

GATED ANONYMITY VERSUS UNGATED COMMUNITY

Overcoming social, functional and physical borders through urban configuration in Baishizhou.

MSc Thesis

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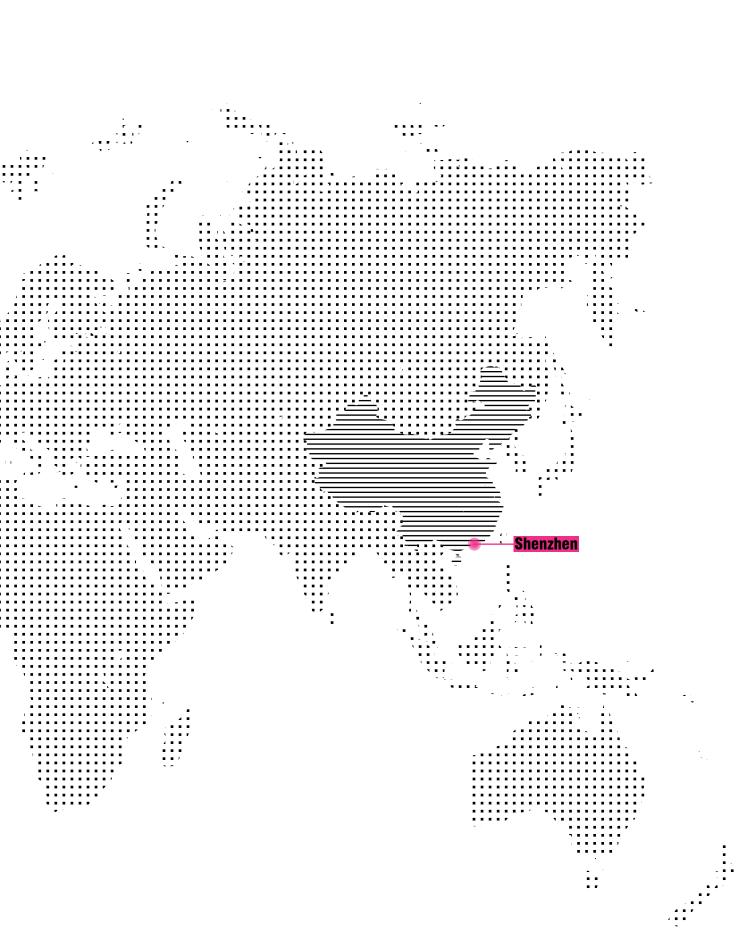
Thank you all and enjoy the final result!

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CHINA AND SHENZHEN IN GLOBAL CONTEXT









01. INTRODUCTION

INTRODUCTION

During the twentieth century, cities placed economic expansion high on their agenda at the cost of social well-being and the environment. In the two graphs in *figure 1*, urbanisation rates and GDP per capita are presented in a global context. The social effects of this economic expansion include homelessness, exclusion, insecurity, criminality and loss of cultural identity. Furthermore, environmental effects such as bad air quality, pollution and low density urban sprawl arose. The economy changed from a national economy to city economies; a huge leap in scale causing local higher densities, traffic congestions and deterioration of infrastructure and living conditions in the built environments (van Nes, 2007).

In China, where Economic Reforms (Open Door Policy) where introduced in 1978, this change in economy had an enormous impact. Cities where Special Economic Zones (SEZ) where introduced, such as Shanghai and Shenzhen, changed in scale due to allowing foreign investments. Cities urbanised rapidly as many rural residents moved towards the city in search for jobs and happiness. Cities such as Shenzhen and Shanghai became wealthy, changing their housing market drastically. Was it once all owned by the government, the housing stock is now based on market forces and speculation. Migrants had no choice but to live in floating villages and illegal settlements. Moreover, the government bought out most private land owners to change their property into state-owned land. Since residential development was implemented to maximise profits for their investment, emphasis was put upon the construction of expensive private estates for the higher classes of society. This process changed the structure of cities and surrounding areas from traditional small scale housing, such as Hutongs, to large private estates for the rich (Hao, 2012). This process dramatically affected the use of public space and street life in large Chinese cities. Streets became anonymous spaces and public facilities where placed inside the walls of large housing complexes (Levitt, 2012). Due to the rise of anonymous streets and anonymous public spaces, insecure and crime oriented urban structures arose.

GATED COMMUNITIES

In the mid to late twentieth century, a renewed urban form began to appear in cities; gated communities and enclaves. Based on ancient and traditional forms, these new enclaves appeared primarily in the United States but were rapidly adopted by modern settlements in South America, South Africa and Asia. (Blakely and Snyder, 1997). Old neighbourhoods closed their streets, protecting their area and reducing traffic, transforming public space into private realms. This phenomenon challenged not only the spatial conditions of the city, but also impinged upon social and organi-

sational aspects (Grant and Mittelsteadt, 2004). A rather complicating factor is that the historical context of these enclaves differs in each country. Moreover, they are all linked to a global trend; to ensure safety and security for local citizens (Low, 2001).

Chinese gated communities arose more than 3000 years ago, as status symbol to separate emperor from citizens and urban from rural citizens (Jin, 1993). However, current gated communities in China are based on the American model of security and prestige (Le Coix and Webster, 2006). But which impact does this new development have on urban configuration and social life in high-density Chinese cities?

NEW TOWNS: SHENZHEN

The trend of gating is also visible in the city of Shenzhen. Shenzhen was an agriculture area the size of Flevoland in The Netherlands. Only 300.000 inhabitants lived here as farmers or fishermen. When in this area a SEZ was assigned in 1978, to compete with the economy of Hong Kong, the city rapidly grew. Starting from scratch most of the original villages were demolished and had to make way for new developments. Massive migration took off from the rural areas to Shenzhen. Shenzhen underwent a rapid economic growth, resulting in high land prices and higher wages for employees. The city focused on high rise, high density and upper class housing units to increase profits. The lack of proper social housing forced migrants to build their own houses or live in illegal (existing) settlements: tents, floating villages or urban villages (Mars and Hornsby, 2008).

Urban villages are a very unique feature of Shenzhen. Majority of the migrants and lower social classes in the city are hosted by (illegal) settlements. They are situated in between wealthy gated communities, construction sites and important attractions in the city but are separated by rigid walls and security guards.

URBAN VILLAGE: BAISHIZHOU

Baishizhou, which means "White Stone", is currently one of the few urban villages left in the SEZ of Shenzhen. It originally consisted of 5 villages, inhabited by farmers and fishermen. The arable land was in hands of the Sha He (agriculture) and Overseas Chinese Town (OCT, Industry), until they split in 1987. The first farmers arrived here during the 1950's and built small farmer dormitories, which are still present today. During the reforms, the government bought the land from the farmers for a small amount of money. Around 1995 – 2000 the area started to urbanise rapidly. One of the most expensive gated communities in Shenzhen (Portofino) was build next to a large factory area (previously belonging to OCT). Real-Estate agents started to develop high rise and upper

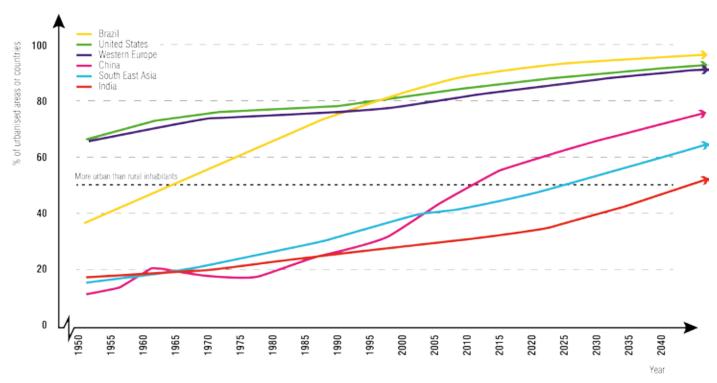


Figure 1a. Urbanisation rates in global conext in percentages. When it reaches over 50%, it means that there are more urban citizens than rural inhabitants. In China, the this point was reached around 2012.

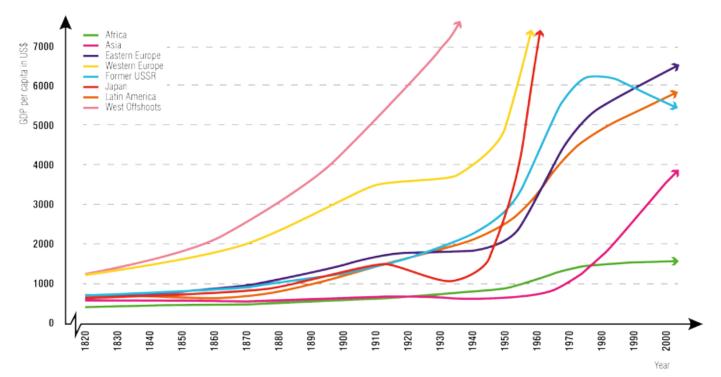


Figure 1b. Economic expansion had an immense impact on wealth and rise in GDP in countries. Where Western countries have experienced a relatively stable growth, Asia has experienced this growth only in the past decades.

class residential areas, enclosed by gates. Due to this development, migrants moved towards Baishizhou to live in the cheap, upcoming urban village. The urban village owes it shape to the strong borders with the industrial area and gated communities and is unable to expand further. The native farmers, who received compensated from the government, have no other way than to add new level to the existing buildings. Some building blocks go as high as 12 storeys.

Currently Baishizhou counts around 120.000 inhabitants, where only 7000 are legally registered. The other 113.000 inhabitants are migrants while 38.000 is "floating population". In Baishizhou only 82.000 inhabitants are permanent residents (legal and illegal, Hong Kong University, 2011). The quarter is situated next to popular tourist destinations, such as *Window of the World, Happy Valley*, etc, and has a very good connection with Futian CBD (Central Business District).

The urban village is surrounded by gated communities, populated by inhabitants belonging to the upper class who use private facilities. The interaction between social classes is minimal and this lack of interaction results in anonymous, homogenous neighbourhoods and zones with a different degree of publicity within the urban fabric. In *figure 2*, a traditional Chinese street is shown with informal shops and activities. In figure 3, the complete opposite of the traditional street life is presented: privatised residential quarters surrounded by walls. The street becomes anonymous, since lack of facilities and social security takes over. The complexity of the problem is huge. It is not only necessary to slow down the process of privatisation, it is also crucial to take into account the different social groups, especially the floating/migrant population. Baishizhou is scheduled for possible demolition in future. The floating population will have no rights when Baishizhou is demolished. They will either have to move back to their hometown or move to illegal settlements outside of Baishizhou.

How can we change the urban configuration to:

- Enhance the interaction between different social classes?
- Overcome the social, physical and functional borders?
- Decrease anonymity and criminality?
- To avoid local displacement?

MOTIVATION

My first trip to China was in 2012. I travelled through Mongolia and China for six weeks and completely fell in love with the country. The culture, the traditions and the mega cities fascinated me. Since that trip I have visited China several other times.

The history of China, its rapid urbanisation and expansion of cities during past 3 decades initiated my curiosity to study the entanglement of traditional Chinese culture and modern urban developments. The China situation is different from the past situation during industrialisation (\sim 150 years) in The Netherlands, or Europe for that matter. The shrinking control by the Chinese State over the housing stock increased the number of illegal settlements within cities. This motivated me to study the problems that arise from this



Figure 2. Traditional Chinese streetlife, where informal shops and other facilities dominate the street view. Where street vendors hang around and products are sold in the public space.



Figure 3. The current trend in China: gated communities. These residential quarters are seperated from the street by rigid walls. Therefore, streets become anonymous.

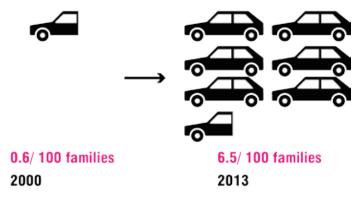


Figure 4. The GDP rise in China is visible through luxury items, such as car ownership. The increase in the number of cars dramatically changes the structure of Chinese cities (Woetzel et al., 2009).



Figure 5. High contrast between the kampong and the high rise residential buildings for the rich in central Jakarta, Indonesia.



Figure 6. Edificio Roof, Jardim das bandeiras residential buildings next to the Paraisópolis favela, Sao Paulo, Brazil (Evans, 2011).



Figure 7. In Mumbai, India, the development of wealthy privatised forts is rapidly increasing, creating a fringe between the shanty town.

change. The challenge is to find possible solutions for the great inequalities that have risen in Chines society. Social housing is not high on the agenda, because developers are generally not interested in these types of projects due to lack of immediate profit. During my Shenzhen site visit I noticed that not only the housing was a major issue, but particularly the organisation or better the lack of public space (illustrated by *figures 2 and 3*). When the government decides to lease the land to a developer, this developer (and the government), ignores existing environment, structures and its inhabitants. Focus lies on building large gated communities for the upper-middle class and upper class. As the income of the urban inhabitants improved, motorised transportation increased (Levitt, 2012). The increase of car ownership is presented in *figure 4*. This changed traditional streetscape from a centre of interaction to a place of desertion.

All the issues discussed above put tension on traditional Chinese values and culture. Should Chinese cities only consist of roads and walls? In an effort to preserve quality of life, the "Shenzhen Scenario's 2.0 studio" focuses on *livability*, preserving social coherence. Moreover, are profits more important than history? Baishizhou is an example of an area where different social classes live completely separated lives. Obviously, services and economy are highly intertwined. Who will clean your house or work in your garden when only highly occupied citizens remain in Shenzhen? The citizens should stem from multiple social classes that interact and complement each other.

IT IS A GLOBAL PROBLEM! Examples of inequality between private estates and migrant/illegal villages in cities can be seen everywhere in the world. In Jakarta, Kampongs are situated in between high rise, wealthy residential (*figure 5*). *Figure 6* presents the separation of the favela and gated community in Sao Paulo. The situation in Mumbai is not any different (*figure 7*).

OUTLINE

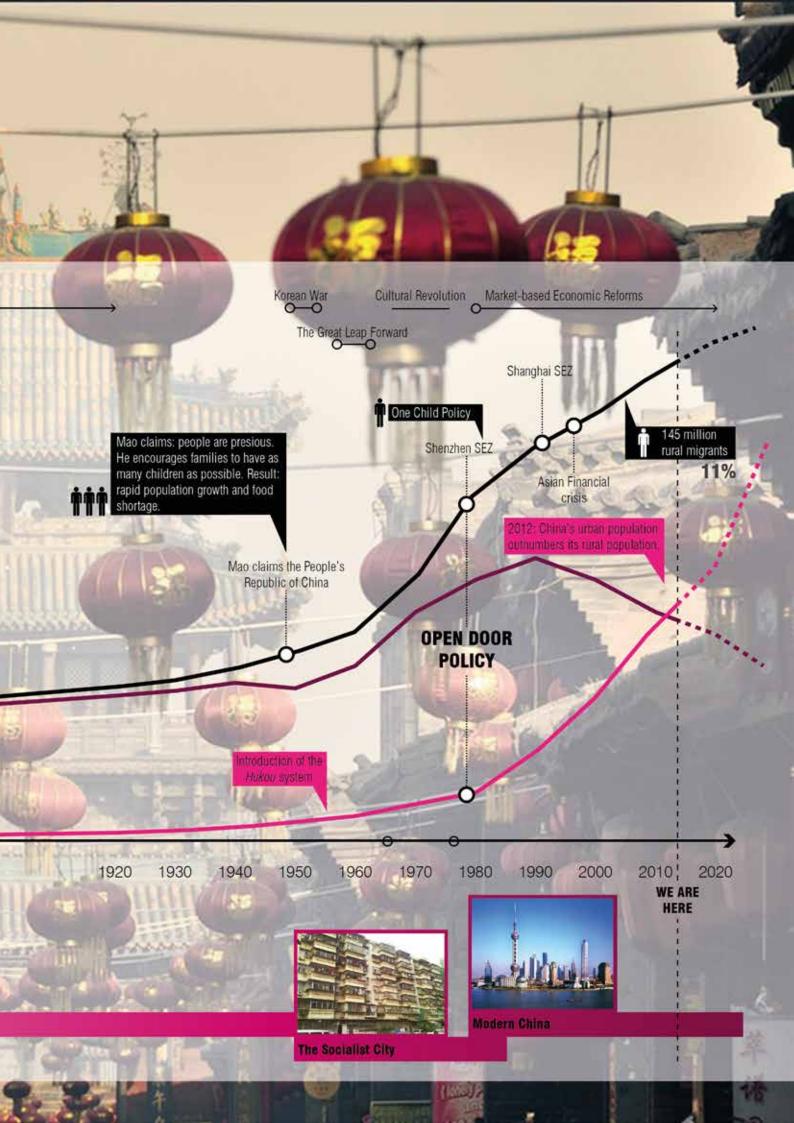
The following chapter presents a thorough investigation on city development in China. A historical overview until 1978 is given guided by social, political and economic changes. The influence on the development of Chinese cities is outlined via illustrations. Furthermore, various housing typologies and the introduction of gated communities is discussed. In chapter three, the (r)evolution of New Town Shenzhen is described. The urbanisation process and urban village principle will be explained. Chapter four focuses on a central quarter of Shenzhen: Baishizhou. Its history, demographics and spatial structure are explored. Several urgent problems are identified and analysed in detail. Chapter five gives various methodological approaches towards finding solutions. Through Space Syntax, case studies and density study, a strategy is formulated. 3D models, maps and collages are presented in chapter six. It is in this chapter that analyses, methodology and strategy are converted into an extensive spatial plan. The last chapter, seven, concludes the report in the form of a summary, recommendation and reflection.





02. CITY DEVELOPMENT IN CHINA: SOCIAL, ECONOMIC AND POLITICAL ASPECTS





Historical overview until 1978

China has a long and extensive (urban) history, with towns dating back to the 2600 BC. The morphology of these cities was influenced by social, economic but more importantly political changes. This had major impact on how cities evolved. In the following chapter the development and history of "the Chinese city" will be described. The history spans 7 periods of time: the *Traditional Chinese city* (5000 BC - 770 BC), the *Closed Walled city* (770 BC - AD 906), the *Open city* (AD 618 - 1840), the *Colonial city* (1840 - 1949), the *Socialist city* (1949 - 1985), the *Economic Reforms* (1978-) and finally the current situation (2014-).

Each phase projects distinctive characteristics and planning philosophy while the friction between urban and rural residents plays an important role.

TRADITIONAL CHINESE CITY (5000 BC - 770 BC)

The traditional Chinese city originated from five principal morphological characteristics; walled enclosure, axiality, North-South orientation, symmetrical layout and a closed courtyard. These characteristics are shown in figure 8. The cities were founded primarily for political and military needs, serving as centre and symbol of authority. An official design system was established by the state during the Zhou Dynasty (1028 – 770 BC) and was applied throughout the country. Cities were constructed over a short period of time and were based on a strict rectangular plan instead of organic growth. Layouts consisted of rectangular areas surrounded by walls for protection and barrier between city and rural population. An additional inner wall was constructed to demonstrate the importance of the palace towards the urban residents. This official design system was regarded as ideal city. The importance of a city was demonstrated through its size, population, number of streets etc.

Figure 9 shows the ideal city design from the Western Zhou Dynasty (1028 - 771 BC). The ideal city was using a grid system of 4500 m by 4500 m with nine streets running north-south and nine streets running east-west; the odd number to create a central axis running from North to South (maintaining East-West symmetry). The imperial palace (1) was located in the centre of the city, its entrance facing south. The ancestor's altar (2) was situated at the left and a ceremonial place (3) at the right hand side of the palace. Markets (4) were located behind the imperial palace along the central axis. Within the city wall, symmetrical districts with residential houses (5) were built (Jin, 1993).

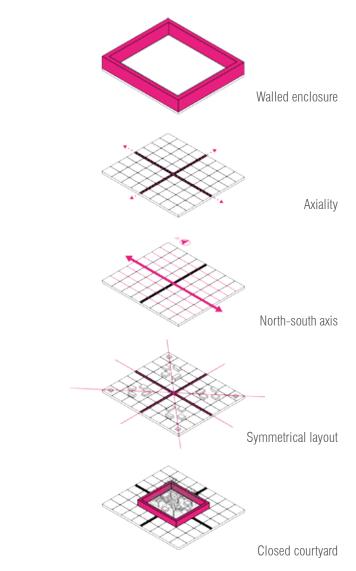


Figure 8. The traditional Chinese city is originated from five principal morphological characteristics.

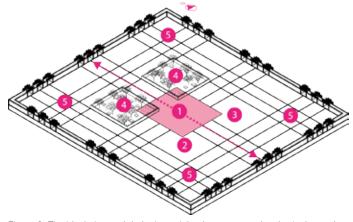
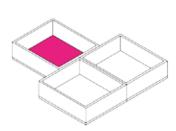
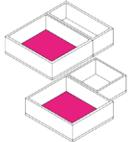


Figure 9. The ideal city model: the imperial palace as central authority located on the central north-south axis (1); the ancestor's altar (2) and ceremonial place (3) towards the South. Markets (4) located on the North side of the palace along the main axis and residential houses and buildings (5) symmetrically situated around the centre (Jin, 1993).



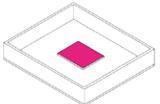
Multi city

Three or more cities: one as imperial city, other as centralized commercial or handicraft zones



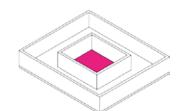
Double city

Two cities side by side: one as imperial city.



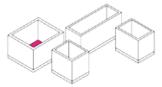
Single city

One city with a one outer wall and no division between other cities



Inlaid city

Two or more cities within a large city containing several walls. One small city as imperial city and another as handicraft area.



Cluster city

Multiple cities around an imperial city all seperated by walls.

Figure 10. Combination of cities after expansion. Multiple (sub-urban) cities were combined to increase power and territory (Jin, 1993).

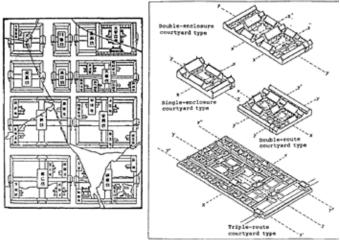


Figure 11. Neighbourhood units consisted of multiple houses around a courtyard surrounded by a windowless wall to decrease social interaction, but increasing social security (Skinner et al., 1977).

CLOSED WALLED CITY (770 BC - AD 906)

During the Western Zhou Dynasty the Chinese sense of unique identity and cultural superiority grows. For the first time, China becomes known as Zhong Guo (中国 or "Middle Kingdom"), a name that is still used by the Chinese today (Carr, 2012).

In the following Spring and Autumn period (722 - 481 BC), the Zhou Dynasty collapses and China fragments into several smaller states due to political disorder and reforms. As a result the authority of the cities, dukes and princes, illegally expand their cities to increase their territory and power. Multiple urban and sub-urban cities are joined, creating cities covering 15 -20 km². Figure 10 gives examples of combined cities; each city or sub city has its own wall, for the reasons mentioned above. As a result, the new, expanded city, contained of multiple inner walls and configurations. In addition, cities changed their focus from regular to geographical patterns, according to relief of the countryside and/ or availability of natural resources. As a result of these changes, commercial activities, such as handicrafts and markets blossomed and expanded rapidly, dominating large parts of the city. Around the imperial palace and outer city, commercial zones arise at the expense of political and administrative areas. The first waterways are constructed around the city walls providing additional protection. The residential zones undergo large transformations as well. Each individual house has its own courtyard. A wall may enclose a single house or a number of houses. These walls are windowless and separate households from the rest of the city. This reduces social interaction within the neighbourhood and increases security (Jin, 1993). In figure 11 several different types of neighbourhood courtvard houses are presented.

During the Qin Dynasty (221 - 207 BC), commercial activities are increasing steadily as a result of political stability and city expansion. Qin divided the organisation of the state in 36 administrative divisions with sub divisions (this system is still apparent today). Moreover, regional differences were eliminated; money, weights, measures and most importantly the written Chinese language were standardised. Social reform took place, for each individual, profession, education and age was administered (and ranked). This system formed the base of the Hukou, which is still present in China. The building strategy in cities did not change. However, instead of the rigid symmetrical layouts, the city was formed after an image of the stars in the sky. The location of schools, markets, palaces and temples was determined according to astrology, instead of the North-South axis (Jin, 1993). Qin invested in a network of roads, waterways and irrigation systems and was responsible for the first version of the Great Wall of China. A major protection against attacks from outside. During the same period the Terracotta Army was built in Xi'an (Carr, 2012).

The Dynasty that followed, $Han\ 206\ BC-220\ AD)$ brought one of China's Golden Ages, where commercial activities, natural sciences and arts blossomed. The development of the Silk Road accelerated economical growth, as merchants from different cultures could now trade and travel from Asia to Rome, and Persia (Carr, 2012). Towns flourished and their number grew from 900 to almost 1600 towns. The layout of these towns was similar to the layout of larger cities (Jin, 1993).

During the *Three Kingdoms Period (221- 264)*, a civil war breaks out due to collapse of Han (Carr, 2012). Cities further expanded and their layout becomes a mix of Zhou, Qin and Han dynasty designs. However, a strict North-South axis was recreated (Skinner et al., 1977). This became the most significant morphological characteristic. The simple grid system is replaced by a complicated chess-board like network as shown in *figure 12*. Although cities expand, the housing typology remains based on courtyards (Confucian philosophy). Neighbourhoods become standardised, with units equal and regular in size. There is an increasing integration with markets; markets expand along the central axis.

OPEN CITY (AD 618 - 1840)

There are not many changes during the Sui -and Tang Dynasty. However, with the $Song\ Dynasty\ (960-1275)$ a strong economic and commercial growth is established. Cities expand rapidly due to increasing population. The city transforms from a closed neighbourhood and market system to an open system. The city does not longer divide markets and residential districts. The small, but homogeneous neighbourhoods disintegrate and social interaction increases. Instead of markets, individual shops along the main streets take over and increase commercial activities. This is shown in *figure 13*. The 11th century was prosperous for China, as an industrial revolution took place: raw materials, such as salt and iron were produced in massive quantities (Carr, 2012).

The following *Yuan* (1276 – 1368) and *Ming* (1368 – 1649) *Dynasties* show a massive growth of market centres and commercial towns. Cities along the main routes and waterways, create city-regional networks. *Figure 14 and 15* show diagrams of this network expansion. Commercial activity grows beyond city walls and expansions of cities through suburbs emerge. In the mid-15th century there is a large migration of former farmers towards cities. They are after better paying jobs, which leads to further expansion of cities. City development does not follow the rigid urban system, but rather expands along natural morphological land and economic networks (Jin, 1993). The best symbols for the Ming Dynasty is the rebuilt and extension of the Great Wall of China and the construction of The Forbidden City. In the latter emperors could distance themselves from society (and reality?). The *Qing dynasty* (1645 – 1911) continues along the same path.

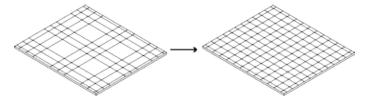


Figure 12. The city network structure changes from a grid of 9 by 9 streets to a more complicated Chess-Board structure.

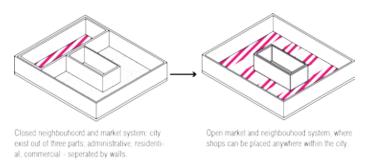


Figure 13. Transition from a closed and separated urban structure to an open and integrated system.

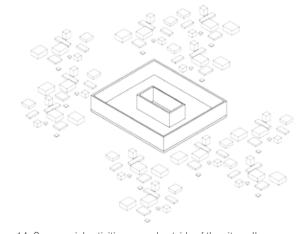


Figure 14. Commercial activities expand outside of the city walls.



Figure 15. City-regional cities arise, with market and commercial towns along main routes and water networks as connecting element.

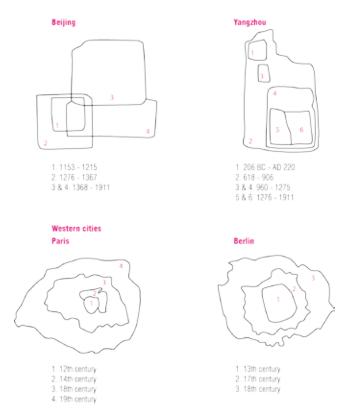


Figure 16. The difference of city expansion in Western and Chinese cities. Whereas Paris and Berlin expand through rings, Chinese cities are flocked together by multiple cities with outer walls, creating discontinuous networks (Jin, 1993).



Figure 17. The discontinuation of the city due to a large wall; city wall of Xi'an.

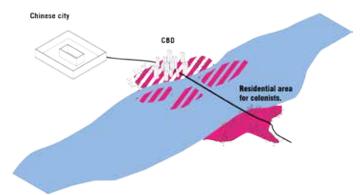


Figure 18. Treaty ports, for example in Fuzhou, developed along large water ways during the colonial era. The CBD was introduced for trading with Western compagnies.

There are four important conclusions to draw from analysing the evolution of the Chinese cities. Spatially they differ structurally from European cities. First, the cities lack a specific centre because of the continuously changing location of the palace. Secondly, the original city centre lacked public space, as it mainly served administrative or political purposes. Third, the ongoing expansion results in forming combinations of multiple cities into larger urbanised areas. There are discontinues, since multiple walls and barriers overlap. *Figure 16* presents the difference between European and Chinese cities and *figure 17* shows the discontinuation of the city in Xi'an. Finally, the traditional economic growth of china was based on agricultural activity and hardly any large production or manufacturing industry (Jin, 1993).

COLONIAL CITY (1840 - 1949)

In time, China's power shifted towards the West. Because China was isolated off from the rest of the world, it did not experience the an industrial revolution in the 18th and 19th century. China believed to be self-supporting and did not want to adopt a Western trading system. Eventually it did allow trade with European countries, but only to certain extend (introduction of Canton system). Foreign colonists entered China and introduced a new type of rapid urban growth. The introduction of modern industrial technologies made it possible to invest in a large railway expansion and introduction of steamboats (1840). Latter led to emigration of hundreds of thousands Chinese searching for a better life outside of China (Carr, 2012).

Westerners initiated another type of city: treaty ports. These cities were mainly situated along the coast or large water ways. The cities where divided into three different zones: production, circulation and residential areas. Production (industries) was mainly situated outside of the city centre and near railway stations. The separation of functions created a decentralised city with multiple nuclei. This is seen in *figure 18* where the layout of the city of Fuzhou is schematically presented as a treaty port.

A new type of district was developed: CBD — Central Business District. This district consisted of a bazaar, trading company, shopping centre, banks and various business offices in the treaty port. Mostly consisting of multi-storey buildings, this formed a large contrast with the traditional Chinese buildings. Traditional buildings consisted of one or two storeys with shop fronts. Also, a special zone for the Western colonists was built close to the CBD and treaty port. The city grid was transformed from the traditional grid pattern into a radial structure. Large public spaces were introduced as shown in *figure 19*.

In addition, changes in the urban form appeared due to the growth of the railway system. It strongly encouraged cities to expand in every single direction. The cities diverted from expansion along the water front, to expansion along the railroad tracks and railway junctions. In cities situated along the water, but disconnected from railroads, the population significantly declined (Jin, 1993).

In the following century, millions of Chinese would die due to wars, floods, droughts and diseases. Western trading companies are forced to find alternative ports, when Shanghai was hit by the Taipei Rebellion. In the 1920's Shanghai is the 5th largest city in the world, with Chinese and a sizable number of foreign inhabitants. It is then in 1921, that *Mao Zedong* calls for change and institutes the Chinese Communist Party (CCP) with the slogan: "Destroy the Old China"! Mostly peasants, farmers and workers choose Mao's side. After the fall of the empire, China's political landscape drastically changes and is dominated by the Nationalist Party (Kwomintang -KMT) and the Chinese communist party. Another civil war breaks out and eventually Mao takes the upper hand as his party is seen as the party of the common man. His "red army" defeats the KMT and on October 1st, 1949 Mao Zedong's "People's Republic of China" is founded (Carr, 2012). KMT flees to what becomes later known as Taiwan.

→

Figure 19. Cities structure changed from a complicated chess board to a radial structure (Jin, 1993).

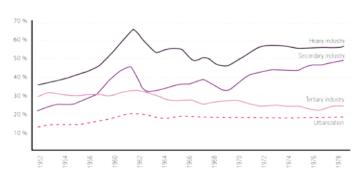


Figure 20. During the industralisation process post-war, Mao lays focus on heavy industry, without massive urbanisation.

SOCIALIST CITY (1949 - 1985)

With Mao in power in 1949, the adaptation of the theory of Karl Marx as social lead was a fact: the city is an evil place. The rapid industrialisation and urbanisation has to slow down, since the processed affect quality of life. The concentration and separation of economic, administrative and cultural activities is recognised as bad division between urban and rural life. However, Mao understood that industrialisation was of major importance to his republic; therefore he proclaimed a highly productive society without urbanisation. He opted for a class-less and self-reliant community with spatial equality. He stood up for the working class and the destruction of social and economic differences between urbanised areas and the countryside. This led to nationalisation of land and housing market (Jin, 1993).

In the 1950's the shift from agricultural production to heavy industry took place (figure 20). Industrial areas exploded in size and left little space for urbanisation. Residential units were built close by due to poor public transport and network. The residential units and factories were heavily influenced by Stalin's socialist Soviet and Eastern European style: concrete building blocks. Frustrated by the slow modernisation, Mao wants to take industrialisation to the next level introducing in the late 1950's the "Great Leap Forward" (Carr, 2012). This turned out to be a disaster for China: rapid unplanned and disorderly expansion of cities creates industrial belts. People are not regarded as individuals, but as communes. Everything must be shared and no luxury items are allowed. Small satellite towns appear around the large cities and industry is slowly pushed

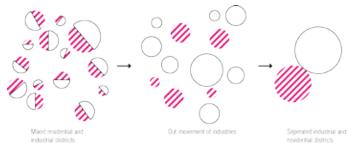


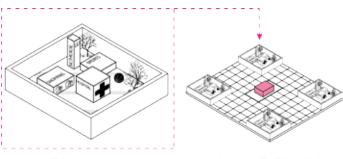
Figure 21. From city centres where residential and industry are mixed together to a complete separation of industry in housing. Industry moves outside the cities in so called satellite towns (Jin, 1993).



Figure 22. In the 1950's the Hukou is introduced. It ensures a restricted migration from rural areas to cities. People with a rural Hukou only benefit from health care, education and pension in rural areas and not in cities.



Figure 23. Danwei housing in Shenzhen, China (photo by Haotian Lin).



Work-unit compounds

Implemented; self sufficient sub cities

Figure 24. Work-unit compound; residential district enclosed by a wall with all the nessessary facilities. Situated within the city, next to the industrial factories. Usually every factory had its own work-unit compound; these became sub-centres within the city.



Figure 25. Chinese propaganda poster (1967) during the Cultural Revolution: "Destroy the old world; Forge the new world". The poster shows a red army guard of Mao, who demolishes historical Chinese artefacts.

towards the hinterlands. This development is illustrated in *figure 21*. The "Hukou" (*figure 22*) is introduced to prevent people from moving from the hinterlands towards the cities. Men are supposed to work in factories, while women work in agriculture. The cities can therefore become self-supporting.

China has no experience in rigid urban planning. They invent structures inspired by foreign socialist cities. Urban expansion consists of a symmetrical layout with a grid pattern including a large symbolic square or centre. Work-unit compounds or "Danwei" housing is introduced: closed-courtyard units with standardised buildings (figure 23). A work-unit compound is presented in left illustration in figure 24. Each unit is enclosed by including all necessary facilities such as: school, shops, supermarket, hospital, parks, restaurants and theatres close to the factories. But rather than adopting the Soviet model where residential areas are spatially separated from the workplace, China attempts to integrate these two facilities. These self-sufficient work-living compounds became sub-centres within the city (Jin, 1993). This is shown in figure 24 (right).

The Cultural Revolution in 1966 is a move by Mao to regain power. He orders his red army to destroy the old China and make way for "Modern China". Many people are killed and old traditional Chinese neighbourhoods, monuments and temples are completely destroyed. A propaganda poster is presented in *figure 25*. In 1971 China deflates its isolation and opens up to the West with a historic visit from US President Nixon. The relationship between the US and China is improved. 10 Years after the start of the Cultural Revolution, Mao dies in 1976 and the start of a new era approaches (Carr, 2012).

THE ECONOMIC REFORMS OF 1978

Deng Xiaoping takes over and realised that poverty and lack of progress are fatal. He introduces a new, more capitalistic, Chinese economy. In 1978 he introduces the "Four Modernisations Programme" (agriculture, defence, science and industry) and introduces the "Open Door Policy" allowing foreign companies to invest in China. Coca Cola™ is one of the first to be admitted to the Chinese Market (figure 26). Along the East coast, a SEZ's are introduced to boost economic growth (Mars and Hornsby, 2008). An immense urbanisation takes place and in 1980, the one-child policy is introduced to stabilise the population as it reaches almost 900 million. The first SEZ in introduced next to Hong Kong; Shenzhen. An area with only 300.000 inhabitants is converted into a mega city (so called New Town) and grows to a population of 12 million in 2014 (INTI, 2012). Shenzhen turns out to be a great success and catalyser for the rest of China. As a result China opens another two dozen SEZ' along the coast. Japanese and Western companies built immense factories and headquarters. In 1987 the first KFC[™] opens its doors (figure 27) and in 1991 MacDonald's [™] arrives in China. In 1990 China's biggest SEZ launches in Pudong. Shanghai, where rapid urbanisation takes place and population grows within 30 years from 12 to 24 million (Brook, 2013). At the start of the 21st century, China has become one of the largest political forces (in Asia), with a booming economy. Cheap labour and sufficient capital generate an annual growth of \sim 10%.

GROWING INEQUALITY

Since the introduction of the economic reforms in China in 1978, the securities of the Danwei have been lost: high rise buildings, luxurious hotels and large shopping malls are replacing the traditional Chinese shopping streets (Hao, 2012). With the transition from a collective land and totalitarian controlled society to a society dominated by market forces, the Chinese peasant is responsible for his own individual survival, resulting in a mass migration to cities. *Figure 28* shows the current density of inhabitants in China. A result of rapid urbanisation is presented on the opposite page, where *figure 29* shows Shanghai in 1980. Within 30 years, the skyline completely changed as Pudong emerged (*figure 30*).

Due to overcrowded cities and lack of public facilities, the upper class tries to dissociate themselves from the chaotic and polluted urban realm (Mars and Hornsby, 2008). As a result large private residential communities for the rich are built, dividing the different social classes while secluding themselves from the "danger" outside their walls. In the transition from a planned economy to a market-oriented society the government's top political concern is social stability. Therefore, the government encourages "gating" as an effective measure against crime and increased control, safety and stability (Miao, 2010). The difference between the development of a country and global trends is measured in the GINI Index. The inequality of a country is rated between 0 and 1. The higher the number, the more inequal the country is (The World Bank,



Figure 26. Coca Cola [™] enters Chinese market in 1978 (Coca Cola Company, 2013).



Figure 27. Kentucky Fried Chicken™ became the first Western food company to open its doors, Beijing 1987 (The Guardian, 2013).



Figure 28. Urbanisation rates in China per district. The areas where SEZ were introduced the past decades have been rapidly urbanised and are situated on the coast.

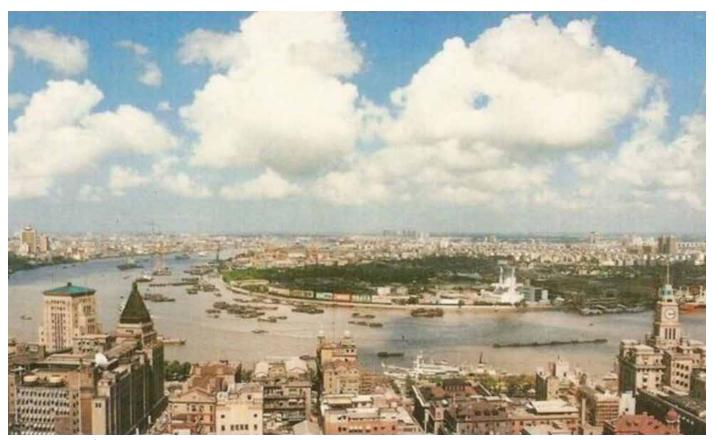


Figure 29. Pudong, Shanghai in 1980. It exists of multiple villages and housing units from the colonial era, with some high rise at the Bund.



Figure 30. Pudong area in China in 2010. An immense transformation of high-rise skyscrapers of (foreign) companies and residential units.

2013). Of a total of 136 countries, China is listed between Brazil and USA. quite low (*figure 31*). With Sweden at number 1 and Lesotho at the bottom of the scale.

