limitations in the thesis, and put forward the academic contributions for future research in this field. (Figure 1)

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

- Global ageing population

1. Problem Definition

This stage is to understand the problem which the study aims to tackle. It requires evidence collection and literature studies that clarify the issue and support the research goal (Blessing & Chakrabarti, 2009). Based on the findings, an initial description of the existing situation (problem statement) is developed, as well as a description of the desired situation (research questions/aim) (Blessing & Chakrabarti, 2009). After narrating the motivation, societal-scientific relevance, problem field, and problem analyses in the theoretical research, the problem statement comes into being: the neighborhood aged services systems and urban design/planning systems do not integrate each other in China. Then the research question indicates the aim of integrating the current neighborhood aged services systems and urban design/planning system, which can contribute to age-friendly and livable cities in China.

2. Problem Description

The problem description consists of literature review that supports the detailing of the existing situation put forward in the Research Clarification phase, having the desired aims in mind (Blessing & Chakrabarti, 2009). After getting the explicit aim of integration in the former stage and building up the concept and theoretical framework (from three aspects: social, spatial and governance) through the literature review, the process comes to the problem description, which mainly analyses the problem and finds out the potential intervention. This stage will dissect the current situation from six aspects: Policy & Regulation, Finance, Operation & Activities, Management, Stakeholders involved and Urban form. They are studied based on the methods of Literature review, Existing diagnosis, Policy analysis, Spatial analysis, Interview, Mapping, and Field trip in order to answer the sub-research 1: "How does the nowadays Chinese neighborhood aged services system work?" and sub-research 2: "How does the nowadays urban planning & design work for the aged in the neighborhood and city scale?"(Figure 2) Besides, it will also tackle the mental and physical demands of the elderlies through Literature review, Existing diagnosis, Case study, Interview, and Field trip,(Figure 2) to address the sub-research 3: "What are the mental and physical demands of the elderlies?" Then the field study of the typical aged city, Changsha, will enhance the analysis of the current situation. In this step, the interview will be the most important method. In the last part of the stage, case studies of Japan, Australia, and America could provide approaches which are capable of solving similar problems in China. Combing with the literature review and existing diagnosis, it will answer the sub-research question 4: "What should the sustainable finance model of the systems be?" and sub-research question 5: "What should the sustainable finance model of the systems be?"(Figure 2)

3.Solution Proposals

According to Lucienne T. M. Blessing and Amaresh Chakrabarti, in this stage occurs the refinement of the desired situation, by putting forward a "vision on how addressing one or more factors in the existing situation would lead to the realization of the desired, improved situation" (Blessing & Chakrabarti, 2009). For that purpose, this thesis elaborates solution proposals. The field of the solution proposals is in Pozi neighborhood, Changsha. It is the typical ageing neighborhood which urgently need to be transformed. At the same time, it is an old neighborhood, which makes it also attractive for other groups of people because of the low cost of living. To solve the conflict between groups of people is also the step to achieve livability city. The whole process based on the framework of social, spatial and governance, divided into two scales in a bottom up way: from neighborhood scale to city scale. According to the solutions of sub-research questions addressing in the second stage, the solution will be explained from vision, strategy to design.

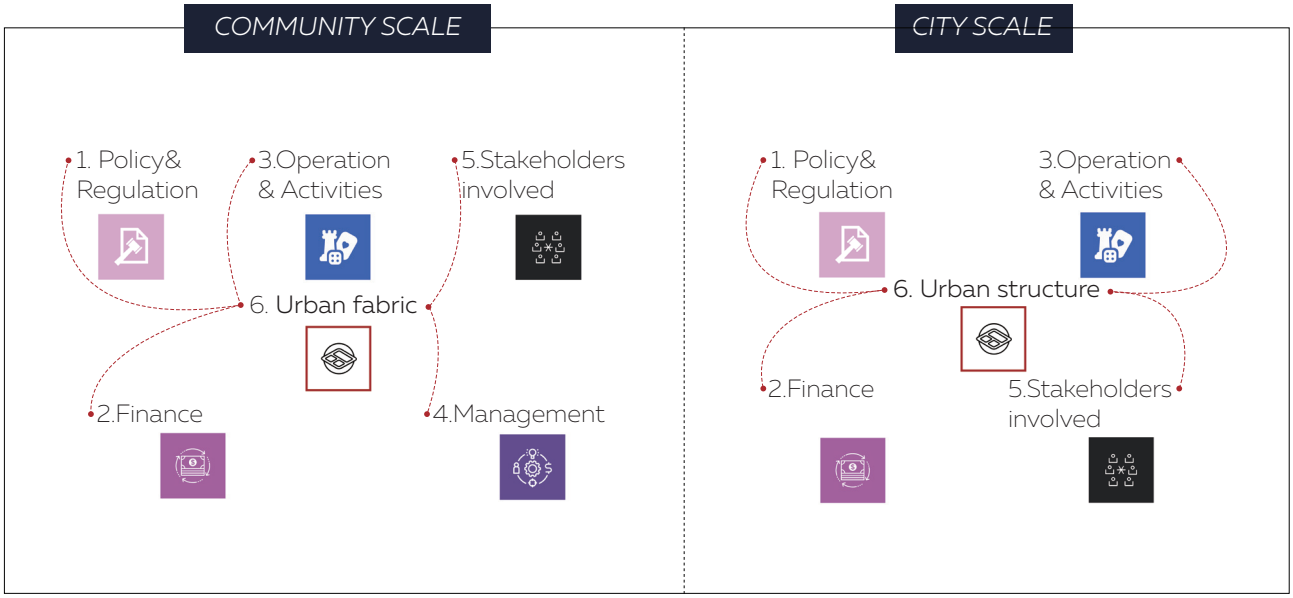
4. Reflection

The purpose of the last stage is to examine the effects of the proposal and evaluate its achievements, applicability and usefulness (Blessing & Chakrabarti, 2009). Moreover, in this stage there is an indication of conclusions and need for further studies (Blessing & Chakrabarti, 2009). In this thesis, this is realized through a reflection. The reflection stage is divided into four parts. First, through the solution proposals for Pozi neighborhood, concluding the feasible principles that can also be used in other places in China. Then, it comes to explanation for the contribution and limitation of the thesis. Last, it will show the direction of further studies.

Reference:

Blessing, L. T. M., & Chakrabarti, A. (2009). DRM, a Design Research Methodology.

China's ageing population



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1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

Building a community of Chinese knowledge

2017 Year in review

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China Studies Centre

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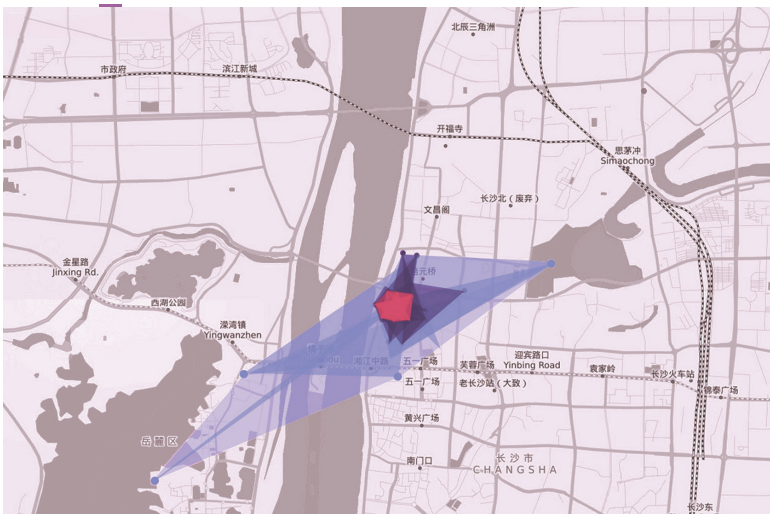
1.INTRODUCTION &MOTIVATION

6.3 Defining of 'neighborhood scale' and 'city scale' in the thesis

2.1 CONTEXT



Frequency:
Every day

Frequency:
At least once a week

Frequency:
At least once a month

Figure 20: Activities range maps which concludes 15 elderlies' Daily Routes Interviews
(Interviewed by author, 2016)
(15 elderlies all lives in the target community--Liansheng)

