

**ENHANCE
THE
PROFOUND
VITALITY OF
URBAN
VILLAGES**

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MASTER THESIS
DELFT, THE NETHERLANDS

COLOPHON

Title:

Enhance The Profound Vitality Of Urban Villages

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MSc track Urbanism

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**INTERNATIONAL
NEW TOWN INSTITUTE**

MOTIVATION

This selected thesis topic is the result of two driving forces: my own interests on “overcrowded cities” and the underpinning from Shenzhen Scenarios Group.

First, my interests drive my concentration on the issue of “overcrowded cities” where spatial resources are limited and the population density is high. The value of planning and design, in such circumstance, can be fully reflected during the processes of reorganizing the spatial sequences and orders in response to the changes of socio-economical structure. Besides, the restrictions force urban planners to come up with innovative and creative solutions, which help to achieve unique identities. Among all types of city forms, China’s “urban village”, especially in the major cities, in a way, has put the “overcrowded” situations to extreme, which makes the topic challenging but interesting.

Second, the Shenzhen Scenarios Group, with the sustained attentions on the urban issue of Shenzhen, provides vigorous support in organizing lectures and field trips in corporation with INTI(International New Town Institutes). The fruits of the previous studies and researches and the opportunities to visit different Shenzhen’s institutions and various specialists enable a better understanding on the contexts as well as possibilities for further researches on Shenzhen’s urbanization.

The focus was ultimately narrowed down to the relationship between “urban vitality” and “self-organization” in Dalang’s urban villages which locate in the periphery zone of Shenzhen. The reasons to focus on Dalang is that: 1. urban villages are universally exist in Dalang; and 2. the attention and study on urban villages in periphery is less. The discussions involve from the physical conditions of urban villages and its roles in deep socio-economic structure, to the redevelopment process based on the complex landownership as response to the current planning system and redevelopment models.

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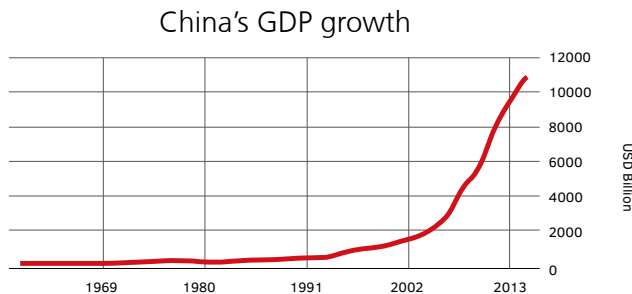
1.Context

1.1 BACKGROUNDS

Reform and Open Door Policy



China's internal migration



Poverty is not socialism.

It doesn't matter if a cat is black or white, so long as it catches mice.

Deng Xiaoping, former China's leader, source:ifeng.com

With the "Reform and Open Door" policy since 1978, influx of capital led to China's fast development and extensive internal migration. More than 230 million people (till 2011) migrated from hinterland to the cities along the east coastline to seek for jobs and better opportunities, which accelerated the city expansion and urbanization process of the coastal cities.

Shenzhen's Fast Development



VS



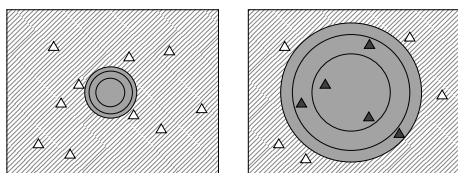
Shenzhen, as one of the most famous cities under the reform and open door policy, has grown from a small fish village to a metropolitan area with more than 10 million population in 30 years. Urban villages were formed under such circumstance.

1.2 URBAN VILLAGE IN CHINA

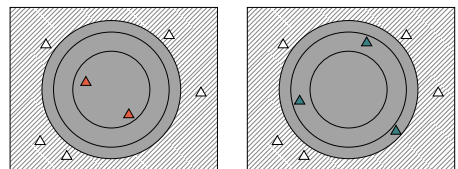
Urban villages in China refer to those rural villages which keep the physical structures but lost the agricultural functions under the influence of rapid urbanization (Gao, 2006, Liu, 2010, Him, 2010, Zacharias, 2013).



Urban village surrounded by skyscrapers in city. source: enorth.com.cn



Transformation urban villages. (Hao, 2012)



Central and marginal urban villages (Zhou, 2014)

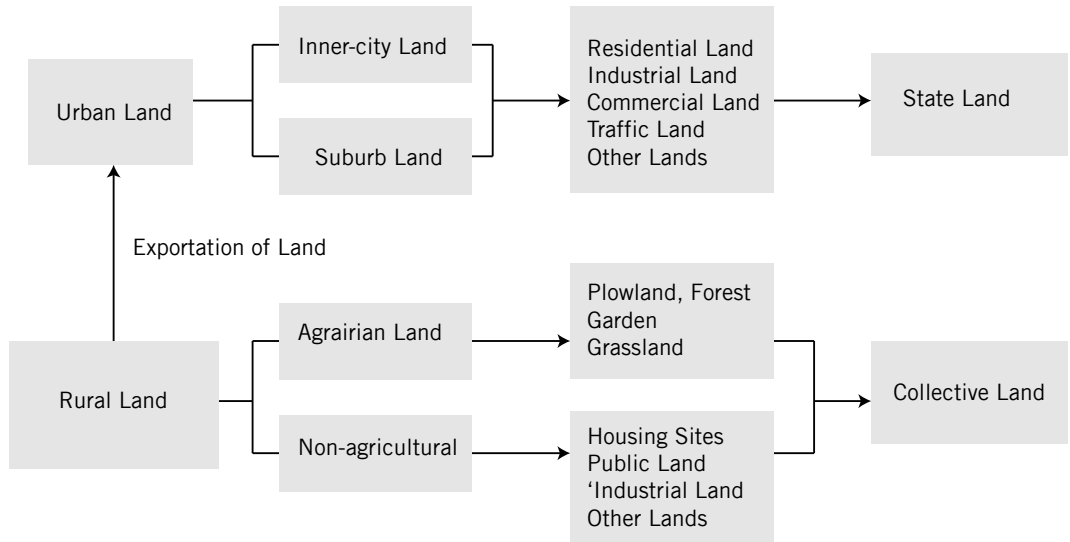
- Farmland
- Urban land
- Central urban village
- Rural village
- Urban village
- Marginal Urban village

Urban villages largely exist in China's cities with fast city expansion and urbanization. And urban villages can be divided into two categories: central urban villages and marginal urban villages, according to their locations.

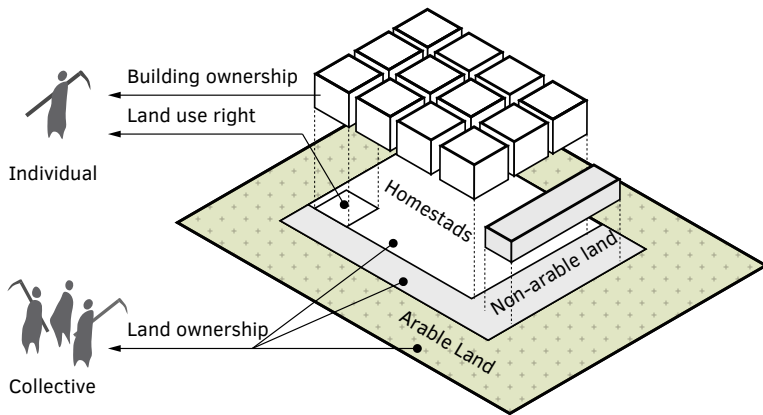
In Shenzhen, central urban villages attract more social groups like migrant workers, young graduates and starters, while the marginal ones are closely related to the manufactory industry.

1.3 FORMATION OF URBAN VILLAGES

1.3.1 Dual Land-Ownership System



Transformation of land between city and village(Zhang, 2012)



Landownership of urban village

In general, the land of a rural village is consisted of three types: arable land, non-arable land and homestead, each of which is collective owned by the villagers. The difference is that arable land and non-arable land can be traded with the government for compensation, but the homestead, where their housing located, can not be trade.

A key reason for the existence of urban villages is the dual land-ownership system in China. According to The Law of Land Administration of the People's Republic of China Article 2, the land is either owned by the state or by the collective. Collective land is not tradable with developer and can only levy by the government to transform from collective owned to state owned.

As consequences, the way that government acquired the land of urban villages is difficult especially when the owner and the ownership of land in is unclear or not clearly defined. So the collectively owned urban villages are comparatively not included in city's development plan since city requires a fast development plan and government doesn't have the development right of urban villages.

As a result, urban villages, functioned as a independent system, developed in a self-organized and spontaneous way, responding to the changes of the surrounding environment.

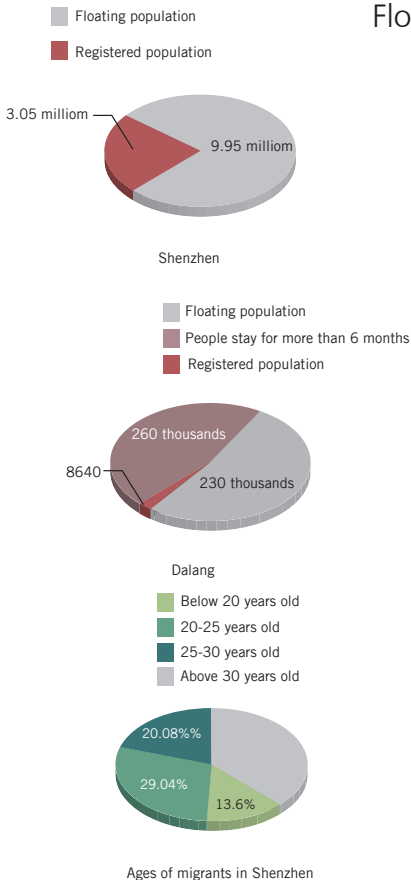
1.3 FORMATION OF URBAN VILLAGES

1.3.2 Floating Population

“Floating population” refers to the migrants who do not acquire permanent resident permits, or HUKOU, in the city they live in.



Floating population in China source: chinatoday.com



Source: Shenzhen Municipal Federation of Trade Unions, 2010

Another factor affects urban villages is floating population. Floating population is quite unsettled for the high frequency of changing jobs and place of residence. And urban villages became their contemporary living place with the low-cost life and low-rent housing. As a result, floating population contribute to the majority of the tenants. However, though they showed high tolerance to the living quality, they are intended to move out once they got higher incomes.

The number of registered and unregistered population in Shenzhen is 3.05 million and 9.95 million (year 2012). And according to the research survey done by “Shenzhen Municipal Federation of Trade Unions” in 2010, the average age of the migrants is 23.7 year old. More than 62 percent of the migrants are below 30 years old. And more than 50% are engaged in labour-intensive work and around 35% find jobs in service industry.

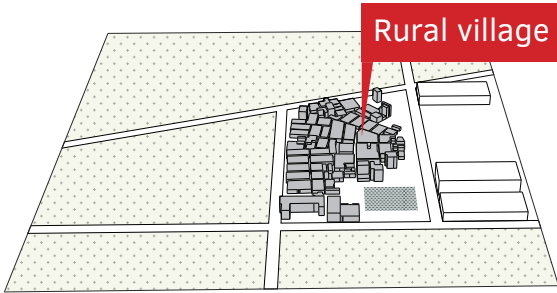
Floating Population In Shenzhen

华强路、泥岗西路 华富路
Huaqiang Road Nigang Road W. Huaifu Road
前方100m  

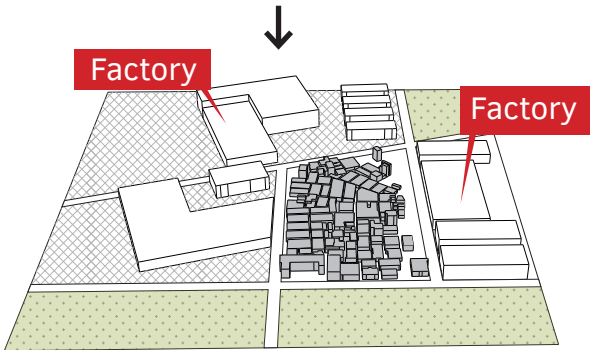


1.3 FORMATION OF URBAN VILLAGES

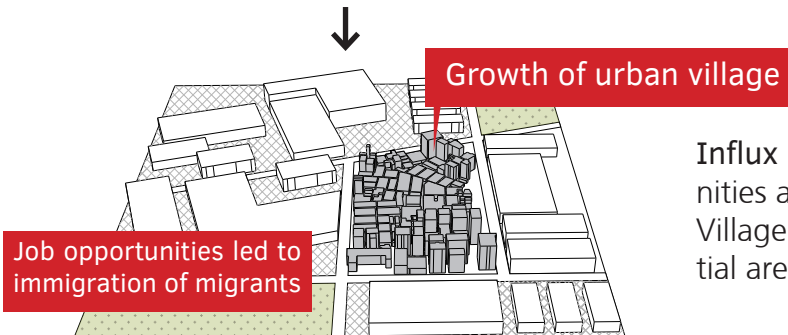
1.3.3 Formation Process(Marginal Urban Village)



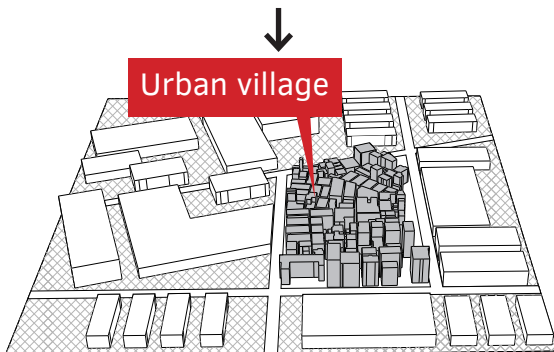
Rural village: located in the periphery



Influx of capital: Low land price attracts investment on the development around village



Influx of migrants: Job opportunities attract migrants to move in. Village begin to serve as residential area for migrants.