NEW TOWNS

When the Open Door Policy was introduced, the area bordering Hong Kong was selected to have the first Special Economic Zone (Shenzhen). Major migration took place, as illustrated in figure 32. Foreign investment and competition with Hong Kong, result in increasing wages in cities and GDP throughout China. With more people becoming wealthy, Chinese start to focus on Western amenities. Within 7 years car ownership increased by 1300%. By 2025. It is expected that China will have 926 million in habitants. Prognoses is that almost half of the total Chinese population (350 million) will live in cities. Of these, 240 million are migrants. There will be more than 221 cities with over 1 million citizens. Figure 33 shows the increase in GDP over past decades and figure 34 presents a summary of expected transitions (Zhuonyong, 2008). A number of cities already exist and are rapidly expanding. Several cities are developed from scratch: New Towns. Here the government buys out rural inhabitants for small money and wipes out everything. These people become instant citizens and their original house will be demolished to make place for high-rise buildings, high-dense neighbourhoods. A type of environment that is completely unfamiliar to them.

CONSEQUENCES OF URBANISATION

The impact of this rapid development is described in *figure 34*. In the forthcoming 10 years, 350 million inhabitants will become citizens. Of these 350 million, 240 million will be rural migrants who will (illegally) live and work in cities. China will build more New Towns, such as Shenzhen, with at an immense rate of 1500 skyscrapers per year. This is equivalent to a new "Downtown Chicago" every year. The increase in GDP generates more wealthy citizens that will invest in luxury products, such as cars. Due to increase in motorised traffic, 5 billion m² of roads will be paved within the next 10 years. The new cities are built from a road grid structure to sustain the vast number of cars. Cities will sprawl because Chinese inhabitants demand bigger houses and living space. Urban housing units will expand from 4,6 to 22,6 m² and rural housing from 8,1 to 31,6 m² (Woetzel et al., 2009). At the same time the government issues the statement that "benefits of urbanisation are more important than history" (Shenzhen University, 2013). The impressive expansion results in the loss of historical, cultural and traditional context. The wealthier the citizens become, the more prestigious they would like to live. Spatial fragmentation is introduced: guards are hired and security measures are taken. This is already a small step in social segregation. The different social classes will distance themselves. Eventually, the lack of interaction between social classes will result in anonymous and homogeneous neighbourhoods will affect the day to day life in a city.

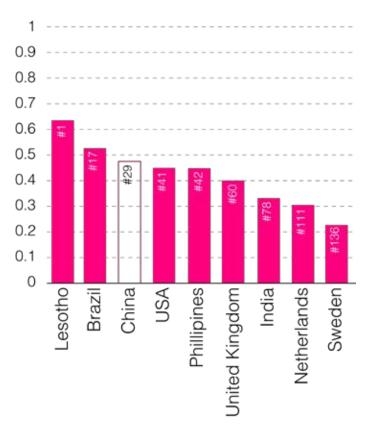


Figure 31. GINI-index is a number which expresses the inequality of trends and developments, measured from 0 to 1. The higher the number, the more inequally the country is developed. China is reasonably high on this list. With a rating of 0,48. China lists number 29 of the world's most in equal countries (The World Bank, 2013).



Figure 32. Large migration from the hinterlands and rural areas in China towards coastal metropolitan areas and cities, such as Beijing, Shanghai, Shenzhen and Hong Kong, around 2000. Another migration is occurring towards the West to a city called Kashgar. "In the East there is Shenzhen, in the West there is Kashgar", is said about Kashgar (Hulshof and Roggeveen, 2011).

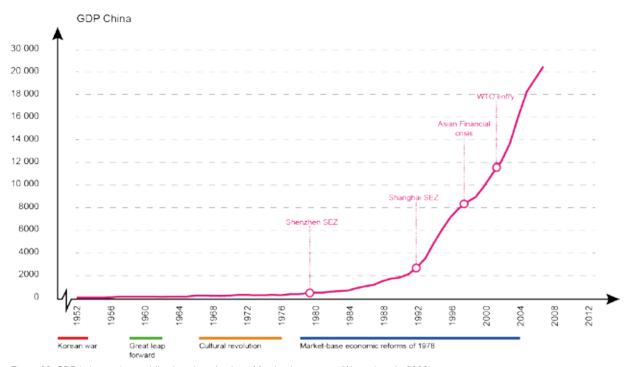


Figure 33. GDP is increasing rapidly since introduction of foreign investment (Woetzel et al., 2009).

IN 2025

POPULATION

total urban population will reach 950 million

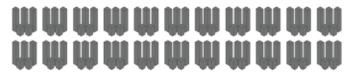


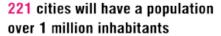
350 million people will be added to China's urban population, of these 240 million are migrants

GDP 7000 USS per capita 35 000 USS per capita

GDP will multiply 5 times

CITIES





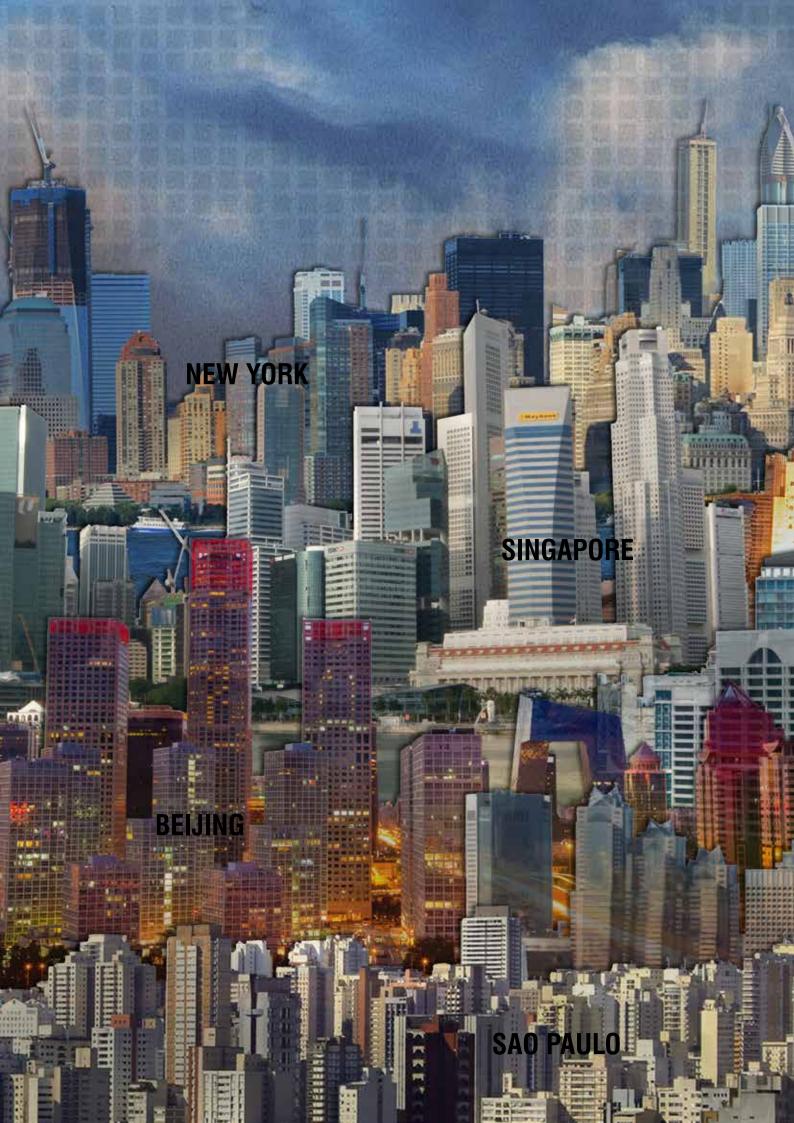
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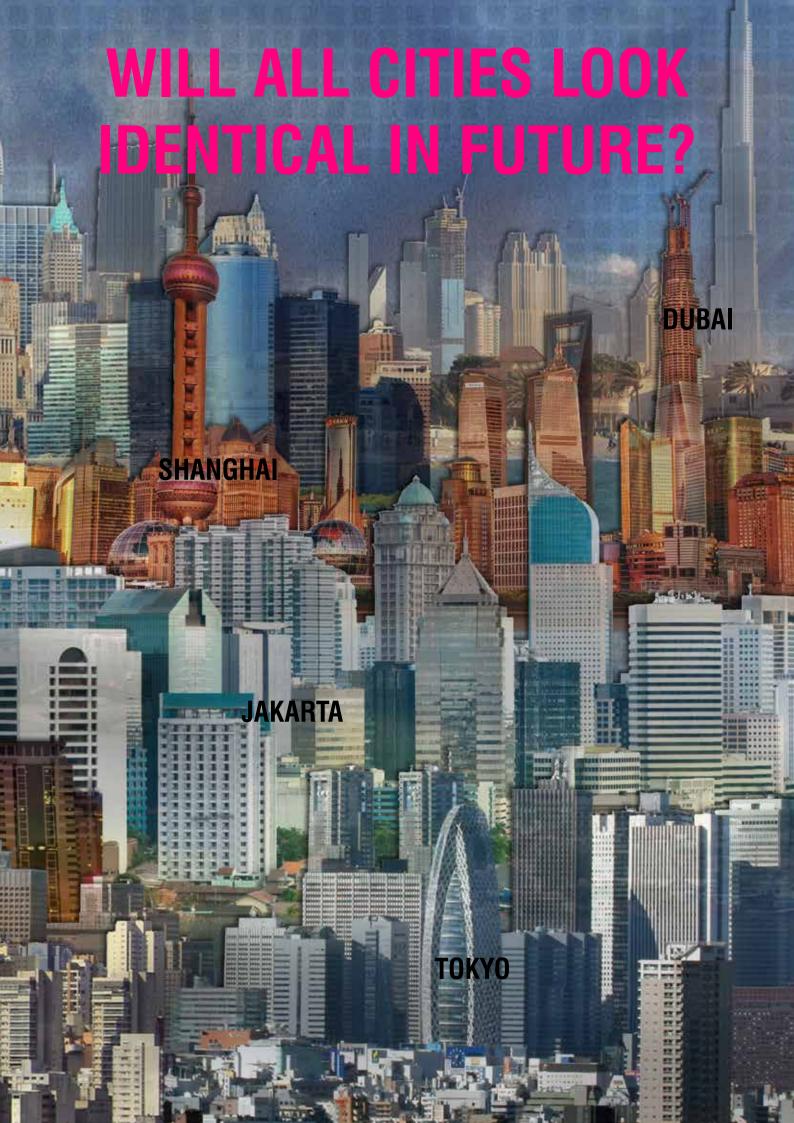
Comparison: Europe only 35

This developments contain:

- 40 billion m2 of floor space (5 million buildings)
- 50.000 of newly built buildings are skyscrapers
 - = equivalent to 10 x New York
- 1500 skyscrapers per year
 - = equivalent to Downtown Chicago

Figure 34. Prosperity transformations in China due to rapid urbanisation and foreign trading (Woetzel et al., 2009).





HOUSING TYPOLOGIES

Three types of housing can be distinguished in Chinese cities. First, the traditional courtyard houses (described earlier in this chapter, *figure 10*) date back from before 1949. Hutongs in Beijing are an example of these low-rise residential quarters. They usually consist of one or two storeys with additional shop fronts situated around a courtyard. Depending on the type of neighbourhood, usually 500 - 800 households make up a neighbourhood unit of multiple courtyard houses. Historically, one courtyard house was inhabited by one family. However, in the past decades multiple families live in a single house (Yutaka et al., 2004). The houses are situated along a main street with multiple side alleys. The closed-yard neighbourhoods (*figure 35*) follow a regular plan with a small public square located in the centre. Multiple small scale household facilities surround the square (Jin, 1993).

The second type of residential housing develops during the postwar Mao era. Medium-rise slab buildings with 3 to 6 storeys were constructed (*figure 36*). Many of these buildings had a mix of industrial and residential accommodation. They are also known as Danwei, or work-unit compounds. Usually, they are built by industrial enterprises for their employees to minimise travel time to work. All facilities, such as schools, shops, playgrounds, sports, etc. are located inside the walled enclosure around a semi-private courtyard. These units are practically small cities in itself (Jin, 1993). For more details see *figures 23 and 24*.

A new class of housing appears after the Economic Reforms in 1978. They consist of high-rise estates, usually fully privatised with 7 to 20 or more storeys. Some residential compounds are completely self-organised (Comprehensive Residential Community) and accommodate up to 50.000 people. Usually all facilities are found within the enclosed enclave. They are referred to as Shequ ($\not\uparrow \pm \boxtimes$) or *Gated Community* and are very popular. High densities can be reached and therefore become very profitable for investors and developers (*figure 37*).

"BENEFITS ARE MORE IMPORTANT THAN HISTORY"

- Chinese government on rapid urbanisation.

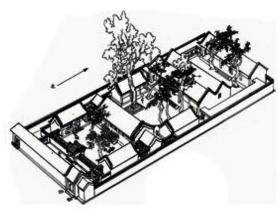


Figure 35. Courtyard houses, historically inhabited by one family, but nowadays by multiple families. The courtyards are very private and have windowless walls enclosing the yard.



Figure 36. Post-war housing in China. Long 6 storey slabs were built mostly by factories to facilitate housing for the workers.



Figure 37. High-rise residential units in the abandoned Chinese city; Zhengzhou (van Duijn and Vos, 2012, Dailymail, 2011).

NEW DEVELOPMENT: GATED COMMUNITIES

Gating goes back thousands of years and has again, during past decades, been adopted by (non) Western countries. Gated communities have become more and more popular, especially in rapidly growing areas with dense population.

Definition

The following definition will be used for a gated community: "a gated community is a housing development on private roads closed to general traffic by a gate across the primary access. The developments may be surrounded by fences, walls, or other natural barriers that further limit public access" (Grant and Mittelsteadt, 2004). Enclaves, residential guarters and compounds all refer to the same definition listed above and do not conform a specific aerial size or number of houses. Gated communities should be seen as a successful formula for market-controlled urbanisation. Developers explore gated projects as an important marketing strategy in the current real-estate market; enclaves can attract future residents, searching for a sense of community, identity and security by providing specific facilities and functions (Grant and Mittelsteadt, 2004). However, whether gated communities are true "communities" is open for debate and some important aspects will be discussed later in this book.

Worldwide phenomenon

Private and gated communities are not new in urban fabric. Historically, walls were built to protect local citizens from invaders. In the nineteenth century a renewed form of gating began to appear in Western countries. Wealthy citizens tried to protect them-selves from the rapid industrialisation in cities through private and urban governance. They closed streets in old neighbourhoods to increase safety and to reduce traffic (Grant, 2008). In the mid- and late twentieth century another form of enclave emerged in postmodern cities; retreats and exclusive residential areas. In the United States many of these gated communities have appeared since the ideology of suburbanisation (Grant and Mittelsteadt, 2004). This gating trend has set its mark all over the globe, where in the United States, senior citizen communities are enclosed by golf courts, in South-America villages are surrounded by barbed wire and cameras. Or for instance in Dubai, where the complete city has been built with fenced neighbourhoods and commercial compounds. All these types of fortifications are the response to an increasing demand for safety, seclusion and community living. Enclaves where specific social classes group together, sharing an ideology or lifestyle, either by fear or hope (Mars and Hornsby, 2008). This phenomenon challenges not only the spatial organisation of the city, transforming public areas into private realms, but also introduces social tensions.

Types of gated communities

The writers of Fortress America, Blakely and Snyder (1997), have presented an extensive investigation on gated communities in the United States. They have identified three types of gated communities; lifestyle, prestige and a security zone. In practice, however, gated communities may show more than only one type. Lifestyle communities focus on leisure activities, such as golf and country clubs. Residents searching for identity, security and shared lifestyle, such as seniors, are mostly attracted to these enclaves. Prestige communities symbolise wealth and status and do often not include shared facilities. Athletes, financers, celebrities and politicians are the type of residents for this community. Security zone communities are built as a reflection of fear for outsiders. Walls and gates are built to decrease crime, traffic and maintain property values. At some moment in time, all social classes have practiced this way of preserving the neighbourhood, but wealthy compounds have been the most successful (Blakely and Snyder, 1997, Grant and Mittelsteadt, 2004).

Chinese context

In urban planning and architecture of Chinese cities, walls have always been an important factor to control social structures. From the imperial palaces, the Great Wall of China to the communist Danwei work units, walls have always been part of the urban fabric. However, in the past decades the new formula of fortification has been rapidly implemented in booming China. Entire networks of residential areas arise with private services, infrastructure and self-governance. With each new compound built, it becomes more apparent that the gated community has a central role in China's urbanisation process. The majority of the residents also like the gate, not only because it increases the safety, but it also keeps out noise of through traffic, unwanted sales persons and pedlars. However, there are many complaints about the rigid walls, since they symbolise a safe environment, but it only generates a virtual safety image. (Miao, 2010). The types of gated communities that are currently identified are prestige and security zone.

Consequences of gating

Currently, the primary reason for gating in China is safety and security. However, exactly the opposite effect is seen in the streets. The lack of social security and street views, result in anonymous and deserted public space and sidewalks around the walls of these gated communities. Furthermore, the design of Chinese gated communities is not comparable with, for example, American enclaves. Whereas American compounds exist out of townhouses or villas, Chinese gated communities are clusters of high-rise residential buildings usually over 15 storeys high.

01. Deserted streets

Gated residential quarters in China may be considered super blocks within the urban fabric. Citizens can walk for hundreds of meters (150-250 meters) without street intersections. The number of gates is minimised to save costs for guards. As a consequence, sidewalks around these residential com-pounds are mostly deserted. Physical borders prevent people from using the street. This is due to unattractive street views and lack of any (commercial) facilities (Xu and Yang, 2009). Gating discourages people from walking, but increases the use of their cars due to large distances between residential and public facilities. Figure 3 (Chapter 01. page 12) shows a gated community in Shenzhen: two separate residential quarters are built alongside the public street. This street is almost exclusively used for through traffic due to the absence of public functions. Not only gated residential quarters are built by real-estate developers, also national institutions, such as universities and factories, are walled. Thus losing the local urban context and not anticipating local urbanisation (Miao, 2010).

02. Homogeneous neighbourhoods and autonomous residential districts

The effects of gating are becoming more and more visible in cities like Shenzhen. The physical fences not only create spatial fragmentation in the urban fabric, but have an even more dangerous problem: social segregation. The booming housing production, which is encouraged by the government, is given to private developers. The government divides the land in small plots and gives each plot to a different developer. The only goal of this developer is to maximise profits. Residential projects become prestige projects with prices going sky-high. These projects are specifically developed for the upper class citizens. The enclaves are socially homogenous, leaving these residential areas spatially and socially isolated (Mars and Hornsby, 2008). The lower classes of society (including migrants) end up in old Danwei housing, illegal settlements and deteriorated areas, creating clusters of specific social classes within the cities. The lack of governmental policies concerning social housing ensures that little will change in future.

03. Anonymity

As discussed before residential clusters exist of multiple highrise buildings with over 15 floors. In most of these clusters green space and some public functions are integrated. These "private" facilities have to compete with, for instance, large shopping malls which are more attractive as their product range is usually much larger. The result is that locals will favour facilities outside their residential area. This minimises social interaction within the local community; neighbours only meet in elevators or parking garages and thus hardly know each other. *Figure 38* shows a high rise residential quarter in Shanghai. Most of its residents work during the day; the residential (green) space barely used. This leads to

a dangerous paradox. Chinese communities and neighbourhoods are historically based on close relationships (Levitt, 2012). Public space has always played a vital role in the social and economic life of the cities and its communities, but due to these new development strategies (public space privatised), cities and neighbourhoods be-come completely anonymous. The elderly, singles, disabled, etc. become socially isolated (Wu and Gaubatz, 2013).



Figure 38. High-rise residential quarter in Shanghai, where green space and facilities are privatised and enclosed by walls.

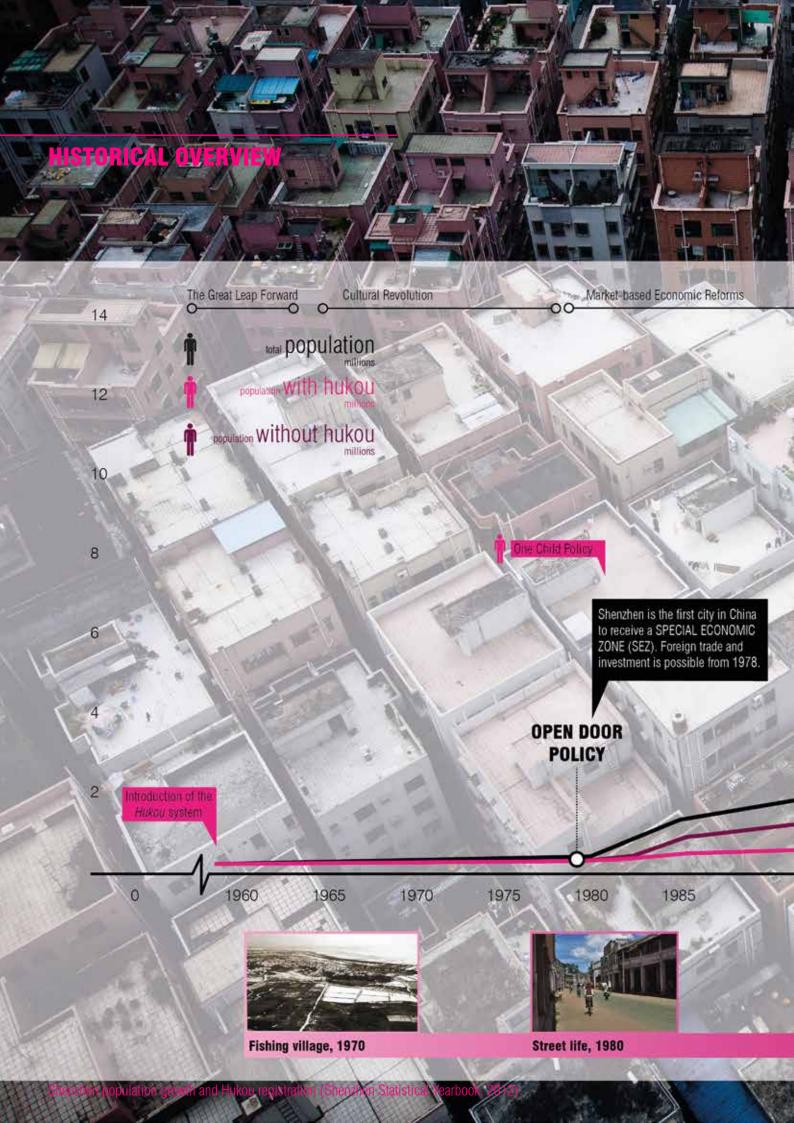
The current development pattern contains multi-million dollar master plans for upper class residents. On the opposite page a small collection of a range of residential master plans is presented (Google search: Residential Master Plans China).

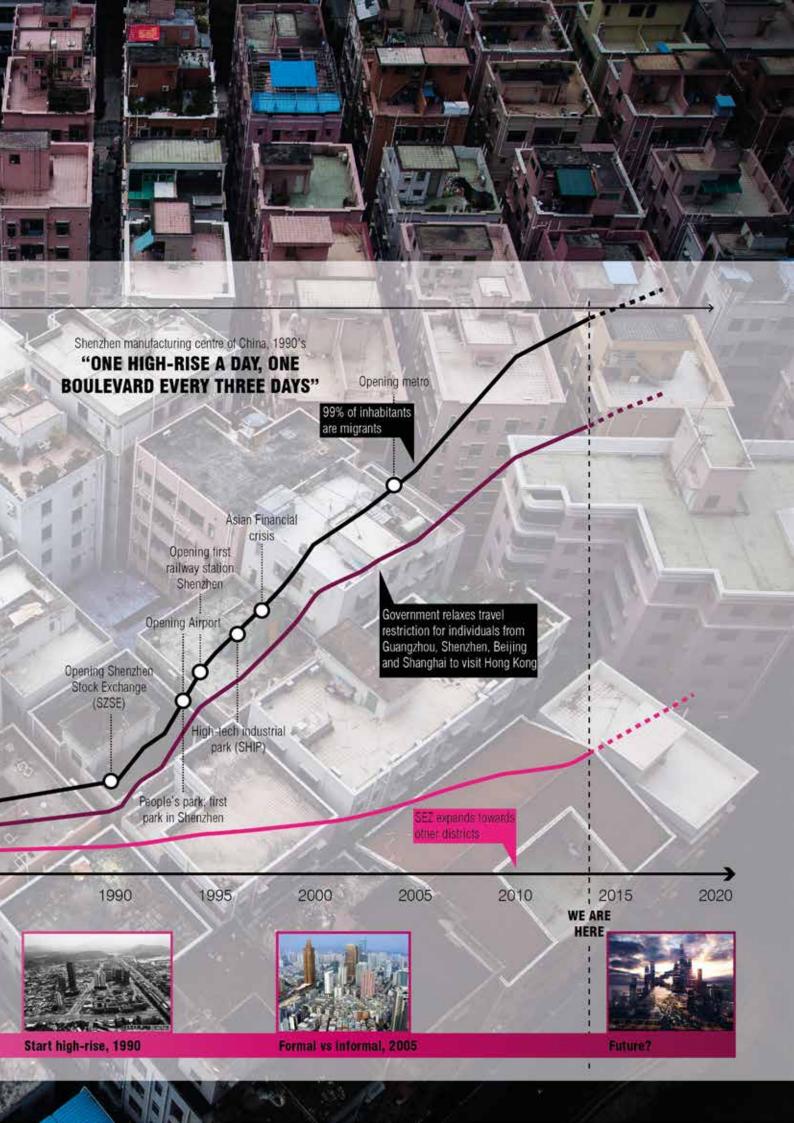






3. NEW TOWN: SHENZHEN





SHENZHEN SCENARIOS

HISTORY OF SHENZHEN

Shenzhen, situated in Guangdong Province, is one of the fastest growing cities in China. It received a Special Economic Zone to compete and interact with Hong Kong's booming economy. Before 1979, the area only hosted agricultural and fishing villages. Nowadays, Shenzhen, has become a national commercial centre. In 2012, it is ranked fourth with the highest GDP in China after Shanghai, Beijing and Guangzhou (Liu, 2013).

A New Town. Shenzhen has an annual growth of \sim 400.000 inhabitants. Occupying 1,991.64 square kilometres, the city has a subtropical marine climate with plenty of rain and sunshine. Due to the rapid urbanisation, the configuration of the city is changing quickly. A continues flow of new skyscrapers, large highways and high quality housing are taking over the area of existing villages. The government has converted all agricultural into urban land. buying out farmers and fishermen. To control the city growth, several master plans have been established throughout the years. They are sketched at the opposite page (figure 41, 42, 43). The idea behind masterplans to create a polycentric city. Figure 41 presents the first plan, where along the Hong Kong border the SEZ is divided into six urbanised areas with sub-centres connected by a grid network of roads. The next important master plan was introduced in 1996 (figure 42), where expansion of the city should be organised through roughly three corridors. Expansion of the special economic zone is in red, extension towards the hinterlands is in blue. The orange circles are dense urbanised areas. The latest plan, presented in 2010 (figure 43), presents horizontal connections with several corridors. The yellow circles show the high dense urbanised areas and in green the Eco-line, the protected landscape of Shenzhen. As a result of the many master plans, Shenzhen consists of four SEZ districts along the border of Hong Kong and the Bay and has expanded far into the hinterlands with large and high-density urban sprawl (figure 39). It should is noted that currently (2014), only 3% of the total land is available for expansion.

LAND-LEASE SYSTEM

To maintain growth and income of the city, the local government has introduced a land-lease system. Developers and investors lease the land for 50 - 70 years. When the project has a residential purpose, real-estate agents will be allowed to lease the land up to 70 years. If it has commercial aspiration, the land can only be leased for maximum 50 years. After this period, either the lease-owner demolishes the buildings and another developer may lease the land, or they pay a large amount of money to the

government to maintain the buildings. The absurd rate of urbanisation in the past 30 years is illustrated by the four maps in *figure* 44, 45, 46 and 47. The urban structures from the master plans (*fi-qure* 41 - 43) are clearly visible in the actual extension of the city.

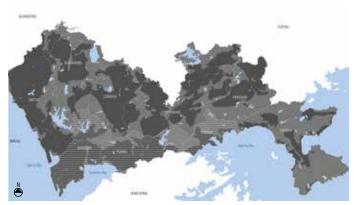


Figure 39. Shenzhen contains ten different districts, including four SEZ districts: Nanshan, Futian, Luohu and Yantian. The location of these four districts is strategically chosen to compete with the economy of Hong Kong.

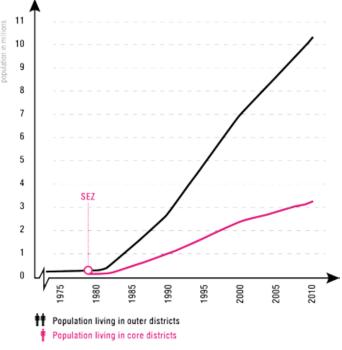


Figure 40. Number of citizens that live in the core and outer districts (urban sprawl). The city is expanding faster and faster, pushing the lower classes of society towards outer districts. There is a strong correlation between the migrants and city-Hukou registered people (Statistical Yearbook Shenzhen, 2010).

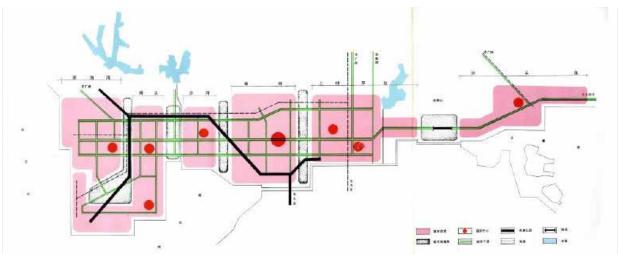


Figure 41. The urban structure for the master plan of Shenzhen in 1986. Centres are alocated in the four districts of the SEZ.



Figure 42. The Comprehensive Plan of Shenzhen (1996 - 2010). A new master plan for larger Shenzhen, presented in 1996, shows new connections with the hinterlands of the SEZ.

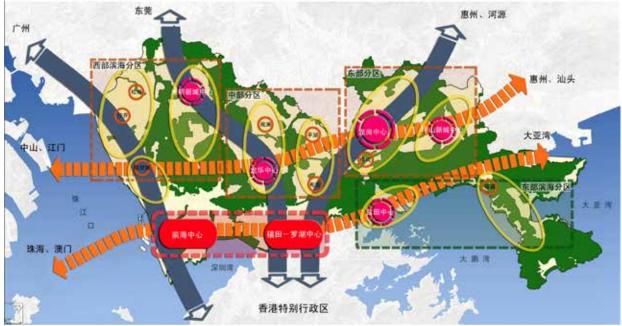


Figure 43. The Comprehensive Plan for Shenzhen City (2010 - 2020). This plan presents new corridors and connections between different districts. Connections between the SEZ and the urbanised areas are emphasised.

URBANISATION PROCESS

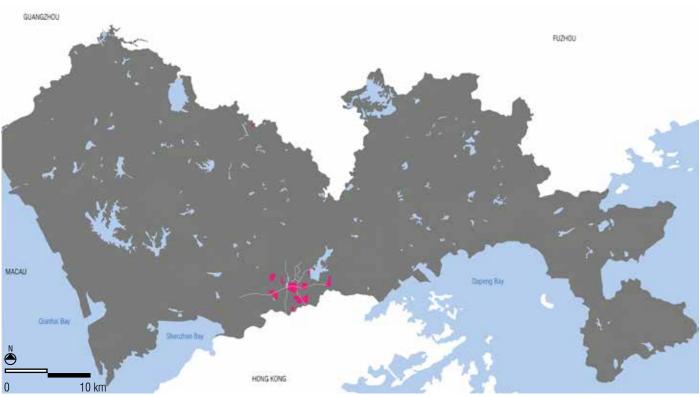


Figure 44. Shenzhen between 1980 and 1990. Shenzhen city starts out as a small scaled urbanised area close to the Hong Kong border.

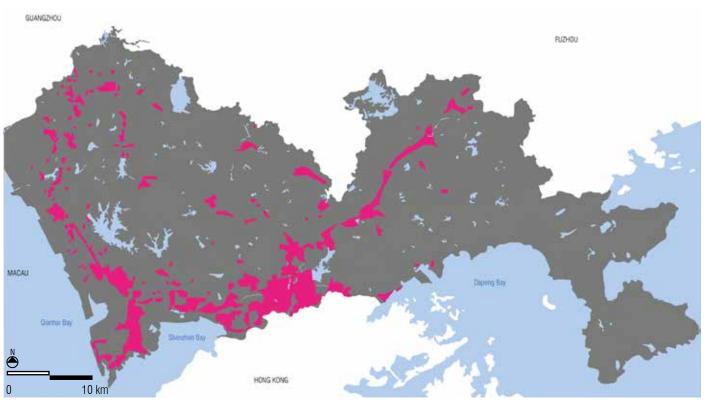


Figure 45. Shenzhen between 1990 and 2000 where the city expands more and more towards the North along the mountains and hills. The SEZ along the Hong Kong border becomes more dense.

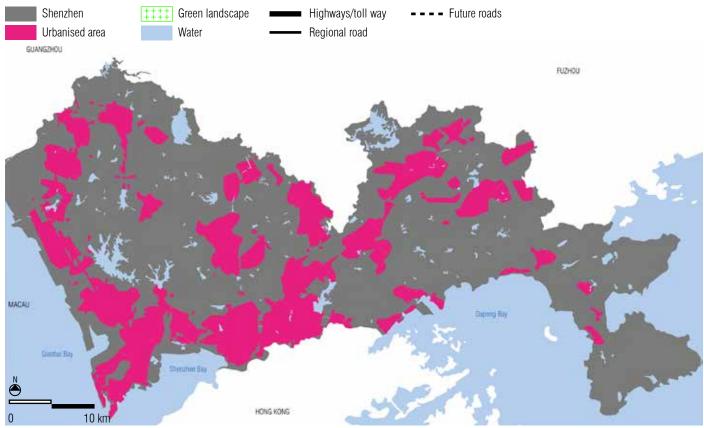


Figure 46. Shenzhen between 2000 and 2010. The city expands towards the hinterlands, along the geographical borders: mountains.

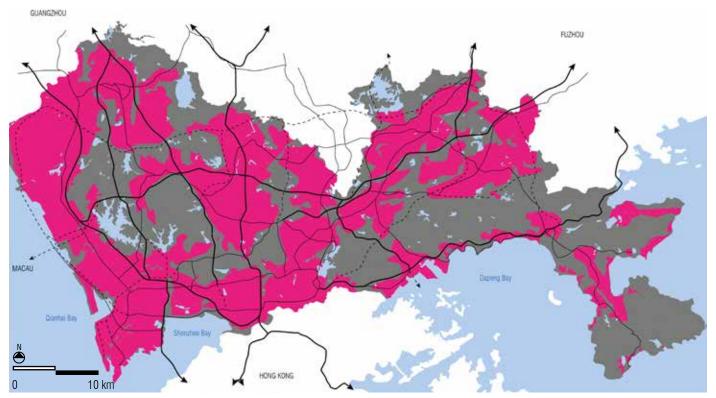


Figure 47. Shenzhen now until 2020. The city keeps on expanding and becomes more and more dense. Large toll roads dominate the landscape connecting all areas of Shenzhen.

"SHENZHEN SPEED"

Currently, Shenzhen counts as many as 12 million inhabitants. Informal sources even estimate a number of 15 million. The division of population in the inner and other district can be seen in figure 40. The size of the city is approximately the size of Flevoland in The Netherlands. The immense growth kicked off when Shenzhen decided to focus on factories for large scale electronics production. One of the prominent factories is Foxconn. This factory produces Apple products for all over the globe. The rapid growth in Shenzhen is called: "Shenzhen Speed". However, this speed has had another impact on the city: only 3% of land is still available for contstruction. This results in high land prices and densifies the current city structure. Production companies/factories do not want to pay high rents and wages, therefore there is a tendency to move to the rural areas in China, Bangladesh and North-India. Economy is shifting from a heavy industry towards service industry (Shenzhen Statistics Bureau, 2012). This shift is represented in figure 50.

CONSEQUENCES

Economic growth resulted in rapid increase of wages (figure 51). As a consequence, real-estate developers increase their price to maximise their profits. They mainly focus on high-rise residential buildings and business areas. These buildings are not affordable for most Chinese. The lack of social housing is frightening, the government seems to ignore this. However, there are some regulations and plans. First, when a developer agrees to introduce social housing in a master plan, it will be rewarded with additional land. Second, Danwei housing is converted to affordable housing projects.

However, more attention is paid to architecture, height and luxury. The bigger and taller, the better! An excellent example of such a development is Kingkey 100. This tower is the tallest in Shenzhen and is situated in the central district (figure 49). A mixed-use building situated on top of a large shopping mall was placed in an area where existing inhabitants were forced to move out. Since most of them did not have a city-Hukou, they did not receive any compensation or help from the government. In addition, the few historical elements in the city have been demolished or will be in the future. Nantou, an ancient village, is situated among the modern high-rise. This village dates back over 1500 years ago and presents a traditional layout of courtyard houses and it entryways (figure 48). Local communities failed to turn it into a museum due to lack of resources. Therefore, it is now up for demolition. A sad situation, since it is one of the remaining historical sites in Shenzhen, where Chinese culture and traditions are still visible.

Figure 52 and 53 present the rapid transformation of Shenzhen in the past 30 years.



Figure 48. Nantou in Shenzhen. A village that dates back to 331, is up for demolision after failing to turn it into a museum. It is one of the few historical elements in Shenzhen (Randomwire, 2011).



Figure 49. Kingkey 100 skyscraper in Shenzhen; once the tallest building in China (Baidu maps, 2012).

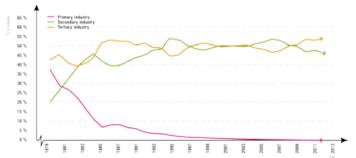


Figure 50. Shift in economy from heavy towards a service oriented industry (Shenzhen Statistics Bureau, 2012).

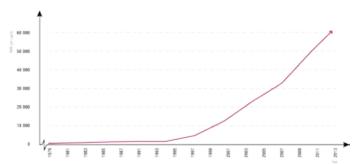


Figure 51. Wages in Shenzhen are increasing rapidly (Shenzhen Statistics Bureau, 2012).



Figure 52. Shenzhen in 1970. Agriculture and fishing industries were dominating the landscape (Shenzhen info, 2008).



Figure 53. Shenzhen in 2014. High rise skyscrapers populate the landscape, all relics from the past have disappeard (Shenzhen info, 2012).

URBAN VILLAGE

The many migrants and floating population in Shenzhen do not receive a Hukou and do not have the luxury to live in the high-rise high-end developments. In figure 54 the number of inhabitants with and without a Shenzhen Hukou is depicted. Majority of inhabitants do not have a city Hukou and therefore have no access to education, healthcare and pension. They are forced to live in illegal and informal settlements: Urban Villages. Urban villages are the result of many migrants moving towards the city. These settlements are situated on the land existing farmer's villages, or close to wealthy high-rise residential quarters or construction sites. Usually there are only a few owners within the urban village that received compensation from the government and were forced to move. Instead they invested their money in the construction of houses and rent to the lower classes of society and migrants. The layout of these villages is strict: plots of 10 by 10 meters. The migration has become so enormous that densifying the urban village is the only way out. The so called Handshake buildings are residential units that are so close to each other that no daylight enters anymore. In *figure 55*, an example of the configuration of an urban village is presented. On the opposite page in figure 57, 58 and 59 the principle of development of urban villages within Shenzhen is shown. Currently there are 320 urban villages where an estimated 90% of migrants live. Overall 73% of the inhabitants are former rural inhabitants of these 76% are migrant workers (O'Donnell, 2012). The black spots in *figure 56* represent urban villages.

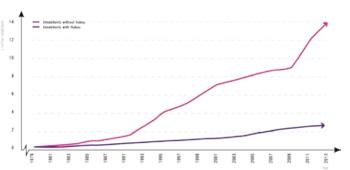


Figure 54. Inhabitants with and without a Shenzhen city Hukou (Shenzhen Statistical Yearhook, 2012)



Figure 55. Majority of houses in an urban village have a plot of 10 by 10 meters. In some cases the owner expands towards the neighbouring house, creating so called *Handshake buildings*. Some owners build as many as 12 storeys without formal permission. Shui Wei urban village (O'Donnell, 2012).

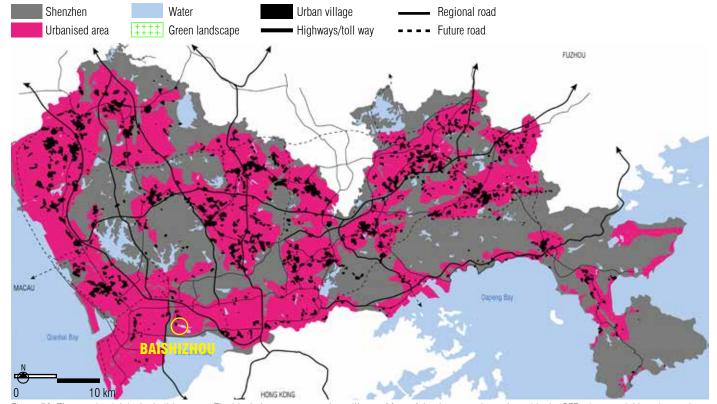


Figure 56. The area in pink is the build up area. The black dots represent urban villages. Most of the them are situated outside the SEZ, since social housing projects and lower social classes were forced towards the outskirts and suburbanisation projects (outside the SEZ). Emphasis is put on Baishizhou.