Source: author

一是老年人口规模巨大。2004 年底，中国 60 岁及以上老年人口为 1.43 亿，2014 年将达到 2 亿，2026 年将达到 3 亿，2037 年超过 4 亿，2051 年达到最大值，之后一直维持在 3-4 亿的规模。根据联合国预测，21 世纪上半叶，中国一直是世界上老年人口最多的国家，占世界老年人口总量的五分之一，21 世纪下半叶，中国也还是仅次于印度的第二老年人口大国。

二是老龄化发展迅速。65 岁以上老年人占总人口的比例从 7%提升到 14%，发达国家大多用了 45 年以上的时间，其中，法国 130 年，瑞典 85 年，澳大利亚和美国 79 年左右。中国只用 27 年就可以完成这个历程，并且在今后一个很长的时期内都保持着很高的递增速度，属于老龄化速度最快国家之列。

三是地区发展不平衡。中国人口老龄化发展具有明显的由东向西的区域梯次特征，东部沿海经济发达地区明显快于西部经济欠发达地区，以最早进入人口老年型行列的上海（1979 年）和最迟进入人口老年型行列的宁夏（2012 年）比较，时间跨度长达 33 年。

四是城乡倒置显著。发达国家人口老龄化的历程表明，城市人口老龄化水平一般高于农村，中国的情况则不同。目前，农村的老龄化水平高于城镇 1.24 个百分点，这种城乡倒置的状况将一直持续到 2040 年。到 21 世纪后半叶，城镇的老龄化水平才将超过农村，并逐渐拉开差距。这是中国人口老龄化不同于发达国家的重要特征之一。

五是女性老年人口数量多于男性。目前，老年人口中女性比男性多出 464 万人，2049 年将达到峰值，多出 2645 万人。21 世纪下半叶，多出的女性老年人口基本稳定在 1700-1900 万人。需要指出的是，多出的女性老年人口中 50-70%都是 80 岁及以上年龄段的高龄女性人口。

六是老龄化超前于现代化。发达国家是在基本实现现代化的条件下进入老龄社会的，属于先富后老或富老同步，而中国则是在尚未实现现代化，经济尚不发达的情况下提前进入老龄社会的，属于未富先老。发达国家进入老龄社会时人均国内生产总值一般都在五千到一万美元以上，而中国目前人均国内生产总值才刚刚超过一千美元，仍属于中等偏低收入国家行列，应对人口老龄化的经济实力还比较薄弱。

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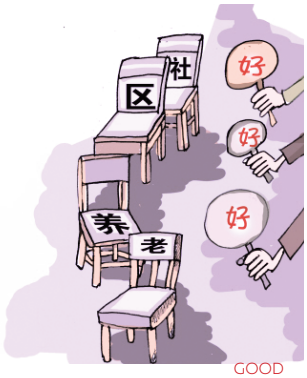
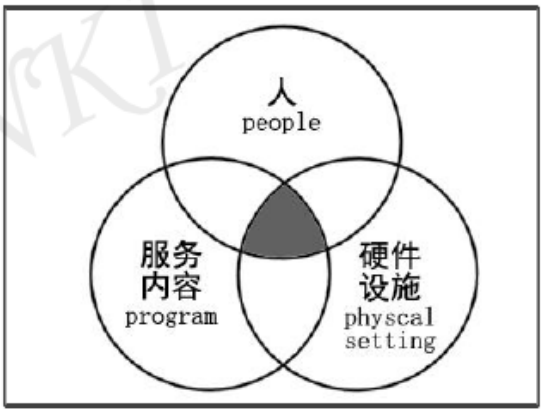
居家养老是指老年人在家中居住，由社会提供养老服务的一种养老方式，它以家庭为核心，以社区为依托，以老年人日间照料、生活护理和精神慰藉为主要内容，以上门服务和社区日托为主要形式，被广泛地认为是符合我国国情的新型养老方式。[2]
居家养老应能满足老年人在养老过程中的各方面需要。居家养老具有家庭养老和机构养老的优势，弥补了机构养老和家庭养老的不足。居家养老符合我国传统的孝道观念，符合老年人和生活习惯和心理需求。但由于我国居家养老还处于起步阶段，老年人对社区报备的利用程度不高，居家养老服务项目偏少，内容简单，服务设施不齐全，专业服务队伍水平低等原因制约了其发展。

Image 10: 'Best game no one played'

Source:Zhili Wu

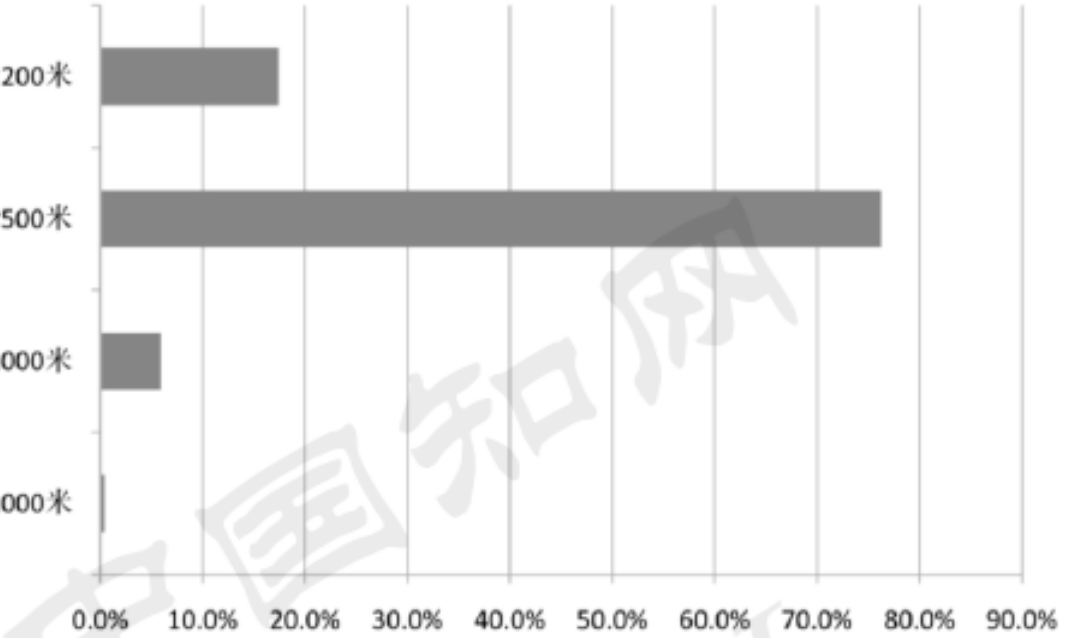


China's ageing population



图片来源：笔者参照文献[35]绘制

图 3-1 美国日间照料中心三要素



4-8 深圳市社区老年人日间照料中心服务半径调研统计结果

图 4-7 深圳市社

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

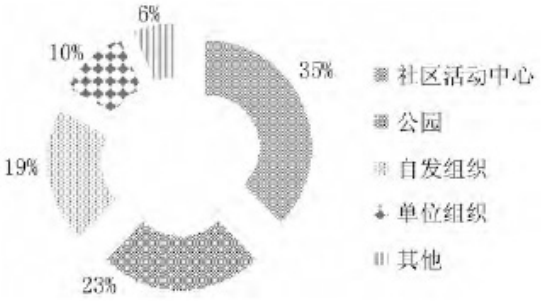


图 10　活动地点分布图

(4) 精神文化的需求情况

根据社会嵌入理论，老人在退休后回归到家庭生活，生活需求已然发生巨大的变化。逐渐脱离了社会复杂关系，老人容易出现孤独感和脱离感，所以要通过家庭环境和社会环境来改善这种情况。老人要通过参与社会活动丰富自己的精神生活。

老人退休后希望更多的参与社会生活，一方面丰富自己的精神生活，另一方面也希望再次实现自己的价值，享受荣誉感。社区有很强的地理优势，充分贴近老人的生活，有能力组织各种文娱活动，为老人的参与提供便利，满足老人的精神文化需求。