Urban village: lose the agricultural functions and became urban village, growing vertical and becoming "fatter and higher"

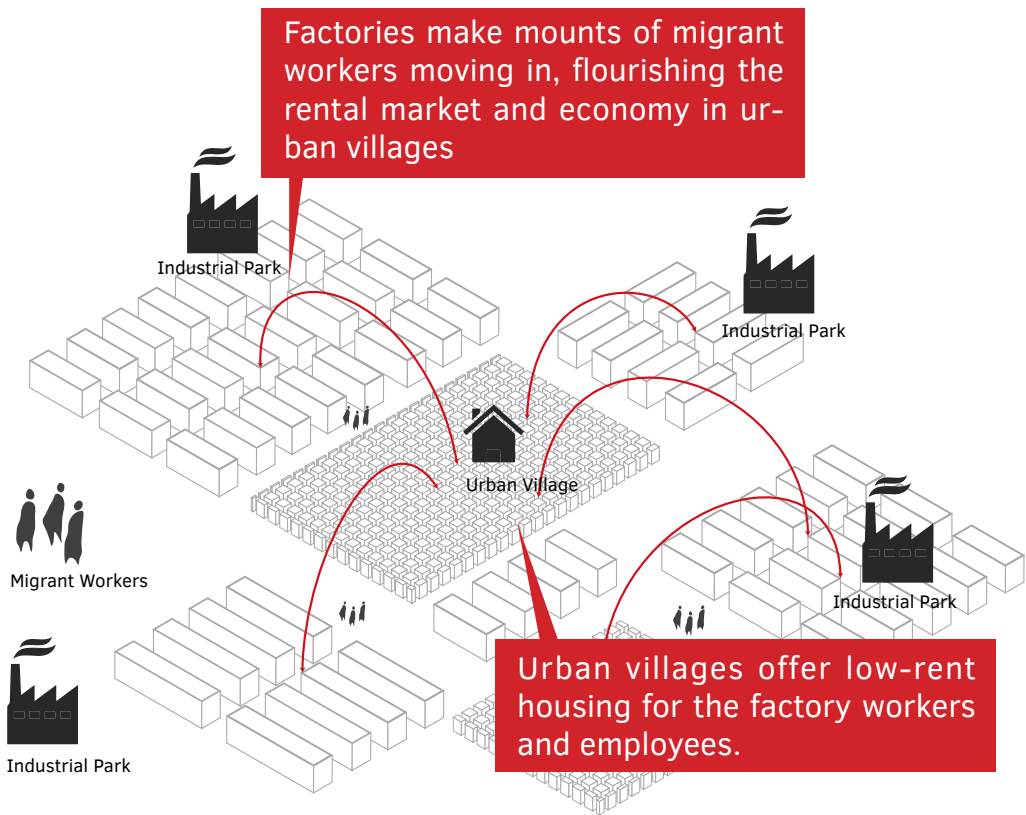
Because of dual land-ownership system in China. The land of urban villages is collective owned by the villagers. So urban villages, functioned as a independent system, developed in a self-organized and spontaneous way, responding to the changes of the surrounding environment.

With the influx of capital and migrants, the land around urban villages have been occupied by buildings and factories for non-agricultural use.

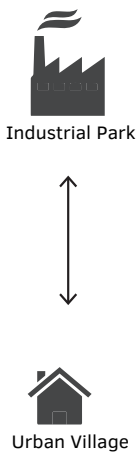
Influenced by such situation, villages began the process of transformation by self expanding its physical form and developing the informal housing markets, informal business and the service economy, which attracts more migrants and factories.

As a result, an rural village became an urban village, and gradually lose its original agricultural functions. In fact, the industrial parks and the urban villages had formed symbiosis relationship with each other.

1.4 SYMBIOSIS RELATIONSHIP



Industrial parks and urban villages form symbiotic relationship



In Shenzhen's case, the booming of the economy of urban villages depended on manufacturing industry with thousands of factories engaged in electronic goods, clothes and shoes.

The combination that industrial parks mingle with urban villages is commonly seen and spatial spread out over the area. For half of the migrant workers live in the dormitory offered by the factory, and the rest find their place mostly in urban villages.

Industrial parks and urban villages form symbiotic relationship since the mounts of migrant workers flourishing the rental market in urban villages, and urban villages, in return, offer low-rent housing to the migrant workers benefiting the industries.

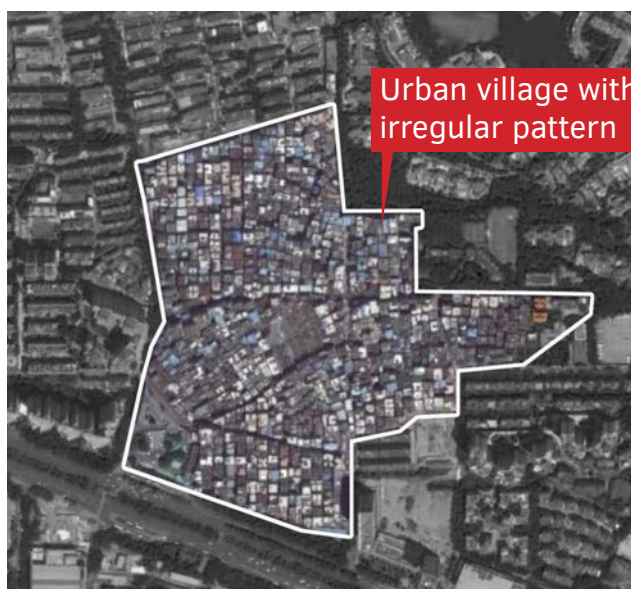
1.5 CHARACTERS OF URBAN VILLAGE

1.5.1 Irregular Layout

The development of urban villages is spontaneous and profit-orientated, which led to its irregular layout.

Urban villages usually are in the absence of formal regulating and planning and retain the layouts handed down from early times when urbanization was not introduced. (Zacharias, 2013, Him, 2010) So the scale of the street network, which accommodated to pedestrian, is in contrast to a regular urban block.

Besides, the land use pattern, due to the complex landownership, is uncoordinated on a large scale.



Urban village and a regular city block in Shenzhen

1.5 CHARACTERS OF URBAN VILLAGE

1.5.2 High Density



Gangxia Village
959 people per hectare



High built-up density is a common feature in urban villages. (Liu, 2010. Him 2010, Hao, 2012)

The development of an urban village is under the combination of market force and complex land ownerships. Villagers reconstruct their buildings to gain more rental spaces in response to the housing demands from the floating population.

As in appearance, buildings in urban village are growing “fatter” and “higher”, which make the building looked more “close” to each other, “face to face” and “hand in hand”.

The FAR (Floor Area Ratio) of urban villages is often above 3, which is higher than a normal living neighborhood that usually around 1.8.



Shenzhen Wonderland
380 people per hectare



FAR: Floor Area Ratio; DU/Ha: Dwelling Units per Hectare; POP/Ha: Population per Hectare Source: densityatlas.org

1.5 CHARACTERS OF URBAN VILLAGE

1.5.3 Limited Public And Green Spaces

Public and green space resources are limited in an urban village both in quantity and quality.

On one hand, the openness is decreasing during the reconstruction and the empty place in urban villages gradually replaced by housing in pursuit for more square meters to rent. In some extreme cases, parks and playgrounds are totally missing in urban villages.(Wei, 2000) Small pieces of green areas and the left over space are scatter inside the urban villages.

On the other hand, the streets, green space are in poor quality. The outdoor spaces are squeezed by building height and limited by the street width and thus, "narrow spaces" were commonly existed in urban villages. And street, used to be the main space for public social lives, has become an area filled with darkness, noise and the overcrowding, which creates a sense of insecurity and uncomfortableness. And all kinds of social facilities have been squeezed out.(Him, 2010)



Public space in urban village

1.5 CHARACTERS OF URBAN VILLAGE

1.5.4 Decrepit Infrastructures



source: Kathyang, 2016

The infrastructure in urban villages is usually decrepit or not accommodate for the demands.(Hao, 2012) The infrastructure involves water, sewerage, drainage, power and road works system. Most urban villages are lack of urbanity, since they have a long history up to one thousands years when the social structure and building technology are so different from today.

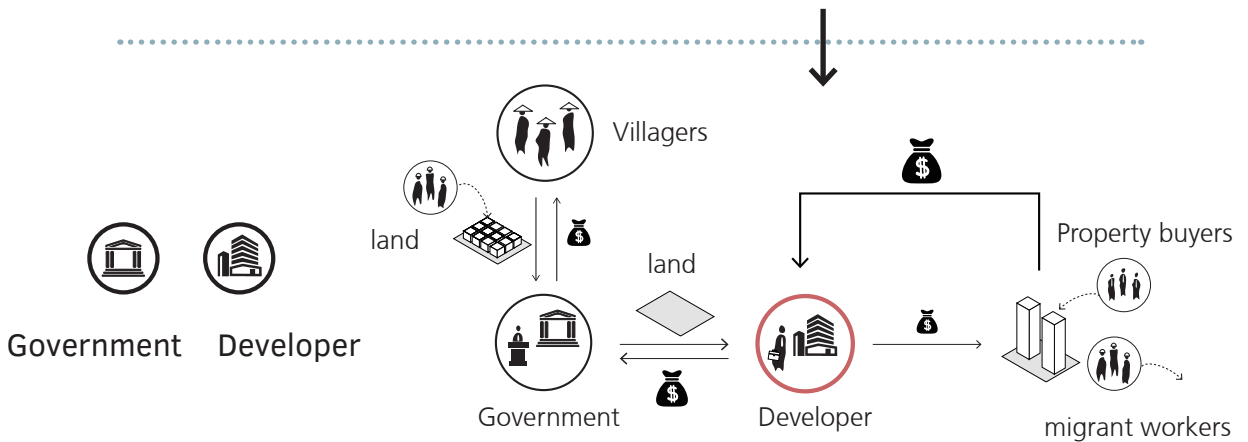
The drainage system is usually far from the modern standard and the ability to deal with waste and recycling is not enough. Besides, the pipes of electrical, water, sewage, and internet are attaching to buildings' facade and crossing over in the air randomly, which may cause security problems like fires and fragile to disease. The old infrastructure, in all, is unable to support the development of an urban village.

Poor Infrastructure In Urban Village



source: Kathyang, 2016

1.6 ATTITUDE OF THE GOVERNMENT



Demolish and development model

Government first considered urban villages as “scars”. From the government’s perspective, the urban villages are in poor environmental conditions and with too many people to manage. So government collaborated with developer to demolish urban villages and develop as formal urban block. On one hand, the city are more “pretty” on surface without urban villages. And the developer earned money from the development process.

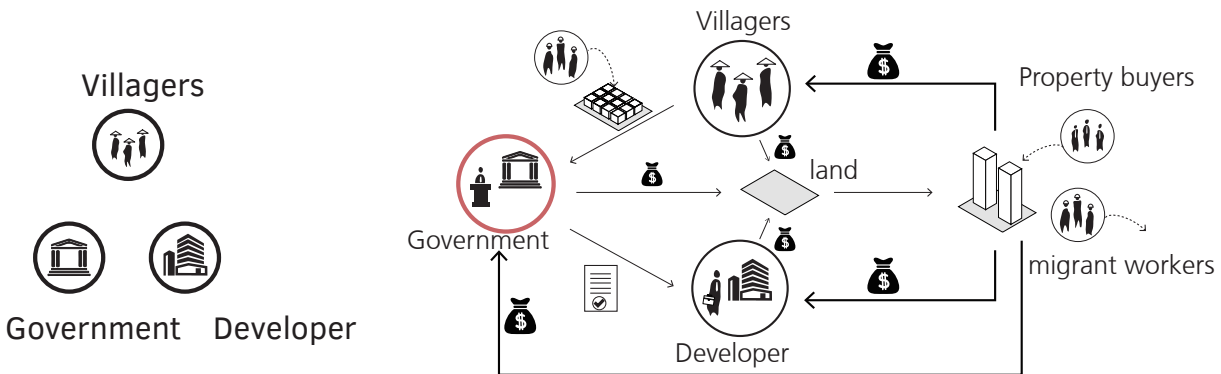
So the “Demolish and development model“ is welcomed in the early years. The government brought the land of an urban village and sold to the developer at high price, but villagers got little compensation. The urban village was demolished and new property buyers were moving in. The government and the developer benefited a lot from this model. Villagers and migrants are moving out in this model.

1.6 ATTITUDE OF THE GOVERNMENT



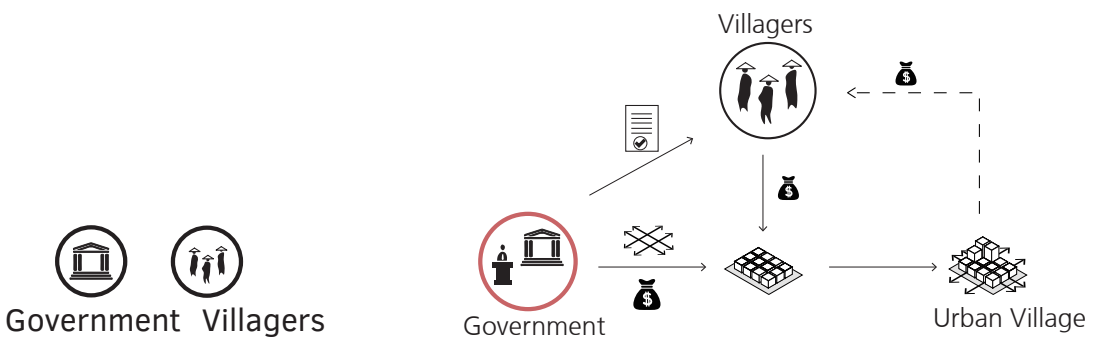
source:google

Collaboration of Government, developer and villagers



source:tecentmap

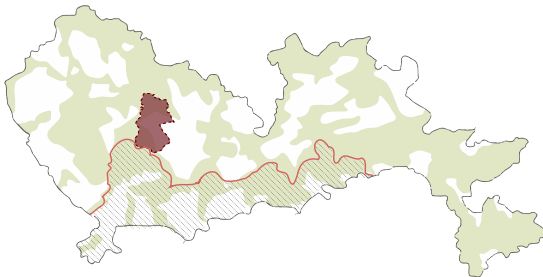
Government-lead comprehensive improvement



In recent years, government came up with models that were more moderate, which included the interests of villagers.