"THERE ARE 320 URBAN VILLAGES WITH 350.000 BUILDINGS WITH A TO-TAL CONSTRUCTED AREA OF 170 MILLION M² THAT PROVIDE LIVING SPACE FOR 6 MILLION PEOPLE. THIS IS 30-50%* OF THE TOTAL POPULATION"

- URBANUS, architecture company.

1975 - 1985

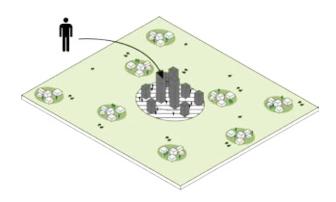




Figure 57. Shenzhen in 1970's. There are 1000 agriculture and fishing villages with around 300 inhabitants each. In 1978 the SEZ is introduced and the modern high rise city is born. The first migrants move to Shenzhen and create informal settlements.

1985 - 1995

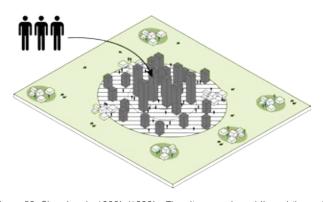




Figure 58. Shenzhen in 1980's/1990's. The city expands rapidly and the agriculture and fishing villages are absorbed. Informal and illegal settlements expand and increase the density at strategic locations and in existing villages.

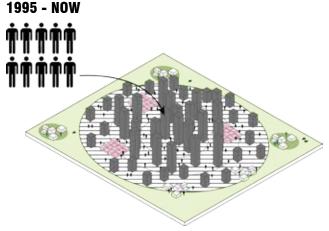
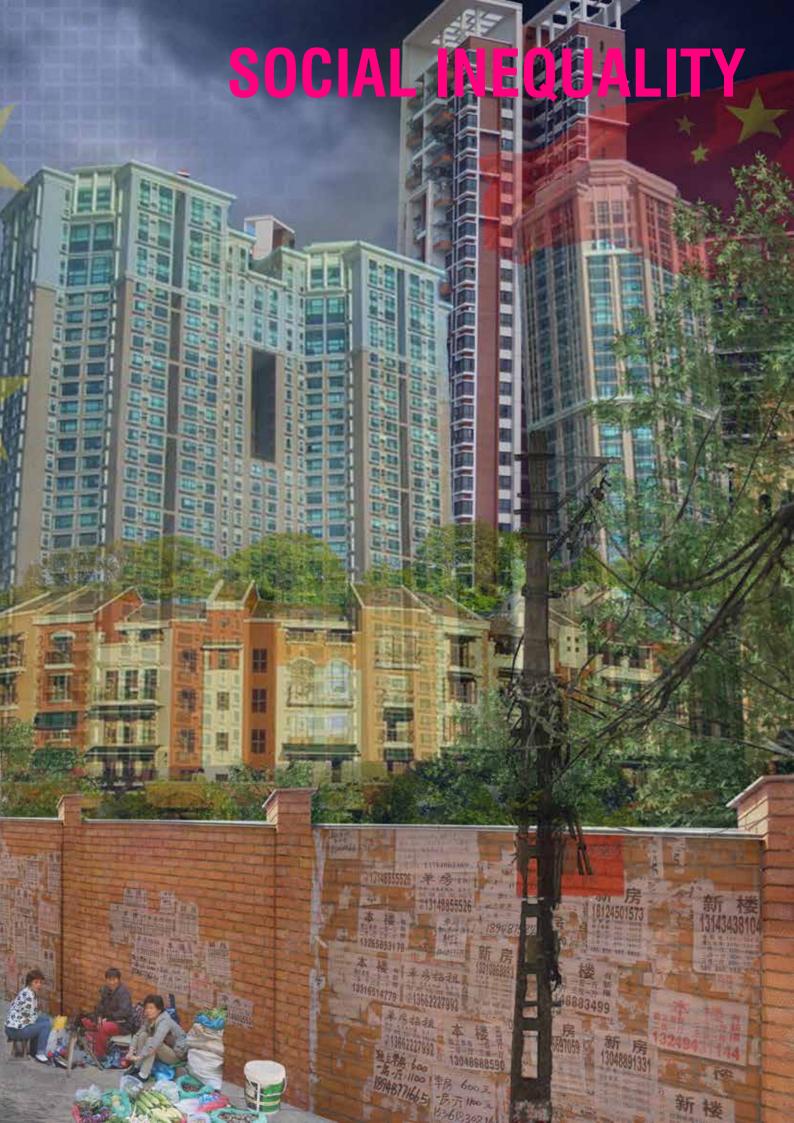




Figure 59. Current view (2014) of urban village Baishizhou. Majority of original villages have been demolished. A limited number of original inhabitants received a small compensation to rebuilt their house. By renting their homes to other migrants, these urban villages rapidly expanded around high-rise residential centres.





PUBLIC TRANSPORT

Shenzhen has an extensive public transport network, which is expanding from its central station towards the hinterlands. It has a number of important high speed railway lines, connecting Shenzhen to Hong Kong, Beijing, Shanghai, Changsha, Jiujian, Maoming, Shantou and several others. A second railway station is situated in Nanshan district, which provides long distance connections to cities throughout China. In 2011, Shenzhen North railway station opened, with high-speed trains to Guangzhou, Wuhan, Beijing and Hong Kong. A third railway station was opened in the East, which mainly provides regional passenger services. A fourth station has opened last year in Longgang also for high speed services to Hangzhou and Fuzhou. This year the Futian railway station inaugurated. This station is in the city centre and serves both regular train services as well as high speed train connections to Hong Kong.

The first metro tracks came into service towards the end of 2004. Two lines were completed, which connect tourist attraction "Window of the World" with Luohu. Currently, Shenzhen has eight metro lines. There is a proposal to extend the network even further by six or seven lines. In *figure 63* an overview of the public transportation system is presented.

Even though Shenzhen has an extensive public transport system, which is quite affordable for the general public, the city is still investing in extending the large road network. Immense multiple-lane highways cut the city in different zones.

TOURISM

Shenzhen is not exactly the first city that comes to mind when booking a vacation. This has partly to do with the fact that hardly no historical sites remain. However, Shenzhen has invested heavily in several attraction parks. For instance, Window of the World hosts miniature buildings from all over the world. Another park collects miniatures of traditional and historic buildings of China (Splendid China, *figure 60*) and is situated next to Window of the World. In the "Chinese Folk Village" people can experience Chinese traditions. "Happy Valley" is a large rollercoaster theme park. All of these attractions are situated in the Nanshan district. The SEZ hosts several other attractions (*Citizen's square, figure 61*).

Beaches have become increasingly popular among tourists as the weather is nice in summer and investment in fancy and high-end resorts is elevated (figure 62). In figure 64 a map of all the tourist attractions is presented. For Western tourists a visit to an urban village mag give a good insight in day to day Chinese life and its traditions.



Figure 60. Splendid China, Nanshan District.

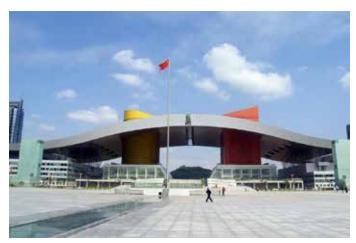


Figure 61. Citizen's Centre of Shenzhen, Futian District.



Figure 62. Dameisha beach, Shenzhen. Beaches in the city are becoming more and more popular each year.

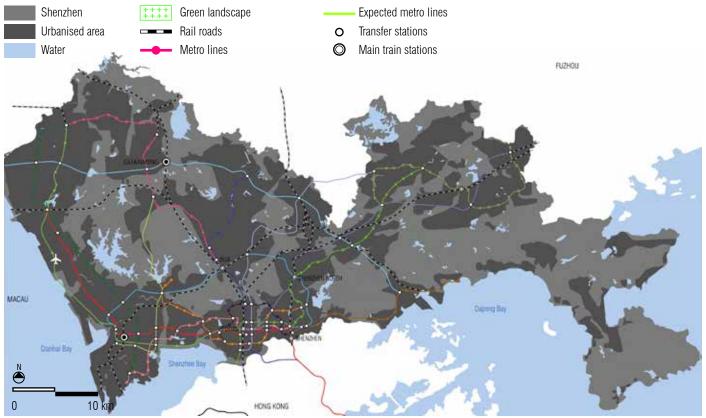


Figure 63. Public transport system in Shenzhen. Shenzhen has invested in a high speed train system from Hong Kong to Guangzhou and an extensive metro network. Only lines (several colours) with stations are currently running.

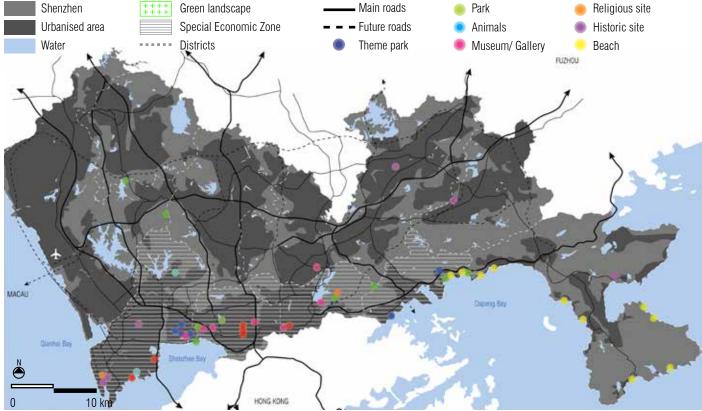


Figure 64. The city of Shenzhen is only 30 years old and has a limited number of tourist attractions. However, it has been investing in several theme parks, a zoo and museums. These are mainly located in the SEZ districts.

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4. A CASE STUDY: BAISHIZHOU

HISTORY AND DEVELOPMENT

Baishizhou, which means White Stone, is currently one of the few urban villages left in the SEZ of Shenzhen. The urban village used to found itself in an agriculture landscape. In the 1950's the first people (~60-80 people) moved from the so called reservoir towards the location of current Baishizhou. They built small farmer dormitories, which are still present today (*figure 65*). The original well, which provided water to the farmers, also remained (*figure 66*). The main income of the villagers was through farming and fishing. Because the village was close towards the coastline, many of these farmers had an additional job of being a soldier (protection against Japan, etc.).

In 1987, the area of Baishizhou consisted of five small villages: "Shangbaishi" (Upper White Stone), owned by Sha He with 289 inhabitants; "Xiabaishi" (Lower White Stone) with 440 inhabitants; "Baishizhou" with 365 inhabitants, "Baishi Cun" with 360 inhabitants and "Xin Tang" with a total number of 256 people. The arable land was in hands of the Sha He (agriculture) and Overseas Chinese Town (Industry), until they split in 1987. OCT was accountable for an industrial area close to Baishi Cun, which resulted in job opportunities. A map of the situation in 1987 is presented in figure 68. In 1978, when Economic Reforms were introduced and Shenzhen became a SEZ, the government decided that all land belonged to the state. The land between 1978 and 1992 was both collective (farmers and fishermen) and governmental owned. However, the inhabitants did not have enough (financial) power and were therefor forced to give up their land in 1992 to the government and received small payment. Additionally Sha He and OCT split into two separate companies, which contributed to lack of money of inhabitants.

The upside was that the approximately 2000 farmers received a Hukou and became citizens. Between the year 1995 and 2000 the area started to urbanise rapidly. The farmers lost their land and therefore their job. Due to lack of education these new citizens had no choice but to find a different way of earning money. This resulted in building houses. The houses were rented out to migrants from all over the country that were searching for happiness and jobs in Shenzhen. The 2000 original farmers became wealthier and kept on building more residential buildings which resulted in the current situation of Baishizhou.

NEW DEVELOPMENTS

As described earlier in this document, rapid urbanisation and market-oriented housing occurred after 1978. In Baishizhou, this urbanisation started around 1990. Large private residential compounds were built closely around the five villages. Rigid walls ensured that privacy and security was present for the wealthy upper class citizens that reside in these enclaves (figure 67). The most



Figure 65. Historic farmer dormitories, built in the 1950's. At present, due to the bad quality, the buildings are used as storage facility.



Figure 66. The historic well is still in use for washing clothes. It used to have a holy pagoda. This has been demolished decades ago when Baishizhou rapidly expanded.



Figure 67. Rigid walls between the urban village and Porto Fino ensure privacy and security for upper class citizens.

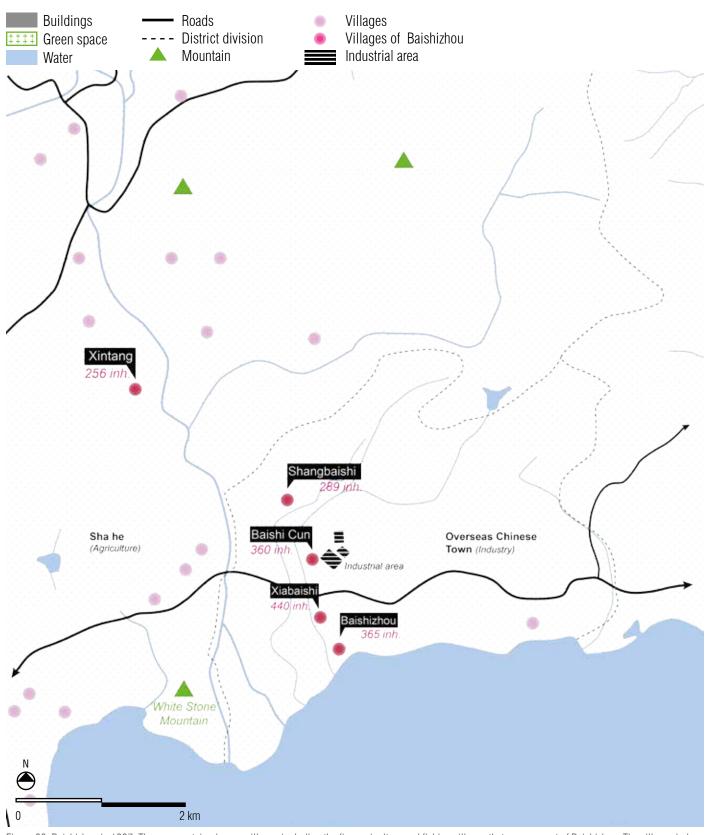


Figure 68. Baishizhou in 1987. The area contained many villages including the five agriculture and fishing villages that are now part of Baishizhou. The villages belonged to the Sha He county. The industrial area was property of the Overseas Chinese Town. Baishizhou named after the nearby White Stone Mountain.

expensive gated community in Shenzhen (Portofino) was built next to the urban village, where apartments are approximately 1.5 million US dollar. More and more migrants moved to the (illegal) village of Baishizhou and the village expanded further. The urban village owes it shape to the strong borders with the former factory area and gated communities and is unable to expand further. Expansion of the urban village is seen in the increasing height and extensions of existing residential buildings. Some houses go up to 12 storeys, without building permits or workmanship. The 2000 original villagers have become very rich by renting out apartments to migrants. So rich in fact, that they do not live in the urban village itself. They mostly resided in high-end residential quarters in Shenzhen.

Baishizhou is one of the many urban villages in Shenzhen and is an illegal settlement. Many urban villages have already been demolished in Shenzhen. However, the government did not succeed in Baishizhou. After a gunfight with the police officers, the government decided to, instead of demolishing, to stop controlling the village. The government assumed the problem would sort itself out. This resulted in a strange contrast with the buildings along the borders of Baishizhou. While in the urban village electricity, garbage collecting, sewerage, water etc. has to be organised and maintained by the villagers themselves, the government organises all these basic facilities for the main street and the settlements around Baishizhou. More detail of this situation will be given on page 62 and 63.

NANSHAN DISTRICT

Baishizhou is located on a very strategically within the Nanshan District and SEZ. In *figure 69*, the current situation of Baishizhou is presented within the Nanshan district. The urban village is situated between the two major East-West highways and it therefore easily accessible. Many important facilities, that have a great impact on Shenzhen, are situated around Baishizhou. For example, in the West, Shenzhen University and its campus is situated, with a direct metro connection to the urban village. Also the High-Tech Park, with many young professionals is positioned next to the university.

Major tourist attractions are situated to the South, such as Window of the World (Miniature Park), Splendid China and China Folk Village. Additionally, a large theme park, Happy Valley, is situated to the East of Baishizhou. Next to Happy Valley, the OCT and OCT Loft are situated, the last an important touristic and local attraction. This old factory area has been completely renovated into a lively (but expensive) neighbourhood. In the South along the water, a strip of land has been developed into an (ecological) park. In the far South, a new harbour is stationed, that will provide a boat service to Hong Kong.

Most of the surrounding built-up area consists of large private estates and gated communities with accompanied golf courses. The spatial form of Baishizhou is due to pressure of these surrounding residential enclaves.



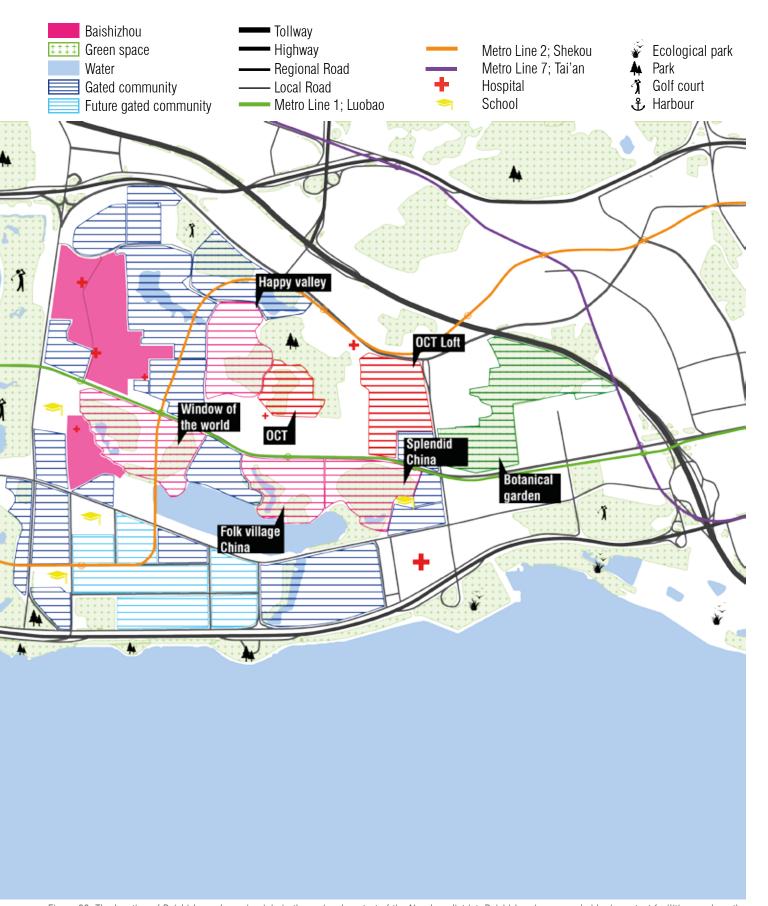
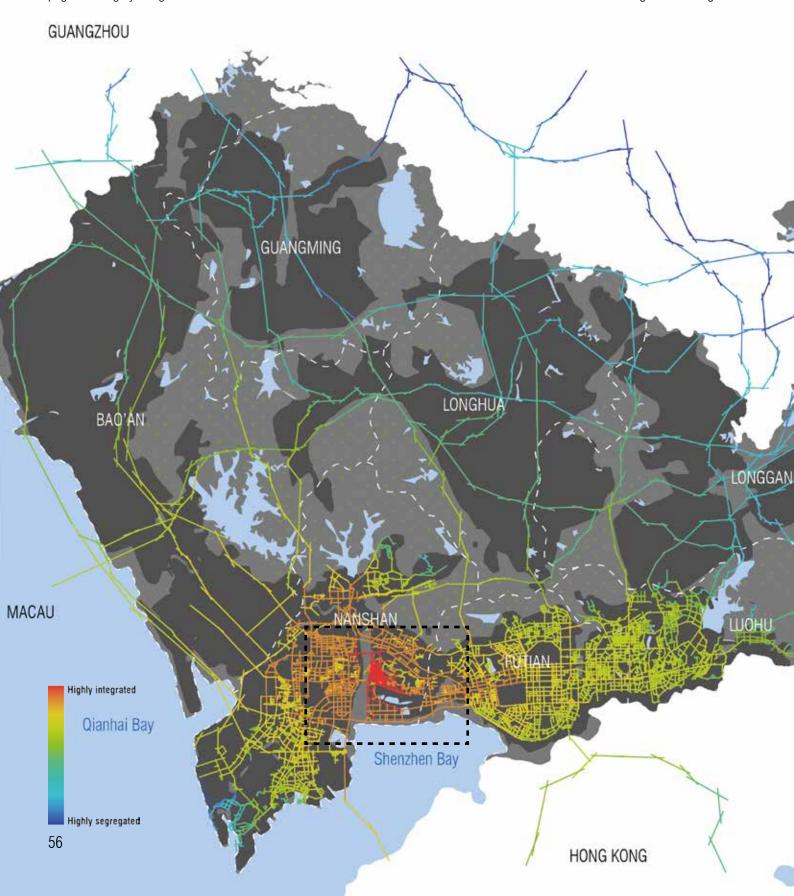


Figure 69. The location of Baishizhou, shown in pink, in the regional context of the Nanshan district. Baishizhou is surrounded by important facilities, such as the university and the High-tech Park in the West. South of Baishizhou, the most important tourist attractions of Shenzhen are situated: Window of the World, Splendid China and Folk Village. A theme park named Happy Valley and the renovated OCT Loft are found at the Eeastern border.

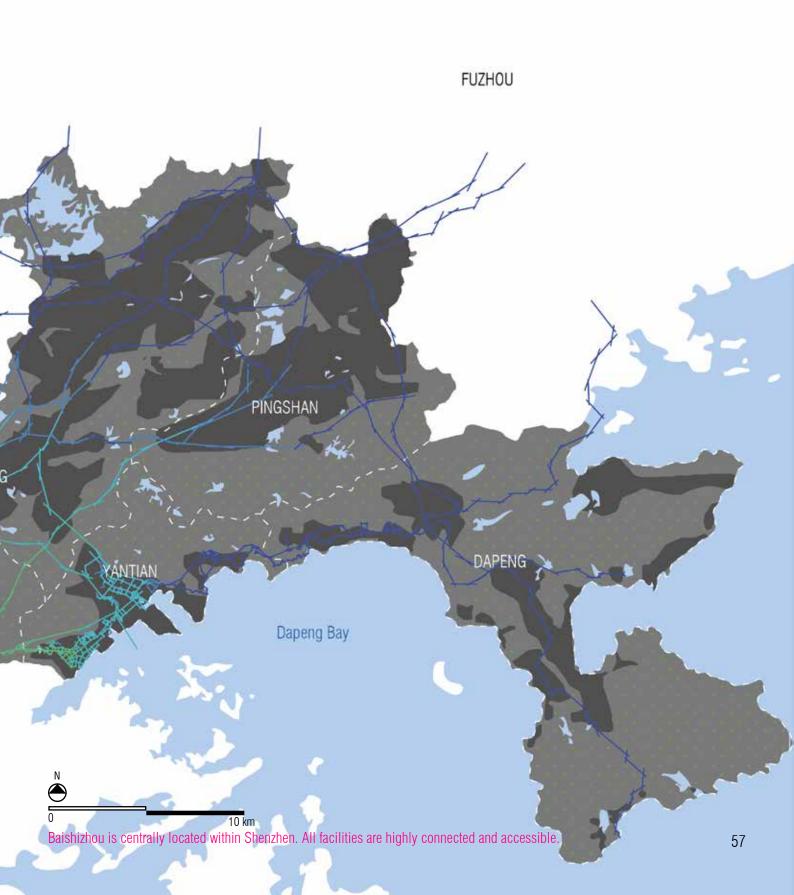
INTEGRATION OF BAISHIZHOU IN SHENZHEN

In this space syntax map the hierarchy of Baishizhou is presented. It is clearly visible that all main attractions discussed in previous pages are highly integrated and accessible from Baishizhou. The

orange streets towards the West are the areas where the University and high-tech park are situated. Towards the South, all the touristic attractions are also accessible with the orange roads. In general



Baishizhou has a very strategic position within Shenzhen as it is highly integrated within the SEZ and good connected to the CBD and Futian district.







ZONING AND PRICES

The urban village is divided into three different parts. This is also presented in the map figure 69 on page 55. The South part has recently been completely renovated and has been a success for both inhabitants and government. Houses have been renovated and painted and money has been invested into new pavement and a large market hall. The Northern part of Baishizhou is presented in *figure 73*. The area exists of a large urban village along the high way in the South and a small area in the North. The two are divided by a former factory area and are completely surrounded by large private gated communities. Baishizhou counts around 120.000 inhabitants, with 7000 legal registered inhabitants (city Hukou). The other 113.000 inhabitants are migrants with a temporary population of 38.000. 82.000 Inhabitants live here permanently (legal or illegal, Hong Kong University, 2011). An impression of one of the main streets is presented in *figure 70*.

The 2000 original villagers are the owners of all the buildings in Baishizhou. The rent of the apartments is low, only 30 RMB/m² per month (\sim 4 euro/m²). Average homes are around 15 m² or less. Many (large) families live together in apartments or have small living spaces.

The former factory area houses some factories in the Eastern part, but is mostly abandoned due to high land prices. Most of the buildings have been transformed into small office spaces, restaurants and even a karaoke bar. Additionally, one of the buildings has been converted into a large market hall, which will be discussed later on. *Figure 71* presents a converted factory building into an office building, which houses small scale offices.

The village is surrounded by multiple high-end privatised enclaves. One of these gated communities is presented in figure 72 and is called Bay Garden. Houses in these residential areas are expensive, around $3500-32\ 000\ euro/m2$. Porto Fino, situated east of Baishizhou is the most expensive gated community in Shenzhen, with housing prices over 1 million euros. The residents of the urban village are kept away from the estates by high rigid walls. However, inhabitants of the gated communities actually use many facilities that Baishizhou has to offer. Fresh foods that are presented along the main roads and the market stalls are used by all classes of society. Moreover, many inhabitants of the urban village are working as a maid, gardener of guard for the gated communities.

An impression is given on the following page. *Figures 74, 75 and 76* presents the characteristics of the urban village. *Figures 77, 78, 79* shows the different areas of the (former) factory area and *figures 80, 81 and 82* present multiple gated communities surrounding Baishizhou.



Figure 70. Main road within the urban village. Buildings up to 12 storeys with shops at street level are close together.



Figure 71. Factory buildings transformed into small scale office units.



Figure 72. Bay Gardens; a gated community next to Baishizhou urban village with a housing price of \sim 3500 euro/ m².

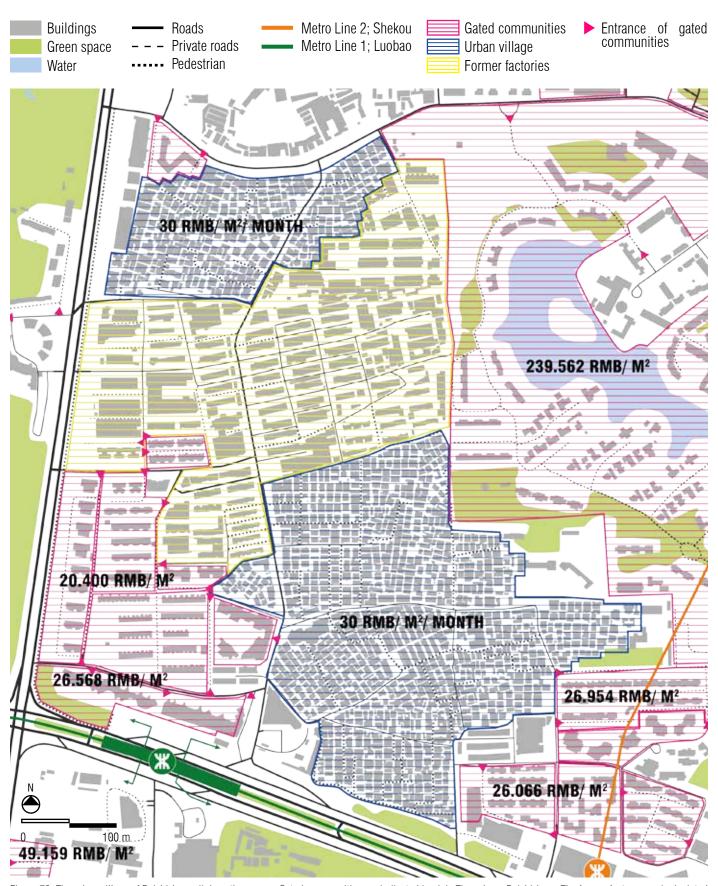


Figure 73. The urban village of Baishizhou adjoins other zones. Gated communities are indicated in pink. They shape Baishizhou . The former factory area is depicted in yellow. Prices vary strongly; Porto Fino is one of the most luxurious housing estates in Shenzhen, with apartments over 1.5 million US\$. At the same time prices within the urban village are as low as 30 RMB/m²/month (\sim 3 euro/m²/month).

IMPRESSION OF URBAN VILLAGE



Figure 74. Dormitories in the historic centre of Baishizhou.



dominate the urban village.



Figure 75. Narrow streets and blind walls Figure 76. Along main routes, many restaurants, bars and gaming areas are located.

IMPRESSION OF FACTORY AREA



Figure 77. Factory buildings that are still in use.





Figure 78. Dormitory for factory wor- Figure 79. A school is situated in between factories. View when school children have their lunch break.

IMPRESSION OF GATED COMMUNITY



shopping mall.



Figure 80. October Tower are three immense towers on top of a Figure 81. Lucky Garden gated community is shielded by high fences and guards.



Figure 82. Liyuan village consists of multiple large dormitories and apartments protected by walls and gates.

PUBLIC TRANSPORT

One metro line is directly situated South or the urban villages. This green line, Line 1, connects Baishizhou with Shenzhen University, the High-Tech park, Window of The World and OCT Loft. By metro, all of these destinations can be reached within 15 minutes. In *figure 83*, a map of Baishizhou with its current public transport system is presented. A 400 meter radius is drawn around the multiple metro stops. 400 Meter is the average walkability rate of Asian cities. As seen in the map, the Northern and Eastern part of the urban village does not benefit from the walkability rate, whereas it will be more likely that these inhabitants will use bicycles or motorcycles.

In addition, multiple bus lines are present. The stops are located along the main roads in the area. In this case a radius of 250 meter is drawn. People are likely to walk to faster services, such as train or metro. They rather walk further than to wait for a bus that covers a short distance. Again, the Eastern part of the urban village does not benefit much from the facilities.

The fact that some parts of the urban village are less connected to public transport than other does not mean that these areas are more isolated. The Chinese inhabitants are very used to walking distances, since this has long been a method of transportation along with bicycles and, later, horse and carriages.

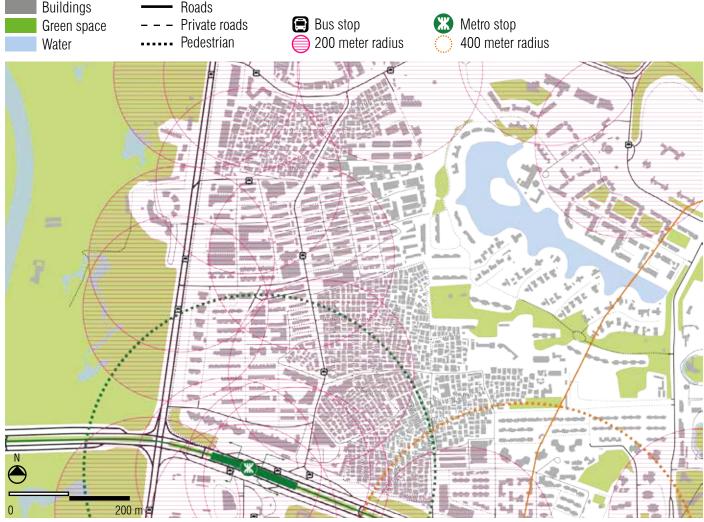


Figure 83. There is one metro station "Baishizhou", South of the urban village, and an extended bus network. Not all parts of the urban village are within walking distance of public transport. The metro station attracts pedestrians within a radius of 400 meters; bus stops cover an area with a radius of 250 meters.

FACILITIES

Baishizhou has many facilities with two faces; it has a formal and informal side. *Figure 87* presents a map with all the existing facilities in Baishizhou. The formal side consists of multiple registered and licensed shops along the main routes of the urban village. These streets are mostly situated between the gated communities and the urban village itself. The formal shops are restaurants, clothing boutiques, hair salons and karaoke bars (*figure 84*). There are a few (Western) chain shops such as KFC, Jiangsu Da Niang Dumpling and Tesco. *Figure 88* shows a map of the main routes with the formal facilities. The multiple hospitals within the area consist of buildings with additional facilities, such as karaoke bars, post offices and super markets. All these facilities are accessible by car or close to public transport. At the South entrance of Baishizhou, some high-end shops and supermarkets are located to attract citizens and provide luxury for residents in the gated community.

The informal shops are located around the market streets within the urban village and the historic centre. Most of these shops are situated in the plint of residential units and are non-registered facilities. In addition, many street shops, street markets and street vendors are present during the day with their local food carts. At night, pop-up restaurants arise along the main square at the farmer dormitories in the centre of Baishizhou. *Figure 85* shows a street vendor selling fresh vegetables at night. Street life in this neighbourhood never ends; all day and night local inhabitants sell their goods. Some inhabitants work outside the urban village during the day and have an additional (illegal) job selling food at night.

There are two police stations that have local police rights. Beside the local police department, additional local community guards are hired by the government and private companies to patrol the streets. Both have different duties and rights, as the police is able to fine inhabitants, the guards job is to patrol the streets and increase the sense of safety.

The market is situated centrally, and is part of multiple (informal) market streets within the urban village. This market is located in a converted factory building and is one of the main attractions and shopping areas within the urban village. *Figure 86* shows the food market during a day in November 2013.



Figure 84. Formal (registered) stores are situated along the main route in Baishizhou.



Figure 85. Local inhabitants selling goods in the street until late at night. The consumption and street life never stops in this urban village.



Figure 86. Market on the North side of the urban village.

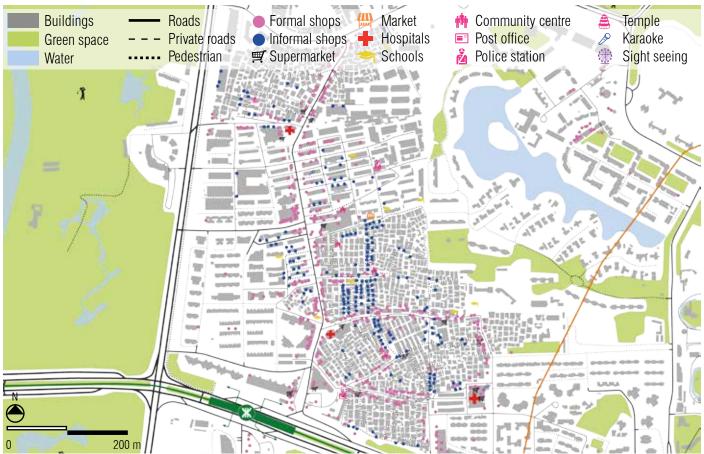


Figure 87. All the facilities located in Baishizhou. Formal facilities are presented in pink, informal and illegal shops in blue. Schools and hosptials are situated along the edges of the urban village.

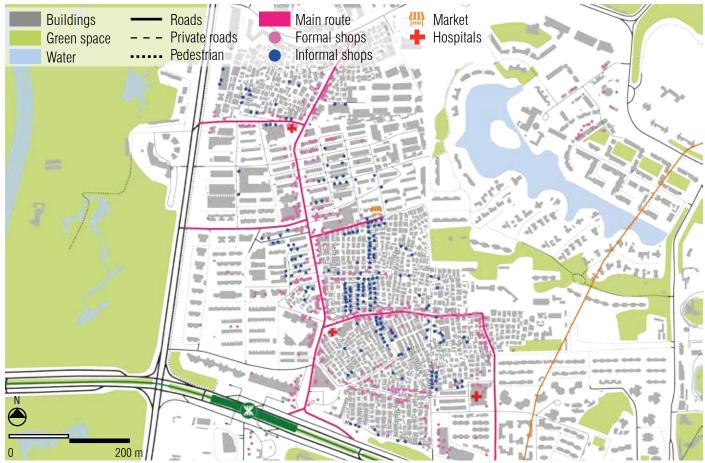


Figure 88. Most formal facilities are located along the main route (pink). This route is managed by the government and is accessible by car and public transport, while all informal activities take place along market routes inside the urban village.

PUBLIC SPACE

Public space is considered an important factor in traditions and street life of many Chinese. This has been visible since the early times, when courtyard houses were introduced with small private realms. Beside the private spaces, where inhabitants plant gardens and flowers, other public spaces such as market areas and squares were present in the spatial planning of cities.

In Baishizhou, several public spaces are present and are presented in a map of *figure 92*. Most of the public spaces are situated along the main route in Baishizhou. Others are situated along market streets and the market itself. Within the urban village itself, several small scale spaces provide places for street vendors, gardens, but most importantly places to play games and space for interaction. In Chinese traditions, public space goes hand in hand with consumption. This consumption not only comes in economic activities, such as shops but also commercial and social consumption, such as restaurants, informal street vendors and the opportunity to play outdoor games. This last aspect is still seen widely and can be seen in *figure 89, 90 and 91*. Many local business owners implement street games, such as pool tables. Others gather around, preferably under a tree along a vivid road to play games and gamble.

The small public spaces within the urban village are not designed, but are organically formed through informal development of residential houses. The public spaces along the main market routes are developed mainly as space for commercial and economic activities. Many stalls, street vendors and restaurants are available along these streets. Along the main route and in between the factory buildings, more detailed and designed public spaces are present; outdoor work-out space, a playground and seating areas. This has been an investment from the government, who tries to improve the livability of the inhabitants in this area.

The several different public spaces attract different type of inhabitants. For example, the South entrance (figure 91) is primarily designed as a seating area. Most of the elderly gather together and many activities are organised on the small square in front of the seating area. Along the main route, the public spaces are used by the whole community, but primarily by people from the surrounding gated communities. This route provides most formal shops and high-end shops. Many people play games along this route, as Chinese like to sit where they can see other, and be seen by others. Vividness plays a vital role in the placement of public spaces and the people who use them. The small scale public spaces within the urban village itself, mainly attract locals who use it as place to hang laundry, garden or watch their children play on the street. These spaces are almost inaccessible for outsiders, therefore they can practically be seen as (semi)-private realms.



Figure 89. Outdoor games are very common in the urban village. Many pool tables stay outside throughout the night.



Figure 90. Elderly gather preferably under a tree along busy roads to play Mahjong and gamble.



Figure 91. The entrance of Baishizhou is dominated by elderly guarding their grandchildren while they play with other kids. The square in front is used for several activities. For example, every Saturday everybody can get a free haircut from a hair salon from the urban village.



Figure 92. Public spaces within the urban villages. They are situated along the main routes, while hardly any is found inside the urban village. Most of the gated communities have their own (private) facilities and green space.



Figure 93. Hierarchy of public spaces. Towards the South entrance of Baishizhou, the main square offers facilities across social classes and has a regional function. Along the main streets in this area, there are mainly local public spaces are presents. Within the urban village some scattered private spaces can be found.

INHABITANTS

During the site visit to Baishizhou last year, many inhabitants of the urban village and surrounding areas were interviewed. Thirteen interviews were conducted with several actors within the neighbourhood. Actors from all ages and all different backgrounds, such as migrants, young professionals, but also inhabitants from gated communities and guards described their daily pattern and answered many questions concerning their habits and daily activities. Full interviews are presented in *Apendix II*.

In figure 94, a map with daily patterns of the actors within the neighbourhood is presented. A short summary of the interview with the actors will be presented here. In general, many of the actors have a full time job. A full time job in the urban village means working seven days a week, with only a couple of days off per year. Many of these inhabitants only have time after work, which usually consists of some grocery shopping and having dinner with the family. Many of them complain about their long work days and the lack of friends they have. They mention their neighbours to whom they have contact once a while. The fact that they are away from their home all day, creates a distance from the urban village. They do not feel any responsibility for their property or surroundings. The inhabitants from the urban village do not own property, so it is hard for them to get a sense of home. Most of them are all migrants from all over China. Many of them have come to Shenzhen to profit from the urbanisation and job opportunities.