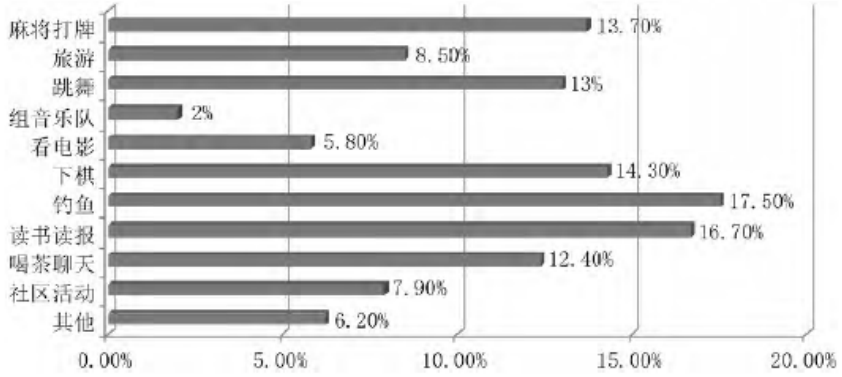


图 9　精神文化活动比例

(5)社会网络的需求

老人的社会关系也是养老的需求之一,调查的发现75%的老人都有很和谐的邻里关系,23%的老人认为关系一般,只有2%的老人觉得不融洽。

很多老人反映自己的精神支柱大部分来源于子女、亲戚。在统计“希望谁经常过来看望您”时,有82.3%的老人选择了子女,有12.6%的老人选择了亲戚,希望朋友来的有3.9%。

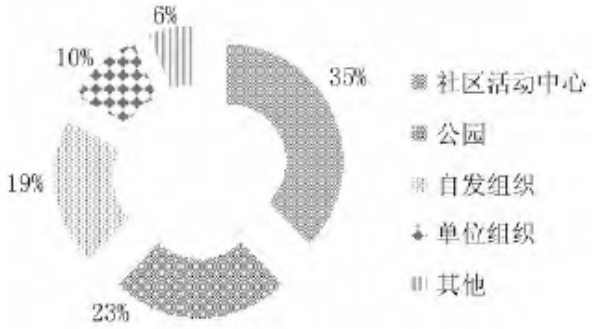


图10　活动地点分布图

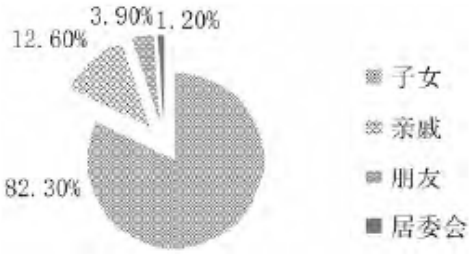


图11　精神支柱的来源分布图

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

https://www.docin.com/p-1446175698.html

按照实施策略方式将社区照顾划分为“在社区内施行照顾(Care in the Community)”、“由社区来负责照顾(Care by the Community)”、“对社区进行照顾(Care for the Community)”三种模式。“在社区内施行照顾”是指充分利用资源，受照顾者可以在社区中心或在家中享受服务。“由社区负责照顾”则是指使用非正式照顾资源， 让接受服务者能在家中接受服务，这种资源对接受服务者只起辅助作用。“对社区进行照顾”是指，将一切有服务需求的群体全部纳入到照顾对象，包括社区中的失能弱势群体以及整个社区的老年居民。[7]

China's ageing population

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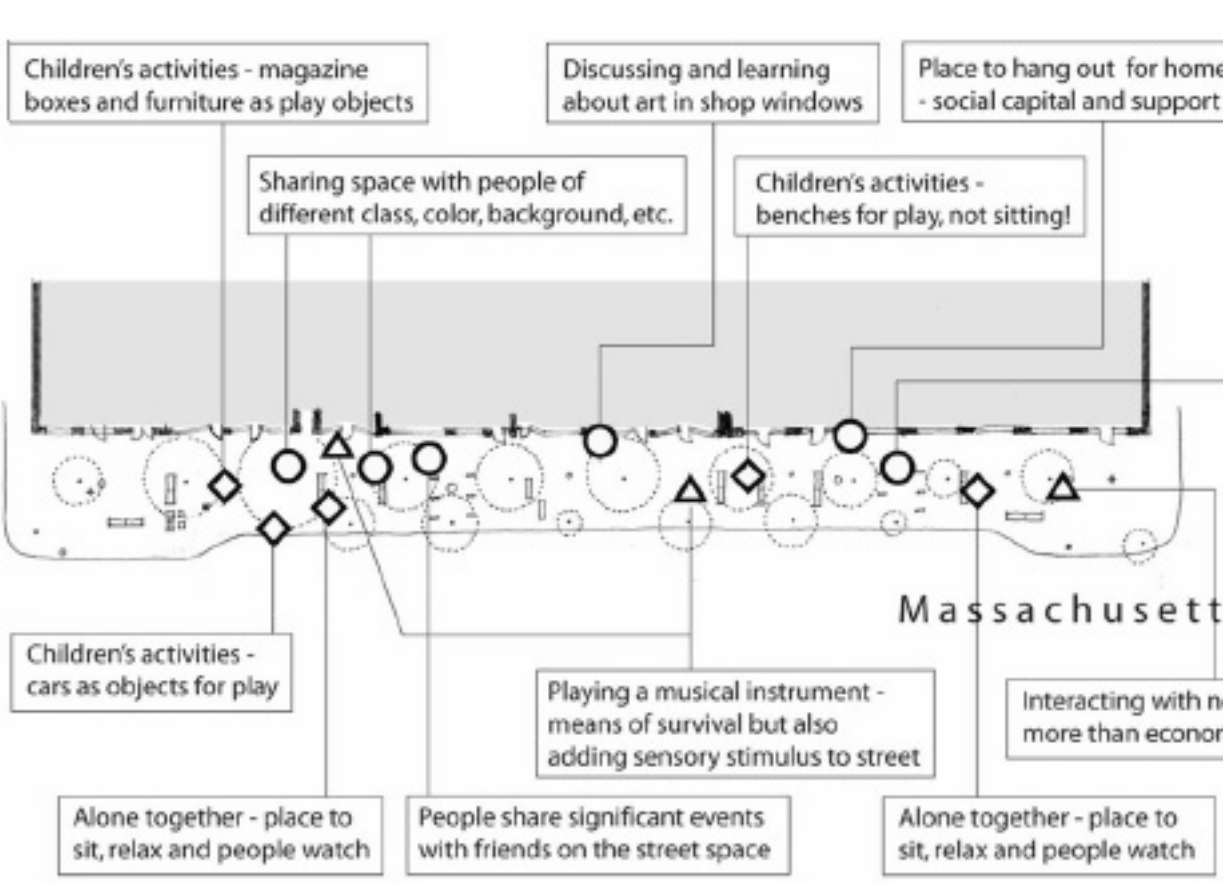
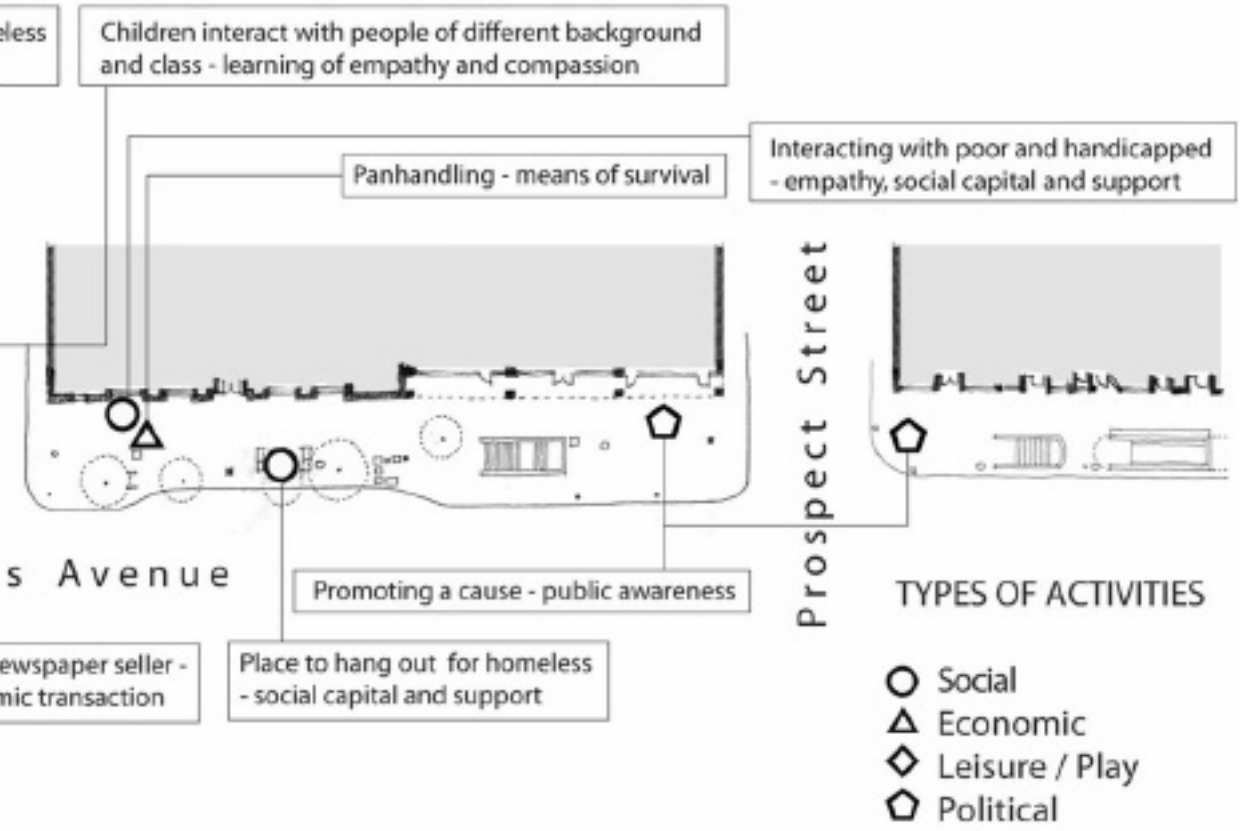