Each urban village had formed a joint-stock company to run and manage the urban village. The transformation process is in collaboration of government, developer and villagers. Villagers either got high compensation from selling the land, or benefit from the development process as key stakeholders. But the “demolish and development” process still led to the demolition of urban villages and forced the leaving of migrant workers.

Besides, government also tried new ways of doing the transformation, called Government-led comprehensive improvement of urban villages, investing money on the infrastructures.



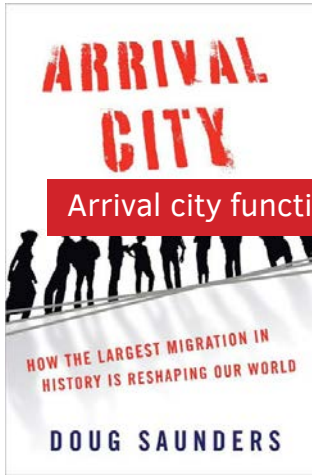
Urban villages will exist for a long time...

No matter which way the government chose, urban village is still considered negative thing from the government's perspective, or at least denying its value. Migrant workers, the majority of the tenants, didn't benefit from the transformation process. Instead, they are forced to move further to seek for affordable houses.

The reality is that the transformation of urban villages is getting harder. In central urban villages, villagers have very high expectation on the compensation, which squeeze the profit of developers. And in the marginal urban villages, developer showed less interests on its development for little profits.

The government is incapable of doing large scale demolition of urban villages because of money issue. But one thing is for sure: Urban villages will exists in a long time.

1.7 RETHINK THE VALUE OF URBAN VILLAGE



D. Saunders



G. Fan

首页 | 意见领袖 | 观点专题 | 热评中国 | 海外来风 | 投资理财 | 管理 | 中国经济50人 | 作者库

“城中村”是一种必然存在

2016年07月25日07:41 作者:樊纲 (5) 我有话说(129人参与)

Urban Village will inevitable exists.

文/新浪财经意见领袖 (微信公众号kopleader) 专栏作家 樊纲 原载新华网思客

sina 新闻中心

新闻中心 > 国内新闻 > 正文

传统意义上的公共空间在城中村里才有生存的土壤

http://www.sina.com.cn 2012年02月11日08:19 南方都市报

Urban Village has the soil for traditional public space



H. Yu

深圳 | 焦点 | 社会 | 图片 | 视频 | 论坛 | 娱乐 | 时尚 | 旅游 | 星座 | 文化 | 美食

深圳新闻网首页 > 地产频道 > 房产新闻

城中村的命运只有一个“拆”字吗?

Urban vilage: low-rent housing system with market value



J. PU

1.7 RETHINK THE VALUE OF URBAN VILLAGE

Many scholars and researchers advocate that we need to rethink the value of urban villages. Urban villages in China have the positive side.

Doug Saunders(2010) come up with the concept of “Arrival City” to see the informal settlement as “neighbourhoods where the transition from poverty occurs, where the next middle class is forged, where the next generation’s dreams.”, instead of seeing informal settlement as places with potential conflicts and crimes.

Gang Fan(2016) argued that urban villges will inevitable exist, since thousands of people, migrating from rural to urban area, required affordable housing and low-cost life. The existence of urban villages could benefit China's urbanization process and offer human resources.

Other researchers such as Jun Pu(2012) said that urban villages are actually providing social and low-rent housings, and had market value. And Wanyu He(2012) said traditional public space can be found in urban villages.

So these helps us to discover the value of urban villages, and to rethink the way to deal with the transformation of urban villages.

2.Problem Field

2.1 RESEARCH AREA

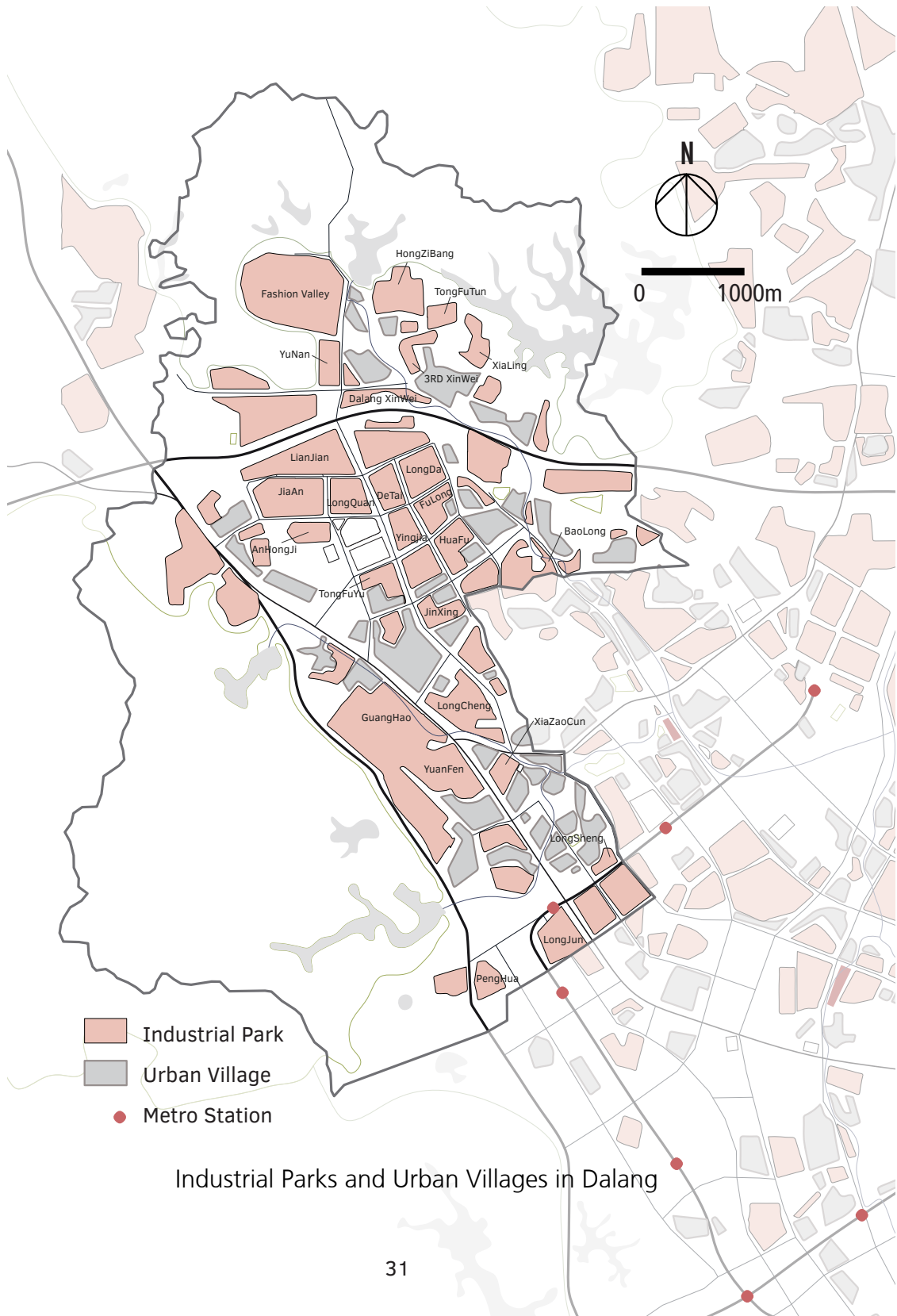
The research area that selected is Dalang, located in Shenzhen outside the SEZ(Special Economic Zone).

Dalang is considered periphery zone in Shenzhen and it is dominated by the labour-intensive industry with more than 1,200 factories, 20 urban villages and 50 thousands population.

Dalang is a typical case that relies on manufacturing industry with the strong productivity in shoes, clothes and electronic goods. Urban villages and industrial parks mingle with each other. It can serve as a good case to discuss the transformation of urban villages.



source: googleEarth



2.2 OBSERVATION

2.2.1 Lively Area In The City

Urban village is one of the most lively areas in the city. It is not only a living place for a large number of people, but also a gathering place for mounts of small businesses and informal economies.

In urban village, all kinds of services and products at low price can easily be found. The vibrant and sensitive small businesses are maintaining the daily lives of the residents.





However, the vitality of urban villages is lack of profoundness.

2.2 OBSERVATION

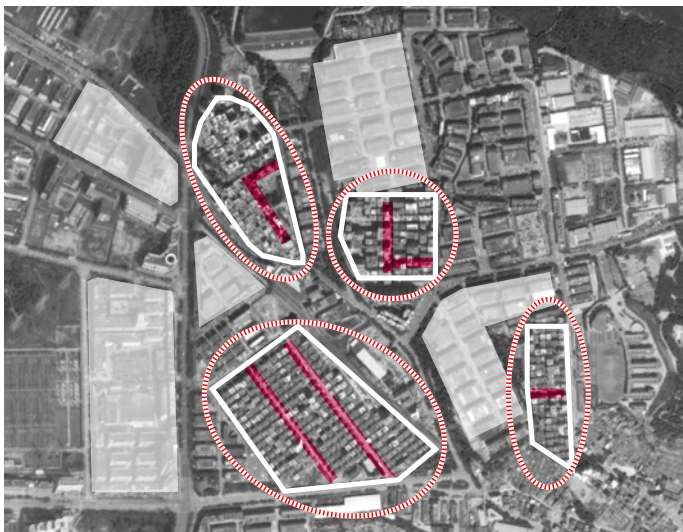
2.2.2 Lack Of Profound Vitality

Time



The intensity of the human activities in urban villages vary hugely over time. High intensity of activities occur during some time while rare activities occur during certain period of time.

Scope



Activities occur in some place inside urban village, while the connection and influence to surrounding environment is weak. The service scope is limited which failed to function on larger scale.

Groups



Though the number of the residents in urban village is large, few social groups are living in urban villages, mainly consisted of villagers and migrant workers. Other social groups rarely live in urban villages in Dalang.

Activities



Though there are many types of products and service, the economy of urban villages is mainly low-end. Besides, public life far from satisfaction.

2.3 PROBLEM DEFINITION

1. One of the most significant reasons is the single and low-end manufacturing industry.

The manufacturing industry, injecting new blood into the remote villages that had been slept for decades, had made the villages an important part of the manufacturing economic chain: urban villages offered low-rent but proximal housing to migrant workers. However, urban villages in Dalang are in close relation with the manufacturing industry that these urban villages fail to attract people who work in other industry to move in. So these urban villages didn't function as transitional place for new comers but rather different form of supplemental living space for factory workers and employees.

This has resulted in the gathering for mono social group: the migrant workers who conducted flow-line works. With similar working time schedule, spaces and facilities in urban villages are intensively used during the same time, which go beyond the capacity of spaces. Besides, the low-end demands of the social group had limited the development of diverse economy, since the economies of urban village is influenced by the demands of social groups.

2. The second reason is the poor quality of social space in urban villages.

On one hand, the quantities of public spaces are limited since most of the land had been built for housing, leaving less space to support people's social life. Public space didn't increase while mounts of migrants moving in, which made public space insufficient.

On the other hand, the quality of spaces in relation to social activities is poor, since lots of spaces in urban villages gradually lost their original spatial attributes during the self-reconstruction and intensification process which made urban villages "higher and fatter". The inner alleys, for instance, used to be suitable for pedestrian life and lively neighbourhood relations, had lost the quality, when the buildings on both sides "grew" vertically and without drawing back at the same time. Light has been blocked and streets have become narrow alleys with darkness and insecurity. Besides, the poor quality of open public spaces are presented either in the occupation of cars, or in no response to migrant workers' social needs.

Thus, social activities have been suppressed because of the spatial condition. Public life in urban villages was tedious and unsatisfied, which didn't facilitate social sustainable development (such as the establish of social networks and social integration).

2.3 PROBLEM DEFINITION

3. Last but not least, the third reason is the dual-landownership system.

Because of the dual-landownership system, the land of villages is owned by the villagers collectively instead of owned by the state. It made urban village an relatively self-organizing independent system. The villagers, individually and collectively, intensified the urban village by reconstructing their housing into higher buildings under the joint forces of market and profit-driven motivation and with less supervision or control from the government.

As a consequence, urban village became an comparatively closed and independent system, leading to spatial fragmentation and deteriorating the social segregation. And the social-spatial segregation hindered the exchange of flows of goods, people, energy and information between the urban villages and the environment, which made urban village isolated from the environment.

2.4 PROBLEM STATEMENT

Urban villages in Dalang, located in periphery of Shenzhen, are lively areas with high density population, vibrant and flexible small businesses, and contribute to the prosperity of manufacturing industry by providing low-rent housing and services to migrant workers,

However, the **single and low-end manufacturing industry** has resulted in the gathering for mono social group with low-end demands, which limited the development of diverse economies in a certain range. And **poor quality of social space** has suppressed the intensity and diversity of social activities, and thus hinder the social sustainable development. Besides, the **dual-landownership system** has made urban villages comparatively closed and independent self-organizing system that facilitated the social-spatial segregation. **All together resulted in the absent of profound vitality of urban villages in Dalang.**

3. Methodology

3.1 PROJECT AIM

The **aim** of the project is to propose an redevelopment approach to enhance the profound vitality of urban villages through the self-organized spatial transformation.