Many of the people who would be seen during the day are mostly elderly and children. Elderly move towards Shenzhen to take care of their grandchildren. They are the ones who play games on the street, visit the markets and take the children for a stroll to a playground. Most elderly live in the gated communities and complain about the lack of management in the urban village and the amount of garbage. In high contrast with the younger inhabitants of the gated communities, the elderly use many of the facilities of the urban village because it reminds them of home.

There is a mixture of actors in Baishizhou. Currently there is a tendency of young professionals and couples that move to Baishizhou, because rent is cheap. This is an opportunity for them to save money and spend it outside of the urban village in expensive shopping malls and night clubs. These inhabitants disconnect themselves from all the activities in this area and use it only to sleep. The younger inhabitants feel more connected towards Western ideals of wealth and time management.

Generally many mention that the urban village itself is extremely safe, and that they feel happy in Shenzhen. All the facilities are present and they hardly have to leave this area.



MISTER HUANG - WAITER 18 YEARS



MISS LI - SHOP ASSISTANT 19 YEARS



MISS KANG - SHOP ASSISTAND 19 YEARS



MISS LIU - ONLINE SHOP OWNER 21 YEARS



MISTER LUI - FINANCE JOB 25 YEARS



MISTER ZHU - PUBLIC SECURITY 26 YEARS



MISS LI - MOTHER 26 YEARS



MISS DING - SALES WOMAN 30 YEARS



MISTER XIONG - GUARD 50 YEARS



MISS PENG - STREET CLEANER 50 YEARS



MISTER ZHAO - SHOP OWNER 55 YEARS



MISTER PENG - RETIRED 66 YEARS



MISTER AND MISS HEBEI - RETIRED BOTH 74 YEARS

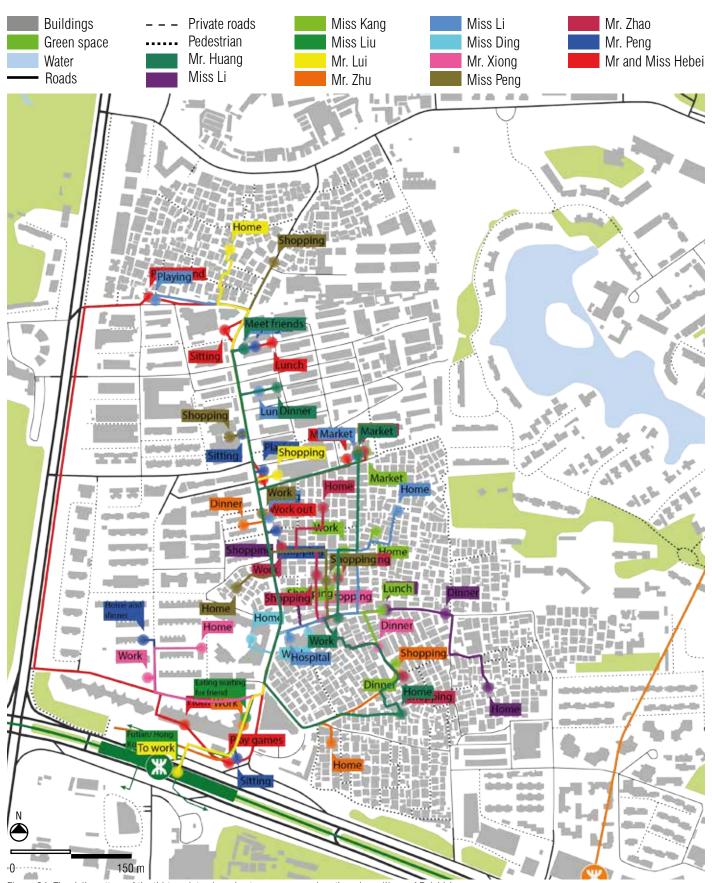


Figure 94. The daily pattern of the thirteen interviewed actors are mapped on the urban village of Baishizhou.

USERS OF PUBLIC SPACE

Through interviewing the several actors and users of the urban village, a division of ages could be made. Several age groups use different types of public space and facilities. Also there is a large difference of inhabitants of the gated communities (local passers), locals itself and the regional passers. They use different routes, facilities and spaces.

In figure 98, a map is presented with the several popular zones in the urban fabric. Many elderly are situated along the main route close to facilities, such as playgrounds, work-out areas in combination with restaurants and supermarkets. In the market area, a mixture of age grounds and inhabitants are present. Figure 95 shows the market area in Baishizhou.

The local passers (inhabitants from the gated community) generally take the main route with facilities and public space connecting this route. This is presented in *figure 99*. The inhabitants of the urban village use the streets within the urban village and use the informal market streets as shopping area. They use the main square as place for dinner and shopping (*figure 97*).

As described earlier in this chapter, the South entrance of Baishizhou has quite an important factor. This is a meeting point for most regional passers. Baishzihou is strategically located within the city with its own metro station and shops close by. Therefore, many youngsters meet here, eat at KFC and either go to Futian or take the boat to Hong Kong. In figure 96, the seating area at the South entrance of Baishizhou, next to the metro station, is seen.



Figure 95. Relatively cheap and fresh food attracts all actors. The market North of the Urban village.



Figure 96. South entrance of Baishizhou, next to the metro station is another area where elderly gather together with their grandchildren.



Figure 97. Centre of Baishizhou with the farmer dormitories. Restaurants appear at night and citizens from all ages gather together for dinner and shopping.

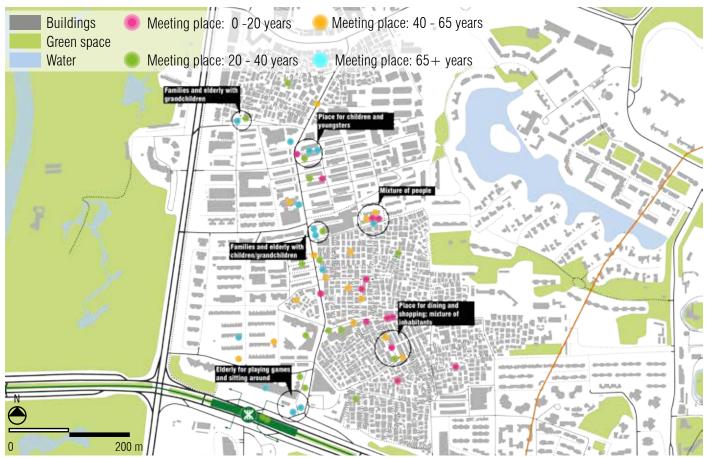


Figure 98. Who uses which public spaces? During the day, elderly and children are the most important actors. At night shopping areas and restaurants attract a mixture of most actors. The map gives an overview of the main actors and public spaces.



Figure 99. Local inhabitants of the urban village versus the inhabitants of the gated communities (West of the village). For the latter there is a different routing as they tend to use the main route with all its formal facilities and activities. Urban villagers stay mainly in their own area, the historic centre of Baishizhou and its markets routs.

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OWNERSHIP

The management system in urban villages is complicated. There are multiple owners with collective and private interests. In *figure 100*, the division in ownership is presented. In 1980 all land became state owned. Therefore all roads, electricity etcetera is managed by the government. The land is leased to the original villager who owned the land around 1978. This is a collective ownership of the government and the leaser. The buildings on top of the leased land are owned by the original villager. As mentioned before, the villager has invested money into his buildings. He expands his residential building in every single way (*figure 101*) as private interest. All of these buildings provide apartments who he rents out to migrants. The original villager eventually moves towards a wealthier area, such as high-end gated communities, but keeps renting out his buildings in the urban villages.

The management system in Baishizhou is complicated. *Figure 102* presents a layer system of all parties involved in the urban village and its surrounding areas. The land is state owned; this includes all the main roads, electricity, sewerage etcetera of all the gated communities, factory area and companies. Many companies lease the land for 50 to 70 years and own private roads that connect to the main roads. An additional layer is the gated communities, who are leased for 70 years and sometimes have their own management system within. The facilities within the gated communities are maintained and financed by the inhabitants and developers, while the guards are usually paid for by the government.

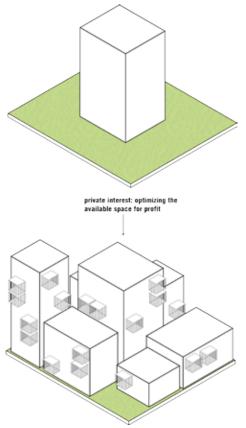


Figure 101. The original villager leases the land from the government for a period of 70 years. He has a private interest in expanding and constructing as many buildings as possible, which he can rent to migrants. Many original villagers have become very wealthy and have left the village.

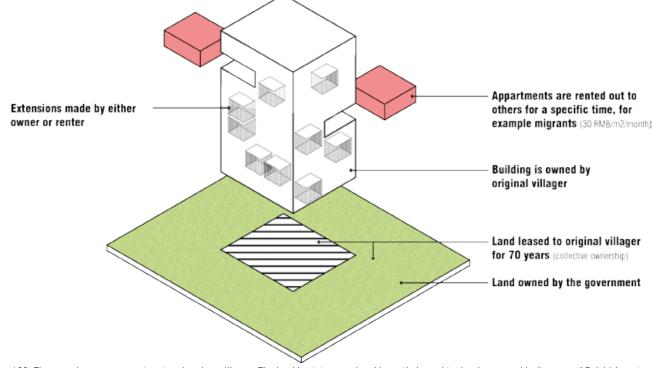
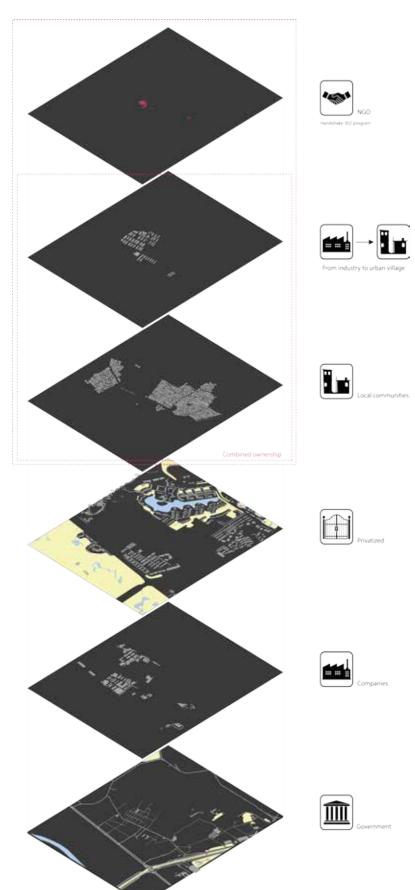


Figure 100. The complex management system in urban villages. The land is state owned and is partly leased to developers and in the case of Baishizhou, to original villagers. There is a collective ownership.



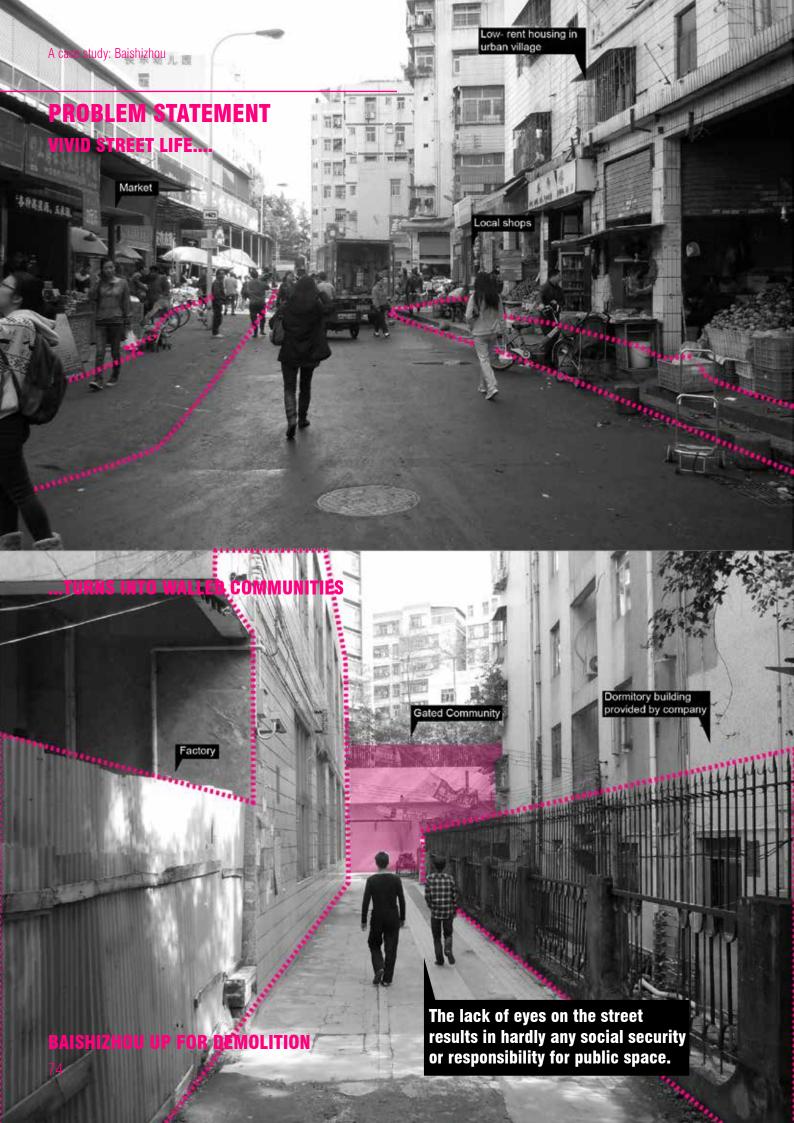
The urban village is an illegal settlement, which consists of five different villages. These five villages have their own community centre, but lack communication and cooperation. The government tried to demolish the urban village, but was unsuccessful in doing so. The only option left for the state is to withdraw themselves from the area and its villagers. This results in the villagers organising their own electricity, garbage, internet etc. without help from the government. The fifth layer is the former factory area, which is in transition to become part of the urban village. Most of these factories have new functions, such as small scale businesses, police station etcetera. There are three NGO buildings, which are combined with the community centres. They organise several activities for children and elderly once every now and then.

HIERARCHY

The composition of families in the gated communities is different than in the urban village. The head of the family works hard and has a good job, a wife and usually a child. He is never home, therefore he lets his parents (grandparents) live with them to raise and take care of his child. It saves him money, because traditionally children have to take care of their parents. However, the elderly in the gated communities become socially isolated because of the lack of interaction. In addition, when the children go to school this isolation increases. The elderly do use the urban village for various reasons: to stroll, go to the market or play games on the street. However, the social life in the old district of Baishizhou is fundamentally different and is much closer towards the traditional street life.

The urban village provides housing for inhabitants that work as gardener, cleaning lady or guard in the gated communities and plays a great economic factor in the area. The anonymity is high in the urban village. The constant stream of migrants that enter and leave the village is large. Many people live in anonymity because of the lack of places to meet or social control.

Figure 102. The various layers of ownership. The government owns the land and the streets surrounding the urban village. Companies own the buildings and lease land for 50 years and introduce private roads. Gated areas are leased for 70 years and sometimes have a private management system. The urban village is essentially illegal, but the government did not succeed to demolish it. Locals are in charge of their own facilities.













SUMMARY OF RESEARCH

The impact of the rapid urbanisation and development in China is huge. In the forthcoming 10 years, 350 million inhabitants will become citizens. To accommodate these (rural) migrants, multiple New Towns, such as Shenzhen will be constructed at an immense rate of 1500 skyscrapers per year. The increase in GDP generates more wealthy citizens that will invest in luxury products, such as cars. Moreover, cities will sprawl due to increase motorised vehicle usage and demand for larger houses and more living space. At the same time the government issues the statement that "benefits of urbanisation are more important than history" (Shenzhen University, 2013). The impressive expansion results in the loss of historical, cultural and traditional context. The wealthier the citizens become, the more prestigious they would like to live. Spatial fragmentation is introduced: guards are hired and security measures are taken. This is already a small step in social segregation. The different social classes will distance themselves. Eventually, the lack of interaction between social classes will result in anonymous and homogeneous neighbourhoods that will affect the day to day life in a city.

Shenzhen, a city that grew from 300.000 to 12 million inhabitants in 30 years, is one of economic successes in China. The city received a SEZ in 1978 to compete with Hong Kong. Two years later, in 1980, all land became state-owned and local inhabitants were bought out by the government. The housing market changed from state-owned to market-oriented and land was leased to developers and real-estate companies. The government divides the land in several plots and rents each plot. There is no global planning: each developer has the freedom to design and build its own style of housing. This results in a scattered patchwork of residential enclaves with disconnected roads, facilities, etc. (figure 103). The economic growth of the city of Shenzhen resulted in rapid increase of wages. As a consequence real-estate developers increase their price to maximise profits. They mainly focus on high-rise residential buildings and business areas with (private) facilities surrounded by rigid walls. These enclaves become sub-centres within the city fabric (figure 104). These buildings are not affordable for most Chinese. The government seems to ignore this.

The economic growth resulted in a large number of migrants and floating population (temporary inhabitants) without a city-Hukou. These inhabitants do not have the luxury to live in the high-rise and high-end developments, have no access to education, health-care and pension. They are forced to live in illegal and informal settlements: urban villages. These settlements are situated on the land of former farmer villages, or close to wealthy high-rise residential quarters or construction sites.

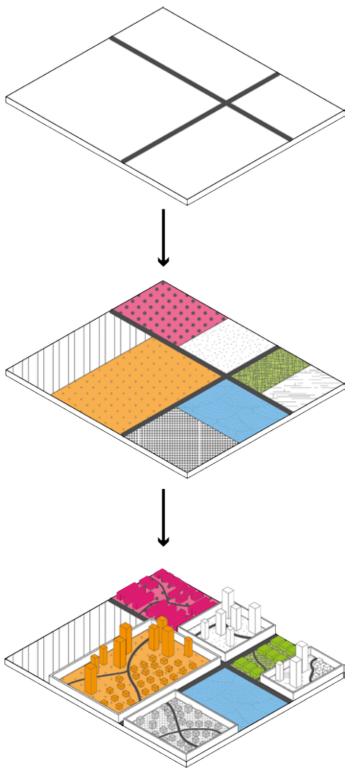


Figure 103. The Chinese government owns the land in Shenzhen. They randomely divide the land in multiple plots and lease these plots to developers. Each developer or real-estate company has the freedom to built anything they wish. This usually results in high-dense, high-end gated enclaves, increasing profits.

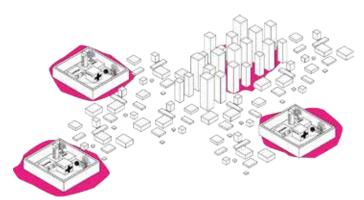


Figure 104. Gated communities usually accommodate shops, restaurants, swimming pools, public space etc. and may house thousands of people. These modern settlements become sub-centres within a city.

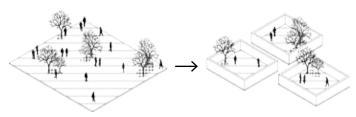


Figure 105. Public space is privatised and located inside the gated community, creating spatial fragmentation.

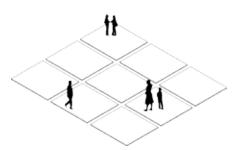


Figure 106. Spatial fragmentation results in clustering of social classes. This results in social segregation.

Baishizhou is one of the few urban villages left in the SEZ of Shenzhen and has illegal settlements. Many urban villages have already been demolished. Baishizhou is situated among the wealthy gated communities and owes its borders to these developments. The village buildings have been constructed by the 2000 original villagers and are rented to about 120.000 locals, with up to 40.000 temporary residents. Although gating has always been part of Chinese city design and was introduced at a small scale to increase community feeling and social structure, today, the primary reason for gating in this area is safety and security. Rigid walls prevent unwanted villagers to enter the area of multi-million dollar villas in Porto Fino (spatial fragmentation, figure 105). However, exactly the opposite effect is seen in the streets surrounding the gated communities: deserted public space and sidewalks. Public facilities and public space become concentrated within these enclosed enclaves. This leads to loss of traditional street life and is contrasting with the urban village, where chaos, informal shops and lower classes of society dominate. However, both groups heavily depend on each other. Moreover, inhabitants of the gated communities extensively explore the cheap infrastructure such as markets, (informal) shops, meeting places, outdoor public gaming facilities etc. The separation and division amongst social classes leads to social segregation, isolation, anonymity, homogeneous neighbourhoods and autonomous residential districts (figure 106). Especially the elderly in gated communities become isolated.

Lack of public space is one of the key reasons that interactions between social classes are broken. There are sufficient facilities and services to satisfy the needs of all inhabitants, nevertheless, there is insufficient space for leisure and social interaction. Can I re-establish the traditional Chinese way of living in order to gain back social coherence through public space?





5. METHODOLOGY AND STRATEGY

PUBLIC SPACE

Shenzhen is a New Town, which has been booming since 1980 with an average growth of 400.000 inhabitants per year. Due to the rapid urbanisation, the configuration of the city is changing in the same rate. A continues flow of new skyscrapers, large highways and high quality housing takes over the existing villages and its street life that are in their way. As a result of the housing reform, the real estate developers have taken over the construction of residential areas. Therefore these areas become totally market-oriented and are primarily focused on middle and upper class citizens, these constructions tends to evolve in gated communities (Yao and Wei, 2012).

SOCIAL RELEVANCE

Public space is a place where people interact and share information; a place where cars, cyclists and pedestrians meet; a place where buildings and streets come together; where residential buildings interact with shops, markets and street life. Public space can be defined in streets, parks, playgrounds, markets, etcetera. Spatial configuration tends to create an environment where people are in control of the public space. Citizens know what is happening in front of their doorstep, they know their neighbours and keep an eye on the street; social security. For this reason public space plays a vital role in the social and economic life of the city and its communities. However, when buildings become higher than four floors the interaction with the street is lost, which impacts the vitality of the street life (Alexander et al., 1977). High buildings become an obstacle in the public space due to its anonymity towards what is happening on ground level. When walls are built around several of these buildings or even houses, the same problem arises. Who keeps an eye on the street? Who knows who is living in the block across from you? Social security decreases dramatically, because the life is taken from the streets into the blocks or compounds (Yao and Wei, 2012). This phenomenon decreases the safety in the streets, parks and squares of a city and increases crime rates. Because who will see or notice you from their enclosed homes when someone robs you?

Spatial configuration therefore plays a key role in the social structures and security of the city and its street life. The livability of a city cannot be done only through building infrastructure, shops, publics transport etcetera. It is built through social interaction and communities. *Figure 107 and 108* display the transition from public to private residential areas within the neighbourhood of Baishizhou.

SCIENTIFIC RELEVANCE

There has been a considerable amount of research about the spatial, social, political and economic aspects of gated communities around the globe and its impacts on the city and its street life. The



Figure 107. Streets in urban village of Baishizhou are crowded due to public facilities, non-privatised housing and pedestrian zones (photo by author).

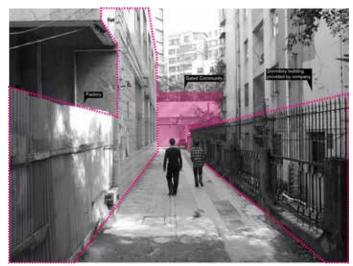


Figure 108. Streets become anonymous due to privatisation of housing and facilities (Photo by author).

many journals, books and articles that have been written about New Towns are rapidly increasing since the massive urbanisation. Much of these research papers talk about this trend that started in the mid to late twentieth century and discuss safety issues (culture of fear and architecture of fear), the change in spatial configuration and social structures. However, most of these articles only talk about the problems that arise in these fast growing cities in primarily South America, Africa and the United States. For example, the number of gated communities in Sao Paulo has increased dramatically in the last couple of decades due to the rapid urbanisation and high crime rates and the city is therefore called the "City of Walls" (Caldeira, 2000). Many of these problems are clearly visible, but have not yet a solution.

Moreover, not much research has been done in China, especially in Shenzhen. Shenzhen only has 3% land left to build. The rest of the city will be densified and urban villages will be sacrificed to become high dense urbanised areas for middle and upper class citizens. These particular places are attractive for gated communities and enclosed enclaves. Currently the International New Town Institute (INTI) has a research program on new New Towns around the globe. INTI is dedicated to improve the quality of global urban development, with a focus on New Towns (INTI, 2012). Shenzhen

is part of the first research towns. INTI has some partners, including TU Delft. Previous year, a group of 8 students from TU Delft has already done a graduation project on Shenzhen and this year, we will take a next step and introduce the livability issue. Since Shenzhen is only 30 years old, not much research or solutions have been done. Moreover, the problem is becoming larger by the day in the cities that are growing rapidly. The following news articles in *figure 109, 110 and 111*, state some of the problems of social segregation, security problems and loss of street life. However, the developments still continue in the same way.



Figure 109. Crime rates are increasing due to lack of social interaction, creating anonymity in large Beijing (Anna, 2010).



Figure 110. Chinese cities in which Special Economic Zones are introduced have become very prosporeous and the housing market is primarily focussing on the rich, creating severe social segregation (Pomfret, 2002).



Figure 111. The traditional Chinese street life is lost due to the increasing wages and wealth in large urbanised areas. The car is becoming one of the main uses of transportation and western shopping malls are becoming more popular than local shops. The same issue is raised as before. Anonymity is increasing due to lack of interaction (Levitt, 2012).

CASE STUDIES 01. QIANMEN HUTONG, BEIJING

The meaning of Hutong is "lane". In the Yuan Dynasty city plan it is presented as an 9.3 meter wide street. These Hutongs provide shelter from the wind and give a strong sense of privacy. Along the lanes, single-story homes that were made out of wood and brick were built around an open courtyard (also known as Si-He-Yuan) (Meyer, 2008). The Hutongs had specific height and architectural restrictions, however, each Hutong had its distinct characteristics, reflecting the different social groups that inhabited them. The courtyard house is an attraction for many, since it houses a secluded and peaceful atmosphere, a degree of privacy and calmness within the busy city. The ambiance of the courtyard houses are closely related to the traditional lifestyle of China's urban families. Before 1911, no residential building was allowed to have more than one storey. Houses could not be taller than the walls of the Forbidden City. The courtyard houses were originally designed to house one family, but have been converted to larger residential units for multiple families since the 1950's. However, the limitations of space and infrastructure within the Hutongs are a major difference with the modern day apartments. But many residents appreciate the environments and quality of Old Beijing, since the Hutongs are usually situated in a central location. Work, schools and shops are in walking distance. The Hutong lifestyle has a long tradition and is regarded as an essential element of Chinese culture (Yutaka et al., 2004).

Qianmen

Qianmen is one of the oldest Hutongs in Beijing. It is located South of Tiananmen Square and the Forbidden City and houses a famous pedestrian street, this is presented in figure 112. It has a history of more than 570 years. Its first name appears in the Ming and Qing Dynasties as Zhengyangmen and got the name Qianmen Street in 1965. During the Qing Dynasty, there were many specialised shops along this main street. A meat market, cloth market and jewelry market were well known and popular among citizens. Moreover, the Hutong surrounding the main axis consisted out of craftsman workshops, warehouses, theatres and residential units. The area resides around 450.000 residents whereof most of them live there for multiple generations. In 1924, a tram was introduced in Qianmen street, but were abandoned in 1966 (Travel China Guide, 2012). Figures 113, 114 and 115 show historical photos of Qianmen Street.

Weigai system

With the introduction of the Economic reforms, which have been explored previously, Hutongs faced a large problem. The densely populated residential districts were old and lacking maintenance and infrastructure. Therefore the *Weigai System* was introduced: residents of these buildings were re-housed somewhere else, and the traditional houses were demolished and plots redeveloped.



Figure 112. Qianmen Hutong in the South and Tiananmen Square and the Forbidden city in the North.



Figure 113. Qianmen street around 1900.



Figure 114. Qianmen Street around 1925. Back then it was already considered one of the most prosperous and busiest areas of Beijing.



Figure 115. One of the alleys in the Qianmen Hutong around 1900.



Figure 116. Entrance of Qianmen Street after renovation in 2008.



Figure 117. Qianmen Street after renovation in 2008. Most buildings have been rebuilt and many western shops have been added to the neighbourhood.



Figure 118. The Hutong has prospered (Dashilan Street) due to increase of (Chinese) tourism. As a result streets could be upgraded and renovated.

Beijing's Qianmen district: Rebuilt for better or worse

By Michael Bristow

BBC News, Beging

Many parts of China are being rebuilt, renovated or spruced up - and Beijing's Qianmen district illustrates both the benefits and the drawbacks.

Qianmen, which means "front gate" in Chinese, is one of the top destinations for tourists in the capital.

Sitting on the south side of Tiananmen Square, it was once an important commercial area just criteria the main rith walls, saling aventation.

More than 4 million square meters of Hutong neighbourhoods have disappeared between 1990 and 1999. The original residents are located far from their daily workplaces and activities, which results in long commutes. In 1993, the State Council approved the "Beijing City Master Plan (1991 – 2010)". It states Beijing as an *international city* and highlights the balance between modernity and historic heritage. As a result, the municipal government adopted the "Conservation plan for the historic and cultural city of Beijing" in September 2002 (Yutaka et al., 2004).

Masterplan of Qianmen Street

When Beijing got the opportunity to host the 2008 Olympics, it got the responsibility to develop into an international metropolis. The Qianmen area was one of the oldest and ancient areas in the centre of Beijing and became part of a preservation plan for New Beijing. The aim of the project was to display the historical culture and to develop the economy of the area. The main street is transformed into a famous pedestrian street of 840 meters long and 21 meters wide. An impression is presented in figure 116. Along both sides of the pedestrian street, the traditional houses are demolished and rebuilt from the buildings style that resembles the late Qing Dynasty. The street is primarily in use as commercial area with the introduction of a new tram system (figure 117) and (high-end) Western companies, such as Starbucks, Zara, Cartier, etc. The street is divided into four zones: culture, food, shopping and entertainment. The street became a very popular destination among (Chinese) tourists and the Hutong neighbourhoods surrounding Qianman Street continue to flourish. People can experience the traditional family life in the existing 50 Hutongs, while enjoying some shopping in the main street. All Hutongs have become heritage sites, as well as 80 historical shops (Li et al., 2005).

Outcomes

Qianmen Street has flourished since its opening in 2008. It has become a very popular area for Chinese as well as foreign tourists. The areas surrounding Qianmen Street have profits from the commercial activity and the Hutongs are becoming wealthier and have more money to spend on renovating its streets and public space (figure 118). However, not all is good. The increase in popularity has its downfalls: the traffic is increasing, the increasing number of bars are becoming a noise obstacle in the evening for surrounding housing. The rebuilding of Qianmen street has required thousands of people to move and dozens of business to close (figure 119, Bristow, 2011). But, even though the area is changing, 77% of the residents think that tourists would like to see the Hutong life and culture and are open to the transformation of the area. Qianmen District is a special case. Not all Hutongs in Beijing could be transformed into an entertainment district. Therefore, to protect the historic areas and the residents, a healthy balance of 50% residential use and 50% or commercial and administrative use is introduced. Moreover, critics cite that "Fake historic streets for tourists may be attractive for commercial reasons; it has no-

Figure 119. Good or bad?

thing to do with the aims of historic preservation and neighbourhood rehabilitation" (Yutaka et al., 2004).

02. YANGMEIZHOU BYWAY, BEIJING

Most of the Hutongs or alleys in Beijing were constructed after the beginning of the Yan Dynasty. These constructions became the veins of the city. One of the remaining and important Hutongs lay in the Dashilar area, to the South of the Forbidden City and close to the Qianmen district, which was described before. Dashilar hosts many Hutongs, constructed as early as 1553 until the 1930's. This region has always been one of the busiest areas of Beijing. The area is also called "The Dragon Spine, since it linked the two prospers capitals of the Yuan and the Ming Dynasties (Dashilare Investment Limited, 2012). This area has always remained untouched, even during the Cultural Revolution.

In 2011, the Dashilar Project was launched by Beijing Dashilar Investment limited and Guangan Holding as an alternative redevelopment strategy for Dashilar. It is a pilot project, in the city's cultural protection zone. One of Beijing most historical and traditional quarters is updated due to deferred maintenance of infrastructure and buildings. The Dashilar Project is an open platform, where multiple parties and stakeholders collaborate on exploring new methodologies in sustaining the old neighbourhood. With small scale inventions, they try to restore the social, cultural and economic aspects of the neighbourhood.

The Yangmeizhou Byway, or Bayberry Bamboo Byway, is a lane that runs almost 500 meters diagonally through the neighbourhood, a route which used to be a former canal. The lane is wide enough for single car, but is mostly used by cyclists and pedestrians (Meyer, 2008). The name of the streets refers to the many apothecaries who worked here and the craftsmen who wold whistles from carved bamboo.

One of the interventions of the platform was the regeneration of the Bayberry Bamboo Byway, presented in *figure 122*. It used to be an old dirt road with an average of 1700 inhabitants (*figure 120*). But through road repairs and the addition of small green zones, the street is upgraded (*figure 121*). The project strives for authentic antique marble streets, instead of demolition of historic features. Also this street is very popular by many of the old tenants and children (Guangan Holding, 2014).

The functionary of construction explains the small scale intervention. "The small scale intervention is chosen because we did not want the old tenants to move out. This tendency could transform the street into an unpopular area. The whole street has to be transformed to increase the vitality and look." Along the street, courty-ard houses are situated. Within the design, small stairs and green spaces are added along the building facades to create a peaceful



Figure 120. Bayberry Bamboo Byway prior to construction works.



Figure 121. The construction has begun in 2012; renovation of the pavement and buildings.



Figure 122. Render of potential transformation of Dashanlan West Byway.



Figure 123. Street view in 2013. The transformation has been quit successful.

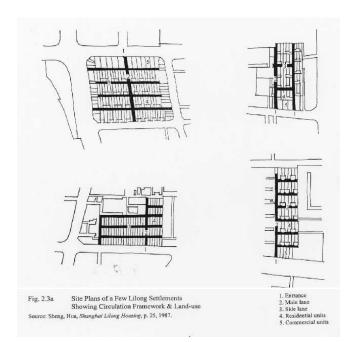


Figure 124. Several maps of Longtangs with Shikumen housing units. A main lane connected to the street contains several commercial facilities, while the side lanes or alleys are purely residential.



Figure 125. Bird view of a typical Lilong in Shangai, enclosed by two main lanes on both sides.



Figure 126. Side lane or alley within the Lilong community. These alleys do not include commercial functions but are purely residential.

street and improve the living standards for local residents. Some of the buildings are restored to bring back the traditional historical features. Bamboo Byway will receive a mix of residential and commercial activities, since these are crucial to many tenants (Zheng, 2013). The restauration finished in 2014 and is already a success. Presented in *figure 123*.

03. LILONG, SHANGHAI

Lilongs are most common in Shanghai, where Li means "communities" and Long means "lanes". Longtang (弄堂) is common term for Lilong (里弄), which is a neighbourhood consisting of 40-60 dwellings along several lanes. These neighbourhoods have emerged around 1842 when Shanghai became an important port city and have been evolved until 1949 (Shanghai Street Stories, 2010).

The Lilong has evolved into five types (Guan, 1996):

- The old Shikumen (石库门)
- The new Shikumen Longtangs
- The new-type Longtangs,
- The garden Longtangs
- The apartment Longtangs

The *Shikumen*, translated as "Stone Gate" is a typical style of housing unique to Shanghai that blends Chinese and Western styles. Wood structure buildings are situated in rows and based one Western row-housing pattern: straight and regular lines. They appeared mostly in the concessions of Shanghai. Longtangs are made of rows of Shikumen houses.

The neighbourhood generally has one or two sides bordering commercial streets, while the rest is enclosed by walls. Every Shikumen consists of housing and commercial units. Housing units are typically two or three-storey townhouses with a front yard protected by a wall. The neighbourhood is divided into a main lane, where most public facilities and commercial activities take place and smaller lanes or alleys, where residential units are situated. Several maps are shown in *figure 124*.

Residents in these small communities walk to outside stores or public transport and usually have a strong sense of territoriality because they know their neighbours. Because of the tight land use inside the Lilongs, no public facilities are located within. The commercial units occupy the street front lots, making the urban street a true public hub (Miao, 2010). In *figure 125* a bird view of a Lilong in Shanghai is shown, which is bordered by two main lanes with commercial activities. In *figure 126* situated below, a typical residential alley or side lane is presented.

Density

Density is a continues game of numbers used by developers, planners and designers. The relationship between the land, inhabitants, buildings and its housing units are measured and calculated (Mars and Hornsby, 2008). On the following pages, the urban village of Baishizhou is compared with several housing typologies existing in China and Hong Kong. The calculations for the different typologies are measured in population density, FAR, space per person and dwelling units (*figure 127*, The Density Atlas, 2011). Population density is measured by the number of people who live on 1 square kilometre (figure 128). The FAR (Floor Area Ratio) is the ratio of the built area (total size of building with total floors) to the lot area (property where building is built). FAR is used by planners and developers to measure the intensity of a development. In figure 129 an example of FAR calculation is shown. Additionally, the amount of space per person is calculated by the total m2 of built up area divided by the number of users (figure 130). Last, the number of dwellings per hectare is measured (figure 131).

Baishizhou (figure 137) is highly populated due to minimal public space and high density residential buildings. The number of people per km2 is incredibly high. Hong Kong high-rise residential buildings (figure 132) have a high FAR, but lower density due to the large plot size. In this project enough public space is realised to facilitate the needs of its inhabitants. The most spacious design is the Villa Park, which is becoming more popular in China (figure 134). The size of houses with gardens is a great contrast with the traditional Hutong and the illegal settlements that are seen today. The Hutong and Lilong have similar designs, however, a Hutong generally has one storey courtyard buildings, which results in lower densities, more outdoor space and low FAR, while Lilongs have two or three storeys residential units, more inhabitants and therefore higher FAR and more space per person (figure 135 and 136).

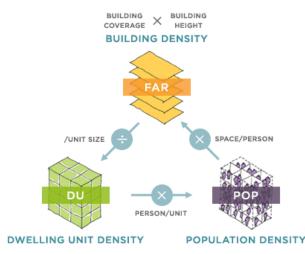


Figure 127. Model to calculate building-, dwelling unit- and population-density (The Density Atlas, 2011).

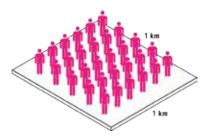


Figure 128. Population density is measured by the number of people living on one square kilometer.

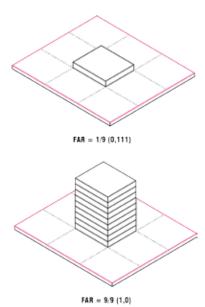


Figure 129. Floor Area Ratio (FAR) is calculated as the ratio between the number of floors divided by the size of the plot.

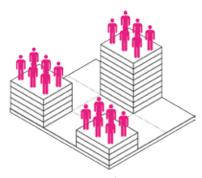


Figure 130. The surface area per person/m² is the ratio between the built up area divided by the number of occupants.

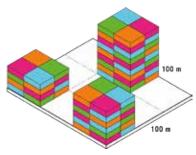


Figure 131. The number of dwelling units (DU) per hectare.

HIGH-RISE MING COURT, WEST-KOWLOON, HONG KONG

\$\int \text{50 000 p/km2} \quad \text{12.5 FAR} \quad \text{35 m}^2 \text{pp} \quad \text{838 DU/ha}\$

\$\text{838 DU/ha}\$

\$\text{Revious mass } \text{20.13}\$

Figure 132. High-rise residential plan in Hong Kong has a very high FAR due to buildings with many storeys on the plot. This results in many inhabitants and much space per person.

DORMINTORY BLOCK FOXCONN, LONGHUA, SHENZHEN

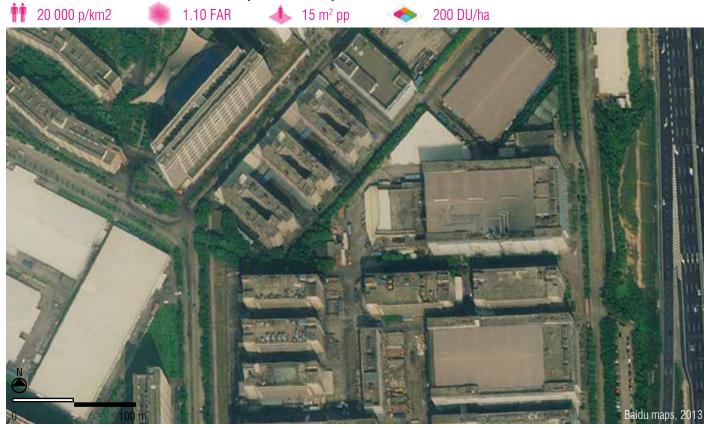


Figure 133. The dormitory blocks of Foxconn in Shenzhen have an average FAR, but a low amount of space per person. Many dwellings per unit and many inhabitants per dwelling results in higher population density.