Fig. 6 The plan and photographs showing a sampling of activities on

ent modification. Enable

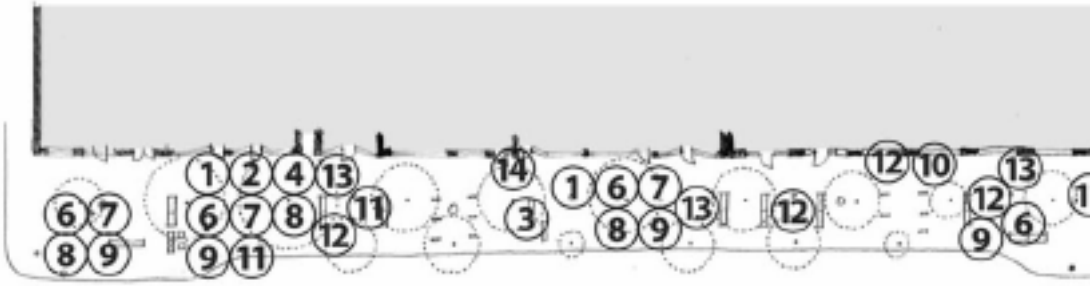


Massachusetts Ave. in Central Square, Cambridge, MA that serves the

1.II

2.1 G

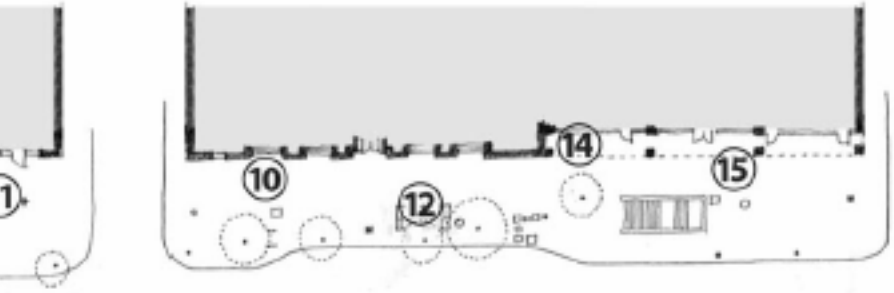
Gl



Massach

LEGEND

1 Families with children
2 Mothers with infants/toddlers
3 Children
4 Middle-age couples
5 Older women



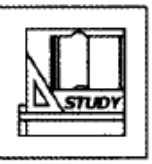
6 Young couples
7 Young women
8 Young men
9 Young women and men
10 Panhandlers
11 Newspaper vendors
12 Homeless
13 Street musicians
14 Store workers
15 Petition seekers

3.2　逐步构建分层分级的养老模式体系

根据老年人的身体健康状况、经济承受能力、个人喜好等不同，应采取不同的养老模式：①从年龄阶段来看，刚退休的老年人，身体健康状况较好，更多选择居家养老。随着年龄增长、身体机能下降及疾病困扰，老年人会更多地寻求机构帮助；②从需要护理级别来看，老人分为自理型、介助型和介护型，每个类型和级别的老人需要养老服务的内容都有所不同；③从经济承受力来讲，有的老年人经济条件相对较好，希望选择高端的养老服务机构，以提升生活品质，而大多数老年人经济收入一般，希望选择普通的经济型养老服务机构，低收入老人则需要政府提供各类托底保障。因此，应根据老年人的不同年龄阶段、不同健康级别、不同收入层次建立不同的养老模式。2012年，东京提出《社会福利与公共健康报告三年计划（2012–2014）》，提出构建东京完备的养老设施体系，包括设备租借及家庭适老改造服务等家庭养老支持及上门服务项目，日间照料和短期住养功能等社区养老，以及强调福利与医疗性质的机构养老，并提供适老性公寓的规划建设等。

提　要　老
型城市、提升
升全民幸福感
现。以上海为
体的策略导引
构养老设施和
方面。规划需
变，尊重老年
导向、设施布
及部门协作角
好地应对老龄

关键词　老
市；战略应对



老龄化背景下特大城市养老设施规划策略探索

——以上海市为例

詹运洲　吴芳芳

龄化背景下，建设老年友好
民生保障水平是特大城市提
感和城市综合实力的重要体
例，对养老设施规划提出具
，明确养老设施体系包括机
社区居家养老服务设施两大
需要重点关注养老模式的转
人的养老服务需求，从发展
布局、存量评估、标准规范以
度入手，为城乡规划如何更
化挑战提供经验借鉴。

龄化；养老设施；特大城
市

Planning Strategies for Aging Megacities: A Case Study of Shanghai

ZHAN Yunzhou, WU Fangfang

Abstract: Under the aging background, it has become increasingly important for a megacity to prioritize the concerns of the elderly population and to enhance their level of happiness. Based on a case study of Shanghai, this paper gives guidance on the planning of facilities for the elderly. It points out that the old-age support system should include two important parts, namely, institutional facilities and community services. Planning should take into consideration of the changing mode of supporting the elderly so that better service can be planned. Five suggestions are given in terms of development orientation, facility layout, capacity assessment, standard specification and cross-sector cooperation.