In **social** aspect, the purpose is to maintain the functions of urban villages as residence for low-income groups and new arrival migrants, and create better economic opportunities while enhancing their public life. In **spatial** aspect, the goal is to integrate the spatial resource of urban villages to adapt to the economic-social configuration and facilitate the integration between urban villages and the environment.

3.2 RESEARCH QUESTIONS

Main Research Question

How to enhance profound vitality of urban villages in Dalang through self-organized spatial transformation?

Sub-Research Questions

Q1. What is the emerging economy and what are the spatial strategies that could promote the diversity of economy in urban villages?

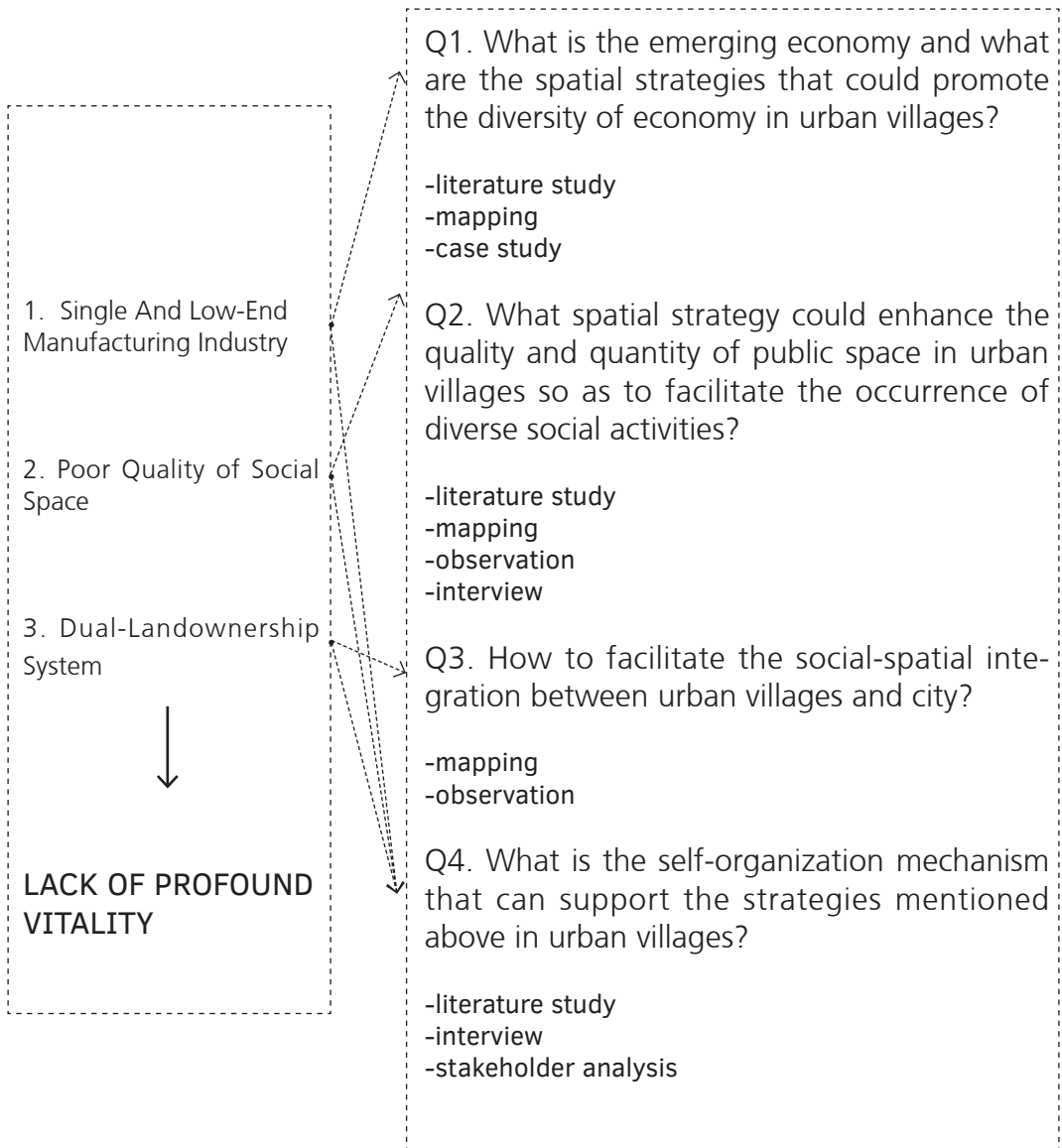
Q2. What spatial strategy could enhance the quality and quantity of public space in urban villages so as to facilitate the occurrence of diverse social activities?

Q3. How to facilitate the social-spatial integration between urban villages and city?

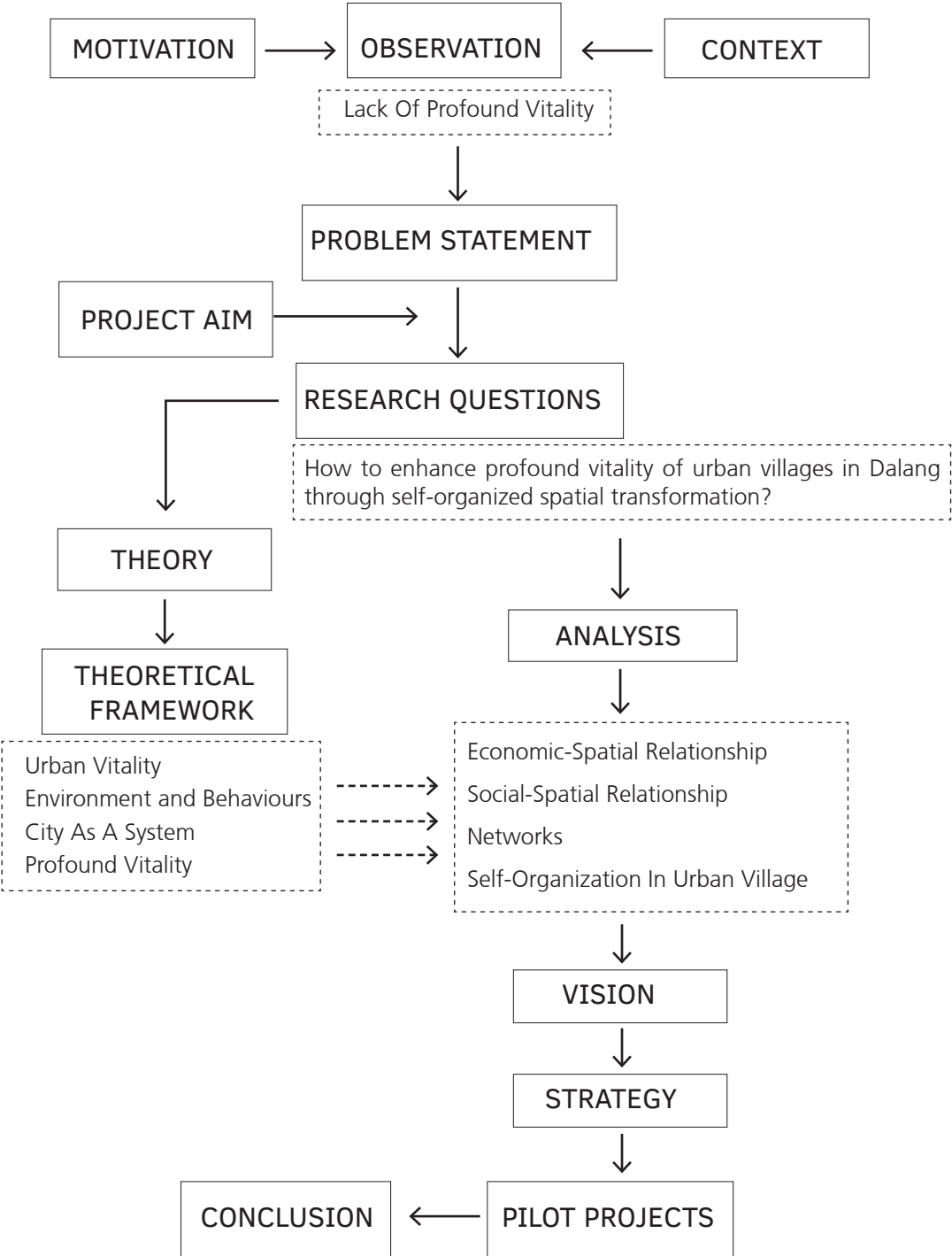
Q4. What is the self-organization mechanism that can support the strategies mentioned above in urban villages?

3.3 METHODOLOGY

In order to approach and answer the research questions, several methods are adopted, namely: literature study, case study, mapping, observation, interview and stakeholder analysis.



3.4 METHODOLOGY FLOW CHART



3.5 RELEVANCE

Academic relevance

This research focuses on the “urban villages” issue, a phenomenon under the influence of China’s fast urbanization. Considered as one study case of informal settlement, it attracts wide attention for its high density but heterogeneous forms. In a broad sense, this research belongs to the scope of “informal settlement”. The discussion on spatial morphology of urban village and human activities contribute to a full appreciation of urban vitality. And the study on the function and contribution of urban villages to the city helps to understand the roles of informal settlement on different scales. In addition, the principles, strategies and methods that applied to the transformation of urban villages can be seen not only as alternative approach and response to tackle the “spatial fragmentation”, but also as exploration on the high efficiency of land utilization while attaining diversity. Besides, the review on current redevelopment models and research on self-organization mechanism criticize the current planning system and seek for alternative redevelopment approach.

Societal relevance

“Urban village” is not only spatial phenomenon but also serious social issue, since the majority of inhabitants in urban villages is “floating population” who is considered as one of the most vulnerable social groups being neglect in the economic society. First, this research tackled the social issue of “floating population” with their socio-economic status and living quality. And the alternative redevelopment approach is trying to take their needs and interests, which have been ignored in the current situation, into account, so as to benefit and balance different interests of various stakeholders to avoid social injustice in the process of city redevelopment. Another social issue this research tackled is “social segregation” which is closely related to the socio-economic structure and relationship. The function-related spatial network established on city scale and the spatial reorganization on small scale aim to promote social integration in deep structure, which is a challenge that all migrant cities has to face.

4.Theoretical Framework

4.1 URBAN VITALITY



J. Jacobs

Density, short blocks, old buildings and mixed uses lead to diversity

“The potential for a lively city is strengthened when more people are invited to walk, bike and stay in city space”.



J. Gehl



J. Montgomery

“It(Vitality) refers to the numbers of people in and around the street (pedestrian flows) across different times of the day and night, the uptake of facilities, the number of cultural events and celebrations over the year, the presence of an active street life, and generally the extent to which a place feels alive or lively. ”

“Vitality, the degree to which the form of places supports the functions, biological requirements and capabilities of human beings.”



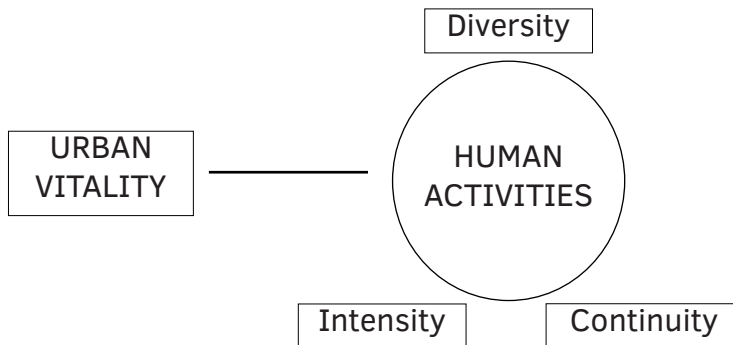
K. Lynch

John Montgomery(1988) portrayed urban vitality as combinations of mixtures of actives. "It(Vitality) refers to the numbers of people in and around the street (pedestrian flows) across different times of the day and night, the uptake of facilities, the number of cultural events and celebrations over the year, the presence of an active street life, and generally the extent to which a place feels alive or lively. "

Jane Jacobs(1961) put her attention on sidewalks, parks and city neighbourhoods in relation to daily life. In her opinion, mixed uses of buildings to provide more opportunities for people to come, small blocks increase accessibility, and dense population facilitates the intensity of activities. And she appreciates the old buildings, with different ages and styles, contribute to economics of cities. For her, density, short blocks, old buildings and mixed uses lead to diversity.

Jan Gehl(2010) holds the view that three types of human activities— necessary, optional and social activities— in the public domain weave a lively city. As he mentioned, "the potential for a lively city is strengthened when more people are invited to walk, bike and stay in city space". Therefore, he is in favour of slow traffic and human scale which facilitate the occurrence of those activities.

Kevin Lynch(1981) give a different perspective that he argues that "vitality, the degree to which the form of places supports the functions, biological requirements and capabilities of human beings." He focused on the health and sustainable of city forms and described sustenance, safety and consonance as three fundamental features of the environment that people and creatures, can survive.



Though “urban vitality” is defined from different perspectives, the core of the concept they described is similar: **the intensity, diversity, and continuity of human activities.**

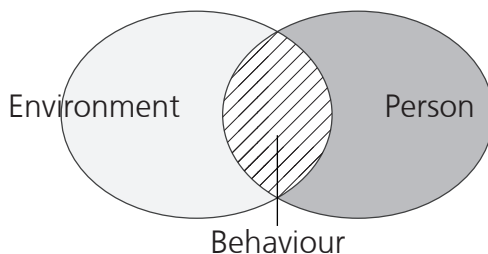
First, discussions link vitality to intensity of human activities. High density and short blocks enable the concentration of a number of people and increase the accessibility, facilitating the intensity of activities. And human scale design in public space encourages people to present in outdoor spaces and thus create more opportunities for social interactions.