STACKED VILLA GEKENG, LONGANG DISTRICT, SHENZHEN

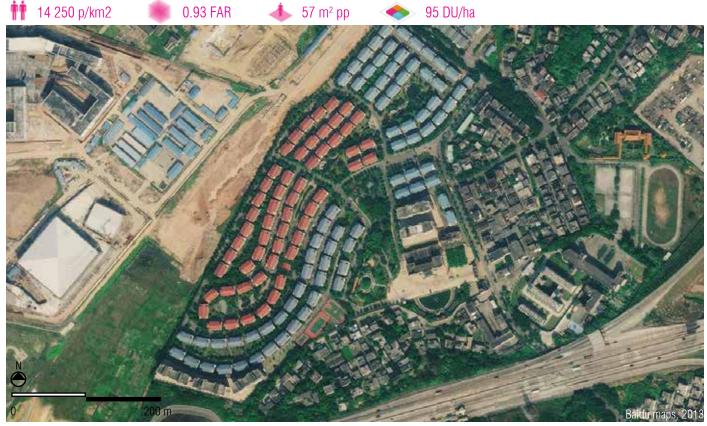


Figure 134. The Villa Park is becoming a popular building typology in China. Low FAR and density, with large spaces per person makes these master plans attractive and spacious.

HUTONG, CHAOYANG DISTRICT, BEIJING



Figure 135. The traditional Hutongs in Beijing consist of one or two storey courtyard houses. The density is high, because multiple families live together in one dwelling unit. Therefore the FAR and amount of space per person is low.

LILONG HOUSING, JING-AN VILLA, SHANGHAI

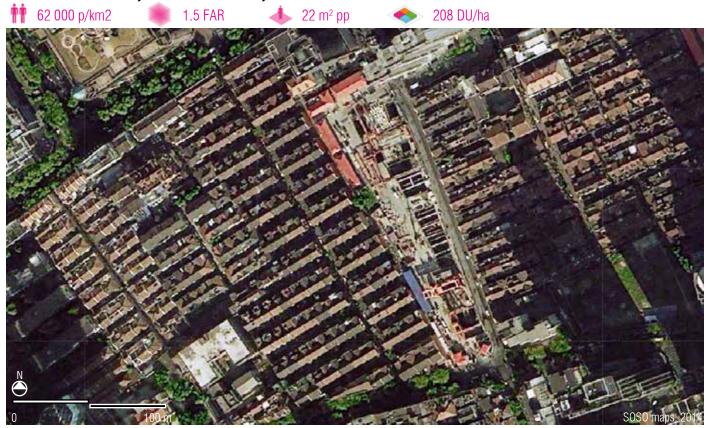


Figure 136.Lilong housing in Shanghai has a very high population density due to the large number of families sharing the dwelling units. The FAR is low as houses are not very tall. In general, Lilong dwellings have two or three storeys.

BAISHIZHOU, NANSHAN DISTRICT, SHENZHEN



Figure 137. Baishizhou is by far one of the densest populated areas. Urban villages have a high FAR, since most of the plot has buildings with up to twelve storeys. The number of inhabitants and dwellings result in limited space per occupant.

SPACE SYNTAX

Space syntax is an approach that investigates the relationships between spatial layout and a range of social, economic and environmental aspects. Connectivity, patterns of movement, interaction, awareness, density, land use and value, urban growth and societal differentiation, safety and crime can be mapped with this information system. In the case of Baishizhou, it was important to identify the hierarchy of streets within the neighbourhood. In the following maps different scales of street integration are presented. In the maps all the streets are drawn and red represents the most integrated streets, which are usually the main streets and dark blue the most segregated areas of a neighbourhood.

Figure 138 represents the global integration if Baishizhou. The red road to the South of the urban village is one of the main highways within Shenzhen. Because of the position of Baishizhou (along this highway), the urban village is easily accessible and shows many orange roads. Figure 139 presents a map with the local integration within Shenzhen. In this map, the hierarchy of the roads are measured when one changes direction three times. It is clearly visible that for example, the historic quarter becomes an important area and parts of the factory area. Also the main market street is clearly integrated. Overall, there are is a main street visible, which is presented in figure 140. This is also the street with the most formal activities and facilities. *In figure 141* the same is represented, but in this case more emphasis is laid on the local integration. Besides the main streets, some of the adjacent streets become more important on a local scale.

In the analyses part of this thesis I have investigated several inhabitants and conducted interviews. Through these interviews I have established three general actors within the neighbourhood: local, local passer and regional passer. The locals use several main streets and these are presented in the map in figure 142. The areas around the market streets and historic centre are highly integrated and primarily provide informal facilities and activities. The local passer represents inhabitants from the gated communities that surround the urban village. The patterns of these users are presented in *figure 143*. The main street and market streets are mostly integrated for their daily patterns. The regional passers are citizens who use Baishizhou as a meeting point and continue their journey after meeting. These people mainly use the streets along the entrances of the urban village. The streets are close to public transport and are combined by (high-end) shops (figure 144).

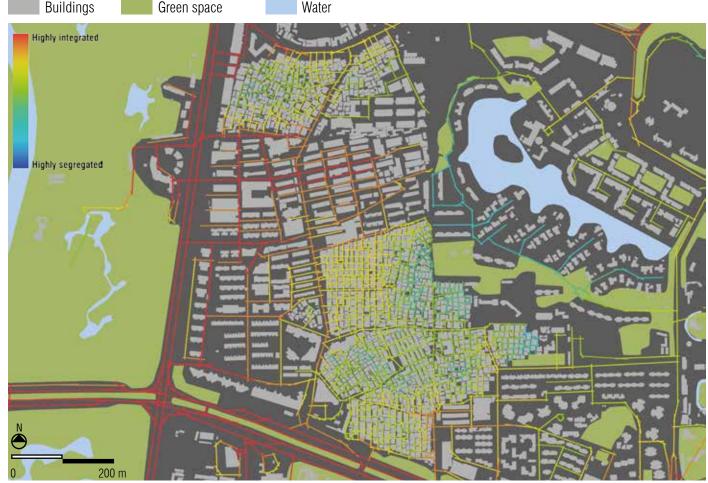


Figure 138. Global Integration [HH]; How well is Baishizhou integrated within the city of Shenzhen? The Shenzhen highway is well connected (orange) with Baishizhou's main route. 94



Figure 139. Local Integration [R3]; The integration of Baishizhou when the direction is changed 3 times. Some of the roads within the village are coloured red, theare well integrated. The dark blue coloured streets and pedestrian roads are mostly situated deep in the urban village and are highly segregated from the network. These are the areas where mostly local inhabitants go.



Figure 140. Total Depth; the red indicated in red are the most integrated and therefore most important streets of Baishihzou. This supports the observation that formal shops and facilities are located along these streets.

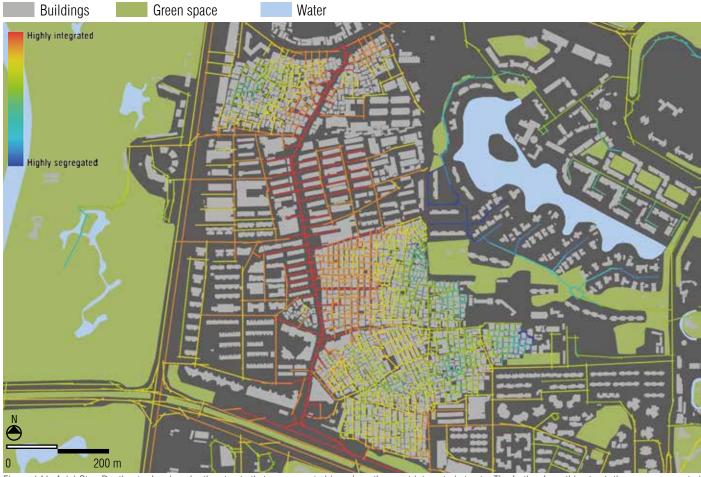


Figure 141. Axial Step Depth; at a local scale, the streets that are presented in red are the most integrated streets. The further from this street, the more segregated the area becomes.



Figure 142. Angular Step Depth - LOCALS -. Based on the interviews, I have identified three types of actors: Local, Local Passer and Regional Passer. They all use different routing. The areas indicated in red are mainly use by local inhabitants, as they utilise market streets and inner streets of the urban village.



Figure 143. Angular Step Depth - LOCAL PASSERS -. Inhabitants from surrounding residential quarters of the urban village tend to use the main street due to its many formal facilities. This results in less interaction with the urban village itself, since they mainly use the West part of Baishizhou.



Figure 144. Angular Step Depth - REGIONAL PASSERS -. Regional passers usually arrive by metro or bus at the South side of Baishizhou. This is one of the main routes and is a highly integrated part of the urban village. However, there is still a tendency to use the main streets and to avoid the urban village.

STRATEGY

In the previous case studies it is clearly visible that the traditional forms of development are small scale and low density. The government realises more and more the importance of the historic structures and tries to establish rules and regulation to preserve the existing Hutongs and Lilongs. In the case of Qianmen, this preservation resulted in construction of a traditional street with historic buildings. The introduction of Western brands has resulted in the attraction of many tourists, which is beneficial for local businesses and income for many. However, this resulted in a large destruction of local shops and houses and the rebuilt has required thousands of inhabitants to move and dozens of businesses to close. Additionally, the area has become much more expensive as locals are struggling to pay rents within this new neighbourhood. The change in many parts of China is happening so guickly, that people often to struggle to keep a link with the past. The relationship between neighbours is changing due to a different type of development. Many Chinese appreciate the walkability of the neighbourhood and the small scale houses. This is lost in the new developments, which are presented in the Density study. Many inhabitants of these newly developed projects lose the connection with ground level and miss the informal and vivid street life. In the traditional Hutongs and Lilongs this street life is still visible, many informal street vendor and markets are available for all classes of society and the mix between social classes is seen every day.

Preservation Baishizhou

Baishizhou is a neighbourhood that is used by many different types of people on a multi-level scale. As discussed in the analyses of this project. However, future development for this neighbourhood consists of multiple high-rise gated communities, where middle and upper class dominate (Urbanus, 2012). The lower classes and migrants have no rights and will be forced to either leave Shenzhen (no Hukou registration) or move elsewhere in Shenzhen without compensation. The village of Baishizhou will no longer exist and all local Chinese traditions will be replaced by the Western ideology of privatised housing, increased car usage and clustering of social groups, creating unilateral homogeneous estates instead of community neighbourhoods. In the space syntax analyses, the urban village is a place where all the activities take place, where people feel safe and were interaction of several social classes take place. However, there is still a difference in routing between local urban villagers and inhabitants of the surrounding gated communities. Instead of assuming Baishizhou will be replaced by private enclaves, will there be a possibility to preserve Baishizhou and make it part of the new history of Shenzhen? Can urban villages be seen as the new Hutongs of Shenzhen in the future?

The Chinese have a strong tradition with street life; they love to spend time on the street. The tradition of street life is a very important component of well-being in China (Levitt, 2012). It is the place where they play games, meet other people, stroll around, and take their (grand) children to the playground. It is a vital aspect in the lives or the Chinese people. The walkability and design of traditional neighbourhoods (narrow streets) ensures motorised vehicles are not necessary. In this strategy, an alternative model is presented for the future of Baishizhou. Key in this project is de preservation of history. History makes the identity of the city and since Shenzhen has demolished the little history that was there, urban villages can become the history of the future (figure 145).

The neighbourhood that is represented in the map in *figure 146* is the focus area of the project. This area will be preserved as much as possible, since this area houses a historical site in the centre. Baishizhou should become an important and pleasant place to stay. Earlier was stated that Baishizhou has a strategic position on a regional and local scale. We can enhance the importance to focus on a new target group within Baishizhou: tourists.

The loss of street life is a negative factor in China. So the focus point will be to bring back the traditional street life and the places of interactions and meeting. Public space is the great factor for this strategy. By creating a network of spaces, connecting specific important anchor points in the neighbourhood, we can establish a fixed framework of squares, playgrounds and parks. These different public spaces will be combined with markets, shops and entertainment facilities and will be established along a network of existing and upgraded routes. In the following section, the specific needs and facilities will be established based on the different actors that will be using Baishizhou. Key in this network and several public spaces is to create interaction between social classes.

Walkability

Chinese people traditionally walk or use a bicycle to get around. However, since large roads were constructed and cheap cars and scooters entered the market, the walkability of the city decreased immensely. Functions have been separated, and instead of small local facilities, large shopping malls have been introduced. One of the aspects of this strategy is to use the small scale urban village in its advantage and create multiple routes for pedestrians and cyclists. Cars and other motorised transport will be banned as much as possible inside the urban village.



Figure 146. The focus area of the project in the context of its direct neighbourhoods. The is chosen for its strategic location in the city and its good connection with the public transport network.

ACTORS

LOCAL

In the conducted interviews, there are generally three types of users of the urban village. First, the locals; the locals are by far the most important actors in this project. By preserving the urban village, most migrants and villagers will not be forced to move out. Below in *figure 147*, the necessary facilities of the locals are presented. These facilities are necessary for daily life activities for inhabitants. For example, gardens close to their house where they can plant vegetables and flowers are currently not available. Some use the rooftops of their residential unit to create gardens, but these lack accessibility. They need shops, supermarkets and

informal markets and like to meet others in restaurants and bars. In their spare time, they like to go to karaoke bars, cinemas and the theatre. Children will go to school, while elderly like to stroll around and sit along one of the many streets to play games.

Other facilities, such as hospitals, post office and community centres are available and closely situated to the urban village. Locals tend to never leave the urban village since many facilities are within reach. For special occasions they will go to a park, CBD or shopping mall.



Figure 147. Facilities needed for local inhabitants require additional private space (gardening) and public space hosting several facilities

LOCAL PASSER

Local passers are all the inhabitants that live in the surrounding gated communities in Baishizhou. Most of these inhabitants are elderly, who live with their children and take care of the grand-children. In most of the gated communities, green space and private facilities are situated. However, most of these passers use facilities in the urban village of Baishizhou. They are migrants and live in anonymity in the gated communities. They stroll around the main street, go shopping at the markets and other informal shops. However, they remain on the edges of the urban village. When specific facilities are placed within the urban village, connected to

a clear network, these passers can be attracted to specific public spaces in the urban village. Especially elderly, who love to play games outside along main roads where they can see and be seen by others. Additionally, children will most likely be the future of this neighbourhood. Besides the schools with their playgrounds, other extensive facilities are needed for these little ones. The facilities that are necessary for local passers are presented in *figure* 148 below.

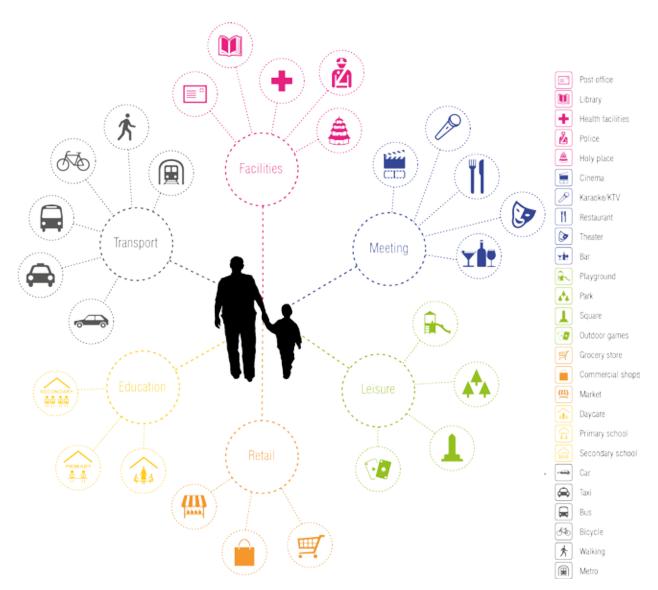


Figure 148. Facilities for local passers. The inhabitants of gated communities are usually elderly and children in need of well designed public space for different social classes.

REGIONAL PASSER

The regional passer is established based on an interview that can be read in Appendix I. The regional passers are citizens of Shenzhen who use Baishizhou as a meeting point as it is a strategic location within the Special Economic Zone. From there, they will continue their journey to either Hong Kong by boat, or take the metro towards other parts of Shenzhen. Most of these citizens meet close to the metro station. However, instead of meeting there, passers can be attracted towards the main square in the urban village when specific facilities are added to the square.

Restaurants, places to relax and shop can be introduced along several streets to increase the use of the urban village itself, instead of the edges and entrance of the area. Waiting for their companion will be much more comfortable for them. At night, passers can use karaoke facilities, a cinema, or quickly go to the informal and cheap market before heading home.

Figure 149 presents the needed facilities to attract regional passers in the urban village.



Figure 149. Facilities that are required for regional passers. Instead of exploring Baishizhou as a place only for passing by, they should be attracted by facilities (restaurants, bars, shops and karaoke) offered by the urban village.

TOURIST

Baishizhou is close to all the main tourist attractions in Shenzhen. The key is to attract these tourists to Baishizhou and reward them with the traditional Shenzhen street life. The tourist can easily take the metro from Window of the World to Baishizhou and stay in Baishizhou. But therefore it must be established which necessary facilities are needed to fulfil the needs of these future tourists. Also it must be said that Baishizhou will only attract a certain type of tourists. The focus will be placed on bag packers and easy travellers, who do not require five-star hotels and resorts. Tourists prefer easy access to their hotel after a long day of sight-seeing.

Additionally, bars, restaurants and shops must be close by. In the diagram below, *figure 150*, the necessary facilities for tourists are presented.

The tourists can play a major role in the position of Baishizhou. When income through tourists go up, as seen in the case study of Qianmen, the government will most likely hesitate to tear down the urban village. Perhaps, the government will consider investing in a livable and traditional village.

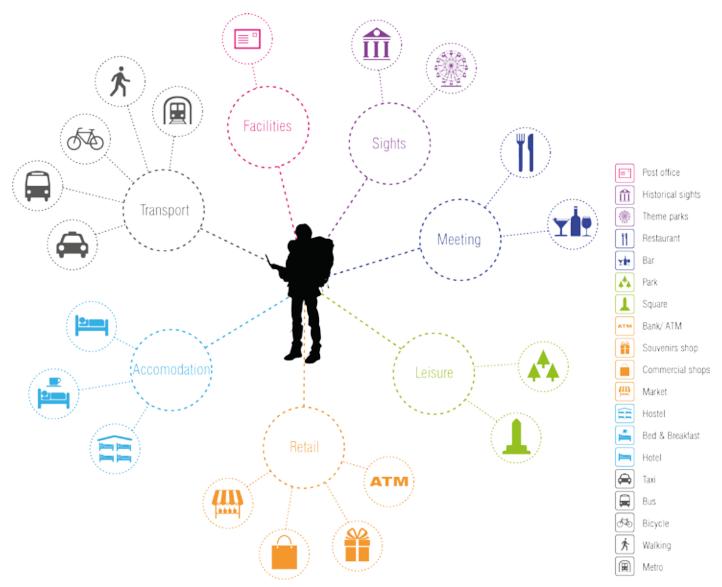


Figure 150. Introduction of a new actor: The tourist. To attract tourists, specific facilities are required, such as souvenir shops, places to relax, hotels and hostels, and places to meet. Facilities should be well connected to public transport.

FACILITIES

All the facilities of all actors in Baishizhou have been established and are carefully placed in the scheme below (figure 151). This scheme presents the overlap of several facilities and spaces that are needed by different actors. For example, facilities such as hospitals are used by local inhabitants, as well as local passers. Through daily patterns, locations of these functions can be placed strategically within the neighbourhood. Places where interaction between several social classes and actors could occur are the restaurants, bars, but also public spaces. These are in use by all actors. Retail facilities, such as markets and shops are also places where that are used by all four actors.

Very specific facilities, such as hostels or private gardens are related to a specific actor and not used as place for interaction. Key is to identify places and facilities that could incorporate several facilities. In this case, public space and meeting locations, such as restaurants, bars etcetera.

In *figure 153*, a scheme is presented which ranks the existing, missing and the shortage of facilities. It is clearly visible that public spaces are by far the missing element in the urban village. Others, such as hotels, private gardens and souvenir shops, are not present at the moment. As seen in the analyses of the project, most of the household facilities, transport facilities and other local facilities, such as hospital, schools, post office etcetera already exist and can be incorporated in the strategic plan.

Public space is, as mentioned before, a key theme in the project and strategy. This is an incubator for the community and special emphasis will lay on the spatial plan of public space.

Since many Chines appreciate the close distances of facilities to their homes, a radius of 400 meter should be applied. The requirements of a walkable city mean that all facilities must be situated within this radius, which is a 5 to 10 minute walk. *Figure 152* present the radius with all facilities needed within a specific range.



Figure 151. Actors versus facilities.

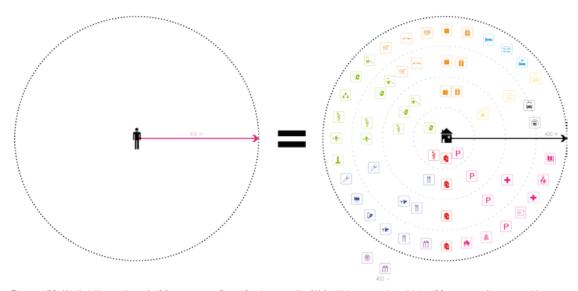


Figure 152. Walkability radius of 400 meters, or 5 to 10 minute walk. All facilities must be within 400 meter radius to avoid motorised vehicles within the urban village.

	EXISTING FACILITIES	MISSING FACILITIES	SHORTAGE OF FACILITIES
FACILITIES	- + 4	PW	A
SIGHTS	m •		m
MEETING	11 11		
LEISURE	+1	E A	\$. • • • <u> </u>
RESIDENTIAL	•	3	
RETAIL		n	Arw Arw
EDUCATION			
ACCOMODATION			
TRANSPORT	原一 魚屬	<i>(</i> 48)	

Figure 153. Existing, missing and shortage of facilities for the four actors in Baishizhou in a single diagram. Obviously there is a lack of public space and hotels.





6. BAISHIZHOU 2.0

PUBLIC SPACE TOOLBOX

The four actors that have been identified in the previous chapter can be further explored. In the analysis, several age groups have been interviewed. Together with the actors and the interviews, six specialised types of actors are established. These are presented in *figure 154*.

- The most important actors are the *locals*. These inhabitants hardly get out of the urban village. They usually work within the village or work for inhabitants of the gated communities. In the weekends some will go to the park, situated along the water in the South of Shenzhen.
- Elderly make up large part of the locals and are the most prominent inhabitants of the area. Many are migrants and live with their children. The primary reason for them to come to Shenzhen is to take care of their grandchildren. They are the people who use many facilities within the neighbourhood; go shopping and play games on the streets. This age group feels isolated and has an incredible need for interaction and meeting others.
- Children in the neighbourhood do not have many places to play, so many of them play along the streets or the main square.
- The local passers are the inhabitants of the gated communities. These inhabitants, besides the elderly and children, usually work outside of the area during the day and withdraw themselves in their secluded private estate at night.
- The *regional passer* is the kind of actor that uses the strategic location of Baishizhou to meet and continue their journey.
- The *tourist*, who visits the many attractions surrounding the Baishizhou, and can play a significant role in the future of the urban village.

Interaction between these actors requires meeting spaces. The existing facilities provide great places to connect inhabitants. However, social cohesion does not only occur through functions. The necessary element for connection happens through public spaces where facilities are incorporated. The shortage of public spaces must be tackled in the spatial plan.

Before we can establish the public spaces, an understanding of traditional commercial squares is needed. Originally, commercial centres and squares were divided into four principal categories: regional, community, neighbourhood and scattered corner shops. The regional square had a prominent function within the city: it was situated close to the palace or authority. Community squares where areas where multiple neighbourhoods could provide from communal gardens, parks, shopping areas etc (for example Danwei courtyards). Neighbourhood squares were located within the residential areas, where multiple families could profit from small

scale informal shops along a square (main square of Hutong). Local scattered shops were traditionally situated close to residential quarters that provide basic household facilities. Traditionally they would be located along main axis of Hutongs and in shop fronts of courtyard houses (Jin, 1993). Moreover, commercial squares are public squares! Public space in China is associated with consumption; restaurants, bars, shops and other daily facilities are incorporated within the urban space (Shenzhen University, 2013).

Now that the several actors and the type of squares are investigated the necessary elements for the four squares can be established, based on the needs of the actors. *Figure 155* presents these ten tools:

- Playground used by children and parents.
- Park used by all actors when located on the regional square.
 On local scale, elderly and children will be users
- Stage designed for local inhabitants (including children and elderly) but can attract regional passers and tourists.
- Garden primarily (semi)-private space for local inhabitants.
- Outdoor work out for all local actors.
- Seating area for all actors but mostly used by elderly during the day. Combined with fucntions, such as restaurants, tourists and regional passers will be attracted.
- Worship garden for religious local inhabitants and regional passers.
- Market for all actors.
- Informal street vendor for all actors
- Outdoor games for all actors.

In the following pages the four squares are presented with the implementation of specific tools.

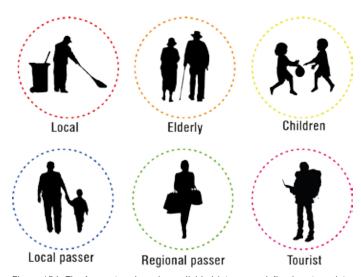


Figure 154. The four actors have been divided into more defined protagonists. Elderly and children play a significant role in China, as they consume most public space.

PLAYGROUND

Place for children!

These spaces should be located in quiet and calm areas. It is necessary that children can play safe and that parents will be able to watch their children. Playgrounds partly enclosed by housing on ground floor.

PARK

This tool can be placed anywhere; either on busy squares to create a small oasis or local squares as neighbourhood garden. The park should contain greenery, provide shade and seating. A small realm for Feng Shui can be added.

STAGE

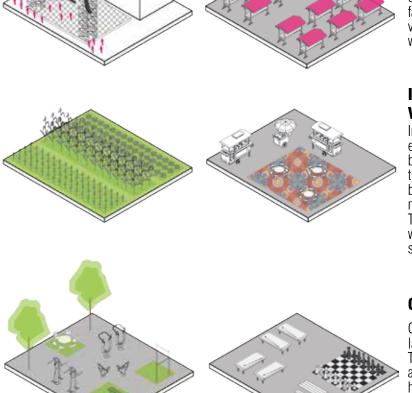
This facility should be placed on main squares and should be integrated with existing community centres or a (new) theatre. Interactive tool for all local age groups.

GARDEN

Located in segregated areas to provide semi-private spaces within the urban fabric. Gardens are organised and maintained by local inhabitants.

OUTDOOR WORK-OUT

Public space for all social groups. Should be located within the urban fabric situated along main routes and squares. This tool can be incorporated with the park or seating/games area.



SEATING AREA

Seating areas can be placed anywhere, depending on the user. When used for elderly, this tool should be situated along main routes and square. Otherwise it can be integrated with shops and restaurants as outdoor food court.

WORSHIP GARDEN

The worship garden is a tool, which is always combined with a temple or religious buildings. These buildings are mostly situated on main squares. This tool can be integrated within the park tool.

MARKET

Markets are an important aspect for Chinese street life and its traditions. This tool should be incorporated on main squares and designated routes. Provide facilities for all actors involved and are combined with restaurants and shops.

INFORMAL STREET VENDOR

Informal shops are situated everywhere. This tool can be placed anywhere within the urban village. Should be integrated with shops, markets and restaurants. This tool can be combined with outdoor games and seating area.

OUTDOOR GAMES

Outdoor games are a popular item for many residents. This areas can be situated anywhere in the neighbourhood and could be combined with restaurants and shops.

Figure 155. Several public space tools are introduced for the different actors. Each tool satisfy specific needs.

REGIONAL SQUARE

Traditionally, the regional square was a major attraction within the city. The implementation of such a square on a local scale requires presence of attractions and facilities for all actors involved. The several actors that should be attracted to this square are illustrated in *figure 156*. The size of the actor represents its importance for the success of the square. The regional square is the centre of an area, regional passers, tourists and local passers will play a key role.

Figure 157 presents a general regional square with the several tools implemented. On the one hand, it should invite outsiders, on the other hand it should provide facilities for local inhabitants. A playground for children should be present on the square, and must

be enclosed by residential units on ground floor. In combination with a theatre or community centre, a central stage should be incorporated in the design. A central market is necessary to bring vivid (traditional) street life to the square. The plint of the square should not contain any residential units, but solely consist of shops, restaurants, bars, cinema and supermarkets. In combination with these facilities, tools as seating area and outdoor games can be combined. A park or green area should be added in combination with seating for relaxation. Hotels and souvenir shops should be present in this area and should have a small private outdoor space.



Figure 156. The regional square has to accommodate facilities for all actors. However, here emphasis is put on the regional and local passer and the tourist.

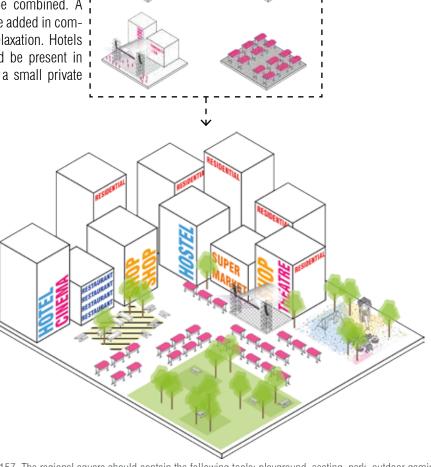


Figure 157. The regional square should contain the following tools: playground, seating, park, outdoor gaming, stage and markets. They should be surrounded by restaurants, shops, hotels, cinema and supermarkets. Except for the playground: this should be enclosed by residential units.

COMMUNITY SQUARE

Local passers and local inhabitants are the main users of this square (figure 158). The square is the central area for a neighbourhood and should be connected to important (pedestrian) routes within the area. The square should be enclosed by shops, restaurants and supermarkets. On this square multiple informal street vendors should be present. Residential units should be placed either above the plint or behind the square. It should contain several important local functions, such as a community centre, temple, library or supermarket. Tools, such as a stage or worship garden should be incorporated with these facilities. This square can either include an outdoor work-out area or playground for children. This is presented in figure 159 and 160. Seating, outdoor games or street vendors should be combined with existing facilities. Below two types of community squares are presented.



Figure 158. The community square is meant for use by local inhabitants, elderly, children and local passers.

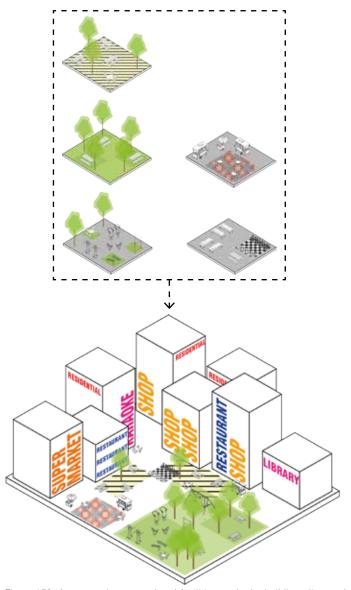


Figure 159. A community square. Local facilities are in the building plints and several activities, such as an outdoor work out, green space, outdoor gaming and informal activities are present.

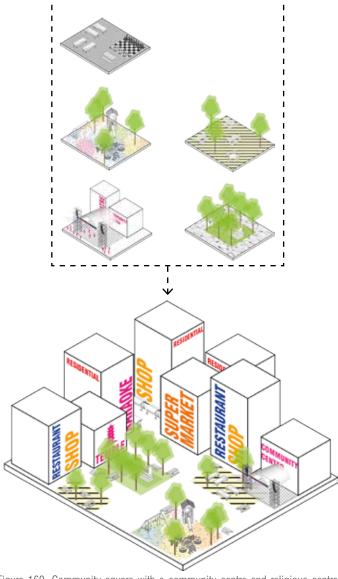


Figure 160. Community square with a community centre and religious centre with the additional tools incorporated. A playground is situated away from the commercial area.

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NEIGHBOURHOOD SQUARE

The neighbourhood square is a small scale public space designed for all local actors (figure 161). It is a place where multiple families can gather and where the plint is made up from commercial activities and residential units. The tools that should be implemented in these public spaces are seating areas, which can be combined with small scale informal street vendors. Additionally, a green space should be present and can be incorporated with a playground. The park and/or playground should be incorporated with the housing units, while the informal street tool and the outdoor game tool should be combined with commercial functions. While the public space is primarily designed for local inhabitants accidental passing by local or regional passers could occur.

Figure 162 and 163 presents' two types of neighbourhood squares. One where mostly elderly and youngsters are present (figure 162) and one where children are the target group (figure 163).



Figure 161. The neighbourhood square is used by all local actors. Accidentily it will be explored by a local or regional passer can use the area.

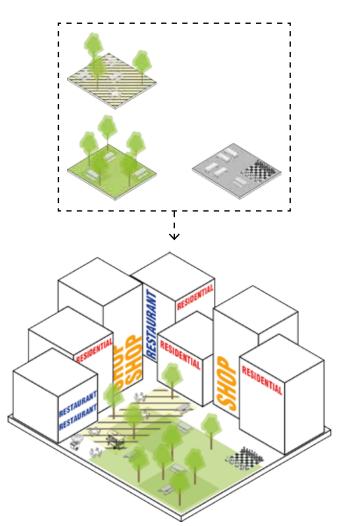


Figure 162. The square has a mix of residential units and commercial facilities. A large park with incorporated seating tool and outdoor gaming is implemented.

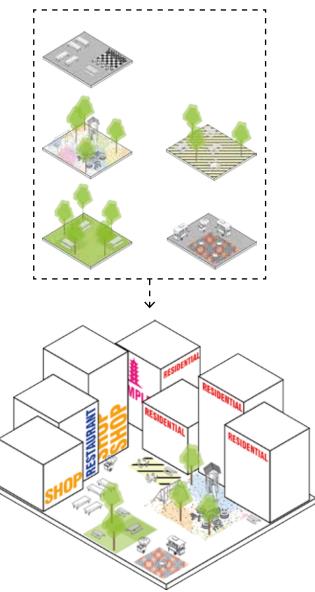


Figure 163. Children in combination with their guards are target group of this square. The playground is situated along residential units, while other tools are incorporated with commercial activities.

LOCAL SQUARE

The local square is primarily planned for local inhabitants (*figure 164*). These spaces are located in small areas enclosed by residential units. These small scaled places either have a flower and/or vegetable garden tool or a playground for children. No commercial facilities or outsiders should be allowed in this area. Multiple residents can maintain and organise these squares.

Figure 165 illustrates the local square specifically for children. The playground tool is implemented enclosed by housing. Figure 166 represents a local square with a vegetable garden. These spaces are enclosed by multiple residential units but remain public. Sunken deep within the neighbourhood, hardly any passers will go here.



Figure 164. The local squares are specifically for the local inhabitants. They can explore vegetable- and flower gardens.

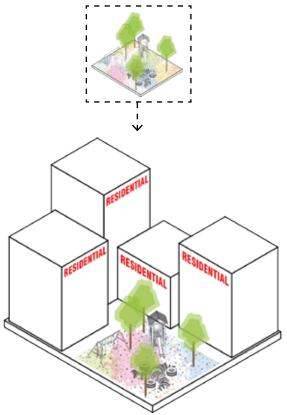


Figure 165. A local square with a small playground for the younger local inhabitants.

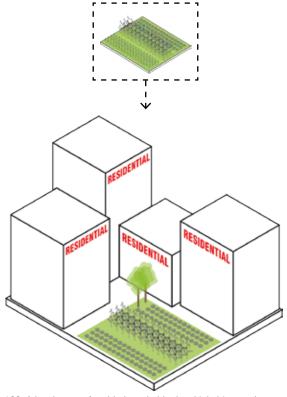


Figure 166. A local square for elderly and older local inhabitants where vegetable and flower gardens are integrated.

STRUCTURE OF URBAN VILLAGE

Baishizhou is currently seen as five different neighbourhoods, connecting to the five historic villages. However, structure wise, this is not visible. The main street in the middle divides the urban village in two. The two areas are so densely populated that most inhabitants and local passers use the main routes along the edges of the two large neighbourhoods instead of passing through the urban village. Jane Jacobs describes the need of small blocks in her book "The Death and Life of Great American Cities". She argues that through good organisation of a network and hierarchy, the usage of a neighbourhood increases and cites that large blocks encourages people to use one particular street; the shortest (Jacobs, 1961). An illustration is presented in *figure 167a*. Blocks and neighbourhoods may be considered obstacles within the urban fabric. This is partly true for Baishizhou. Even though the urban village has many small and narrow streets, it is considered a maze without order and organisation. People tend to avoid the inner areas of the urban village unless they live there.

When block sizes decrease to about 90 to 100 meters, according to Jacobs, the neighbourhood becomes more vivid, since multiple other streets will become important routes from A to B (illustrated in *figure 167b*). When all blocks are designed not larger than 100 meters, most streets in the neighbourhood will be available for passers. Instead of being an obstacle, the neighbourhood will be integrated into the urban fabric and can become an exciting opportunity for new facilities (*figure 167c*).

This strategy is also implemented on a larger scale in Baishizhou. First, the existing main routes will be upgraded to create a continuous network for vehicles. Second, an extensive upgraded pedestrian network will be explored. This network is based on the existing informal and formal facilities, such as shops, hospitals, supermarkets and schools. Additionally, analyses of daily patterns of inhabitants is implemented to establish a new pedestrian network. In the map in *figure 168*, the road and pedestrian roads are illustrated in black. These roads will be the main routes for all passers and local inhabitants and present the important shopping routs. Two pedestrian connections to Porto Fino will be made, to attract inhabitants of the gated community to Baishizhou.

In addition, an informal local route will be established to divide the urban village into smaller neighbourhoods. This is done to create more open spaces and increase the number of meeting spaces. This green route will facilitate a calm environment, which crosses right through the neighbourhood. Along this network, small local pocket parks will be introduced. The downscaling of the neighbourhood will also increase a more phased development in the future.

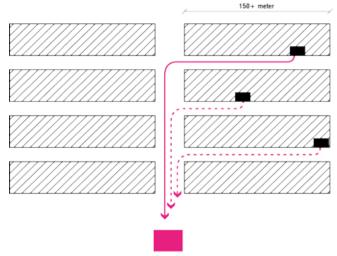


Figure 167a. Long blocks ensure that inhabitants take one route from A to B: the shortest (Jacobs, 1961).

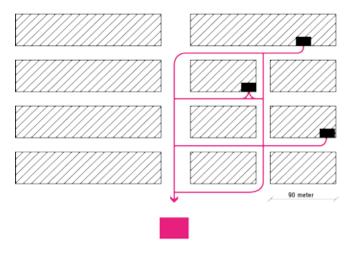


Figure 167b. When several blocks are smaller, more interaction within the neighbourhood occurs (Jacobs, 1961).

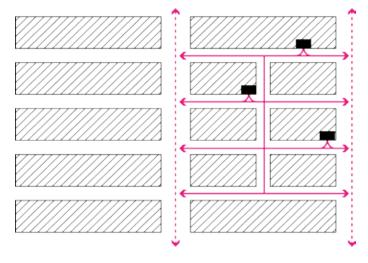


Figure 167c. When the whole neighbourhood consists of blocks not longer than 90-100 meters, both East and West streets become integrated. The neighbourhood obtains a pass through instead of barrier.



Figure 168. Main vehicle routes will be upgraded and an additional pedestrian route will be introduced to connected to Porto Fino. The positioning of these routes is based on the availability of current formal and informal facilities and Space Syntax analyses. An additional green route will be implemented to downsize the large neighbourhood.

TESTING THE NETWORK

The network that is applied in the new strategic plan should increase the integration and accessibility of several functions within the urban village. Also it must create specific places where interaction could occur. To test this, another space syntax analysis is done based on the new network.

The global integration of the urban village will remain practically the same. Some routes towards the South of the village become more integrated (figure 169), but in general most of the changes become visible on a smaller local scale. The local integration, presented in figure 170, represents the main streets of the new network. The street that divides the urban village from the gated communities remains quite important and integrated. However, additional areas, such as the market and its surrounding streets and the historic centre become much more integrated.

In figure 171, the main streets of the urban village are shown. The new networks of upgraded routes clearly define the smaller neighbourhoods and are more integrated in the urban village. From the current main street, an Axial Step Depth is measured (figure 172). Almost the entire urban village is accessible through the implementation of the new network. Especially the upgraded pedestrian

network increases the integration of many part of the urban village. In this case, hardly any segregated areas arise.