Keywords: aging; facilities for the elderly; megacity; strategy

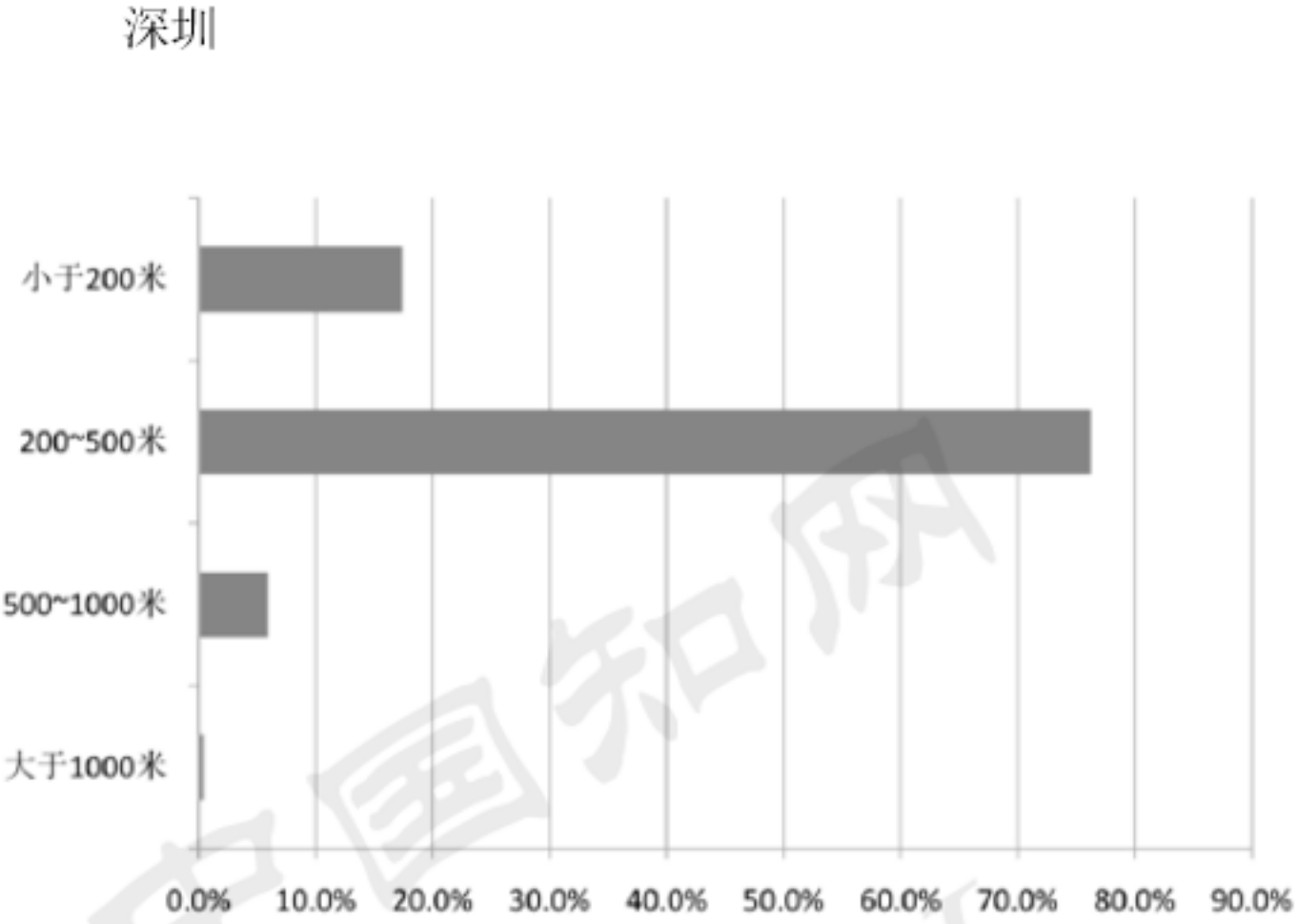


图 4-8 深圳市社区老年人日间照料中心服务半径调研统计结果

深圳市的社区老年人日间照料中心的建设才刚起步，养老
要有一个科学的目标和一个循序渐进的建设过程。目前有些部门
街道设置一间或每个社区设置一间”的规模都不是十分适合深圳
道为单位配置显然规模过大，服务半径超出深圳老年人接受的
导致资源的浪费；以社区为单位配置，若社区规模不足，配建
一定规模，投入资金有限，最终运营也无法维持。经前文分析
设目标宜以 30000~40000 人/间的配置标准为主，服务面积不宜
公里，人口较少的社区优先选择与临近社区合并设置，以保证
节约资源、提高运营效率。因此建议深圳市在近期（5~10 年）
区内都设置老年人日间照料中心，随着老龄化水平的发展，远
老年人使用需求再逐渐增建或扩建。

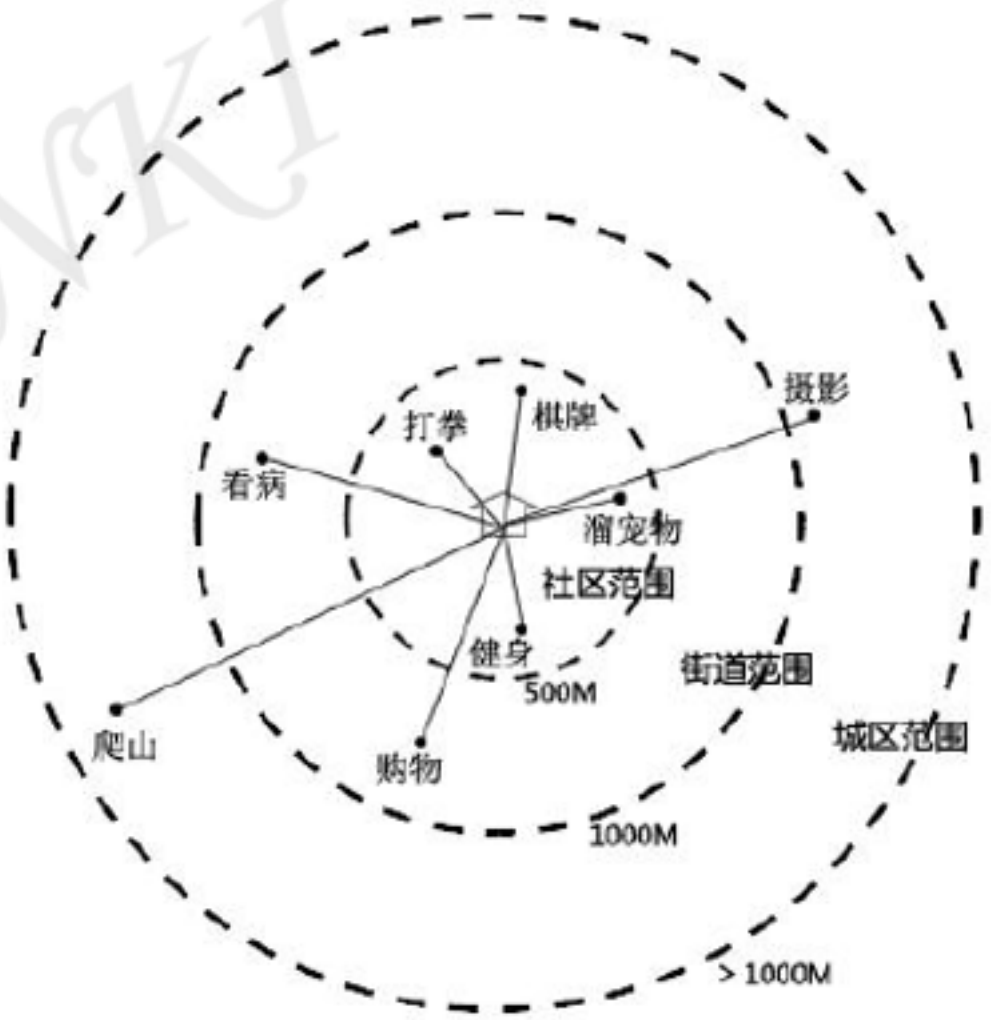


图 4-7 深圳市社区老年人出行半径调研统计

设施的建设需
门提出的“每个
圳的现状，以街
范围，最终会
设施难以形成
深圳市近期建
超过 1.0 平方
设施的规模，
不必在每个社
期目标可根据

以街道、社区
多大范围来配置？？？

老年人精神文化需求及服务状况调查与思考
——以长沙市为例

蒋玉芝[1],赵 睿[2]
(1.长沙民政职业技术学院医学院,湖南 长沙 410004;2.民盟长沙市委,湖南 长沙 410004)

摘 要:良好的精神文化生活是老年人身心健康的保障。笔者以长沙市为例,结合调查走访和文献研究,就如何加强老年人精神文化服务进行思考与探讨。

关键词:老年人;精神文化;服务需求;服务状况
中图分类号:R161.7 **文献标识码:**A **文章编号:**1671-1246(2017)05-0117-02

1 长沙市老年人精神文化需求状况

在以教育需求、文化娱乐需求、情感需求、政治需求、自我实现需求为选项的调查中,老年人的情感需求最强烈。调查发现,老年人的首要精神文化需求是情感需求(72%),其他依次是文化娱乐需求(58%)、自我实现需求(52%)、教育需求(46%)、政治需求(38%)。访谈中,绝大多数老年人对子女不能经常陪伴他们表示理解,但也表示最开心的事情是有亲人陪伴。访谈发现,老年人平时打发时间的主要方式是看电视,他们反映“现在政府重视和关心老年人,生活改善了,吃得好住得好,就是缺少人说话”。养老机构工作人员对此表示心有余而力不足:“我们也知道他们要求并不高,就希望常有人说说话,哪怕只听他们说。但我们日常工作都忙不过来,没有时间陪他们聊天。”

China's ageing population

关于长沙 2050 老年友好城市建设调查问卷

您好，我是来自荷兰代尔夫特理工大学的孟婉婷。现在正在进行硕士毕业设计，研究方向是长沙社区居家养老的建设与改进，建设老年友好社区。您提供的信息我将保证只用于学术研究，并且会对于我的毕业设计研究有极大的帮助。感谢您的配合和帮助！祝您生活愉快！：）