Second, their statements try to portrait diversity. The mixed uses of functions and the buildings of different ages can offer various motivations and uses for different groups. Besides, the weaving of necessary, optional and social activities contributes to diverse outcome with various people’s behaviours.

Third, continuity in time dimension is involved. Lynch bridges the vitality to a health and environmental friendly city form in a long term. And Montgomery’s statement on the time duration of the activities and events put the focal point on the time dimension.

4.2 ENVIRONMENT AND BEHAVIOURS

German-American psychologist Kurt Lewin(1936) gave a idea of how behavior occurs by defining the Lewin’s equation— $B=f(P,E)$ — where B stands for behavior, P means person, E is the environment and f represents the specific function linking person and environment. In other words, human behavior is the result of intrinsic needs and external environment. A person behaves when the physical environmental is able to provide material support for a person’s needs. The environmental condition, in return, can facilitate or suppress the desires.



$B=f(P,E)$, Kurt Lewin(redraw by author)

Another research on the relationship between space and activities is from Jan Gehl(1971). He argued the occurrence of some activities are highly affected by the quality of space. In his discussion, optional activities and social activities depend on the physical conditions and quality of place. Poor condition of the environment could suppress the intensity of optional activities. And places with proper scale and conditions can facilitates the occurrence of potential activities.

	Quality of the physical environment	
	Poor	Good
Necessary activities	●	●
Optional activities	•	●
Resultant activities (Social activities)	•	●

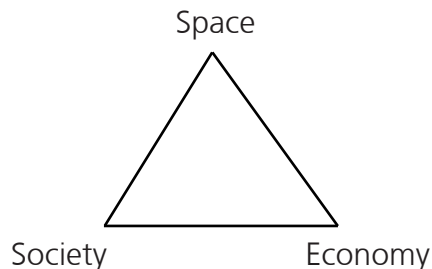
Relation between activities and space quality(Gehl,1961)

Human activities are influenced by space, the spatial condition could suppress or facilitates the occurrence of human activities.

4.3 CITY AS A SYSTEM

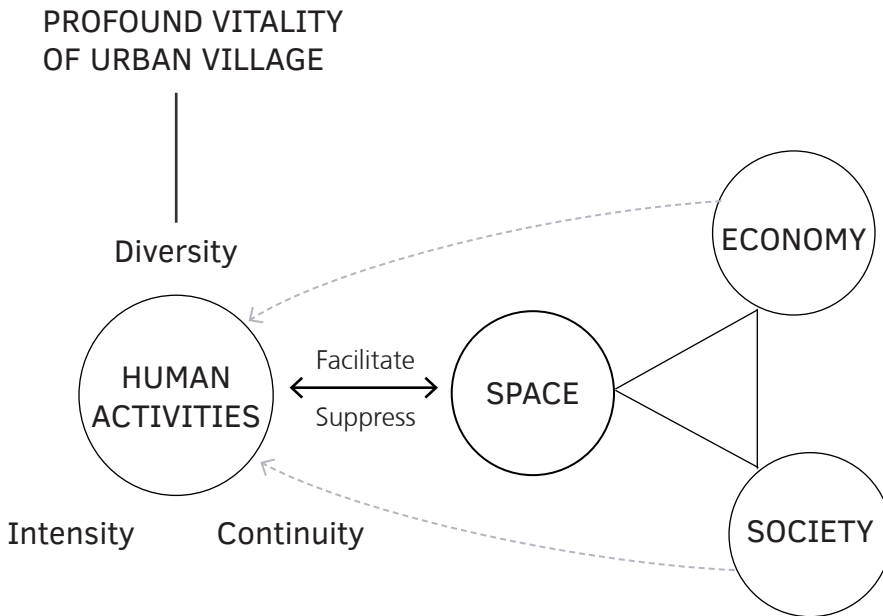
Juval Portugali(1996) consider city as inter-representation network, composed of internal and external representations. Internal representation refers to the mind-brain cognition reflecting external environment, while external environment refers to the artificial world representing ideas and thoughts. The network(city) evolves and develops, in a dynamic process, by an interactive sequential interplay of the internal and external environment.

As what he suggested, the relation between the physical structure and the socio-cultural-economic configuration is highly integrated.



Urban village can be considered as a system. The physical form is influenced and shaped by the socio-economic structure. The development of urban village can be considered as a dynamic process in which the physical form and socio-economic configuration adapting to each other.

4.4 PROFOUND VITALITY OF URBAN VILLAGE

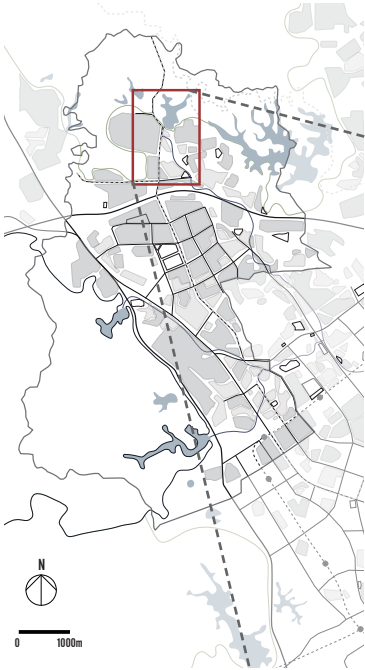


To discuss the profound vitality of urban village is to discuss the relation between the socio-economic configuration and the space of urban village, and how they influence the diversity, intensity and continuity of human activities.

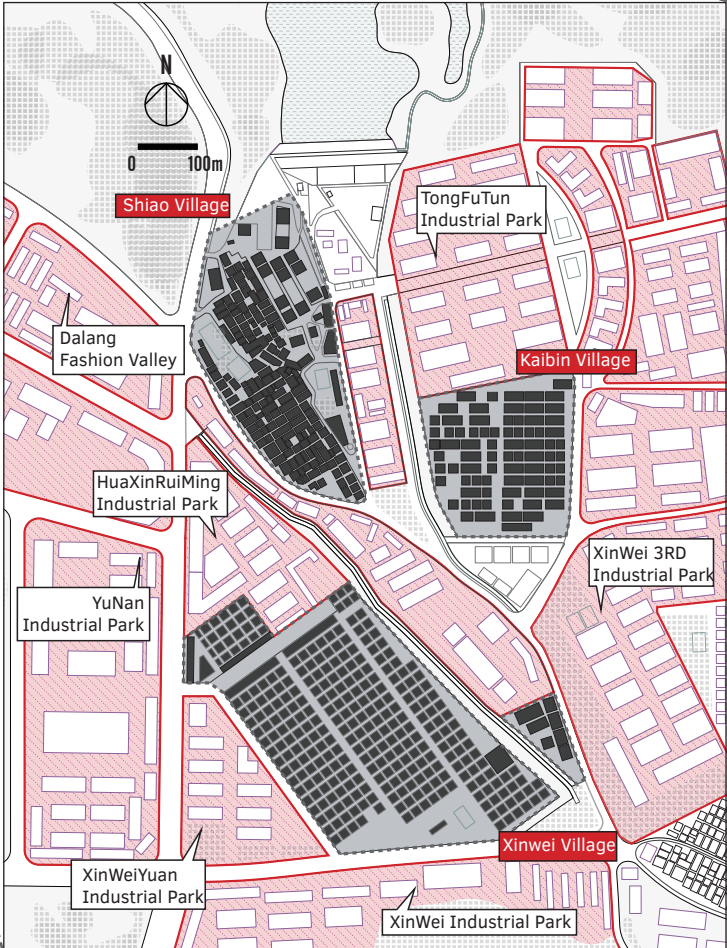
5. Analysis

5.1 FOCUS AREA

The focus area that selected is located in the north part of Dalang. The area is close to the Fashion Valley and there are three urban villages in the site.

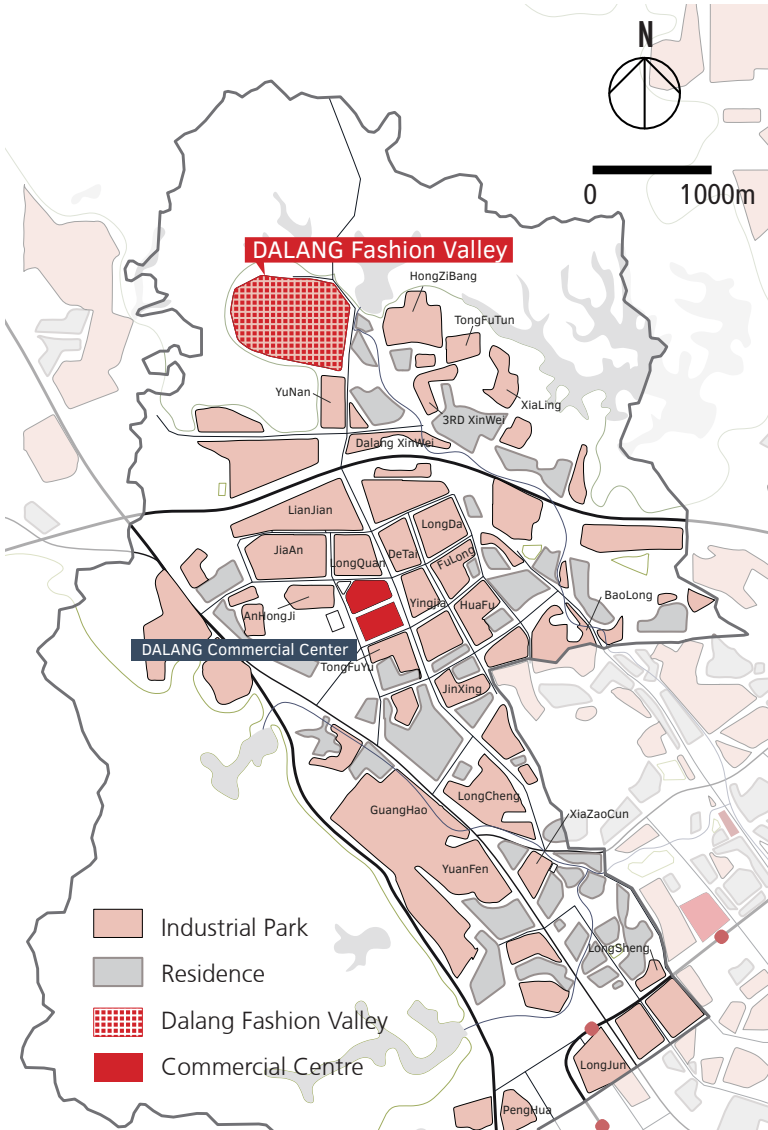


Dalang



focus area

5.2 ECONOMIC INDUSTRY IN DALANG



The economic industries in Dalang mainly rely on manufacturing industry for 268 industrial parks and 3274 industrial enterprises in the area. And there are more than 20 thousands small stalls engaging in small business providing different services.

Besides, Fashion Valley supported by the government in the north part of Dalang is considered opportunity to develop fashion industry. With more than 22 large enterprise moving in, fashion industry is becoming emerging industry in the area.