The several actors that have been identified have to be tested as well. The same roads as previous will be used. The Local Angular Step Depth (figure 173) presents a highly integrated urban village. The main route is the market streets and the historic area. Figure 174 presents the local passers. The main idea behind the thesis was to incorporate the inhabitants from the gated community into the urban village. The upgraded network increases integration for these inhabitants. Last, the tourists and regional passers, strategic location for the users have to be identified. Especially for them, the urban village is very well accessible from the Metro station. Their main routes are represented in orange and red (figure 175).

In general, the new implemented network immensely increases the integration of the urban village. Strategic locations, such as the historic centre, market streets and streets along Porto Fino increase in accessibility and become important anchors within the neighbourhood. In the current situation, segregated areas existed in the urban fabric. In the new situation, all areas are integrated and a connection to Porto Fino is made.



Figure 169. The global integration [HH] of Baishizhou will not change. However, main routes to the South of the village and streets crossing the village 116 are more integrated than before.



Figure 170. Local Integration [R3]. In the current situation only the main routes within the neighbourhood are coloured red. With the new network structure, several streets are locally much more integrated and therefore more accessible.

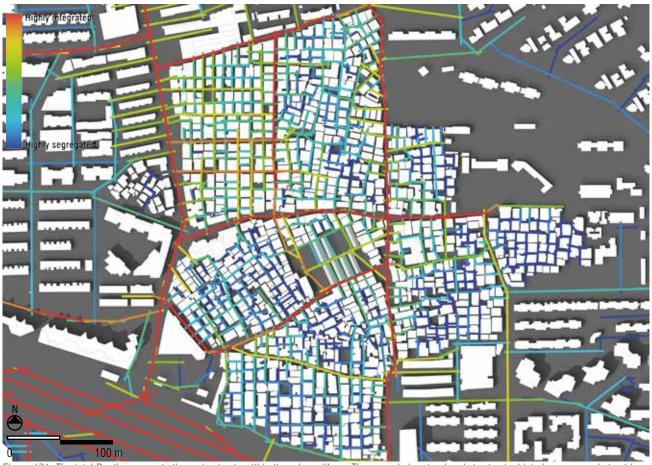


Figure 171. The total Depth represents the main streets within the urban village. The upgraded routes (markets streets, historic square and street long Porto Flno) are much more integrated.



Figure 172. Axial Step Depth. From the main street, almost the entire urban village is accessible through the implementation of the new network. No segregated areas exist.



Figure 173. Angular Step Depth - LOCALS -. The integration of the urban village from the main routes used by locals. Through the new network, the area 118 around the market routes becomes highly integrated.



Figure 174. Angular Step Depth - LOCAL PASSERS -. One of the most important aspects is to incorporate inhabitants from gated communities. The areas indicated in red, orange and yellow show high level of integration.



Figure 175. Angular Step Depth - TOURISTS AND REGIONAL PASSERS -. The tourist and the regional passer usually arrive in Baishizhou via the South Entrance. The red and orange marked streets will be their main routes to access the urban village.

STRATEGIC PLAN FOR PUBLIC SPACE

Traditionally gating was done on a small scale to increase a community feeling and increase social security and consisted of several families clustered together (Jin, 1993). Moreover, gating was also used as a form to divide urban citizens from rural habitants. And urban citizens from the authority. One large difference with today is that historically the gated areas were only used for housing and commercial activity always remained public. However, the gated communities in Baishizhou have private facilities and green space and are socially, spatially and economically isolated from the urban village. The gated communities are built for seclusion, prestige and security.

The strategic plan of this project is based on traditional values of community-feeling and street life. Street life has always been part of the Chinese culture and was present along main streets an squares within the neighbourhood. Traditionally these Chinese commercial centres were divided into four principal categories: regional, community, neighbourhood and scattered corner shops. These have already been discussed in the Toolbox section. The principal of several squares attracting different types of actors has been implemented in the strategy of Baishizhou. However, this principal is downscaled to a local scale, where a new hierarchy in public squares is implemented. This implementation is presented in the map on the opposite page in *figure 177*.

The regional square is the central area within the urban village and is present where the historic dormitories are situated. This square attracts many social classes; locals who gather to play games, local passers who step-by at night to eat at the informal pop-up restaurants and many children, as it is the only large open area. The regional square is easily accessible and highly integrated within the area. New facilities such as hotels, a temple and souvenir shops will be introduced to attract regional passers and tourists. This square is connected with the market routes, presented in pink, towards the main market in the North. Another regional square is the South entrance of Baishizhou. This square is used by many regional passers due to its close connection with the metro station.

The community square focuses on a scale where locals and passers come together. They are highly connected to the main pedestrian routes and are important public spaces within the urban village. Main functions, such as community centres and shops are implemented here. All of the squares are integrated within the urban fabric and are connected to schools, main streets and supermarkets.

The neighbourhood scale squares are situated along an informal green route. These squares are combined with commercial activities as well as housing units. Facilities are shared with inhabitants from the neighbourhood and are placed along the routes that are less accessible for outsiders. However, these public spaces be used by "accidental" passers. Most of the commercial activities are informal and the squares are loosely intertwined within the urban village.

The fourth square is very local based. Almost hidden in the urban village, these spaces provide semi-private/local facilities, such as vegetable- and flower gardens. In the map the several centres are presented. These squares provide small spaces that are shared with multiple families. These local spaces are maintained and owned by the villagers themselves. The ownership is important to feel a sense of home and responsibility towards the outdoor space. An existing local square is presented in South Baishizhou and is shown in *figure 176*.

These several public spaces are strategically planned for multiple social classes and actors. They will all be linked through several pedestrian networks, which have been discussed earlier. In the map, the historic centre becomes the regional square and is shown in pink. In blue, the community squares along the main (pedestrian) routes are presented and the neighbourhood squares in orange. These squares are situated along the informal green route. The local squares are red coloured and are sunken deep within the urban village, in more segregated areas.



Figure 176. Local square within the urban village today (photo by author, 2013)

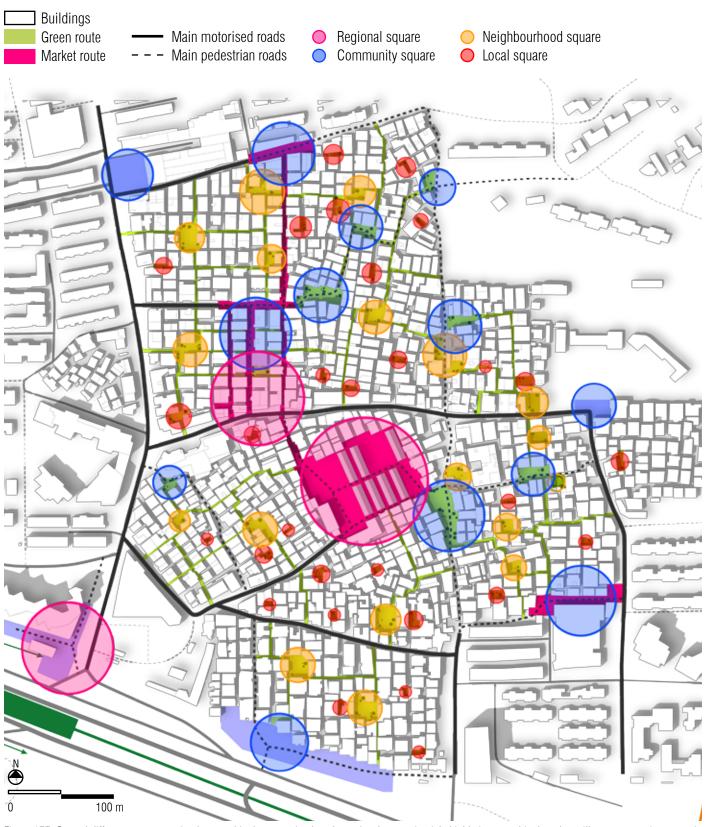


Figure 177. Several different squares are implemented in the strategic plan; the regional square in pink, highly integrated in the urban village, community square in blue, connected to the main (pedestrian) routes, neighbourhood squares in orange, semi-integrated along the informal green route and (semi)-private local squares in red. Latter is segregated in the urban fabric.

DETAILED STRATEGIC PLAN OF HISTORIC QUARTER

The historic centre of Baishizhou will become one of the central areas within the urban village. In *figure 178*, the location of the plan is presented. This area will have a regional character, which means that regional passers and tourists will be integrated and use the square. Moreover, locals, children and local passers will have places on the square for their daily activities. In the plan on the opposite page in *figure 180*, a detailed strategy is shown. Three historic buildings have been removed to increase space for a relaxing green area. This area is surrounded by a new hostel, which is placed within the renovated historic buildings. In the bird view below *(figure 179)*, the several new functions are presented.

A playground is situated on the East side of the square, enclosed by residential units and connected to a meeting place for elderly and game area. This area is connected to one of the main pedestrian routes, as vividness plays a large role in the success of a meeting place. The existing community centre is connected to the historic well, where the existing game play area will remain. Additionally, a (pop-up) stage for performances of local inhabitants will be introduced. Some buildings will be demolished to enlarge the square. Facilities such as local shops will be relocated within two historic buildings (figure 179, yellow). Additionally a market will be introduced, to expand the market route towards the square. Storage for market products will be situated in the one of the remaining historic buildings. These buildings will be incorporated in the spatial plan and daily lives of inhabitants. The square will receive multiple ambiances to satisfy all users and social classes of Baishizhou.

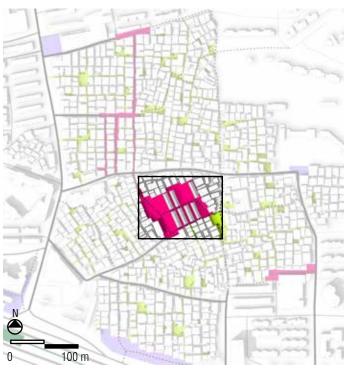


Figure 178. Location of the regional historic square in Baishizhou. The pink areas are the market routes and will be expanded towards the main regional square.

(souvenir) shops

Storage market



Hostel

Figure 179. Bird view of the historic centre. The colours represent several functions, such as hotel/hostel in blue, (souvenir) shops in orange and storage for market products in red.

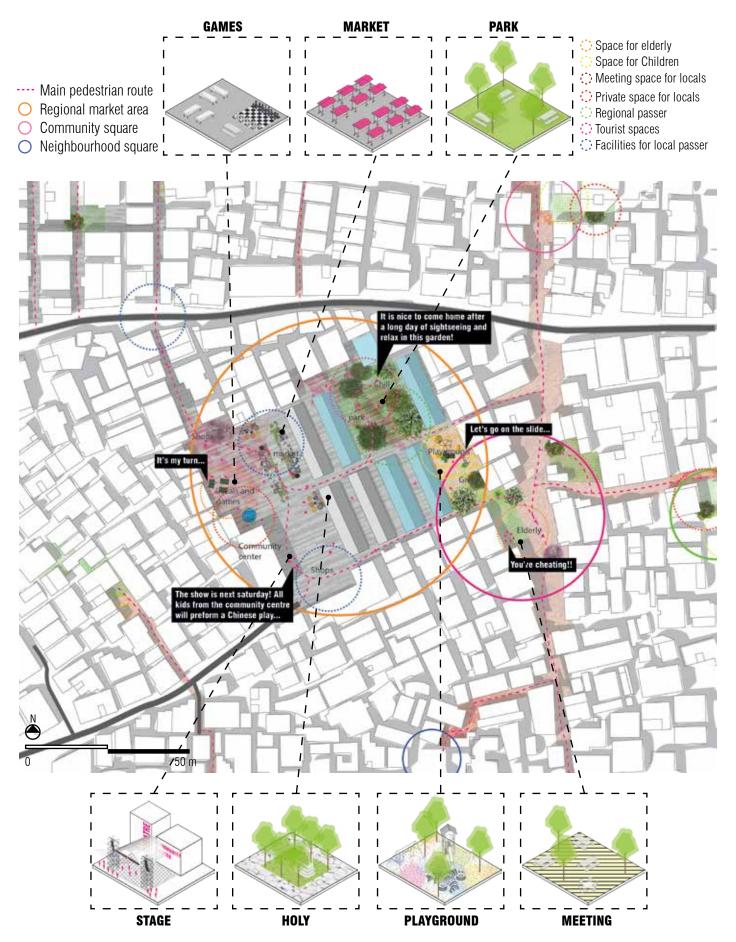


Figure 180. Detailed strategic plan for the historic centre. The square will receive several ambiances to comply with all actors in Baishizhou. A playground is situated behind the historic buildings and is connected to a meeting place for elderly. At the main square, a market, temple and stage will be situated. The stage will be operated in close collaboration with the community centre.





DETAILED STRATEGIC PLAN OF COMMUNITY SQUARE

The community square provides interaction for locals and local passers from the gated community. The squares are situated along the main pedestrian market route. *Figure 181*, represents the location of the community square. A detailed plan is presented in *figure 183*. Several tools have been implemented into the square; a park with a stage on the West side of the square. The location of the stage is chosen because of the existing community centre.

In the South of the square, seating areas, informal street vendors and game-play areas are situated together. Restaurants and bars are situated in the "plint" of the buildings. Shops are located on the East and North side of the square, away from the seating area. Many Chinese like to sit and play games in the shade, so many of the seating areas will be located away from the sunny areas.

This square will mainly have shops, restaurants and bars situated on ground floor, since the square represents vivid areas for all social classes by day and night. Residential units are either situated above the shops or behind the square. The community centre is a connecting element between the market street and the community square. *Figure 182* presents a bird view of the square with the several functions in colour.



Figure 181. Location of a community square in Baishizhou. It is connected with the main market route.



Figure 182. Bird view of the community square. It has shops (yellow) in the "plint" and all residential units (red) are situated above the shops. The community centre is a connecting element between the market street and the square.

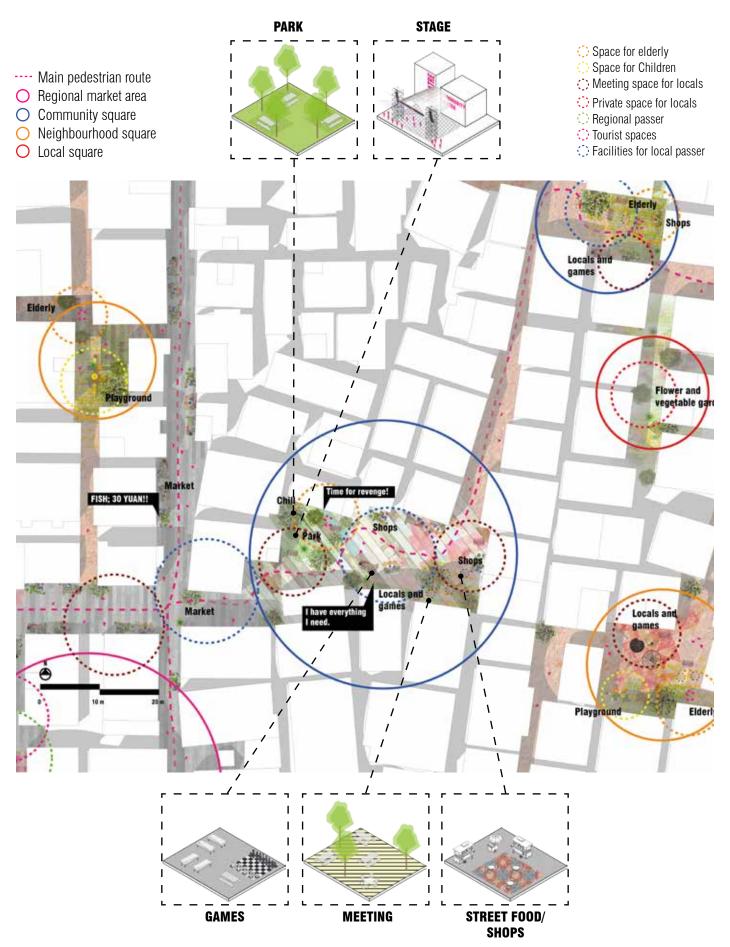
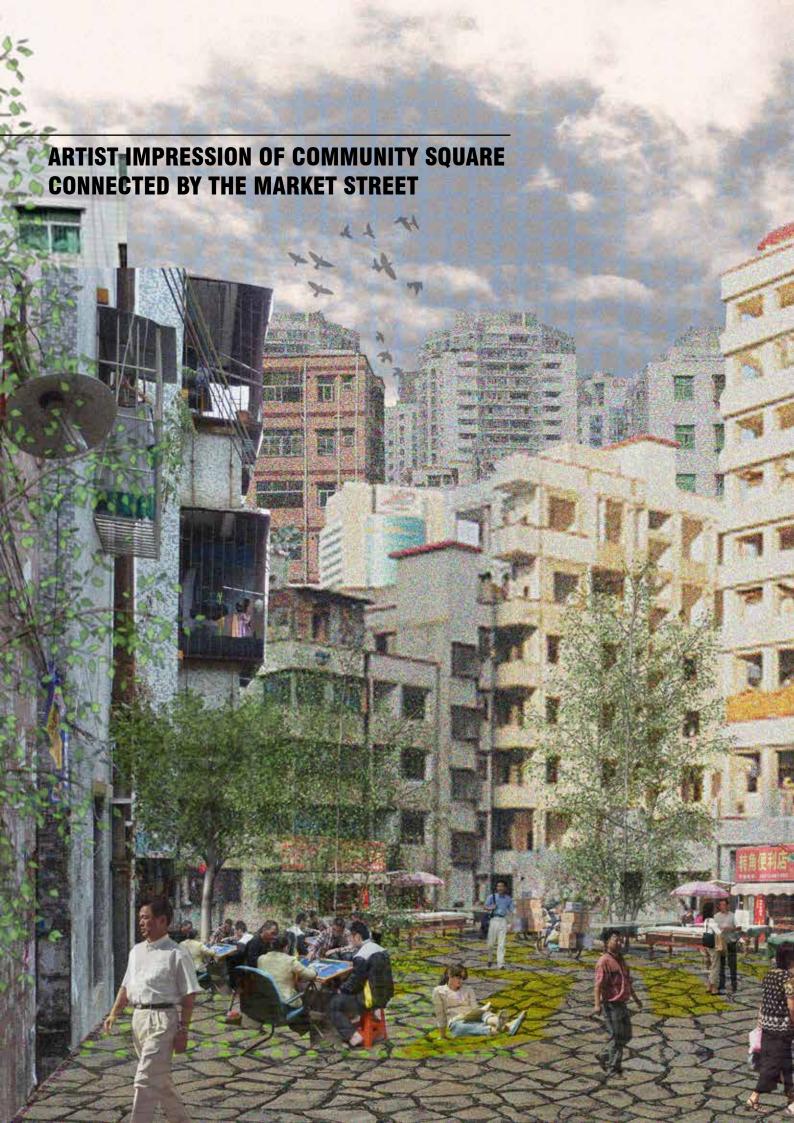


Figure 183. The community square facilitates locals and local passers from the gated community. Several tools have been implemented, such as a park and a stage. Seating area, informal street vendors and gaming are situated together along restaurants and bars in the plint. Shops are located on the East and North side of the square.

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DETAILED STRATEGIC PLAN OF NEIGHBOURHOOD SQUARE

Figure 184 presents the location of the chosen neighbourhood square. This square is connected to an informal green route, designed for local inhabitants and local passers and shown in green.

The square divides the existing neighbourhood in multiple smaller areas and is mainly used by local actors. The square has a mixture of facilities, such as informal shops and street vendors. Additionally, a large part of the "plint" is residential. The several functions are presented in the bird view in *figure 185*. The mixture of functions in the "plint" results in increased social security at night. Most areas in the urban village are deserted at night because of the lack of citizens living on ground floor.

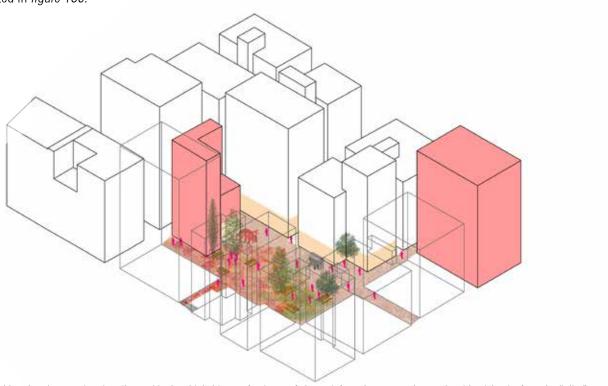
The square itself contains several areas that provide functions for multiple local age groups. An area for games, combined with informal restaurants in a small park is located towards the south. This area has a connection with a local square and operates as a barrier between the local and neighbourhood square. Towards the North, a place for seating and elderly is situated along the pedestrian route. *Figure 186* presents a map of the new situation.

In this square no facilities for children are situated. However, towards the East an additional square is present where a playground and other activities for youngsters are placed. The implemented tools are presented in *figure 186*.



Figure 184. Location of a neighbourhood square in Baishizhou. This square is connected to the informal green route designed for local inhabitants.

Shops



Residential unit

Figure 185. The neighbourhood square is primarily used by local inhabitants. A mixture of shops, informal street vendors and residential units form the "plint".

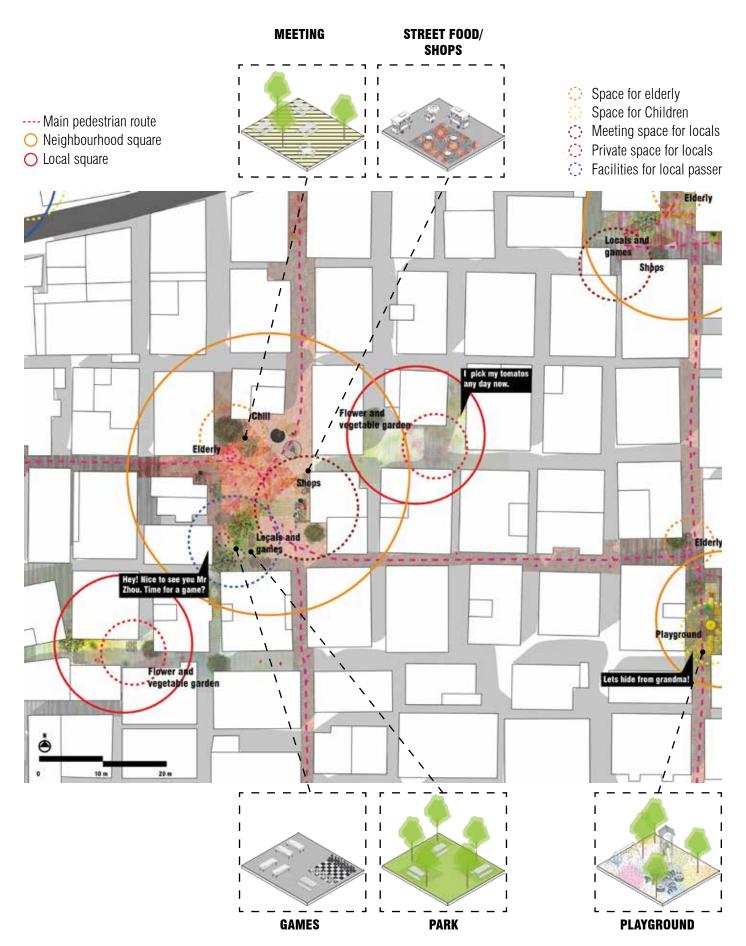
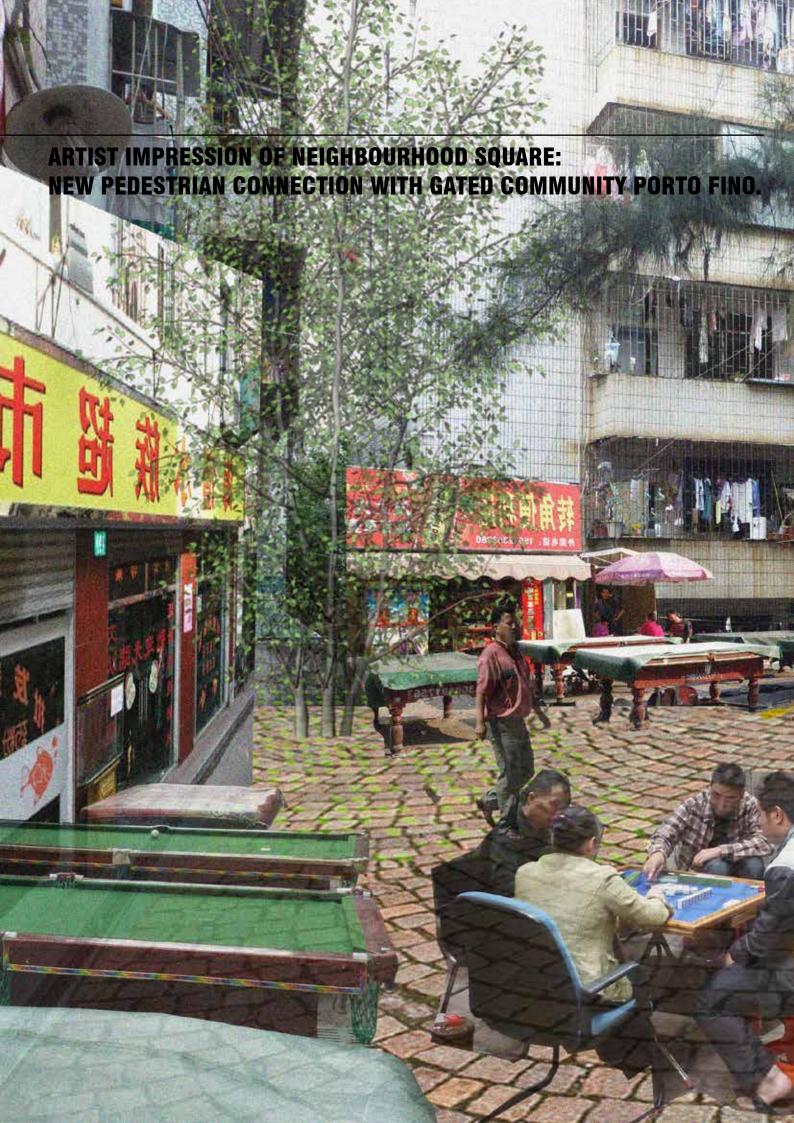


Figure 186. The neighbourhood square integrate several public space tools for all except children. A small pocket park with a gaming zone and shops provides a barrier between the local and neighbourhood square. North, along the pedestrian green route, seating areas with informal vendors are situated. Far East another small square is projected dedicated to children.





DETAILED STRATEGIC PLAN OF LOCAL SQUARE

The local square is placed in a segregated area of the urban fabric. These spaces are enclosed by residential units and maintained by multiple families. The location of the detailed square is presented in *figure 187*. It is situated close to the main pedestrian route (dotted line) that connects Porto Fino with the market streets (pink).

In the map in *figure 189*, a detailed plan of the semi-private space is shown. This square is designed to have a flower and vegetable garden, to create a type of ownership and responsibility for local residents. Other local squares may contain a small playground for children, as discussed in the toolbox. Close to the gardens, other facilities are situated, such as a meeting space and multiple shops.

These local areas refer to the traditional courtyard houses, situated in Hutongs for example. Within the busy and vivid urban village, locals can draw back to these small and calm realms. *Figure 188* presents a bird view of the local square, surrounded by residential units. No commercial activities tak place in these small squares.

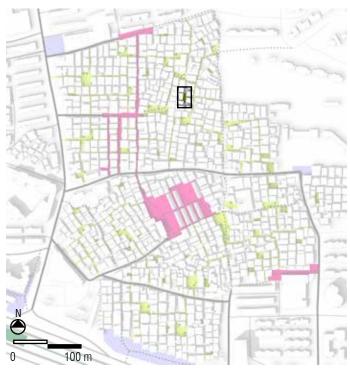


Figure 187. Local square in Baishizhou. Secluded semi-private area close to main pedestrian streets.

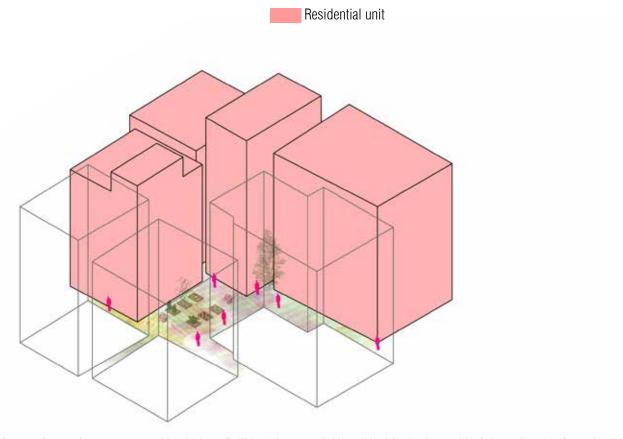


Figure 188. The local square does not have any commercial activities or facilities. It is surrounded by residential units that provide shelter and security for gardens or playgrounds.

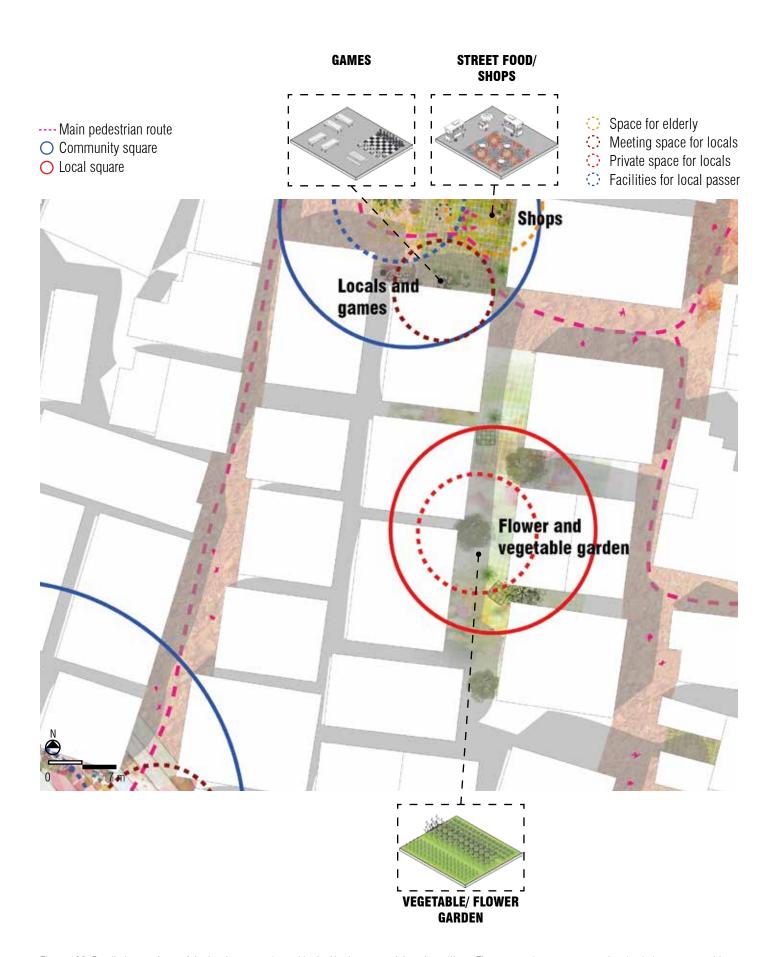


Figure 189. Detailed map of one of the local squares situated in the Northern part of the urban village. The community may create and maintain its own vegetable or flower gardens.





ORGANISATION

DEMOLISHION

To implement the proposed strategic plan, several buildings have to be demolished to increase open space within the neighbourhood. A total of 40, of which 3 historic, buildings will have to be removed for wider streets and several squares. This means that hundreds of families will become homeless. Most of these families are unregistered inhabitants and are either forced to go back to their hometown or find another place to live. To avoid this, a new principal should be adopted: re-locating villagers in Baishizhou. Forcing people to leave – without any form of compensation or alternative- should be avoided at all cost, not to ignite social unrest.

Figure 190 presents an overview of the demolished buildings in pink and the two proposed areas for relocation.

The first location is the former factory area north of the urban village, where buildings are currently abandoned. These are a great opportunity for renovation into affordable residential units. The land on which they are situated is from the government and the buildings either belong to the state, a developer or company. If the government owns the factory building, they should take the responsibility for renovation. However, when the owner is a company,



Figure 190. Some 40 buildings will be demolished to accommodate the new strategic plan. Residents will be relocated within the urban village. A new residential district will be developed in the East with Lilong housing type. In addition, the factory area will be renovated and old factories become residential units.

a collective interest can be established between company and state. The city council may propose compensation for development, extension of the land-lease contract or may allocate additional land for free, provided that the developer agrees to invest in and construct affordable housing.

A second region for relocation is situated in the East part of Baishizhou. This small neighbourhood of the urban village is the most segregated area and is most likely up for redeveloped in near future. Since the state is landowner and the buildings are mainly illegal, the government should invest in affordable housing to reside the relocated inhabitants of the urban village. Another option for this region is to have state and real-estate company working together on a new development project. In this project, high-end houses may be constructed, but they should be combined with affordable/social housing. This method is applied in several other countries, for example in The Netherlands, where profit from highend apartments pay for the social housing. In Shenzhen, developers will receive more land when they incorporate more social housing.

ORGANISATION & FINANCE

The idea behind financing the spatial plan is that it an effective project avoiding long construction periods. The plan may be implemented via small interventions such as re-paving the main areas (new squares) of the urban village and adding greenery. The government should take responsibility for this neighbourhood and invest in satisfying the basic needs of the inhabitants. Infrastructure (electricity, water, garbage etc.) should be managed and maintained by the city of Shenzhen. In addition, small projects, such as upgrading the main (pedestrian) routes will be cheap and quick procedures to upgrade the neighbourhood. The government should convince the 2000 owners of urban village real-estate, to invest in the quality of their buildings and as important: public space. In return the government may consider legalising the complete urban village. The small local squares with vegetable and flower gardens can be maintained by the local inhabitants. Large squares can be financed by city council in combination with local investors. For example, large supermarkets or shops can invest in specific tools for the square, such as playground for children, in return for privileges from the government.

PHASING

The first phase of the strategic plan focuses on the realisation of the regional square. First, the three historic buildings will be demolished and others will be completely renovated. By accommodating a hostel in 4 of the buildings, tourist can be attracted to the area. With the introduction of the tourist, local shop owners may increase their profits and Baishizhou can become a stronger, vital community. The government may be convinced that the value of the local settlement adds an important quality to Shenzhen. The urban village proved to be guit organised due to its well operating five community centres. This should convince the government that no major interventions will be necessary in future. After the regional square, the main car and pedestrian network will be upgraded. Along this network, community squares will be constructed. During the last phase, informal green routes and local and neighbourhood squares are introduced. This will only involve small scale, localised building activities.





7. CONCLUSION

SUMMARY AND REFLECTION

This thesis is part of the Shenzhen Scenario's 2.0 study, which is a programme of the Complex Cities studio. This studio focuses on contemporary cities in a global and regional context. Students work on a method to design a strategy to guide the city into future and current development. The studio claims that "students are challenged to propose projects in which strategy and interventions are developed which release productive and innovative activities and capacities in regions, cities and local places" (Van Nes et al., 2010). The focus of the studio is the complexity of cities and its context in global, regional and local networks. The developments of the city are strongly influenced by global forces that have an impact at a local scale. The city structures are researched by formal and informal developments, low and high paid work, global tourism etc. My project has a high complexity and connects to this research studio.

Baishizhou is an urban village with over 90% of migrants and unregistered inhabitants in the Special Economic Zone (SEZ) of Shenzhen. The first settlement was founded some 50 years ago, when local farmers built dormitories. During the Economic Reforms in 1978, the farmers were bought out by the government to give way for the development of high dense residential quarters. The SEZ urbanised rapidly over the next 30 years. However, the new developments formed a contrast with the traditional Chinese building style, typology and way of living. Modern, high-rise residential buildings for the upper class became the new form as an exponent of the market-oriented thinking. Originally, Chinese cities consisted of one or two-storey houses, some with shop fronts. Commercial activity was concentrated along the main axis of a neighbourhood or located at public squares (Miao, 2010). The new developments show a different pattern: exclusive residential quarters with private facilities; also known as gated communities. These wealthy privatised enclaves have been implemented at the outskirts of Baishizhou.

To understand the traditional Chinese society, an extensive research on the evolution of Chinese cities and gated communities has been carried out. This study surprisingly shows that gating has always been part of Chinese city design. Although traditional gating was meant to provide security, today, prestige adds a new dimension. Traditionally, gating was introduced at a small scale to increase community feeling and social security and clustered several families (Jin, 1993). Moreover, gating was also used as a form to separate urban citizens from rural habitants and urban citizens from the authorities. In the past, gated areas were only used for housing and commercial activities always remained public. Today, gated housing includes many private services and facilitates thousands of people belonging to one single social class.

The inequality between social classes plays a major role in both research and design study in my thesis. During my site visit, extreme contradictions became apparent: division, not only spatial (immense walls) but also social and functional. The gated communities around Baishizhou isolate themselves from the locals, however, they actually heavily depend on the services of urban villagers. Moreover, they extensively explore the cheap infrastructure such as markets, (informal) shops, meeting places, outdoor public gaming facilities... The rigid walls and guarded parks, shops etc. within the enclaves form a barrier and generate anonymity and isolation for the inhabitants. The roads along the walls of the enclaves are deserted in the absence of any public facility.

By investigating the current situation in Baishizhou, through mapping and conducting interviews with locals, I realised that the lack of public space is one of the key reasons that connections between social classes is broken. There are sufficient facilities and services to satisfy all classes in society, nevertheless, there is insufficient space for leisure and social interaction. This is the reason why I have focused on developing public areas to promote integration among social classes and to improve cohesion. It occurred to me that tearing down walls of gated communities is practically impossible. Integrating different social groups and facilities through public space and urban configuration is a challenging approach. Traditionally, public space was divided into four principal categories; regional, community, neighbourhood and scattered corner shops (Jin, 1993). I have adopted this principal and created a modern version which I present in my strategic plan for Baishizhou. Through case studies, such as analysing the design of Shanghai's Lilongs and transformations of Hutongs in Beijing, I could pin down which types of functions and consequently which types of public spaces are needed to bring back vivid street life and interaction among the actors in Baishizhou.

I developed strong guidelines along which a design should evolve. These guidelines define functionality and spatial planning of public areas. They are inspired by the four traditional categories mentioned above and interviews with local citizens. To materialise these guidelines, I have developed a toolbox. Tools are defined by daily needs and activities of six actors: local inhabitants, elderly, children, local passers (inhabitants of gated communities), regional passers and tourists. Several tools, such as playgrounds, green spaces etc. are implemented in the various public areas depending on the scale and needs of the neighbourhood. The strategic plan contains several public spaces that are connected via a spatial network. To implement this network I have used Space Syntax to identify the current hierarchy of roads and pedestrian routes in Baishizhou. From this I could derive possible locations suitable for integrating meeting places. Although I have defined a

series of public spaces, I have concentrated on four specific areas.

The local square (figures 187 - 189) is only enclosed by residential units, no public facilities are foreseen, and is maintained by multiple families. It is situated close to the main pedestrian route establishing a connection to market streets. This square is a semi-private space and provides leisure in particular for elderly and children. It has a vegetable and/or flower garden. The neighbourhood square (figures 184 – 186) is connected to an informal green route that is designed for local inhabitants and local passers. This square divides the existing neighbourhood into several smaller areas. It is mainly used by local actors and the plint is a mix of public facilities (shops and street vendors) and residential houses and therefore improves social security. It combines an area for games and informal restaurants in a small park. It provides a seating area for the elderly which is situated along the pedestrian route. The community square (figures 181 - 183) strengthens interaction between locals and inhabitants from gated communities. The square is situated along the main pedestrian market route and contains a community centre with an outdoor stage and a small park. The informal area (seating, street vendors and outdoor games are grouped together) is separated from the more formal area with shops, bars and restaurants. Public facilities in the plint support activities during the day and prolonged period for the night. The regional square (figures 178 – 181), the historical centre of Baishizhou, should become the main square of the urban village. This area will have a regional character, including non-urban village people and tourists. Of the historic buildings, only three will be removed to increase and improve the green and public areas. These areas surround the remaining historic dormitories. Four dormitories will host a hostel to accommodate tourists visiting neighbouring theme parks. Other actors are the locals, elderly, children and local passers. The children's playground is located at a more remote part of the square and is partly enclosed by residential units. There is ample space for the already existing community centre and a new theatre stage. A small number of surrounding buildings need to be removed, while their services will be relocated. In addition, a market area is created. In summary, by integrating a hostel in the regional public space, a new actor is introduced in Baishzhou namely the tourist. Baishizhou becomes an incubator at a larger scale. This is based on the strategic location of the neighbourhood within Shenzhen and the SEZ and the (popular) large scale tourist attractions around Baishizhou.