1. 年龄 e. 50-65 f. 65-75 g. 75-90 h. 大于 90

2. 身体状况 a. 良好，身体健康 b. 一般，偶尔有些不舒服 c. 身体状况较差，经常需要前往医院

3. 家庭模式 a. 自己一个人生活 b. 与配偶生活 c. 与子女一起生活 d. 与父母一起生活 e. 与父母子女一起生活

4. 给一下几个要素排个序：家庭（带小孩，与家人相处），健康，娱乐，工作（自我价值的实现）

5. 出门频率，每天都出门？一周出门两次？出行方便吗？

6. 对于每天要去的这些地方，为什么要去，你觉得这个地方做的好吗？好在哪里？有什么可以改进的？去的时候方便吗？

7. 你最喜欢的娱乐活动是什么？哪里可以进行这些活动？

8. （地图展示） 9.1 平时生活轨迹 / 活动范围。家在哪，大约几点出门，有什么活动，几点回家，每个时间点对应去哪些地方。9.2 除了社区周边活动，还会去更远一点的地方吗，如岳麓山，贺龙体育馆之类的，大概多久出一次社区

9. 受教育程度 a. 简单的基础教育 b. 小学 c. 初中 d. 高中 e. 大专及以上

关于长沙 2050 老年友好城市建设调查问卷

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1. 年龄 a. 7-12 b. 12-18 c. 18-25 d. 25-50

2. 家庭模式 a. 自己一个人生活 b. 与配偶生活 c. 与子女一起生活 d. 与父母一起生活 e. 与父母子女一起生活

3. 给一下几个要素排个序：家庭，健康，娱乐，工作（自我价值的实现）

4. 你最喜欢的娱乐活动是什么？哪里可以进行这些活动？在这些地方会有老年人的参与吗？

5. 您平时生活中有注意到老年人这个群体吗？在哪里见的最多？（社区里及周边地方）

6. 就您看来，社区里的哪些设施或者空间您觉得不利于老年人出行或者使用？有哪些地方您觉得有利于老人使用？

7. （地图展示） 9.1 平时生活轨迹 / 活动范围。大约几点出门，有什么活动，几点回家，每个时间点对应去哪些地方。9.2 除了社区周边活动，还会去更远一点的地方吗，如岳麓山，贺龙体育馆之类的，大概多久出一次社区

8. 受教育程度 a. 简单的基础教育 b. 小学 c. 初中 d. 高中 e. 大专及以上

9. 您对于老年友好社区建设有什么意见或者建议吗

调研项目：
1. Questionnaire 采访 / 填写问卷（放到 interview 一起做）
2. Observation：
  2.1Walk-by observations: 观察哪些地点聚集了比较多的老人，在地图上标记地点和老人数量，记录空间特征，拍照
  2.2Structured direct observations: 这些老人在这里做什么，这里什么空间特征吸引老人，/ 缺失的空间品质是什么 / 吸引什么特征的老人（年龄，性别，姿势等）
  2.3Interview：
    2.3.1 为什么使用这些空间
    2.3.2 在这个空间最看重什么
    2.3.3 觉得有什么可以改进的
3. 自己从老人视角，去观察社区空间，有什么不舒适的行走 / 活动体验

其他：
1. 梳理空间结构（这两天做）？社区中心在哪？公共空间在哪
2. 打印地图，截取一些老人多的地区 zoom in
3. 翻译给 birgit

CONTENT OF INTERVIEW

1. AGE a. 50-65 b. 65-75 c. 75-90 d. 大于 90

2. Physical condition a. Good and healthy b. Soso, sometimes has a little uncomfortable c. Poor health, often need to go to hospital

3. Education level. a. Primary school b. Junior high school c. Senior high school d. College and above E. Uneducated

4. Living alone, with your spouse or with your children

5. Order elements(to see in different age range, which element is more important): life, health, entertainment, work (realization of self-worth)

6. Ordinary life trajectory/type of activities. About what time to go out, what activities, when to go home, where to go at each time point.

7. Frequency of going out, going out every day? Twice a week? Is it convenient to go out/walk in (and out of) the neighborhood?

8. What is the most satisfactory place for community environmental construction and what is the most unsatisfactory place (e.g. occupied sidewalks, road pits and depressions, etc.)

9. In addition to community activities, will you go further, such as Yuelu Mountain, Helong Stadium and so on, how often do you go out?

10. Do you have a regular social circle?

11. What is your favourite recreational activites?

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

- Global ageing population

China's ageing population

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

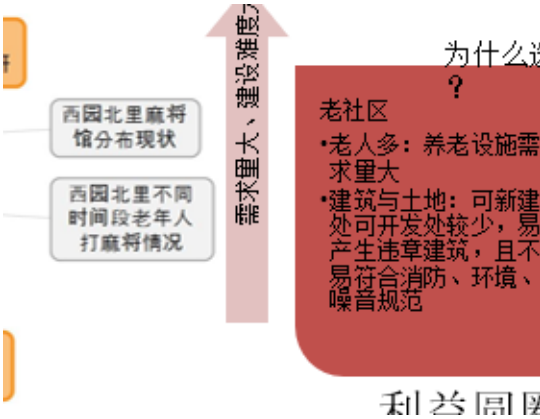
Global ageing population

Chinese ageing population

Ultimately, ageing will change the societal intergene
young people against those who are benefitting
confrontation between workers and retirees will likel
– HUANG YANZHONG

China's population is growing old at a faster rate tha
year one-child policy, combined with dramatic impro
in life expectancy and decreases in China's birth ra
effect, life expectancy in China improved from 67 to
looming demographic shift presents considerable s
ageing problem? , 2016)

This trend is particularly worrisome for China, as its
For decades, China reaped the benefits of a demog
its manufacturing sector, which enabled China to
China's demographic shift presents significant socia
skyrocket, prompting questions of China's prepare
ageing problem? , 2016)

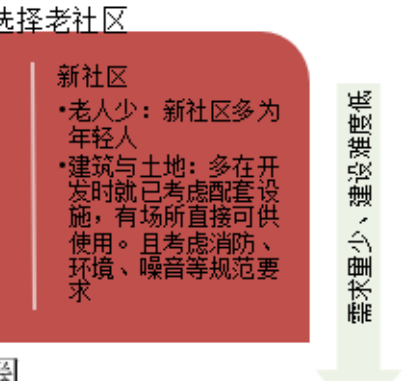


China's ageing population

erational relationships pitting the economic productive from social security and medical care payments. A y arise.

n almost all other countries. The effects of China's 35- vements in health care, have contributed to increases ate. During the years that the one-child policy was in 75 and fertility rate decreased from 2.8 to 1.7. China's ocial and economic challenges. (Does China have an

s development is tied to its demographic advantages. graphic dividend that supplied a young workforce for emerge as a global economic power. Furthermore, l problems. The number of Chinese retirees will soon edness to provide senior care. (Does China have an



1.INTRODUCTION &MOTIVATION

Chinese neighborhood services systems for elderlies

2.1 CONTEXT

Global ageing population

（2）社区养老模式优势的讨论 陈永生(2008)认为，社区养老服务以多样化的方式向老年人提供服务，主要包括日常生活照料服务、医疗保健服务、精神慰藉服务、就业服务及法律援助服务等。社区养老不同于家庭养老、机构养老,其弥补了传统家庭养老及社会机构养老的缺点，充分利用社区资源，调动社区各种力量，有效降低养老成本，减轻政府及老年人的经济负担，合理满足老年人的基本生活需求。[16]

晋凤(2010)认为社区养老服务的一大特点是其可满足老年人的多方位需求，主要包含物质经济上的供给需求、生活照顾及护理需求、精神需求以及医疗保健需求，这往往是传统家庭养老及社会机构养老所不能提供的。[17]

毛满长,李胜平(2010)提到，社区养老服务的质量相对较高，其服务人员具备家政服务、康复医疗护理等专业知识，能够最大限度地满足老年人的生活基本需求。另外，由于其服务形式的多样化，可针对不同老年人提供个性化的社区养老服务。[18]

（3）发展社区养老服务的可行性研究 社区养老是介于家庭养老与机构养老之间的、具有两者共同特点的、新的养老模式，这一新概念的提出，引起社会各界关注，并且事实证明社区养老与我国的实际国情也是非常符合的。