268 industrial parks

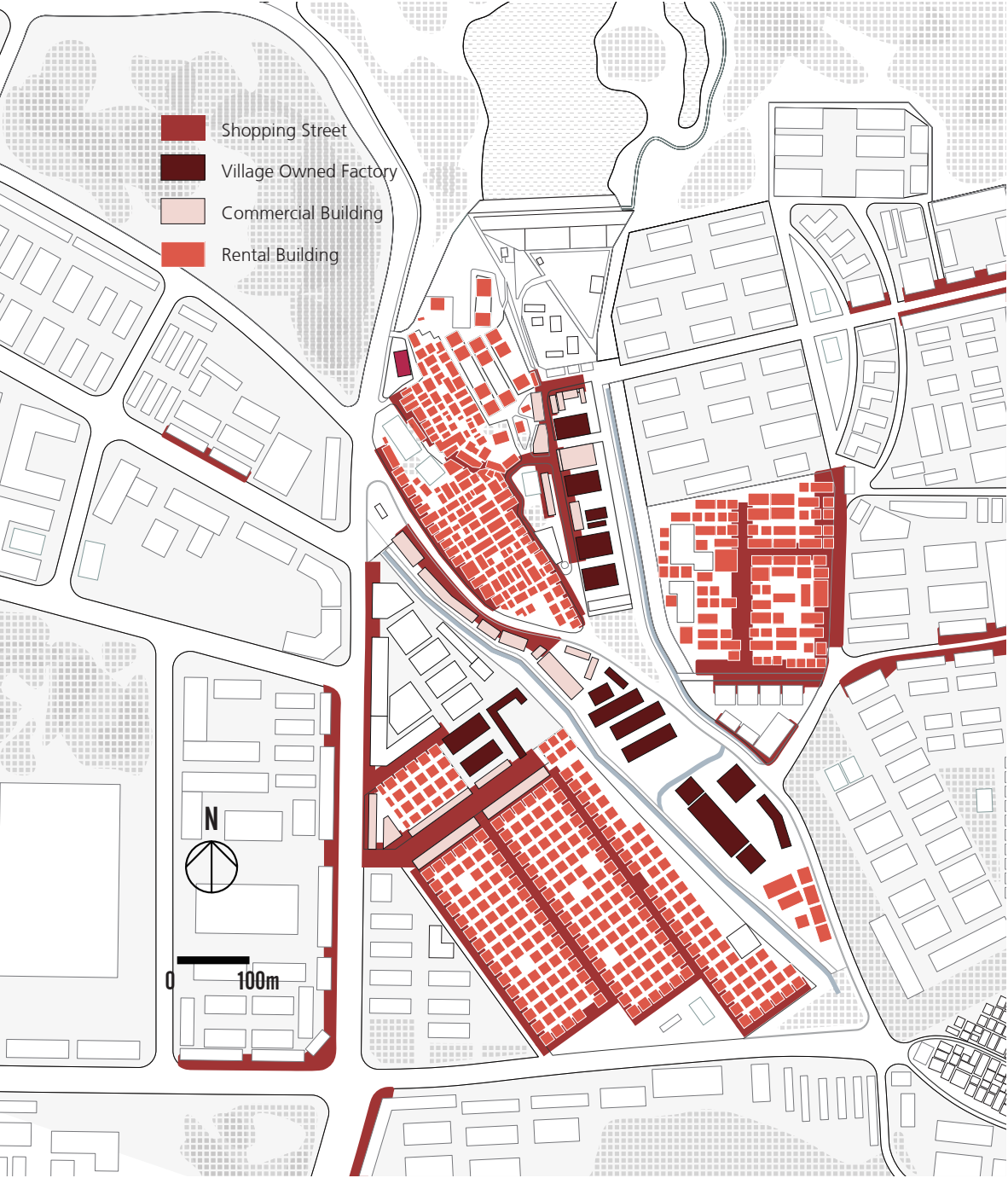


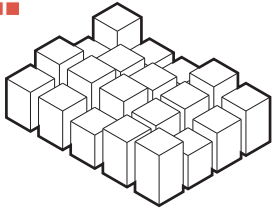
3274 small stalls

Fashion Valley

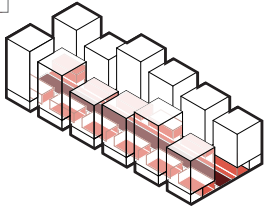
image source: tencent map

5.3 ECONOMIES IN URBAN VILLAGES

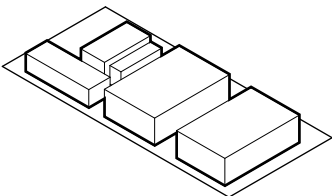
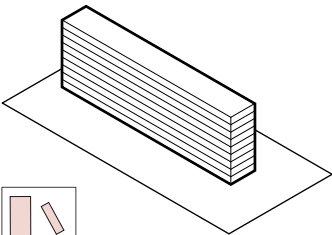
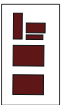




informal housing market



small business



land and property rental

Informal economy is the majority of urban villages' economy for the low barrier to entry and avoidance of taxes and regulations(Yin et al, 2009). With many informal enterprises located in, urban village is the center of informal economic activities, involving mainly three parts: the informal housing market, land lease to factories, and small business.(Tan, 2005, Zhang, 2014)

Firstly, rents collected from informal market are the primary source of income for villagers. The economy of urban village has actually become rental-based economy. Villagers invest on their own house reconstruction to gain more rooms and rent them to outsiders so as to get a long term return.

In addition, small businesses are another pillar of the village economy. Almost every urban village has a market zone including grocery stores and service shops targeting migrant workers as their main service groups.

Besides, many urban villages lease the collective-owned land to factories to get commercial benefits. And it also creates jobs for migrant workers, contributing to the villages' economy.

5.4 ECONOMIC SPACE IN URBAN VILLAGES

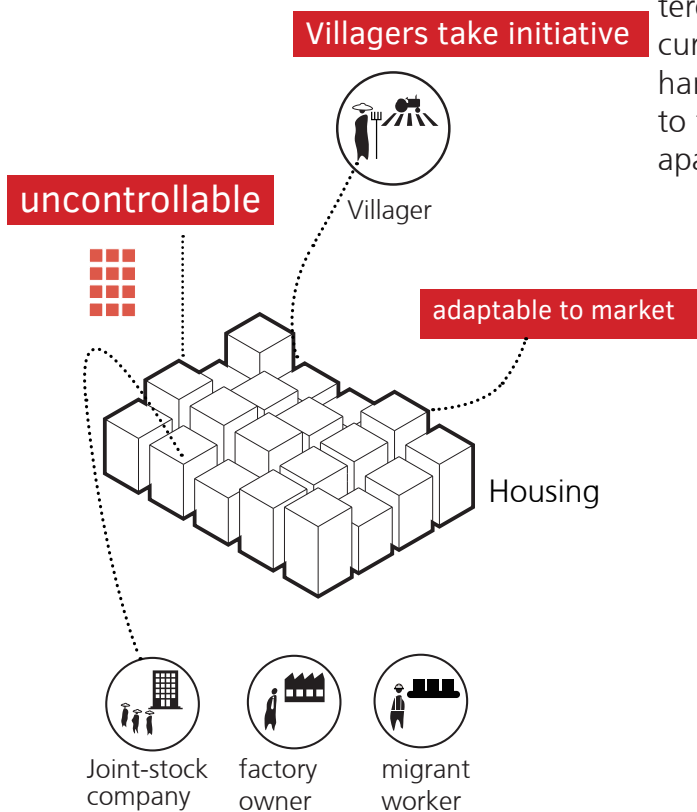
5.4.1 Rental Housing



housing in urban village

Housing is the most important space in urban village for it offered accommodation to migrant workers and employees worked nearby.

This space is uncontrollable that individual villager takes initiative. It is the complex part of the in the transformation process since the interests of villagers is involved in the current situation. But on the other hand, these housings are sensitive to the rental market with its diverse apartments.



15-30 m2 source:baidu.com



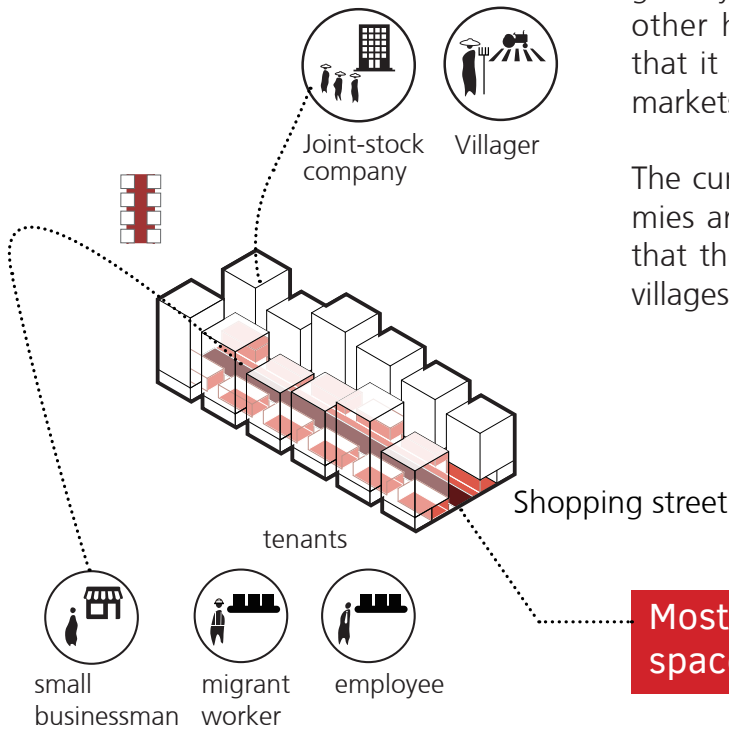
40-60 m2 source:baidu.com

Different types of apartments respond to the rental market.

5.4.2 Shopping Street



shopping street in urban village



Shopping street, comprised of main road and buildings' first floor, is the most lively area in urban villages. It is the most flexible and adaptable space in urban villages.

On one hand, the first floor space is flexible that it suits different types of small business such as internet bars, grocery stores or restaurants. On the other hand, the space is adaptable that it is sensitive to the changes of markets and people's demands.

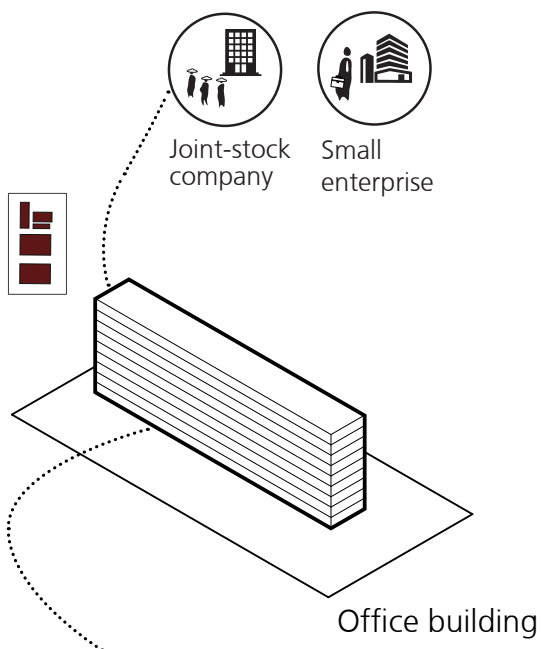
The current situation that the economies are mainly at low-end revealed that the mono group living in urban villages are with low-end demands.



source:tecent map

5.4 ECONOMIC SPACE IN URBAN VILLAGES

5.4.3 Office Building



differentiated competition with the industrial parks

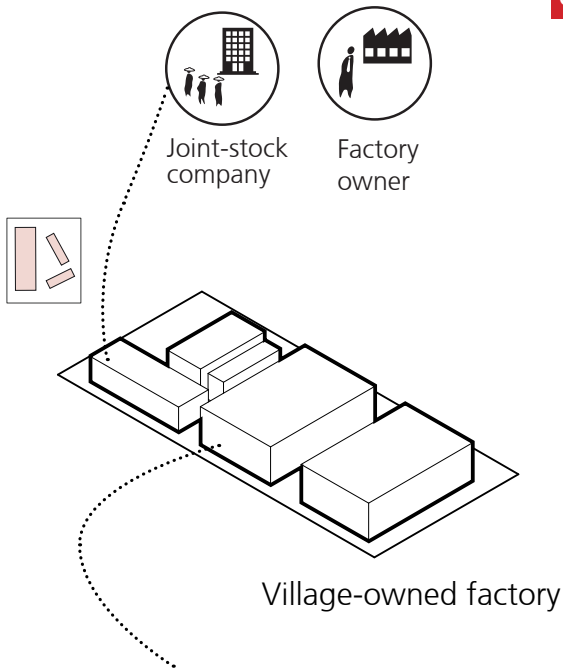
The village-owned properties can be categorized two types in terms of use: office building and factories. Office buildings in urban villages are making differentiated competition with the industrial parks, which attracted small corporations, including training institutions offering training courses.



office building in urban villages

5.4.4 Village-Owned Factory

The formal industrial parks are more competitive than village owned factories



Formal Industrial Park

VS



Village owned factory

Factories become vacant when industry shrinks. Potential space to make differentiation competition.

Less competitive space

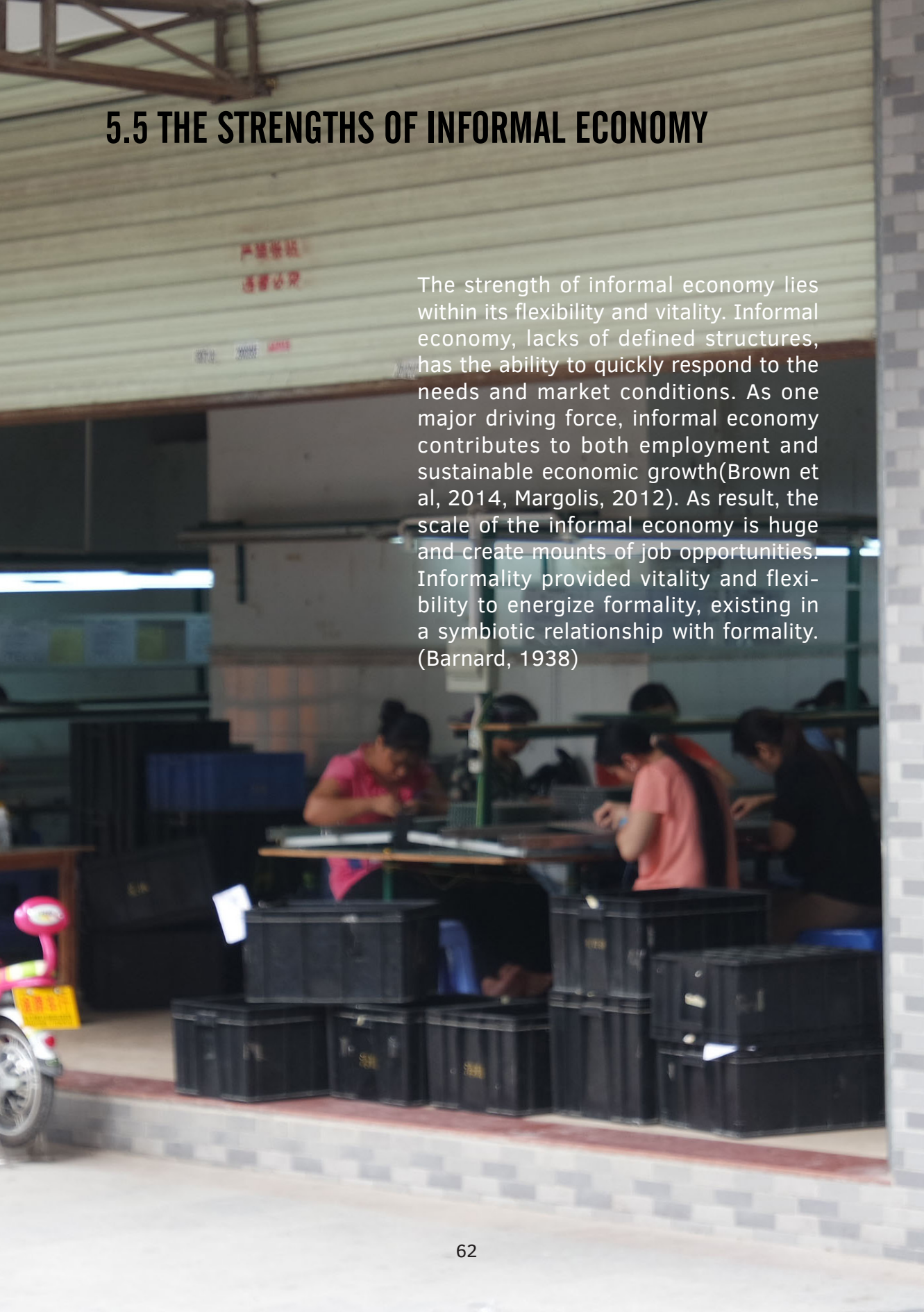
The village-owned factory is similar to formal industrial park but less competitive.