This project is incredibly complex. Therefore, to understand the history and current situation of a country and a city that are unfamiliar to me, I needed to use several research methods, such as mapping, case studies, literature research, conducting interviews and Space Syntax. All this provided the necessary insight to come to

a thorough analysis, methodology and to develop a strategic plan. During my site visit, I interviewed thirteen actors and mapped their daily patterns. My case studies where not exactly a starting point for my approach, but gave me much inspiration on how traditions can be preserved. A Hutong conservation plan, established immediately after the Olympics in Beijing in 2008 gave me insight in what negative effects could occur when Western shops (H&M, Starbucks etc.) are implemented in historic neighbourhoods. Land and housing prices rocketed (Yutaka et al., 2004). Therefore I have not allowed any Western shop or facility to enter my spatial plan. I try to re-establish the traditional Chinese way of living in order to gain back social coherence through public space.

The problem of social and spatial inequality is not only observed in Baishizhou or Shenzhen, but is also visible throughout China. Cities focus on gaining fast money and therefore built high-rise residential quarters for the upper class. Lack of social housing and housing for the middle class force inhabitants to live in (il) legal settlements. By excluding specific social classes from society, fringe and loss of street life becomes more visible every day. Moreover, lack of historical context changes the character of the cities drastically. It seems that all major densely urbanised areas worldwide start to look the same. Examples of unequal development are seen in the Favela's in Sao Paulo, Kampongs in Jakarta or Shanty towns in Mumbai. Recently, on November 2nd, the front page of the Dutch newspaper (NRC Handelsblad, 2014) described the appearance of similar developments in The Netherlands. The rich and highly educated people distance themselves from the lower educated inhabitants (de Koning, 2014).

Segregation, one of the major sources for social tension, appears to become the issue that may seriously obstruct society. Could urban planners take the lead in providing solutions? Is creating a secure and prosperous environment not an essential prerequisite for a blossoming community? Should (local) governments not recognise their responsibility and take a stronger lead in urban planning?





APPENDIX I

MISTER AND MISS HEBEI



Name

Mister and Miss Hebei

Age

Both 74 years

Occupation

Retired, but used to be farmers

Where do you live?

CNOOC Shenzhen Bay Garden gated community.

How long have you lived in Shenzhen?

2 months.

Where are you from originally?

From the North of China, but we moved to Shenzhen to live with our son and grandson and for a better climate. The North is too cold for us at our age.

Who do you live with?

We are staying with our son. Our son is divorced, so we partially take care of our grandson as well. He partly lives with us.

Is the house bought or rented?

Our son rented the appartment.

Costs per month;

We do not know.

Where do you work?

We are retired, but our son works for an electronic company in Shenzhen.

Salery:

-

How do you get to work?

-

How do you usually get around?

(by foot, car, public transport...)

Because of old age, we do not travel far. We usually stay on this

square or walk around baishizhou for some arrends. Otherwise we take our son's car or when he is at work we take the subway.

Can you describe your daily routine?

Wake up when son goes to work, around 7 am. Make breakfast for son and grand son and afterwards play some games on the square and sit in the sun. Does grocery shopping in the neighbourhood and make sure dinner is set at night, around 7 pm when son goes home. At night they sit stay at the appartement with family for tea and go to bed around 9/10 pm.

Do you know many people in your street or neighbour-hood?

We know some people from our floor in the appartment building and we talk to people here on the square. Play games etcetera. But we are not friends.

Do you go/know things outside of your district?

We hardly go out of our district due to our age. Most of the shopping is done here on the main square and for other supplies we go into the urban village for vegetables etcetera. It is much cheaper there, than in the stores.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

Yes, we go to the local market and streets to buy vegetables and meat.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

We feel safe here, because our area has a lot of security. You need identity cards to access our appartement building.

Do you feel at home in Shenzhen/ Baishizhou? Why?

Yes, much more than in the North of China.

What would make you feel at home?

More family in Shenzhen.

What could be improved in the neighbourhood?

What are you future perspectives and dreams?

Staying in Shenzhen.



MISTER ZHU



Name

Mister Zhu

Age

26 years

Occupation

Public security

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

1 year.

Where are you from originally?

-

Who do you live with?

I live in a dormitory from the security company and stay with workmates.

Is the house bought or rented?

It is rented by the company and I do not have to pay for it.

Costs per month;

Food and housing is payed for by the company.

Where do you work?

I work in Baishizhou as a security officer and walk around the public squares and patrol the streets.

Salery:

2000 RMB/month.

How do you get to work?

By foot, I walk on the streets all day.

How do you usually get around?

(by foot, car, public transport...)
I usually go by foot, since everything is close to my home. I usually stay in Baishizhou, but if i go out to the cinema or something, I will take the subway.

Can you describe your daily routine?

I usually work 12 hours every day, with only 1 or 2 days off per month. I eat breakfast together with my workmates in my dormitory as well as lunch. At night we sometimes go out and eat in the urban village. In the weekends I try to do some running and shopping and at night we usually drink and play games either in the dormitory or on the street.

When i have a holiday I like to ride my bike around Shenzhen.

Do you know many people in your street or neighbour-hood?

We know some people from our floor in the appartment building and we talk to people here on the square. Play games etcetera. But we are not friends.

Do you go/know things outside of your district?

I do not have much free time, so I hardly go out of Baishizhou.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

I meet a lot of people on the street and talk to lots of people, but I do not have many friends. Mostly I interact with my workmates in the dormitory. I do most of my shopping in the urban village, because it is cheap.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

I feel very safe in Baishizhou, but sometimes there are still some robbers.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I feel very at home, because the people here are very friendly.

What would make you feel at home?

I do not know.

What could be improved in the neighbourhood?

I do not know.

What are you future perspectives and dreams?

I do not know about the future, I live from day to day, trying to survive. I have a good job right now and I hope I can keep this job for a while.



MISS LIU



Name

Miss Liu

Age

21 years

Occupation

Online shop owners

Where do you live?

I live in Futian in Shenzhen.

How long have you lived in Shenzhen?

Couple of years.

Where are you from originally?

-

Who do you live with?

I live with one of my classmates.

Is the house bought or rented?

Rent.

Costs per month;

-

Where do you work?

I own an online clothing shop.

Salery:

The same as a regular job, enough to survive.

How do you get to work?

I work from home.

How do you usually get around?

(by foot, car, public transport...)

I usually take the subway to school or walk in my neighbourhood for daily routines.

Do you know many people in your street or neighbour-hood?

I am not from this neighbourhood. I am waiting for a friend who lives in Bao'an.

Do you go/know things outside of your district?

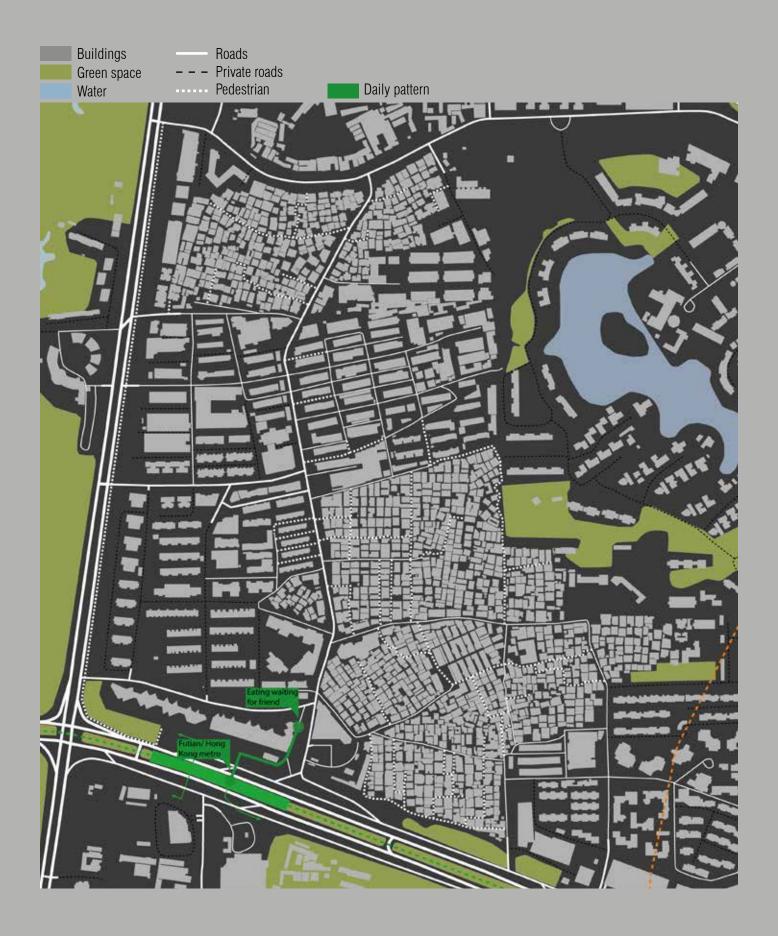
Yes, I go to Baishizhou to meet up with my friend. We are going shopping in Hong Kong and this area is a strategic point to meet up. It is near Shenzhen Bay and has a good connection by subway.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

Yes, we go to the local market and streets to buy vegetables and meat.

What are you future perspectives and dreams?

I do not know about the future, I live from day to day, trying to survive. I have a good job right now and I hope I can keep this job for a while.



MISTER PENG



Name

Mister Peng

Age

66 years

Occupation

Jobless

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

1 year now, but usually I stay in Shenzhen for 3/4 months a year.

Where are you from originally?

Shijiazhuang, Herbei.

Who do you live with?

I currently moved to Shenzhen to take care of my newborn grandson. I stay with my son and his wife.

Is the house bought or rented?

My son bought a house in gated community "Lucky Gardens".

Costs per month;

-

Where do you work?

I do now work, but I do take care of my grandson. My son is 35 years and works for a software company.

Salery:

-

How do you get to work?

-

How do you usually get around?

(by foot, car, public transport...)

I usually walk or if I go further I take the car. My son drives to work everyday.

Can you describe your daily routine?

I am making sure that my grandson is taken care of and make dinner and breakfast for my family. I usually walk around the neighbourhood and do some grocery shopping.

Do you know many people in your street or neighbourhood? I do not know many people here. There is hardly any interation between people here. I only know my neighbours, but we are not friends. Most of the time i spend alone, with my grandson, of with my son and his wife.

Do you know many people in your street or neighbour-hood?

I do not know many people here. There is hardly any interation between people here. I only know my neighbours, but we are not friends. Most of the time i spend alone, with my grandson, of with my son and his wife.

Do you go/know things outside of your district?

I hardly go out of the district, it is complicated with a small child.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

No, sometimes I talk with my neighbours.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

I feel very safe in Baishizhou. Not much happens on the street and our community is secured with guards.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I do not want to live here forever, Shenzhen is too hot, but my son likes it.

What would make you feel at home?

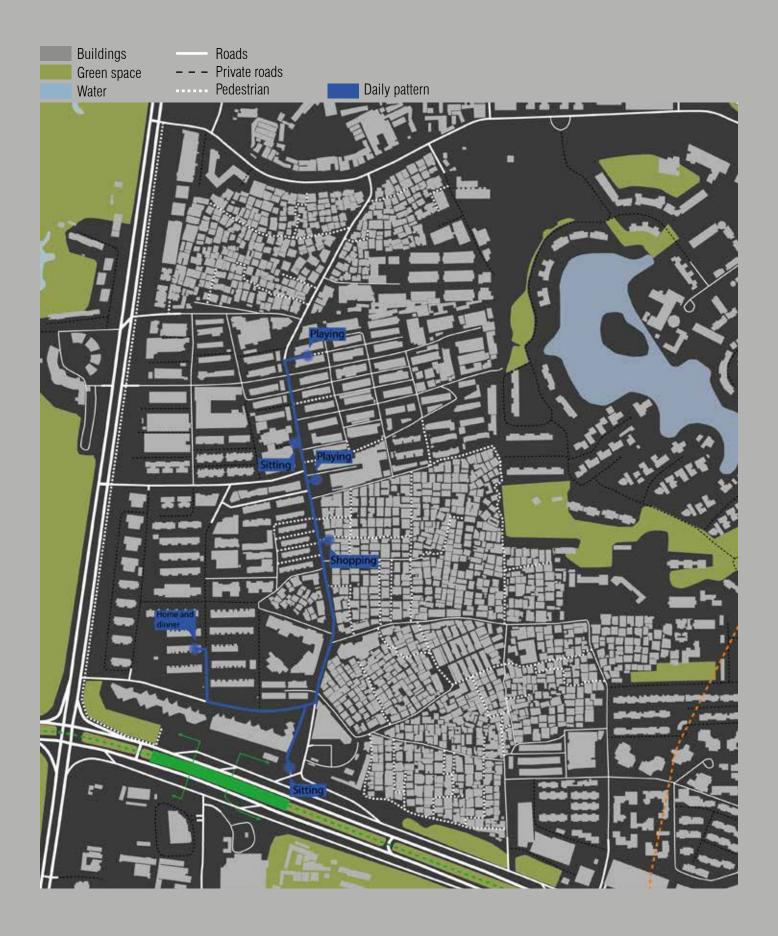
If i would know more people and if the weather was cooler.

What could be improved in the neighbourhood?

I do not know.

What are you future perspectives and dreams?

Hopefully moving back after my grandson goes to school and hopefully my son and his wife will move back with me to Herbei.



MISTER XIONG



Name

Mister Xiong

Age

50 years

Occupation

Security guard "Lucky Gardens"

Where do you live?

I live in the gated community of Lucky Gardens. There is a special dormitory for me and the other guards.

How long have you lived in Shenzhen?

6 months. This is the second time I came to Shenzhen. The first time I lost my job and was forced to go home, because I had no money to stay in Shenzhen.

Where are you from originally?

Fujian province.

Who do you live with?

I live with my workmates.

Is the house bought or rented?

It is rented by the company and I do not have to pay for it.

Costs per month;

Food and housing is payed for by the company, so I live for free.

Where do you work?

I work as a security guard at gated community of Lucky Gardens.

Salery:

3000 RMB/month, but I think that is too low. I work everyday and hardly have days off.

How do you get to work?

By foot.

How do you usually get around?

(by foot, car, public transport...)

Sometimes I take the metro or the bus, but I usually stay here because I do not have a lot of free time.

Can you describe your daily routine?

I work 7 days a week and have no day off, only during Chinese New Year. I interact with my workmates, but do not go out much, because Shenzhen is too expensive.

Do you know many people in your street or neighbourhood?

No, only my workmates. Sometimes the inhabitants of this community will say hi to me.

Do you go/know things outside of your district?

No, I do not have enough time to go out.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

Only my workmates. I do not have to go shopping, because the company takes care of that. So I'm usually here in this guard house or in the dormitory with my workmates.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

I feel very safe here.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I feel at home.

What would make you feel at home?

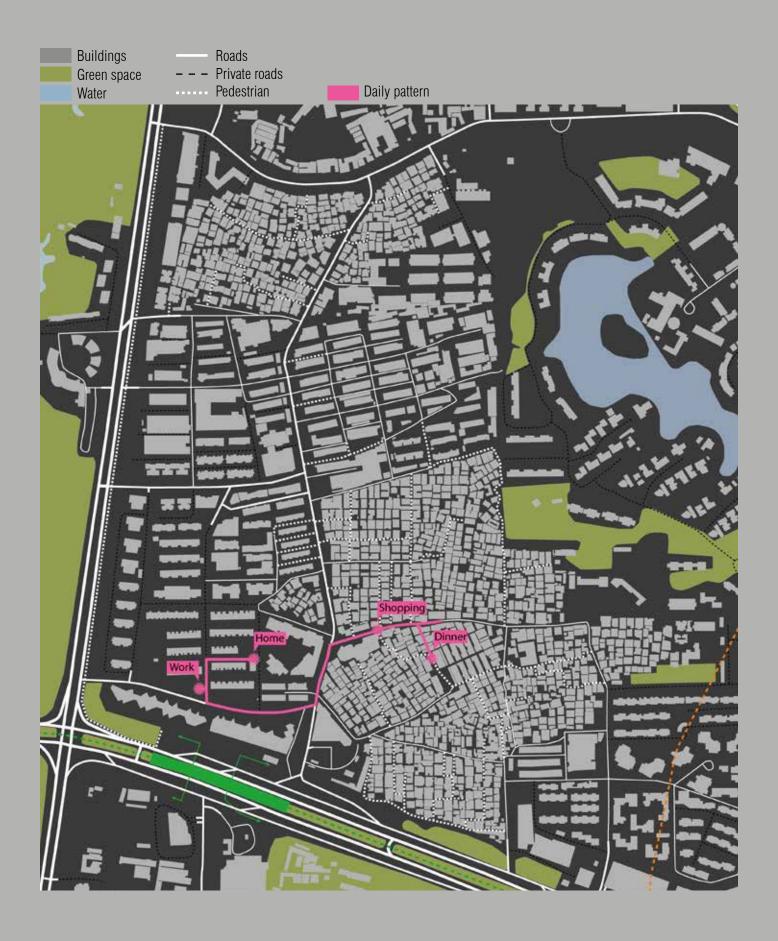
I do not know.

What could be improved in the neighbourhood?

I do not know.

What are you future perspectives and dreams?

I do not think much about the future, but I would like to save some money and get a better job.



MISS DING



Name

Mister Ding

Age

30 years

Occupation

Sales woman

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

6 years.

Where are you from originally?

-

Who do you live with?

I live in a dormitory in the gated community.

Is the house bought or rented?

It is rented by the company.

Costs per month;

Food and housing is payed for by the company.

Where do you work?

I work in Baishizhou in the urban village as a sales woman for China Mobile.

Salery:

_

How do you get to work?

By foot, it is only 200 meters from my home.

How do you usually get around?

(by foot, car, public transport...)
I walk around here, but sometimes I will go to Dongman in Futian and then I will take the metro.

Can you describe your daily routine?

I do not want to answer this question.

Do you know many people in your street or neighbourhood?

I do not want to answer this question.

Do you go/know things outside of your district?

Hardly, everything is close here.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

-

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities? I feel safe.

Do you feel at home in Shenzhen/ Baishizhou? Why? I feel at home.

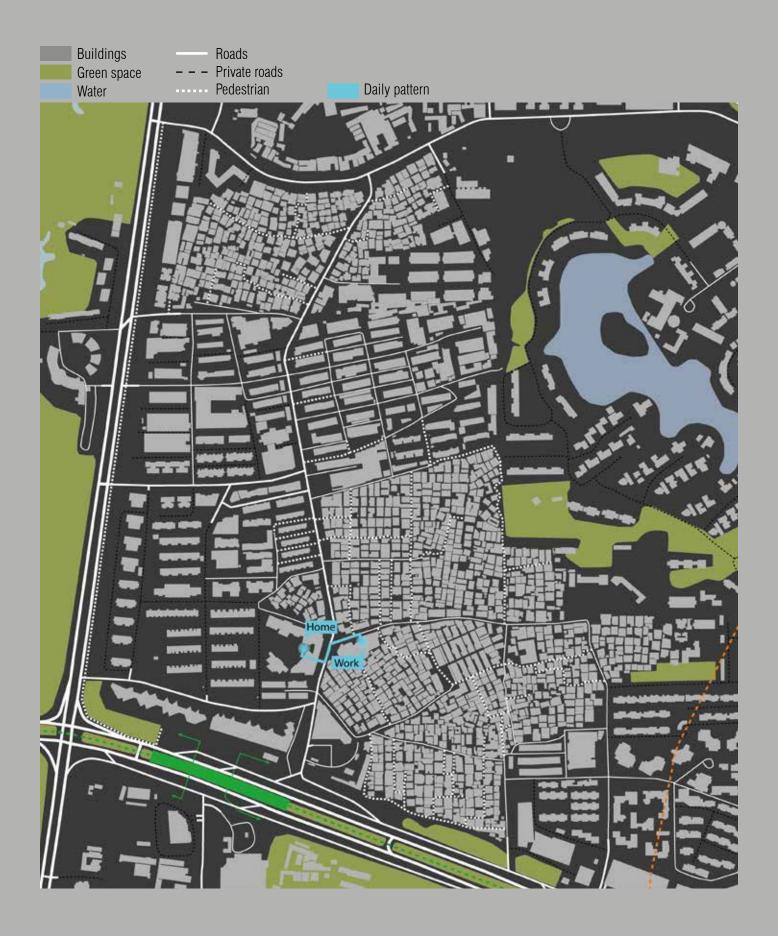
What would make you feel at home?

I do not know.

What could be improved in the neighbourhood?

I do not know.

What are you future perspectives and dreams? I do not know.



MISTER HUANG



Name

Mister Huang

Age

18 years

Occupation

Waiter

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

9 months.

Where are you from originally?

Hubei. I dropped out of Junior High school and moved to Guangzhou. But there were not as many opportunities as in Shenzhen. Also my brother lives in Shenzhen, so that is the reason why i moved here.

Who do you live with?

I live in a house of the boss of my friend.

Is the house bought or rented?

I rent a room.

Costs per month;

-

Where do you work?

I work in this restaurant as a waiter.

Salery:

Not enough to survive. My brother helps me.

How do you get to work?

I walk to work.

How do you usually get around?

(by foot, car, public transport...)

When I go out to Luohu or Futian I will take the subway, otherwise I go by foot.

Can you describe your daily routine?

I work 7 days a week, but at night I hang out with my brother and my friends. We drink at one of their houses and play games.

Do you know many people in your street or neighbour-hood?

I have many friends here in this neighbhourhood. And my brohter lives here too which is nice.

Do you go/know things outside of your district?

I work a lot and do most of my shopping here in Baishzhou, but sometimes i go out with my friends and we will go to Luohu or Futian.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

No. I do almost everything in the urban village.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

There are quite some thieves, but it is not severe. I feel safe here.

Do you feel at home in Shenzhen/ Baishizhou? Why?

Yes, because my brother lives here too. Shenzhen is a great city, because i has many opportunities and chances for me.

What would make you feel at home?

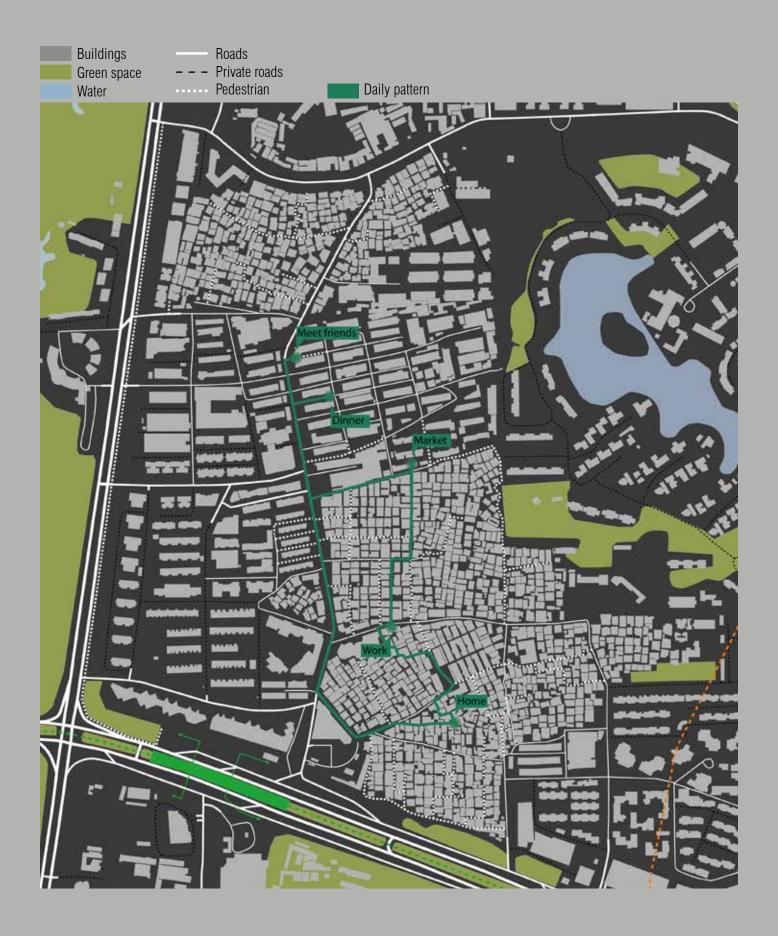
-

What could be improved in the neighbourhood?

I do not know.

What are you future perspectives and dreams?

I am not satisfied where I stand today, but I think if i work hard I can get a better life.



MISS KANG



Name

Miss Kang

Age

19 years

Occupation

Shop assistant

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

2.5 years.

Where are you from originally?

Sichuan province.

Who do you live with?

I live with my parents. My parents also work in Shenzhen.

Is the house bought or rented?

My parents rent the house.

Costs per month;

600 RMB/ month.

Where do you work?

I work as a shop assistant in a small grocery shop in Baishizhou.

Salery:

2000 RMB/ month.

How do you get to work?

I walk from home to the store.

How do you usually get around?

(by foot, car, public transport...)
I never leave Baishizhou, so I always walk.

Can you describe your daily routine?

I work all day, 7 days a week. I do have 1 day off per month. I wake up and have breakfast at home with my parents. I eat lunch here

somewhere on the street and at night I stay with my parents again, we will have dinner and tea.

Do you know many people in your street or neighbourhood?

I do not have friends, but I do know a couple of people from my age.

Do you go/know things outside of your district?

I always stay in Baishizhou.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

No, all the things I need are here in the urban village. I do not have time to go somewhere else. All the money I earn I spend on shopping and helping my parents.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

It is pretty safe, but last year, 2 guys broke in our appartment and stole some things. But this usually never happens. They guys got caught by the police.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I do not feel at home here, I would like to go back to my home town. I do not go to school, because my parents do not have enough money. I have nothing here except my parents and work. However, the people here in Shenzhen are very friendly.

What would make you feel at home?

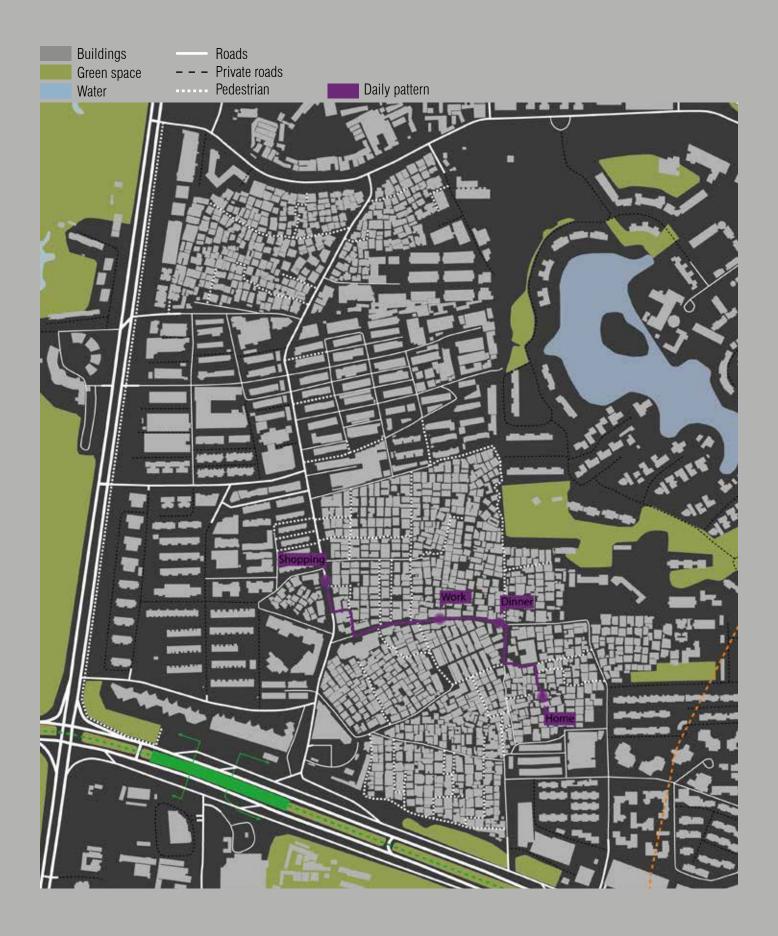
I do not know, maybe having more free time to spend with friends and family.

What could be improved in the neighbourhood?

I do not know.

What are you future perspectives and dreams?

I do not think about the future, I live now.



MISS LI



Name

Miss Li

Age

19 years

Occupation

Shop assistant in the bakery

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

2 years.

Where are you from originally?

Guangdong.

Who do you live with?

I live in a small appartment with the other girls and owner of the bakery.

Is the house bought or rented?

It is rented by the owner and I do not have to pay for it.

Costs per month;

Food and housing is payed for by the owner.

Where do you work?

I work in Baishizhou in a small bakery and pattisserie.

Salery:

_

How do you get to work?

I walk to my work, because I live right around the corner.

How do you usually get around?

(by foot, car, public transport...) I walk around the neighbourhood.

Can you describe your daily routine?

I work 7 days a week, also in the weekends. Sometimes I have a day of and I sleep, or go shopping here in the neigbhourhood. I eat with the people from my home.

Do you know many people in your street or neighbour-hood?

I am not familiar with a lot of people, only the 2 girls who I work with. Other people I know, I only greet.

Do you go/ know things outside of your district?

No.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

I usually go shopping in the urban village. I do not know people from the gated communities, they hardly come here.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

I feel very safe in Baishizhou. I can walk at night by myself and nothing happens. This is the great thing about Baishizhou.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I do feel at home, but I have a problem with the language here, because sometimes I do not understand the people here. I like my hometown better.

What would make you feel at home?

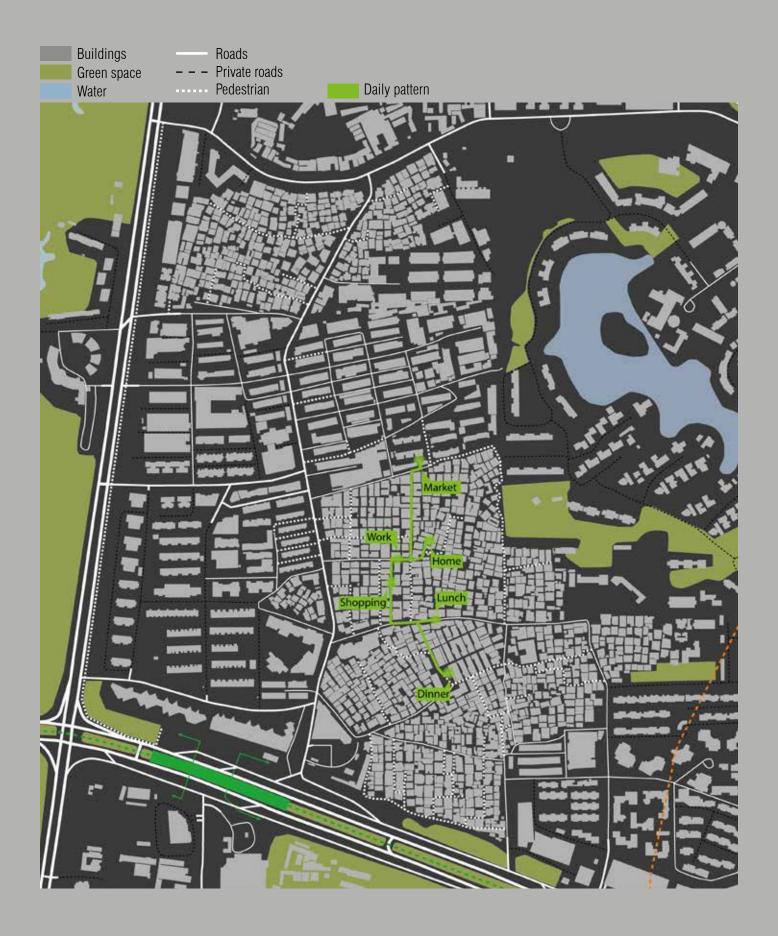
Understanding the language better.

What could be improved in the neighbourhood?

The people here throw everything on the streets, so there is a lot of litter. This should be improved; it should become cleaner.

What are you future perspectives and dreams?

I do not know.



MISTER ZHAO



Name

Mister Zhao

Age

55 years

Occupation

Owner watch shop

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

1 year.

Where are you from originally?

Hunan province.

Who do you live with?

I live with my wife and our 2 children (son and daughter).

Is the house bought or rented?

We rent an appartment.

Costs per month;

1200 RMB/ month.

Where do you work?

We own a small shop on the main street here in Baishizhou. We restore and sell watches and clocks. I used to be a teacher at the university, but didn't like that job anymore.

Salery:

Enough to live. We also have to pay for our shop, this is 1050 RMB/ month, but we make enough to have a good life. He earns the same as when he was a teacher.

How do you get to work?

I walk to work.

How do you usually get around?

(by foot, car, public transport...)
I walk or when I will take the subway.

Can you describe your daily routine?

I work 7 days a week, also in the weekends. Sometimes if we do not feel like working, we will not open the shop. If we do not work we spend time with the family or I play video games on the computer. My wife usually takes care of the food and the shopping, while i work at the shop.

Do you know many people in your street or neighbourhood?

There is a phenomenon here in Shenzhen that a lot of people do not know eachother. This is the same in my case. We only greet eachother, but do not know anything about eachother.

Do you go/know things outside of your district?

Actually hardly. Everything we need is close to our home or shop.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

We only interact with the family, but my children are always working, so it is usually me and my wife.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

I feel safe here.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I do feel at home, but I do not like the new generation. They do not work hard enough and tend to be lazy.

What would make you feel at home?

More interaction.

What could be improved in the neighbourhood?

What are you future perspectives and dreams?

My motto is; Cherish the time we have now, and do not waste this time. I do not really think about the future.



MISS LI



Name

Miss Li

Age

26 years

Occupation

Mother

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

3/4 years.

Where are you from originally?

-

Who do you live with?

I live with my husband and my child.

Is the house bought or rented?

We rent an appartment.

Costs per month:

1050 RMB/ month.

Where do you work?

I do not work, being a mother is a full time job. But my husband works at an electic-tech company.

Salery:

_

How do you get to work?

My husband takes the subway.

How do you usually get around?

(by foot, car, public transport...)
I usually talk or take the subway.

Can you describe your daily routine?

I take care of my child and sometime I take the subway to the park in Futian. But it is not convinient to take my child far away.

Do you know many people in your street or neighbour-hood?

I only know my neighbours.

Do you go/know things outside of your district?

Yes, sometimes to go to the park. But mostly I stay here in Baishizhou, because all the facilities we need are here.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

Only in the urban village.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

Now it is safe, about 2 or 3 years ago, when we just lived here, it was unsafe. Many robbers and thieves. But they increased the amount of police on the streets this past 2 years and now it is a lot safer.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I do not feel at home. If we do not have enough money we will move back to our hometown.

What would make you feel at home?

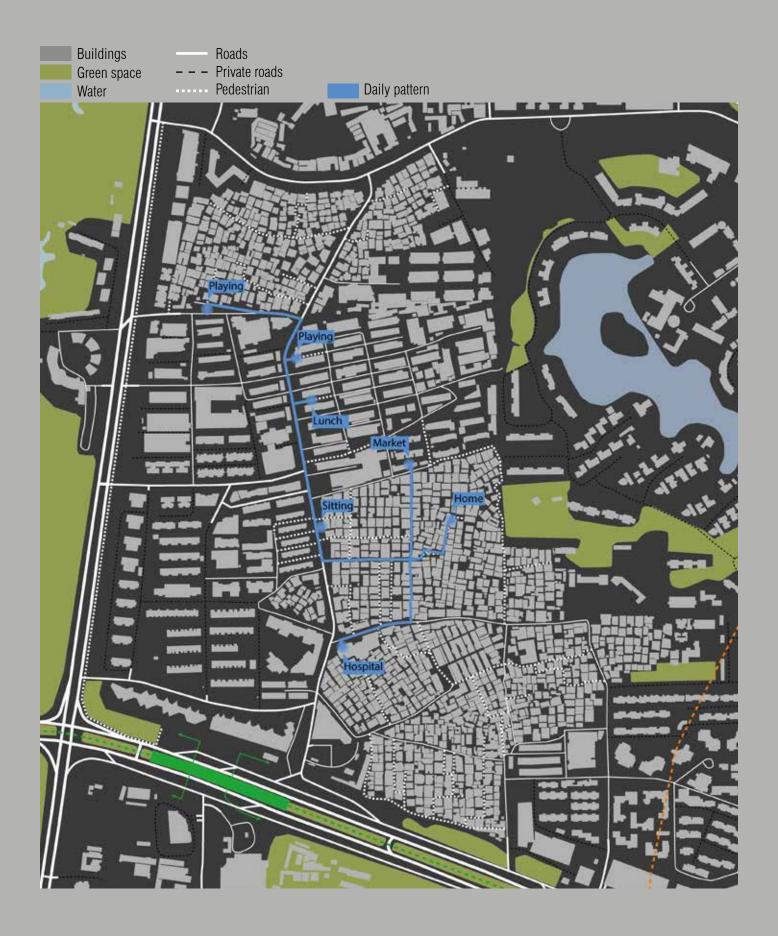
Earning more money to raise our child and buy a house. Also there is a lot of trash, it should be much cleaner.

What could be improved in the neighbourhood?

Clean environment.

What are you future perspectives and dreams?

I do not know.



MISS PENG



Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

10 years.

Where are you from originally?

Xintang, Hunan.

Who do you live with?

I live with my family.

Is the house bought or rented?

We rent an appartment.

Costs per month;

1500 RMB/ month.

Where do you work?

I work as a street cleaner in Baishizhou. Baishizhou has 3 cleaning district and every 3 months we rotate districts.

Salery:

Around 1800 RMB/ month. We make around 60 RMB/ day and we get an average of 4 days off per month. We do have to work during Chinese new year.

How do you get to work?

I walk.

How do you usually get around?

(by foot, car, public transport...)
I usually talk or take the subway.

Can you describe your daily routine?

I work most of the time, i make very long hours. When i have free time i have to do some grocery shopping and make dinner for my family.

Do you know many people in your street or neighbourhood?

I only interact with my workmates. But the people on the street here are very nice and always talk to me.

Do you go/know things outside of your district?

Hardly, i have no time. We would like to go to our hometown, but we do not have enough holidays.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

I do everything close to home in the urban village.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

Now it is safe, because of the police, many years ago it was very unsafe.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I do not feel at home. But my whole family lives here and the people in Shenzhen are nice.

What would make you feel at home?

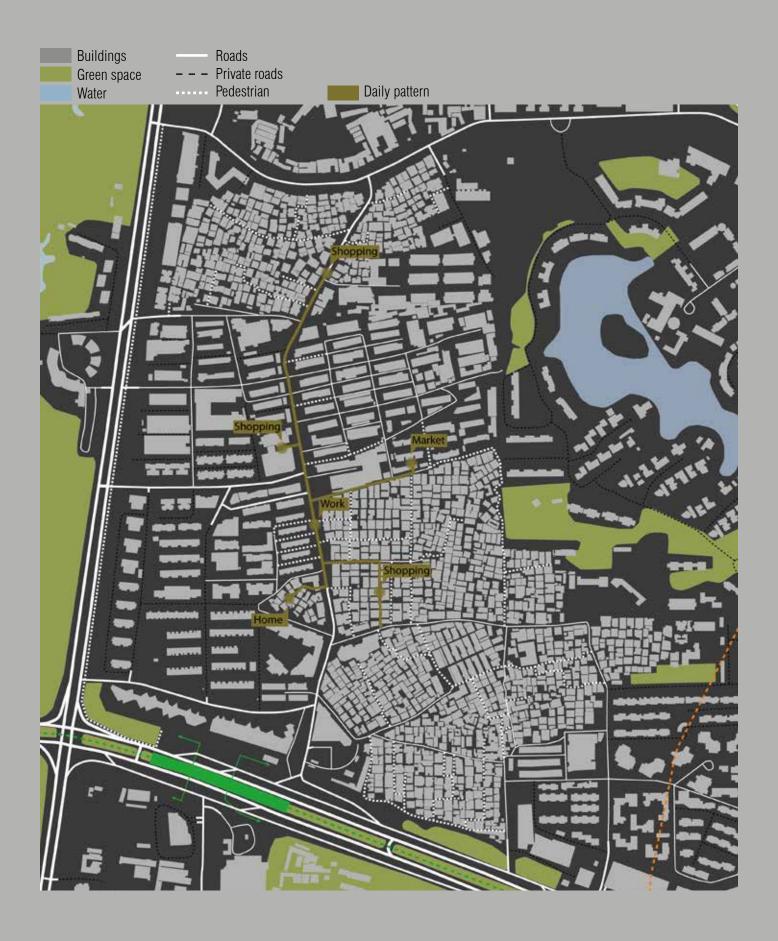
I would like to buy a house, that would make me feel at home.

What could be improved in the neighbourhood?

-

What are you future perspectives and dreams?

I do not know.



MISTER LUI



Name

Mister Lui

Age

25 years

Occupation

Finance job

Where do you live?

I live in the urban village of Baishizhou.

How long have you lived in Shenzhen?

3 years

Where are you from originally?

Wuhan, I went to the university there to get a finance degree, afterwards I moved to Shenzhen because of the great work opportunities and the good behaviour of inhabitants.

Who do you live with?