针对社区养老在我国是否可行，研究者纷纷表达了他们的看法，多数对我国开展社区养老服务持乐观态度，并且有研究者提到我国早已在法律层面上肯定了社区养老服务的重要作用。1992 年我国召开第 47 次联合国大会时指出，要以社区为单位，向老 年人提供基本生活照顾，使他们在舒适熟悉的环境下安度晚年，同时需要组织老年人积极参与社区活动。另外，在我国的老年人权益保障法中也指出要发展社区服务，为老年人建立基本生活相关服务，提供健康护理与康复服务，积极鼓励老年人参与文化体育等活动。

张碧涛（2010）从我国政治体制层面上考虑，认为政府已向社区养老创造了环境： 为社会市场经济的有效运行，政府已逐步将琐碎的行政事务下放到基层组织，街道办事处及居民自治委员会有一定的自主权利，发挥街道办事处及居民自治委员在社区养老服务中的作用，使其承担相应责任，为老年人提供合理的社区养老服务。[19]

[14] 史柏年.老人社区照顾的发展与策略[J].中国青年政治学院学报,1997(1): 33-38.
[15] 乔志龙.社区养老——我国城市养老模式的新选择[J].内蒙古农业大学学报,2008(6): 252-256.
[16] 陈永生.对我国社区养老的可行性分析[J].北京城市学院学报,2008(6): 45-49.
[17] 晋凤. 浅析城市社区化居家养老模式的可持续性[J]. 辽宁行政学院学报，2010(11)： 143-145.
[18] 毛满长,李胜平.社区居家养老—中国城镇养老模式探索[J].西北农林科技大学学报（社会科学版）》，2010(1): 119-123.

社区养老与家庭养老、机构养老有所不同。社区养老不是家庭养老，它是社区里的居家养老，同时它也不是机构养老，它是将机构养老的功能引入到社区，它弥补了传统家庭养老与机构养老的缺点，其主要优势有：

一、符合老年人“家”的需求。老年人年龄越大就越不愿意离开自己的老窝以及熟悉的社区，社区养老则满足了老年人这一需求，其所提供的全部服务都可以在社区范围内，或是在社区中的服务机构或是直接上门服务，唯一宗旨就是不让老人踏出社区。同时，社区养老也非常注重老年人的情感需求，在社区中会安排特定场所向他们提供交友、聊天的机会，减缓老年人孤独的心理情绪。

二、充分利用社区资源，降低养老成本。社区养老的成本之所以是最小的，这是因为老年人可在家中接受服务，可减少大量的所需设施，同时在很大程度上减轻了家庭成员赡养老人的负担，并且政府也对社区养老提供一定的补贴和扶持，因地与传统养老及机构养老相比，其养老成本较低。

（2）社区养老的模式、服务形式 社区养老，在部分地区又被称为社区照顾，主要包括两种模式：“社区内的照顾”和“由社区照顾”。“社区内的照顾”，其主要是考虑老人的基本生活需求和精神需求，向其提供专业化服务，主要包含：老年人便利服务、文化娱乐服务、医疗保健服务；“由社区照顾”模式主要是依靠家人、邻居及志愿者服务队所提供的服务，有“代用券”和“时间储蓄”两种形式，“代用券”是指在居民自愿参加社区服务活动的过程中，将其提供的服务按标准换代用券，等到自己有需要的时候便可用其兑换服务；而“时间储蓄” 是指让社区中身体好的的退休老人或是下岗工人、有时间的年轻人，自愿向老年人提供服务，所耗用的时间单位计入社区的个人账户，等他们自己有需要时，便可从其他社区居民那里获取同样时间的免费照护。

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

The neighborhood services system for the elderlies is the hub of the entire aged services systems, effectively integrating various aged services systems such as self support, family support and institution aged services system. (Li Zhiming, 2016) By building a neighborhood aged services system, the service entities and multi-party services resources will be effectively pooled and sank to the neighborhood. The neighborhood service system is mainly reflected in the neighborhood and also the integration of service resources is mainly implemented in the neighborhood. The key to establish a good interaction between institutions, communities and families relies on the neighborhood. (Li Zhiming, 2016) If there is no neighborhood environment to support, neighborhood aged services system will become empty talk. However, in the existing urban design and planning system, there is no response to the neighborhood services systems for elderlies. In other words, neighborhood services systems for elderlies and urban design & planning systems do not integrate each other nowadays, which causes the following problems:

a.(space,governance) Lacking of practical guidance to apply the services systems and supervision in the neighborhood scale

The government planning concept of taking neighborhood as an important position for old-age care has been clearly put forward, but the policy objectives only have macro guiding. Although the local governments have the responsibility to land the services systems in the local scale, they do not know how to apply it. Besides, there is no unified rules or principles to constrain and supervise. The actual situation is that there are few institutional design and arrangements for the operation of residential care services in local communities. The only policy documents in the form of “notices” and “opinions” , are only instructive, but not practical. Not binding enough. (W. Chen 2016)

b. (governance) Non-economic-sustainable model

The neighborhood aged services system has obvious characteristics of public welfare, sociality, high input of constructions and services, high operation costs and low profit space. It focus more on moral value instead of economic value, which leads the engagement of social forces are low. At the same time, the economic funds is not enough leading the construction quality of the facilities fall behind (L. Wang, 2015)

c.(space) Inadequate neighborhood design

Neighborhood aged services systems have problems in installations and facilities such as inadequate functions, not enough space and so on. (L. Gao, K. Gao, 2014)

d.(governance) Lack of communication and interation between different stakeholders

There is insufficient communication and interaction between various stakeholders in the systems. The function of the community as a platform for multi-dimensional cooperation of old-age services is not well played. The interaction between the multi-agents such as government, social organizations, markets, and families is insufficient, and communication is lacking. The software and hardware resources mastered by each subject have not yet been real-time linked. (C. Li, 2016)

China's ageing population

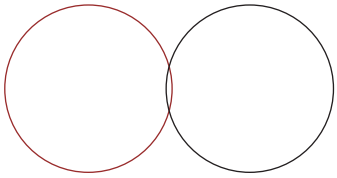


Figure 11: The current relationship between the systems and planning

Source:author

e.(space& governance& social) Inappropriate evaluation standards leading the governments do not focus on the demand of the elderlies

Inappropriate assessment standards guide governments to invest a large amount of money in tangible and visible facilities and installations, such as expanding neighborhood nursing homes, neighborhood service centers, and neighborhood daytimes care places. At the same time, the government also purchase a large number of rest beds, rest chairs, mahjong poker tables, indoor exercise equipment and other facilities. The lack of humanistic care for the needs of the elderly has even deviated from the fundamental purpose of demand-oriented. A large number of neighborhood daycare centers are vacant, without the participation of the elderly, resulting in more surface services and a poor reputation among the elderlies. (W. Chen 2016)

f. (space &governance) Lack of links and integration between different neighbourhoods

The old-age resources belong to different neighborhoods, and the resources between the neighborhoods lack links and integration. Neighborhoods aged resources are usually not open to the outside world and cannot flow freely between neighborhoods, resulting in waste of resources and inefficient using. (C. Li, 2016)

g.(governance) Do not have the specialized institution for neighborhood aged services systems management

When Western developed countries implement the community services systems, they usually establish specialized community pension service institutions, so that the community pension work is legalized, institutionalized and orderly. However, this special institution is lacking in China. The level of neighborhood governance in China is still not high. There is no self-contained system of operation, and the corresponding professional neighborhood management staffs are also in short supply. The current neighborhood managers are mainly residents of the neighborhood committee, volunteers and some non-profit organizations. There is often a lack of collaboration between them. (Y. Zhang, L. Zhou, X. Ye, 2017)

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

- Global ageing population

Image 11: Photos of Day-care center in the Wangyuehu District

Source: Author

China's ageing population

Wangyuehu District covers an area of 1.57 square kilometers and are composed by seven communities, 48,000 population. The aging phenomenon is prominent, since there are over 9000 elderlies. In order to relieve the ageing pressure, Wangyuehu District builds up neighborhood services systems. Taking "life care", "health care" and "spiritual care" as the service content, it is mainly open to three types of elderly people:

A. Are unable to work, have no source of livelihood and have no protector and provider.
B. Advanced age, epsecially poor or losing the only child
C.'Empty-nested' elderly who need and can afford the services