This factories were functioning well when the demands of the industry are beyond the capacity of formal industrial parks. But when the industry shrinks, the village-owned factories are easy to be vacant. It's less flexible and vulnerable.

In fact, village owned factories began to be abandoned in the area.

5.5 THE STRENGTHS OF INFORMAL ECONOMY

The strength of informal economy lies within its flexibility and vitality. Informal economy, lacks of defined structures, has the ability to quickly respond to the needs and market conditions. As one major driving force, informal economy contributes to both employment and sustainable economic growth(Brown et al, 2014, Margolis, 2012). As result, the scale of the informal economy is huge and create mounts of job opportunities. Informality provided vitality and flexibility to energize formality, existing in a symbiotic relationship with formality. (Barnard, 1938)



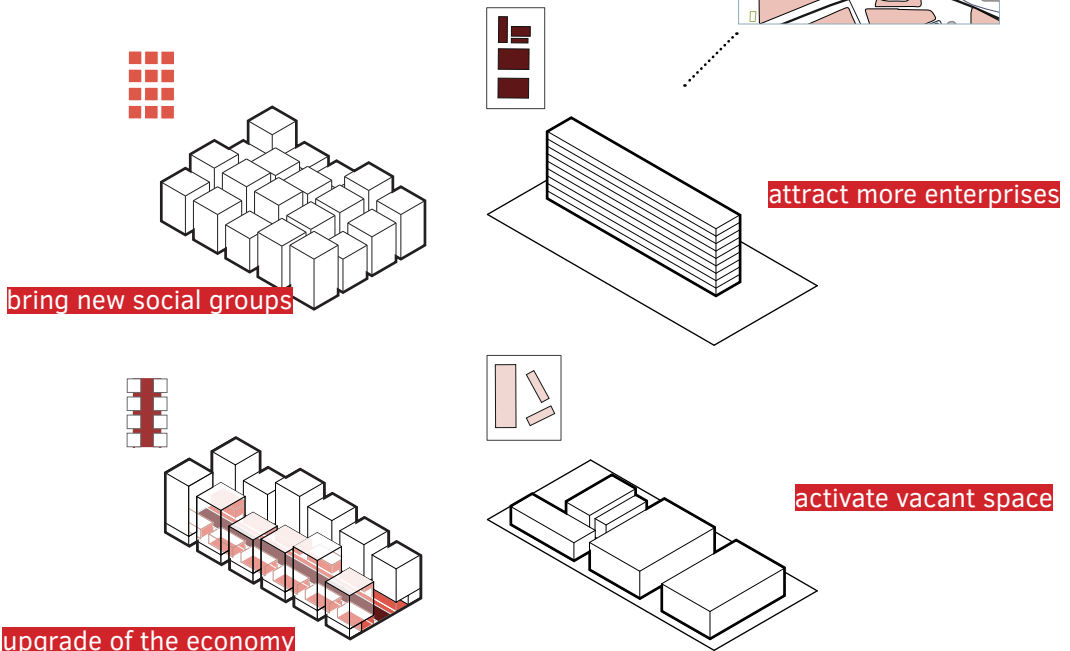
5.6 FASHION VALLEY AS AN OPPORTUNITY



source:chinadaily

Fashion Valley, supported by the government, aims to develop fashion industry, which can be considered as an opportunity for urban villages.

It could bring energy to the housing rental market, providing market force to the changes of housing. And it can also facilitates the upgrade of economy in urban villages. The fashion industry may also activate the vacant factories owned by the villages and attract more companies to rent the office buildings.



5.7 CASE STUDY: OLD FACTORY TRANSFORMATION

MACAU Design Centre



After transformation



Before transformation

Macau design centre, located in Macau, was transformed from a five-floor vacant factory in 2014. It functions as design centre with shops, small studios, exhibition space and conference room, targeting young designers and starters. The government is subsidizing the rent fee and renovation costs to maintain its low-rent to starters and young brand of Macau.



images source: dcmacau.com

HUASHAN 1914 Creative Park

Huashan 1941 creative park, located in Taipei, is a show case of transforming old factories into creative parks. The old brewery now became the place with diverse public life and with high considerable economic output. What can learn from the case is that the creative park is more than an economic area, but with the domain of social life. The redevelopment process introduced private capital and involved the public, reduce the cost of the government and activate the positivity of different actors.



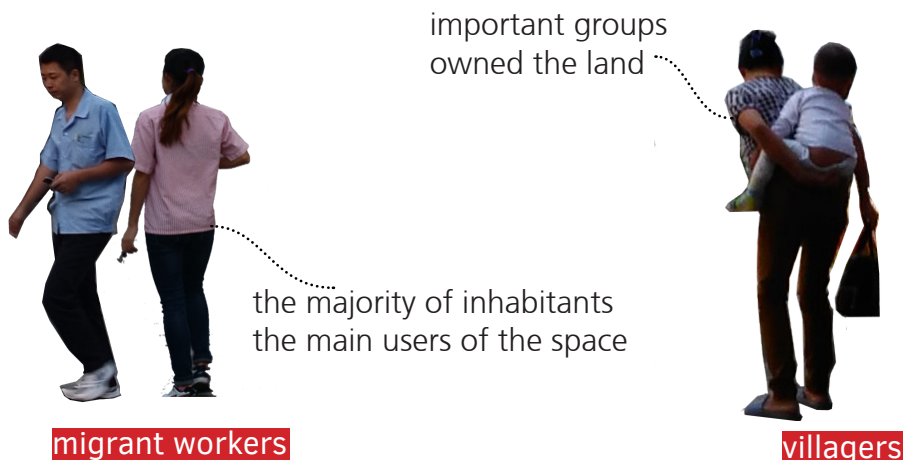
images source: huashan1914.com

The space of urban village related to its economies has its own characters: flexibility and adaptability. When it combines with informal and small business, it has the strengths to make differentiated competition to the formal economy as well as to benefit the development of each other.

The economies in urban villages remain low-end, indicating the single industry and mono social groups. Fashion Valley is an opportunity for the urban villages to develop more diverse economies and make differentiated competition with the formal industrial parks with the transformation of its spatial resource, in order to take advantage of its flexibility and adaptability.

5.8 GROUPS IN DALANG

5.8.1 Groups



important groups owned the land

the majority of inhabitants the main users of the space

migrant workers

villagers

This block contains two images. On the left, two people, a man in a light blue shirt and a woman in a pink shirt, are walking. A dotted line connects them to the text 'the majority of inhabitants the main users of the space'. Below them is a red box with the text 'migrant workers'. On the right, a man is carrying a child on his back. A dotted line connects them to the text 'important groups owned the land'. Below them is a red box with the text 'villagers'.



work and live in urban villages

pass by and consume in urban villages

small businessman

employee of enterprises

people live nearby

This block contains three images. On the left, a woman is standing behind a food cart. A dotted line connects her to the text 'work and live in urban villages'. Below her is a red box with the text 'small businessman'. In the center, two men are walking. A dotted line connects them to the text 'work in urban villages.. live in other area'. Below them is a red box with the text 'employee of enterprises'. On the right, a woman is walking away, carrying a pink backpack and an orange bag. A dotted line connects her to the text 'pass by and consume in urban villages'. Below her is a red box with the text 'people live nearby'.


The people related to urban villages in Dalang can be categorized in 5 groups:

1. villagers;
2. migrant workers;
3. employee of enterprises;
4. small businessman; and
5. people live nearby.

Villagers are the majority of the residents in urban villages. And villagers and the migrant workers are the main users of public space. Besides, the employee of the enterprises, who work in urban villages or nearby, use the public space occasionally. And the people who live nearby will pass by and consume in urban villages.


5.8 GROUPS IN DALANG

5.8.1 Needs of People




migrant workers

- sports
- self-upgrade
- meetings
- social network
- entertainment
- date
- rest




villagers

- meetings
- kids care
- gatherings
- neighbour relation
- cultural events
- entertainment




small businessman

- rest
- meetings
- social network
- entertainment



employee of enterprises

- meetings
- entertainment
- rest
- interpersonal relation
- leisure
- sports



people live nearby

- entertainment
- public event

The social needs of residence in urban villages are quite diverse. Migrant workers are needed to establish social network, and maintenance of neighbourhood relationship is valued by the local villagers. Small businessman needs to expand the interpersonal relation. Migrants need place to rest and date during spare time, and villagers want a safe place to take care of their kids. And different traditional events and entertainments are also part of the public life.

5.9 CONFLICT OF CULTURE

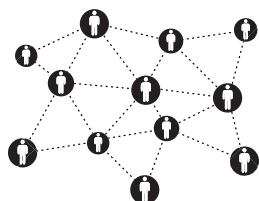
5.9.1 Rural Culture vs Urban Culture

images source: internet

Conflicts of culture can not be ignored in urban villages. There are two pairs of conflicts: Rural Culture vs Urban Culture; Local Culture vs Foreign Culture.



The background of most of the residents lived in urban villages has a close relation to rural culture. They came from rural area, maintaining, more or less, customer of rural life. Compared to urban life, there are mainly three difference:



social network



traditional festival



low-cost life

1. Social network is more important. For example, the establishment of social network begin from people came from same place and the social activities based on that is intensified to the first arrivals. The locals maintain their neighbourhood relationship through daily chatting and participation of the collective activities.

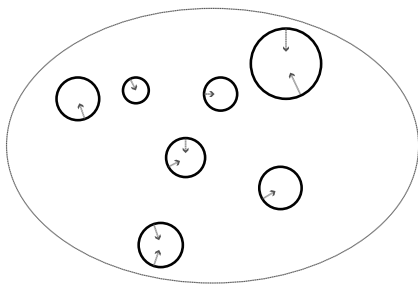
2. The traditional festival and events received more attention in rural culture than urban culture. In these villages, there are a variety of traditional cultural celebration events like commemoration on ancestors and the "Qilin dance". Moreover, villagers, in spring festival, gather together to have food outside to celebrate new year.

3. Costs of life take priority over quality of life. Compared to the life in urban area, consumerism is less dominated in rural area. When people begin to live in urban area, the low-cost product and free space is more welcomed than the quality of experience.

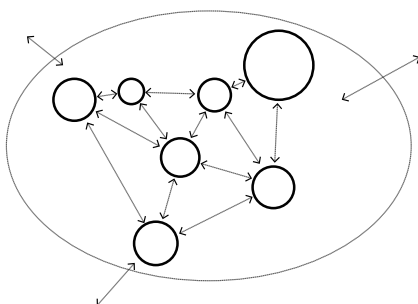
5.9.2 Local Culture vs Non-Native Culture



images source: internet



Public space support the activities held by different sub groups



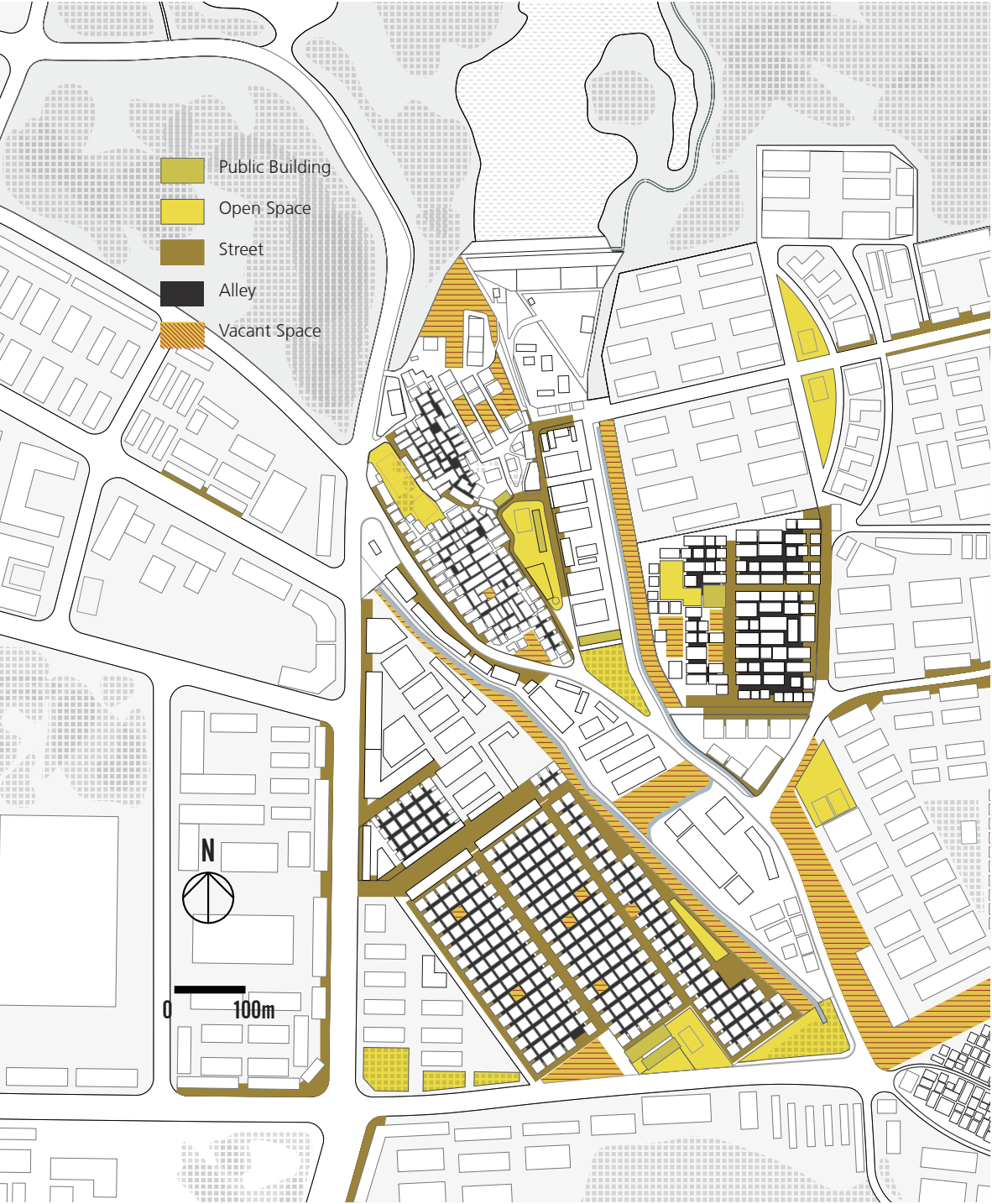
Inclusive public facilitate social integration

Though categorized into five types in general, the people in urban villages have various backgrounds. More sub groups are formed according to the interests, personality or background, overlapping one another. The difference exist not only between local people and outsiders, but also between different migrant worker groups.