I live alone.

Is the house bought or rented?

I rent an appartment.

Costs per month;

1000 RMB/ month

Where do you work?

I work in the High Tech park.

Salery:

12.000 RMB/ month

How do you get to work?

I take the subway, because it is really close. I walk to the subway.

How do you usually get around?

(by foot, car, public transport...) I usually take a taxi or subway.

Can you describe your daily routine?

I work 5 days a week and have the weekends off. In the weekends I go out with my friends, collegues and former classmates to clubs in Futian, coco park or I will go to the OCT loft area. Sometimes I will go to Hong Kong to go shopping.

Do you know many people in your street or neighbourhood?

I do not know many people in Baishizhou, but I do have many friends in the city, some of them live in Baishizhou. We do a lot of things together after work and in the weekends. We go everywhere in Shenzhen.

Do you go/know things outside of your district?

Yes, I mostly go out of Baishizhou.

Do you interact with people from the gated community/ urban village? Do you use their facilities?

I use the markets and shops here in Baishizhou, because it is very cheap.

Do you feel safe in your neighbourhood? Why? Have you ever encountered crime/ criminal activities?

Yes. I feel safe here.

Do you feel at home in Shenzhen/ Baishizhou? Why?

I feel at home here, because I know many people in Shenzhen. The people are very friendly and there are a lot of opportunities and chances here in Shenzhen for young people like me. I would like to live here forever.

What would make you feel at home?

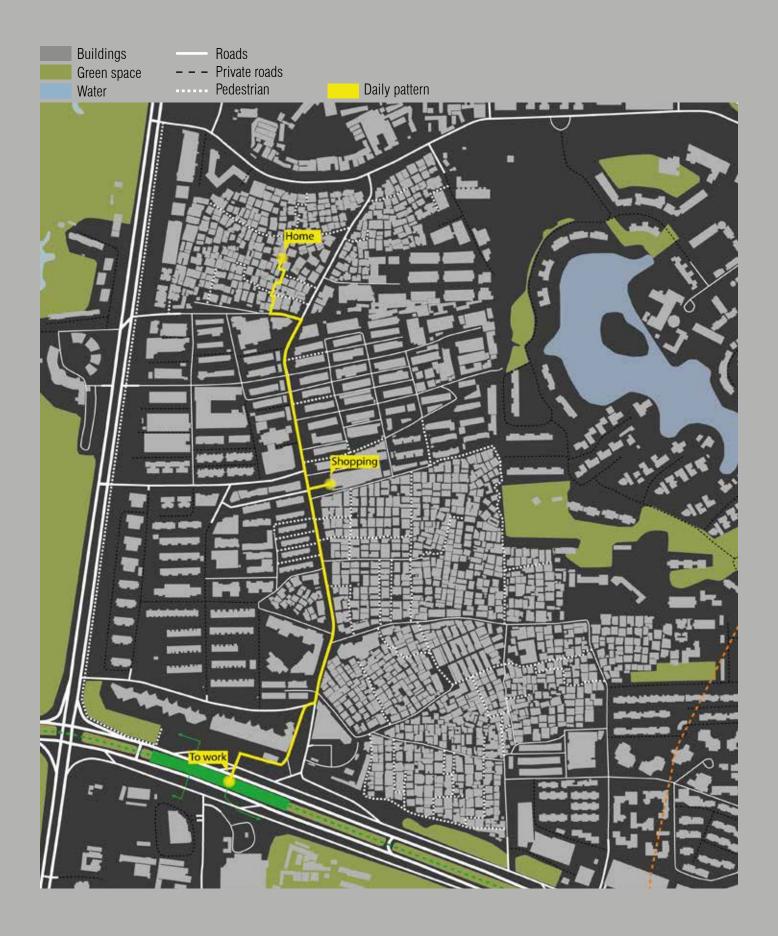
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What could be improved in the neighbourhood?

Clean environment.

What are you future perspectives and dreams?

I would like to start a company with friends next year and eventually buy a house.







APPENDIX II

The Walled Cities

A global phenomenon and study on Chinese gated communities

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6th Graduation Lab Urbanism Conference

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communities and enclaves. Many based on ancient and traditional forms, these new enclaves appeared primarily in the United States but were rapidly adopted by modern settlements in South America, South Africa and Asia. (Blakely and Snyder, 1997). Old neighbourhoods were closing their streets, protecting their area and reducing traffic, transforming public space into private realms. This phenomenon challenged not only the spatial conditions of the city, but also impinged upon social and organisational aspects (Grant and Mittelsteadt, 2004). A rather complicating factor is that the historical context of these enclaves differs in each country. However, they are all linked to a global trend; safety and security of local citizens (Low, 2001).

The aim of this paper is to obtain a better insight in these so called compounds and to identify the problems of these gated communities in relation to public space. Moreover, preliminary strategies on how to (re)integrate gated communities into urban fabrics in China are presented. Chinese gated communities arose more than 3000 years ago, as status symbol to separate emperor from citizens and urban from rural citizens (Jin, 1993). However, current gated communities in China are based on the American model (Le Coix and Webster, 2006). In the mid twentieth century wealthy citizens built enclaves to protect themselves against rapid industrialisation (Blakely and Snyder, 1997).

Through literature review an introduction of different types of gated communities throughout the world is presented. Emphasis will be on new gated communities in China. Which impact does this new development have on urban configuration and social life in high-dense Chinese cities? This paper will focus on understanding China's new building strategies and the influence of gated communities on spatial fragmentation and social segregation in highly urbanized areas. Spatial interventions with the goal to integrate enclaves and to increase social cohesion will be addressed and will provide the necessary insight for a dedicated design project.

Key words – China; spatial fragmentation; social segregation; gated communities; security

1. Introduction

Gating goes back thousands of years and has been adopted again by non-Western countries during last decades. Gated communities have become more and more popular, especially in rapid growth areas with high urbanisation rates, for example in Chinese cities.

Chapter two presents the definition, investigates worldwide trends and the types of gated communities. Chapter three will focus on the historical development of 'gating' in China and compares with current trends. Next, the consequences of gating will be summarized. Chapter five discusses the urgency of this topic, with proposals for alternative planning models in chapter six. The paper concludes with a summary and outlook towards my master thesis plan.

2. Gated communities

2.1 Definition

The following definition will be used for a gated community: 'a gated community is a housing development on private roads closed to general traffic by a gate across the primary access. The developments may be surrounded by fences, walls, or other natural barriers that further limit public access' (Grant and Mittelsteadt, 2004). Enclaves, residential guarters and compounds all refer to the same definition listed above and do not conform a specific aerial size or number of houses. Gated communities should be seen as a successful formula for market-controlled urbanisation. Developers explore gated projects as an important marketing strategy in the current real-estate market: enclaves can attract future residents, searching for a sense of community, identity and security by providing specific facilities and functions (Grant and Mittelsteadt, 2004). However, whether gated communities are true 'communities' is open for debate and some important aspects will be discussed in section 4.3.

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2.2 Worldwide phenomenon

Private and gated communities are not new in urban fabric. Historically, walls were built to protect local citizens from invaders. In the nineteenth century a renewed form of gating began to appear in Western countries. Wealthy citizens tried to protect themselves from the rapid industrialisation in cities through private and urban governance. They closed streets in old neighbourhoods to increase safety and to reduce traffic (Grant, 2008). In the mid- and late twentieth century another form of enclave emerged in postmodern cities; retreats and exclusive residential areas. In the United States many of these gated communities have appeared since the ideology of suburbanisation (Grant and Mittelsteadt, 2004). This gating trend has set its mark all over the globe. where in the United States, senior citizen communities are enclosed by golf courts, in South-America villages are surrounded by barbed wire and cameras. Or for instance in Dubai, where the complete city has been built with fenced neighbourhoods and commercial compounds. All these types of fortifications are the response to an increasing demand for safety, seclusion and community living. Enclaves where specific social classes group together, sharing an ideology or lifestyle, either by fear or hope (Mars and Hornsby, 2008). This phenomenon challenges not only the spatial organisation of the city, transforming public areas into private realms, but also introduces social tensions.

2.3 Types of gated communities

The writers of Fortress America, Blakely and Snyder (1997), have presented an extensive investigation on gated communities in the United States. They have identified three types of gated communities; lifestyle, prestige and a security zone. In practice, however, gated communities may show more than only one type. Lifestyle communities focus on leisure activities, such as golf and country clubs. Residents searching for identity, security and shared lifestyle, such as seniors, are mostly attracted to these enclaves. Prestige communities symbolize wealth and status and do often not include shared facilities. Athletes, financers, celebrities and politicians are the type of residents for this community. Security zone communities are built as a reflection of fear for outsiders. Walls and gates are built to decrease crime, traffic and maintain property values. At some moment in time, all social classes have practiced this way of preserving the neighbourhood, but wealthy compounds have been the most successful (Blakely and Snyder, 1997, Grant and Mittelsteadt, 2004).

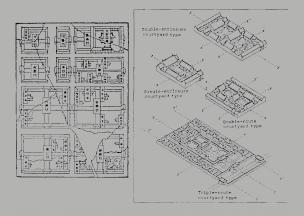
3. China

In urban planning and architecture of Chinese cities, walls have always been an important factor to control social structures. From the imperial palaces, the Great Wall of China to the communist *Danwei* work

units, walls have always been part of the urban fabric. However, in the past decades the new formula of fortification has been rapidly implemented in booming China. Entire networks of residential areas arise with private services, infrastructure and self-governance. With each new compound built, it becomes more apparent that the gated community has a central role in China's urbanisation process.

3.1 History of gating

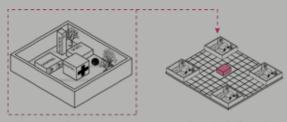
The Chinese gated communities show a long history. Gates were built as a form of status and protection. Every city had a wall to protect urban citizens from rural citizens. Within the city the emperor had his palace walled to detach himself from the city citizens (Jin, 1993). The walls were a way to separate urban from rural residents. The inner wall was to demonstrate that the palace was more important than the residential district. During the period 770 BC -906 AD China breaks up in smaller states (political reforms) due to political disorder. Cities are redeveloped and enclosed neighbourhoods arise to minimize social interaction, but increase local social control. *Figure 1* shows the typical structure of several types of closed neighbourhoods.



In the Song dynasty (618 – 1840) a new spatial transition is taking place. Commercial districts and residential areas are combined into one common neighbourhood. Walls within the cities are being demolished. The city is no longer divided into enclosed neighbourhoods; neighbourhoods become more heterogeneous. During the colonial era (1840 –1949) industrialisation is taking place on a large scale. As a consequence production, circulation and residential activities are separated again. The first commercial buildings are introduced, in high contrast with traditional Chinese streets with shop houses. Western traders and diplomats receive their own enclosed neighbourhoods.

During the socialist era of China (People's Republic of China as of 1949) the city is regarded as an evil place due to high industrialisation (The Great Leap Forward) and bad quality of living. The cities have to become class-less cities, and there should be a

large difference between cities and rural areas. To keep people from moving to cities, the *Hukou* is introduced; a system in which people can only use healthcare and education facilities in their hometown. However, this did not stop the mass-migration to cities, which resulted in a new 'socialist' housing development: *Danwei work-units*. *Figure 2* gives an artist impression of the *Danwei* model.



Work unit compounds
Figure 2. The Danwei model: self-sufficient neighbour-hoods combined with factories (ill. by author).

Buildings are standardized within a unit surrounded by a wall, with a complete set of living facilities, mostly provided by the industrial companies. These units became self-sufficient sub centres (Jin, 1993).

3.2 Economic reforms of 1978

In 1978 the open door policy was introduced allowing foreign companies to invest in China. Along the East coast, a Special Economic Zone (SEZ) was introduced in multiple cities to boost economic growth. An immense urbanisation took place and is still taking place, modelled to western ideals. Since these reforms, the securities of the Danwei have been lost: high rise buildings, luxurious hotels and large shopping centres are replacing the traditional Chinese shopping streets (Hao, 2012). With the transition from a collective land and totalitarian controlled society to a society dominated by market forces, the Chinese peasant is responsible for his own individual survival, resulting in a mass migration to cities. Due to overcrowded cities and lack of public facilities, the upper class wants to dissociate themselves from the chaotic and polluted urban realm (Mars and Hornsby, 2008). As a result large private residential communities for the rich are built, dividing the different social classes and secluding themselves from the 'danger' outside their walls. In the transition from a planned economic society to a market-oriented system the government's top political concern is social stability. Therefore, the government encourages gating because it quickly reduces crime and increase control, safety and stability (Miao, 2010). The majority of the residents also like the gate, not only because it increases the safety, but it also keeps out noise of through traffic, unwanted sales persons and pedlars. However, there are many complaints about the rigid walls, since they symbolize a safe environment, but it only generates a virtual safety image. (Miao, 2010).

4. Consequences of gating

Currently, the primary reason for gating in China is safety and security. However, exactly the opposite effect is seen in the streets. The lack of social security and street views, result in anonymous and deserted public space and sidewalks around the walls of these gated communities. Furthermore, the design of Chinese gated communities is not comparable with, for example, American enclaves. Whereas American compounds exist out of townhouses or villas, Chinese gated communities are clusters of high-rise residential buildings usually over 15 storeys high.

4.1 Deserted streets

Gated residential quarters in China may be considered super blocks within the urban fabric. Citizens can walk for hundreds of meters (150-250 meters) without street intersections. The number of gates is minimized to save costs for guards. As a consequence, sidewalks around these residential compounds are mostly deserted. Physical borders prevent people from using the street. This is due to unattractive street views and lack of any (commercial) facilities (Xu and Yang, 2009). Gating discourages people from walking, but increases the use of their cars due to large distances between residential and public facilities. Figure 3 shows a gated community in Shenzhen: two separate residential quarters are built alongside the public street. This street is almost exclusively used for through traffic due to the absence of public functions.



Figure 3. Gated communities 'Lucky Gardens' and 'Bay Gardens' along the public, but abandoned street in Shenzhen (photo by author).

Not only gated residential quarters are built by realestate developers, also national institutions, such as universities and factories, are walled. Thus losing the local urban context and not anticipating local urbanisation (Miao, 2010).

4.2 Homogeneous neighbourhoods and autonomous residential districts

The effects of gating are becoming more and more visible in cities like Shenzhen. The physical fences

not only create spatial fragmentation in the urban fabric, but have an even more dangerous problem: social segregation. The booming housing production, which is encouraged by the government, is given to private developers. The government divides the land in small plots and gives each plot to a different developer. The only goal of this developer is to maximize profits. Residential projects become prestige projects with prices going sky-high. These projects are specifically developed for the upper class citizens. The enclaves are socially homogenous, leaving these residential areas spatially and socially isolated (Mars and Hornsby, 2008). The lower classes of society (including migrants) end up in old Danwei housing, illegal settlements and deteriorated areas, creating clusters of specific social classes within the cities. The lack of governmental policies concerning social housing ensures that little will change in future.

4.3 Anonymity

As discussed before residential clusters exist of multiple high-rise buildings with over 15 floors. In most of these clusters green space and some public functions are integrated. These 'private' facilities have to compete with, for instance, large shopping malls which are more attractive as their product range is usually much larger. The result is that locals will favour facilities outside their residential area. This minimizes social interaction within the local community; neighbours only meet in elevators or parking garages and thus hardly know each other. Figure 4 shows a high rise residential quarter in Shanghai. Most of its residents work during the day; the residential (green) space barely used.



rigure 4. Hign-rise residential quarter in Shanghal where social interaction is lost (Brook, 2013).

This leads to a dangerous paradox. Chinese communities and neighbourhoods are historically based on close relationships (Levitt, 2012). Public space has always played a vital role in the social and economic life of the cities and its communities, but due to these new development strategies (public space privatized), cities and neighbourhoods become completely anonymous. The elderly, singles,

disabled, etc. become socially isolated (Wu and Gaubatz, 2013).

5. Relevance

Considerable research has been presented about the spatial, social, political and economic aspects of gated communities around the globe and its impacts on the city and street life. Many books, journals and articles have been written about the urbanisation and gated community trend in the past century in countries, such as the United States, South America and Africa (Blakely and Snyder, 1997, Grant and Mittelsteadt, 2004, Grant, 2008, Le Coix and Webster, 2006, Low, 2001). However, not much research has been done on New Towns, such as Shenzhen, China. China plans to build 20 new cities in the forthcoming 20 years, but is unable to find buyers for the hundreds of millions of new homes. Reports have shown that in 2011, 64 million new homes, mostly neat 4 storey houses or skyscrapers in the form of gated communities, are empty. Experts discuss the soulless cities where tradition and street life have completely been lost (Dailymail, 2011). Public space can be defined in streets, parks, playgrounds, markets, etc. and plays a vital role in tradition and history of Chinese cities. In public space, people are expected to interact and share information. A place where transport (including cyclists) and pedestrians meet; where buildings and streets come together and residential buildings interact with shops, markets and street life. Therefore, solutions should be researched (and implemented for the current housing development) that restore social coherence in New Towns in China.

6. Possible solutions 6.1 Redefying urban blocks

Learning from the traditional city and emerging trends in recent practice, a number of solutions will be discussed. Instead of gating large neighbourhoods, the clustering of small groups of buildings or small neighbourhoods should be considered. Figure 5 shows two designs of clustering. Regularly distributed streets and short blocks are valuable for improving the vitality of the neighbourhood, according to Jane Jacobs (Jacobs, 1961). Allan Jacobs argues that there should be an intersection every 90 meters and the optimal size of blocks should be between 60 and 100 meters. Allen describes that the best streets are those that minimize application of uniform walls. Streets should be embedded in a transparent environment, that is with entryways about 4 meters apart (Jacobs, 1993). Blocks in Chinese cities should preferably have 100 - 150 instead of the current 300 - 800 residential units. The original Lilong, which is a traditional neighbourhood in Shanghai, holds around 40-60 dwellings (Miao, 2010). The important aspect of this traditional neighbourhood is the fact that they do not contain private facilities, while the neighbourhood is con-

trolled by a small community. In the cluster designs proposed in *figure 5*, either clusters of buildings (left) or clusters of blocks (right) may be gated as found in traditional *Lilongs*. Although gating is applied, it should not prevent non-local residents entering the area; within the urban fabric no private streets should exist.



Figure 5. Two possible clusters designs with their public space. Black is commercial area, hatched is public space or park. Left: Few buildings are clustered together along a main street with public facilities, with publicly accessible parks and squares. Right: Blocks are clustered with semi-public parks and squares and public facilities around the boarders (Miao, 2010).

6.2 Public space

Proper public space should support interaction between people. It should contain access to sun light, a proper landscape, food facilities, public attractions, benches and proximity to a street and public transportation (Whyte, 1980). Thus (the small) individual blocks and residential clusters should avoid including commercial facilities (black rectangles in *figure 5*). The streets between these residential communities will then become the true public space, a place where people from different clusters can gather and all activities take place. Parks and squares may be located within the cluster to create a semi-private realm which, may be controlled by the cluster committee (right figure). However, it is necessary that parks and squares are also designed outside of the clusters, bordering the public streets (left figure). Public space will be managed and controlled by the city council. A mix of citizens from all social classes should provide the necessary variety within clusters and public space, leading to more social diversity and reducing the number of autonomous districts (Miao, 2010).

7. Conclusion

In summary, although a global phenomenon, new trends in gating have been identified in Chinese cities. Enclaves are the new planning typology in densely populated and rapidly growing cities. There is no exhaustive literature on these new developments in China. The consequences of these developments became visible only recently. Social classes become more separated and spatial fragmentation occurs at large scale. Due to absence of governmental policies this situation will not change in near future.

However, there is a social urgency to rethink the planning and building system in China. Two proposals are presented. First, the size of urban blocks should be reconsidered. Clustering small groups of buildings or small neighbourhoods are more effective towards vital street life. Secondly, public space should not become part of private residential quarters; it should really remain public.

My master thesis will contain a more extensive study on gated communities in China, specifically in the city of Shenzhen. Several solutions will be discussed.

Bibliography

- BLAKELY, E. J. & SNYDER, M. G. 1997.

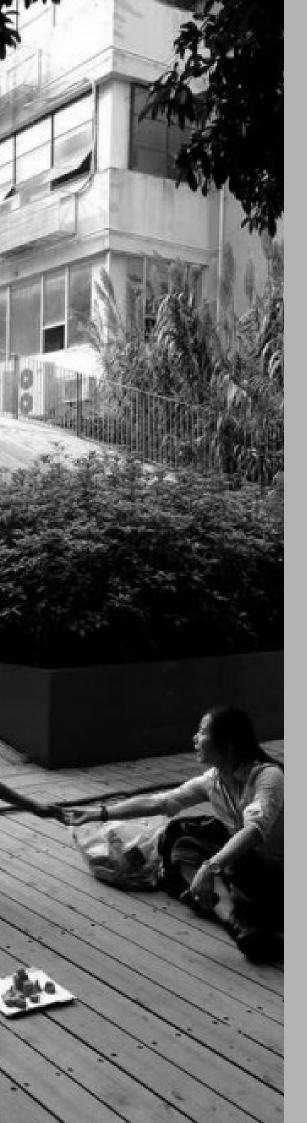
 Fortress America; Gated Communities in the United States, Washington, Brookings Institution Press.
- BROOK, D. 2013. *Head of the Dragon: The Rise of New Shanghai* [Online]. Design Observer. Available:

 http://places.designobserver.com/feature/the-rise-of-new-shanghai/37674/2014].
- DAILYMAIL. 2011. *China's Ghost towns* [Online]. United Kingdom: Daily mail. Available: http://www.dailymail.co.uk/news/article-2005231/Chinas-ghost-towns-New-satellite-pictures-massive-skyscraper-cities-STILL-completely-empty.html 2014].
- GRANT, J. & MITTELSTEADT, L. 2004. Types of gated communities. *Environment and Planning B: Planning and Design*, 31,913-930.
- GRANT, J. L. 2008. Challenging the public realm: gated communities in history. Halifax, Canada: School of Planning Salhousie University.
- HAO, P. 2012. Spatial Evolution of Urban villages in Shenzhen. PHD, Utrecht University.
- JACOBS, A. 1993. *Great Streets*, Cambridge, MA, MIT Press.
- JACOBS, J. 1961. *The death and life of great American cities*, New York, Random House.
- JIN, W. 1993. The historical development of Chinese urban morphology. *Planning Perspectives*, 8, 20-52.

LE COIX, R. & WEBSTER, C. 2006. Gated communities, sustainable cities and a tragedy of the urban commons. *Critical planning*.

- LEVITT, T. 2012. Chinese cities "feel the loss of streetlife and community" [Online]. Beijing: China Dialogue. Available: https://www.chinadialogue.net/article/show/single/en/5291-Chinese-cities-feel-the-loss-of-streetlife-and-community-[Accessed 15 December 2013].
- LOW, S. M. 2001. The Edge and the Center: Gated Communities and the Discourse of Urban Fear. *American Anthropologist*, 301, 45-58.
- MARS, N. & HORNSBY, A. 2008. *The Chinese Dream: a society under construction*, Rotterdam, 010 publishers.
- MIAO, P. 2010. Deserted Streets in a Jammed Town: The Gated Community in Chinese Cities and Its Solution. *Urban Design* 8:1 45-66.
- WHYTE, W. H. 1980. *The Social Life of Small Urban Spaces*, Washington, DC, The Conservation Foundation.
- WU, W. & GAUBATZ, P. 2013. *The Chinese City*, New York, Routledge.
- XU, M. & YANG, Z. 2009. Design history of China's gated cities and neighbourhoods: Prototype and evolution. *URBAN DESIGN International*, 14, 99-117.





APPENDIX III

LIVEABILITY INDEX

	RANK - Spatial Adjusted Liveability Index	RANK - EIU Liveability index	Change in ranks	Green Space (1=best - 5=worst)	Sprawl (1=best - 5=worst)	Natural Assets (1=best - 5=worst)	Cultural Assets (1=best - 5=worst)	Connectivity (1=best - 5=worst)	Isolation (1=best - 5=worst)
Hong Kong	1	10	9	1.2	1.0	1.3	4	2.3	1.3
Amsterdam	2	8	6	1.7	3.0	1.3	2	1.3	4.3
Osaka	3	3	0	2.8	2.8	2.7	2	2.3	2,5
Paris	4	5	1	1.2	3.2	2.3	3	1.3	3.8
Sydney	5	2	-3	1.3	4.3	2.0	4	2.3	4.5
Stockholm	6	4	-2	2.3	3.2	2.0	2	2.0	5.0
Bertin	7	7	0	1.3	4.5	1.7	1	2.5	4.8
Toronto	8	1	-7	1.0	4.5	4.0	5	1.8	3.8
Munich	9	9	0	1.2	2.5	1.3	4	1.5	5.0
Tokyo	10	6	-4	3.3	2.7	3,3	5	1.3	3.0
Rome	11	18	7	2.3	3.0	1.3	1	1.8	4.8
London	12	22	10	1.0	4.0	1.7	2	1.0	4.0
Madrid	13	15	2	1.8	2.3	1.7	4	1.8	4.3
Washington DC	14	11	-3	1.5	4.7	2.7	5	1.3	3.0
Chicago	15	12	-3	1.5	4.7	3.3	5	1.0	3.3
New York	16	23	7	1.3	4.3	2.3	4	1.0	2,3
Los Angeles	17	17	0	3.2	5.0	2.0	5	1.3	3.0
San Francisco	18	21	3	2.2	4.7	1.3	5	2.3	3.3
Boston	19	16	-3	2.0	5.0	2.7	5	2.0	3.8
Seoul	20	25	5	2.8	2.3	3.7	3	1.8	1.5
Atlanta	21	12	-9	2.0	5.0	4.0	5	1.0	4.5
Singapore	22	20	-2	2.2	2.0	4.0	5	2.3	4.5
Miami	23	12	-11	3.3	5.0	3.7	5	1.8	4.3
Budapest	24	19	-5	3.7	3.8	2.7	2	3.8	5.0
Lisbon	25	24	-1	3.0	3.7	3.7	3	3.3	4.8
Buenos Aires	26	26	0	2.8	3.3	4.0	4	2,8	3.8
Moscow	27	30	3	2.7	3.3	3.3	3	1.8	3.8
St Petersburg	28	29	1	2.7	2,8	4.0	2	3.5	4.5
Athens	29	28	-1	2.7	3.0	2.3	4	2.5	4.8
Beijing	30	32	2	3.3	2.8	3.7	2	2.0	2.3
Santiago	31	27	-4	3.7	2.7	3.3	4	3.3	4.3
Warsaw	32	31	-1	2.3	3.8	2.7	5	3.3	5.0
	33	35	2	3.3	3.5	4.0	4	2.3	1.0
Shanghai	33	33	Ľ	3.3	3,3	4.0	4	213	1.0

2.8

2.7

3.7

3.5

1.3

34 Ranking of cities: Shenzhen on the 34th position (Eaves et al., 2012))

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Shenzhen

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Pollution (1=best - 5=worst)	Spatial Characteristics (1=best - 5=worst)	Stability (18.75%)	Healthcare (15%)	Culture and Environment (18.75%)	Education (7.5%)	Infrastructure (15%)	Spatial Characteristics (25%)	Spatial Adjusted Liveability Index
3	2.0	95.0	87.5	85.9	100.0	96.4	75.0	87.8
1.5	2.1	80.0	100.0	97.2	91.7	96.4	71.3	87.4
2	2.4	90.0	100.0	93.5	100.0	96,4	64.0	87.4
2.5	2.5	85.0	100.0	97.2	100.0	96.4	63.7	87.1
1	2.8	90.0	100.0	94.4	100.0	100.0	55.7	86.0
2	2.6	95.0	95.8	91.2	100.0	96.4	58.9	86.0
2	2.5	85.0	100.0	97.2	91.7	96.4	61.7	85.9
1	3.0	100.0	100.0	97.2	100.0	89.3	50.0	85.4
2	2.5	85.0	100.0	97.2	91.7	89.3	62.5	85.1
1.5	2.9	90.0	100.0	94.4	100.0	92.9	53.3	84.3
2	2.3	80.0	87.5	91.7	100.0	92.9	67,3	83.6
1	2.1	70.0	87.5	97.2	100.0	89.3	72.6	83.5
2	2.5	85.0	87.5	94.4	100.0	92.9	61.3	83.5
1.5	2.8	80.0	91.7	94.4	100.0	96.4	55.1	82.2
1.5	2.9	85.0	91.7	91.7	100.0	92.9	52.7	81.5
1.5	2.4	70.0	91.7	91.7	100.0	89.3	65.2	81.3
1.5	3.0	80.0	91.7	94.4	100.0	89.3	50.3	79.9
1.5	2.9	85.0	91.7	94.4	83.3	85.7	53.0	79.7
1.5	3.1	80.0	91.7	91.7	100.0	96.4	46.7	79.6
3.5	2.7	80.0	83.3	85.6	100.0	89.3	58.8	79.1
1.5	3.3	85.0	91.7	91.7	100.0	92.9	42.9	79.0
2	3.1	95.0	87.5	76.6	83.3	100.0	46.7	78.2
1	3.4	85.0	91.7	91.7	100.0	92.9	39.3	78.1
2	3.3	85.0	91.7	90.0	100.0	83.9	43.0	77.4
2	3.3	80.0	87.5	95.1	91.7	80.4	41.7	75.3
2.5	3.3	70.0	87.5	85.9	100.0	85.7	42.3	73.3
2	2.8	65.0	79.2	81.5	91.7	83.9	54.2	72.3
2	3.1	65.0	87.5	81.5	83.3	80.4	48.2	70.9
2.5	3.1	75.0	83.3	83.1	75.0	75.0	47.3	70.8
4.5	2.9	80.0	66.7	72.2	83.3	85.7	51.5	70.5
4	3.6	75.0	70.8	89.1	83.3	85.7	35.1	69.3
2	3.4	80.0	70.8	80.3	75.0	82.1	39.0	68.4
4	3.2	80.0	62.5	75.0	75.0	75.0	46.1	66.8
3.5	3,1	85.0	62.5	63.7	66.7	82.1	48.5	66.7





BIBLIOGRAPHY

- ALEXANDER, C., ISHIKAWA, S., SILVERSTEIN, M., JACOBSON, M., FIKSDAHL-KING, I. & ANGEL, S. 1977. *A Pattern Language*, New York, Oxford University.
- ANNA, C. 2010. *Beijing starts locking poor villages at night* [Online]. Beijing: NBC News, Associated Press. Available: http://www.nbcnews.com/id/38248053/ns/world_news-asia-pacific/#.UtxUKfTb-Q8 [Accessed 3 October 2013].
- BLAKELY, E. J. & SNYDER, M. G. 1997. *Fortress America; Gated Communities in the United States*, Washington, Brookings Institution Press.
- BRISTOW, M. 2011. *Beijing's Qianmen district: Rebuilt for better or worse* [Online]. Beijing: BBC NEWS. Available: http://www.bbc.co.uk/news/world-asia-pacific-12344304 [Accessed 2014].
- BROOK, D. 2013. *Head of the Dragon: The Rise of New Shanghai* [Online]. Design Observer. Available: http://places.designobserver.com/feature/the-rise-of-new-shanghai/37674/ [Accessed 2014].
- CALDEIRA, T. P. R. 2000. City of Walls, California, Regents of the University of California.
- CARR, M. 2012. *China Mike* [Online]. Bristol, UK. Available: http://www.china-mike.com/ [Accessed 2013].
- DAILYMAIL. 2011. China's Ghost towns [Online]. United Kingdom: Daily mail. Available: http://www.dailymail.co.uk/news/article-2005231/Chinas-ghost-towns-New-satellite-pictures-massive-skyscraper-cities-STILL-completely-empty.html [Accessed 2014].
- DASHILARE INVESTMENT LIMITED. 2012. *Dashilar* [Online]. Dashilar, Beijing: Guangan Holding. Available: http://dashilar.org/
 [Accessed 2014].
- DE KONING, P. 2014. Tweedeling dreigt in Nederland. NRC Handelsblad.
- EAVES, D., YAU, N., MASONG, H., COPESTAKE, J. & BARBER, C. 2012. Best cities ranking and report: A special report from the *Economist Intelligence Unit*. In: ECONOMIST, T. (ed.). Economist Intelligence Unit, Buzzdata.
- EVANS, C. 2011. *Two cities* [Online]. Expoistion; Oxford University's most intellegent magazine. Available: http://expositionmagazine.com/?p=936 [Accessed 15 October 2013].
- FITZPATRICK, L. 2009. A Brief History of China's One-Child Policy. TIME.
- GRANT, J. & MITTELSTEADT, L. 2004. Types of gated communities. Environment and Planning B: Planning and Design, 31, 913-930.
- GRANT, J. L. 2008. *Challenging the public realm: gated communities in history*. Halifax, Canada: School of Planning Dalhousie University.
- GUAN, Q. 1996. Lilong Housing, A Traditional Settlement Form. Master, McGill.
- GUANGAN HOLDING. 2014. 杨梅竹斜街整体改造: Bayberry Bamboo Byway transformation [Online]. Beijing: Guangan Holding. Available: http://www.gaholding.com.cn/News Show.aspx?nid=8&pid=22&id=117 [Accessed 2014].
- HAO, P. 2012. Spatial Evolution of Urban villages in Shenzhen. PHD, Utrecht University.
- HUANG, Y. 2005. From work-unit compounds to gated communities; housing inequality and residential segregation in transitional Beijing. In: MA, L. J. C. & WU, F. (eds.) Restructuring the Chinese City. London: Taylor & Francis Group.
- HULSHOF, D. & ROGGEVEEN, D. 2011. How the city moved to mr Sun, Amsterdam, Martien de Vletter, SUN.

TU Delft Shenzhen Scenarios 2.0

INTI. 2012. *International New Town Institute* [Online]. Almere. Available: http://www.newtowninstitute.org/spip.php?article843 [Accessed 15 December 2013].

- JACOBS, A. 1993. Great Streets, Cambridge, MA, MIT Press.
- JACOBS, J. 1961. The death and life of great American cities, New York, Random House.
- JIN, W. 1993. The historical development of Chinese urban morphology. Planning Perspectives, 8, 20-52.
- KAIMAN, J. & XU, C. 2013. China's fast-food pioneer struggles to keep customers saying 'YUM!'. The Guardian.
- KOJIMA, K. & KOKUBUN, R. 2002. *The 'Shequ Construction' Programme and the Chinese Communist Party*. Copenhagen Journal of Asian Studies, 16, 86-105.
- LANDMAN, K. 2004. *Gated communities in South Africa; Comparison of four case studies in Gauteng.* CSIR Building and Construction Technology.
- LE COIX, R. & WEBSTER, C. 2006. Gated communities, sustainable cities and a tragedy of the urban commons. Critical planning.
- LEVITT, T. 2012. Chinese cities "feel the loss of streetlife and community" [Online]. Beijing: China Dialogue. Available: https://www.chinadialogue.net/article/show/single/en/5291-Chinese-cities-feel-the-loss-of-streetlife-and-community-[Accessed 15 December 2013].
- LI, J., WU, P., YANG, K., CHEN, Y., WU, Y., WANG, M., ZHUANG, X., ZHAO, N. & NIU, R. 2005. *Protection, Renovation and Development of Beijing Qianmen Area* [Online]. Beijing: Archiprix Glasgow. Available: http://www.archiprix.org/2015/index.php? project=2073 [Accessed 2014].
- LOW, S. M. 2001. The Edge and the Center: Gated Communities and the Discourse of Urban Fear. American Anthropologist, 301, 45-58.
- LOWE, M., WHITZMAN, C., BADLAND, H., DAVERN, M., HES, D., AYE, L., BUTTERWORTH, I. & GILES-CORTI, B. 2013. Liveable, Healthy, Sustainable: What Are the Key Indicators for Melbourne Neighbourhoods? Place, Health and Liveability Research Program. Melbourne, Australia: Faculty of Architecture and Planning, Melbourne School of Engineering, Department of Health Victorian Government, McCaughey VicHealth Centre for Community Wellbeing.
- MADDISON, A. 2007. *Contours of the World Economy.* 1-2030 AD: Essays in Macro-Economy History. New York: Oxford University Press.
- MARS, N. & HORNSBY, A. 2008. The Chinese Dream: a society under construction, Rotterdam, 010 publishers.
- MEYER, M. 2008. The Last Days of Old Beijing: Life in the Vanishing Backstreets of a City Transformed, New York, USA, Walker & Company.
- MEYER, U. & KOGEL, E. 2000. The Chinese City; Between Tradition and Modernity, Berlin, Jovis Verlagsburo.
- MIAO, P. 2010. Deserted Streets in a Jammed Town: The Gated Community in Chinese Cities and Its Solution. Urban Design 8:1 45-66.
- MOSER, C. O. N. 2004. Environment & Urbanization, Nottingham, Smith+Bell.
- O'DONNELL, M. A. 2012. Shenzhen Noted [Online]. Shenzhen. Available: http://shenzhennoted.com/ [Accessed 2013].
- POMFRET, J. 2002. *In China, the Rich Seek To Become the 'Big Rich'; the wealth creates class divisions* [Online]. Beijing: Washington Post. Available: http://www.washingtonpost.com/newssearch/search.html?st=china+big+rich&submit=Verzenden [Accessed 20 September 2013].

- QIWEI, W. 2012. *Maillen Hotel And Apartment / Urbanus* [Online]. Arch Daily. Available: http://www.archdaily.com/208268/ [Accessed 15 October 2013].
- SASSEN, S. 2000. Cities in a world economy, London, Pine Forge Press.
- SHANGHAI STREET STORIES. 2010. *Understanding Shikumen Architecture and Lilong Housing* [Online]. Shanghai. Available: http://shanghaistreetstories.com/?page_id=1288 [Accessed 2014].
- SHENZHEN STATISTICS BUREAU 2012. Shenzhen Statistical Yearbook, Shenzhen, China Statistics Press.
- SKINNER, G. W., BAKER, H. D. R., CHANG, S., DEGLOPPER, D. R., ELVIN, M., FEUCHTWANT, S., GOLAS, P. J., GRIMM, T., LAMLEY, H. J., MOTE, F. W., SCHIPPER, K. M., SHIBA, Y., VAN DER SPRENKEL, S., WATT, J. R. & WRIGHT, A. F. 1977. *The City in Late Imperial China*, San Francisco, USA, Stanford University Press.
- THE COCA COLA COMPANY. 2013. Coca-Cola Continues Strong Investment in China with Opening of 43rd Production Facility [Online]. China. Available: http://www.coca-colacompany.com/press-center/press-releases/coca-cola-continues-strong-investment-in-china-with-opening-of-43rd-production-facility [Accessed October 24, 2013].
- THE WORLD BANK. 2013. *GINI index* [Online]. Washington. Available: http://data.worldbank.org/indicator/SI.POV.GINI [Accessed 20 September 2013].
- TRAVEL CHINA GUIDE. 2012. *Qianmen Street* [Online]. Beijing. Available: http://www.travelchinaguide.com/attraction/beijing/gianmen-street.htm [Accessed 2014].
- UNITED NATIONS 2010. Population Division. World Urbanization Prospects. New York: Department of Economic and Social affairs.
- VAN DUIJN, W. & VOS, L. 2012. Abandoned Cities, Amsterdam, BNA.
- VAN NES, A. 2007. The structure of the street net and its impact on urban sustainability. The spatial conditions for a vital compact city. Delft: Delft University of Technology.
- VAN NES, A., NADIN, V., COLOMBO, F., SEPULVEDA, D., QU, L., READE, S., ROCCO, R. & BALZ, V. 2010. *Complex Cities Guidebook*. Delft: TU Delft.
- WHYTE, W. H. 1980. *The Social Life of Small Urban Spaces*, Washington, DC, The Conservation Foundation.
- WOETZEL, J., MENDONCA, L., DEVAN, J., NEGRI, S., HU, Y., JORDAN, L., LI, X., MAASRY, A., TSEN, G. & YU, F. 2009. *Preparing for China's urban billion*. Shanghai: McKinsey & Company.
- WU, W. & GAUBATZ, P. 2013. The Chinese City, New York, Routledge.
- XU, M. & YANG, Z. 2009. *Design history of China's gated cities and neighbourhoods*: Prototype and evolution. URBAN DESIGN International, 14, 99-117.
- YAO, Q. & WEI, W. 2012. *Gated Community: The Past and Present in China*. World Academy of Science, Engineering and Technology, 71, 691-693.
- YUTAKA, H., DORJE, L., ALEXANDER, A. & DE AZEVEDO, P. 2004. Beijing Hutong Conservation Plan. In: TIBET HERITAGE FUND INTERNATIONAL (ed.). Beijing.
- ZHENG, G. 2013. 杨梅竹斜街留住"老北京: Bayberry Bamboo Byway retain old Beijing. Beijing Daily.
- ZHUONYONG, C. 2008. Urbanization and Spatial Structure Eveolution of Urban System in China. 439, 32.

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