The services systems can provide daily meals, daily housekeeping, health care, recreation, spiritual comfort, legal rights protection and other voluntary services. According to the actual situation and service needs of the elderly, it has been divided into free services, compensatory services and paid services. To enrich the cultural life of the elderly, the center will regularly organize recreational activities such as reading, calligraphy, painting, chess and board game.
(District, T. s. o. W., 2015)

1.INTRODUCTION &MOTIVATION

2.1 CONTEXT

Global ageing population

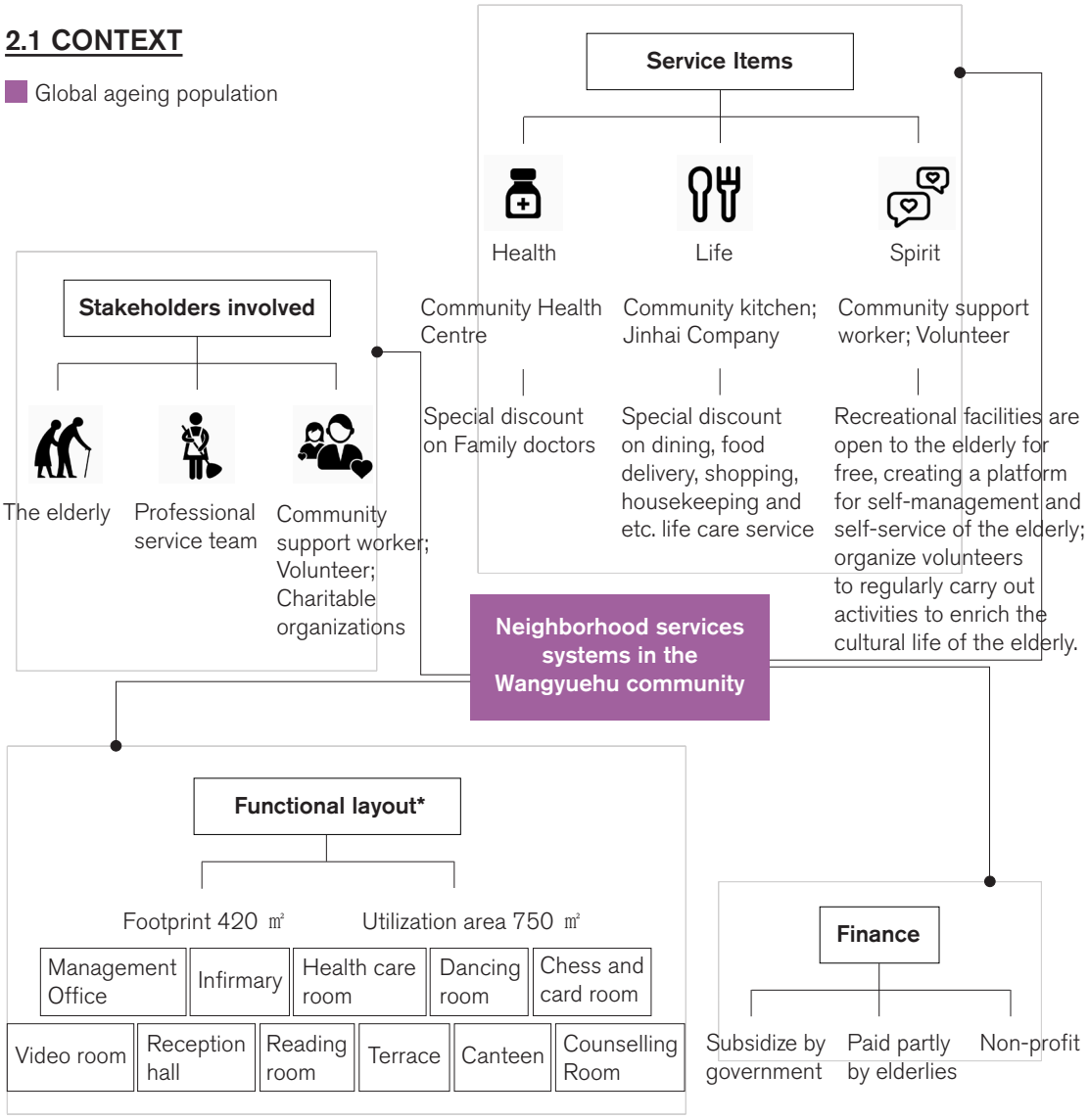


Figure 13: Neighborhood services systems in the Wangyuehu District

Source:Author

Functional layout*: All of these functions are centralized in one building

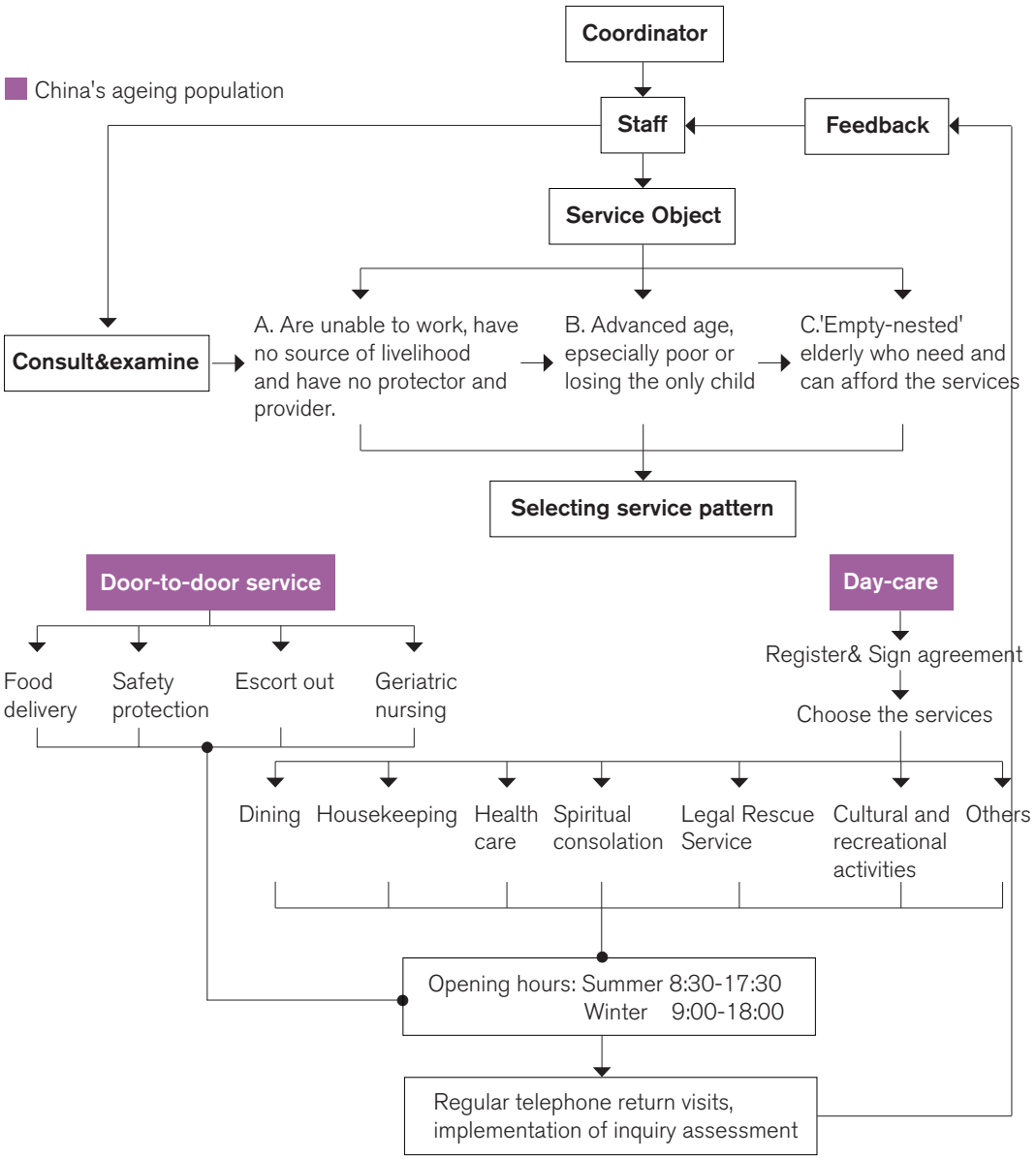


Figure 13:Service flow chart of Wangyuehu District

Source: Author