So public space should, on one hand, be flexible to be able to support the activities held by different sub groups, to satisfy the diverse needs.

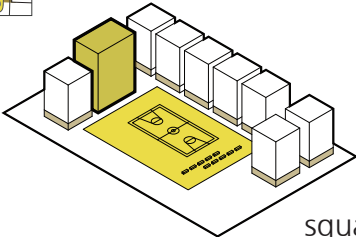
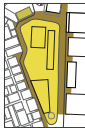
On the other hand, it should be inclusive, which, not only include the needs of various residents, but also facilitate social integration by encouraging people's participation to public life, where people get new information and knowledge while adapting themselves to city life.

5.10 PUBLIC SPACE IN URBAN VILLAGES

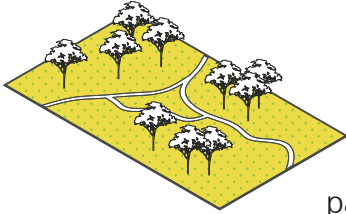


Public space in urban villages can be categorized into three types: open space, linear space and vacant space. Open space mainly refers to squares and parks. Linear space involves streets and alleys. And vacant space means the void plot in urban villages and the slopes in this area.

Open Space

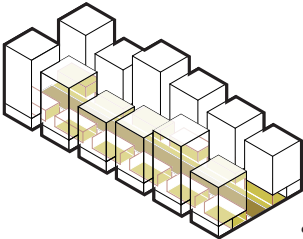


square

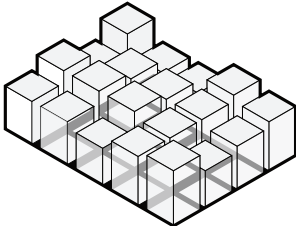


park

Linear Space

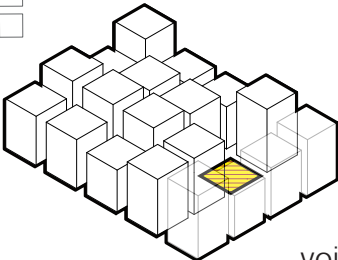
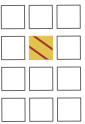


street

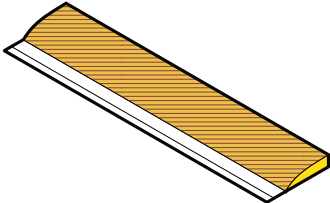
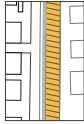


alley

Vacant Space



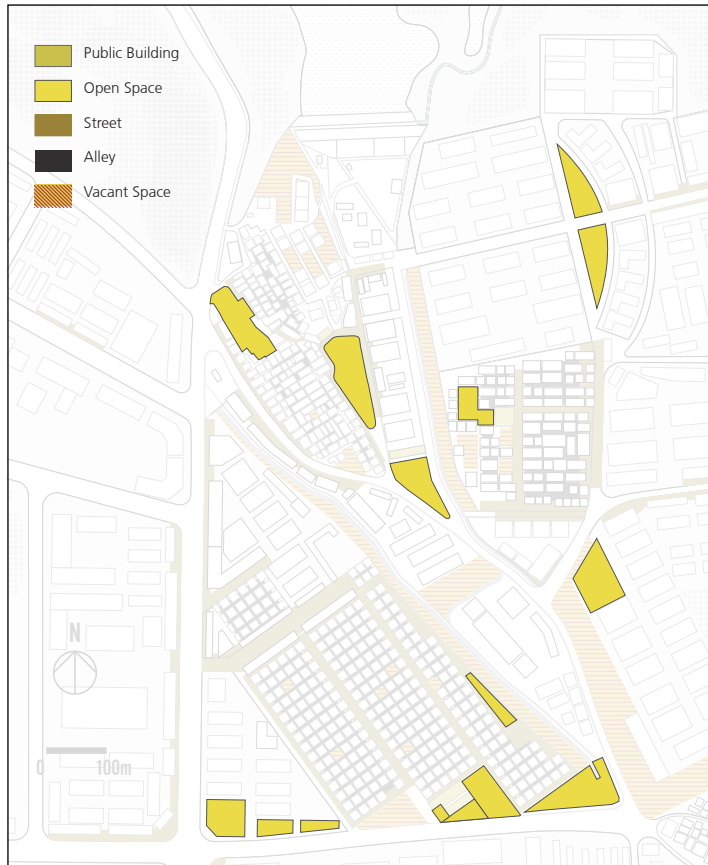
void plot



slope

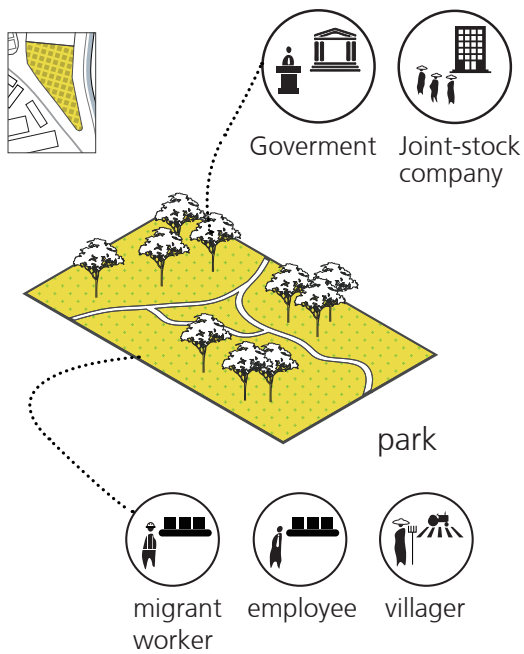
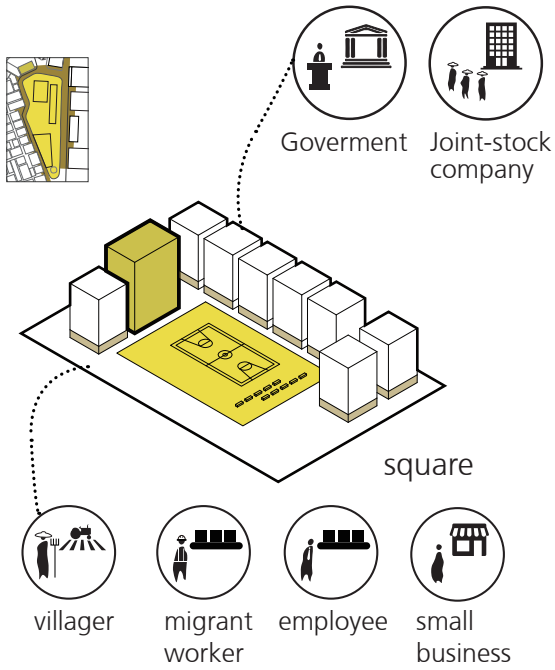
5.10 PUBLIC SPACE IN URBAN VILLAGES

5.10.1 Open Space



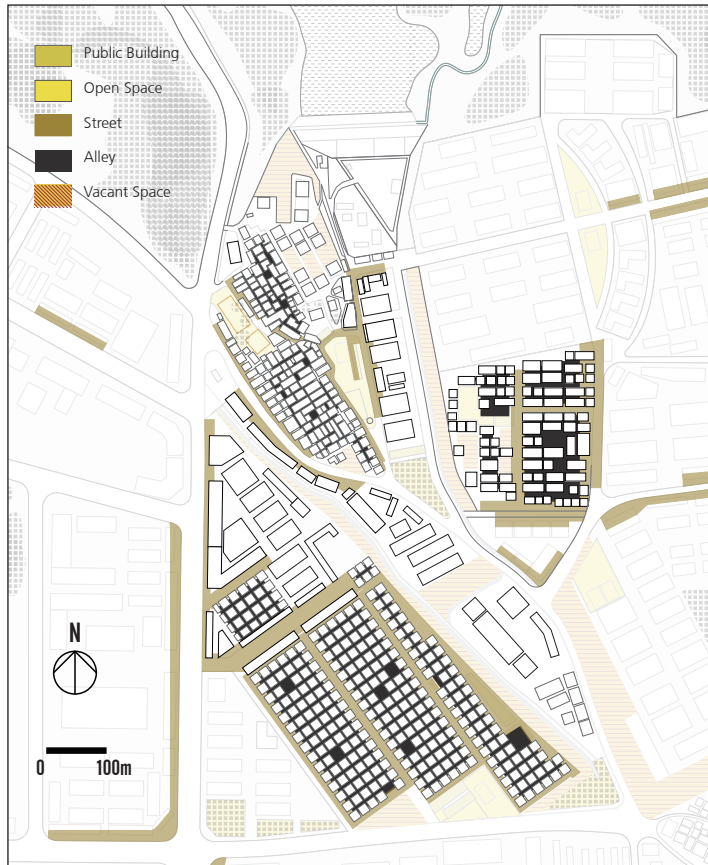
Open space in urban villages mainly refer to squares and parks. Square is the most important open space in urban villages, where different social and collective activities occur. It is usually organized with a basketball court in the centre and it is where official building located. And parks usually located around the corner with shades of trees and grass as pavement.

The design of the open space is simple, which didn't involve people's actual needs. With many inappropriate design, people cannot actually use the space frequently. As a result, lots of activities had been suppressed.

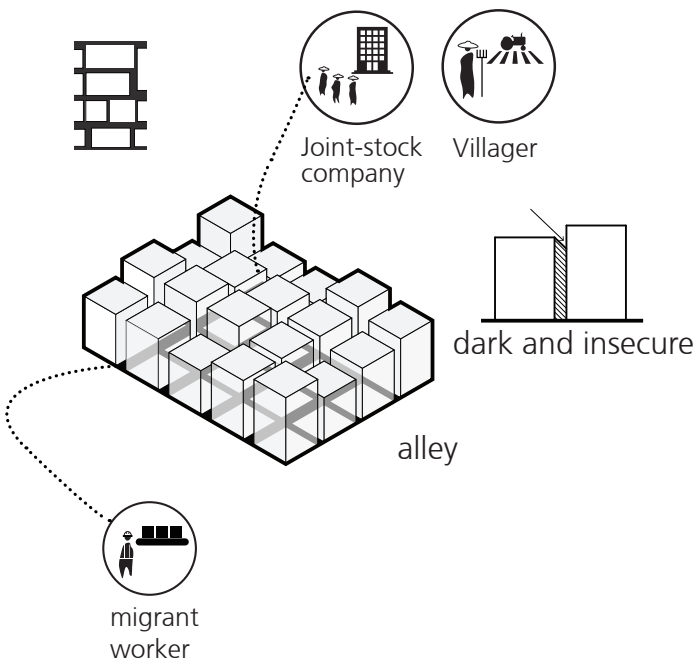
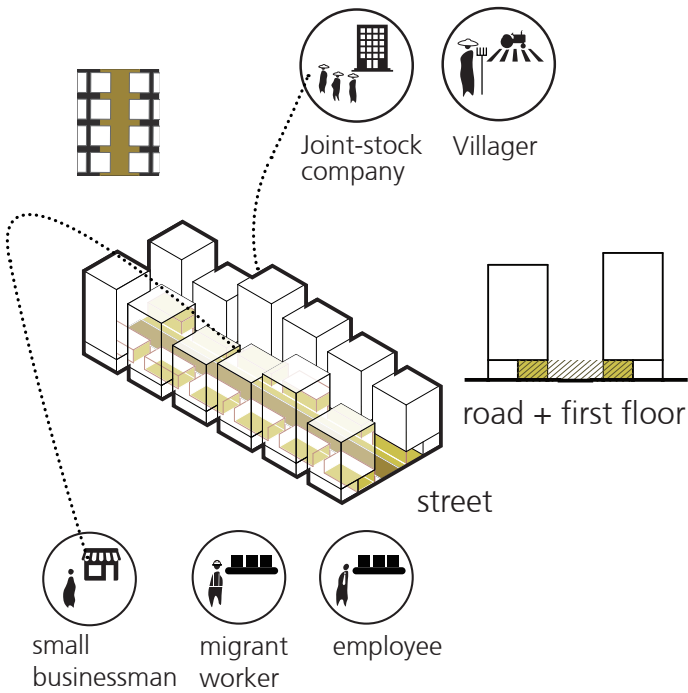


5.10 PUBLIC SPACE IN URBAN VILLAGES

5.10.2 Linear Space

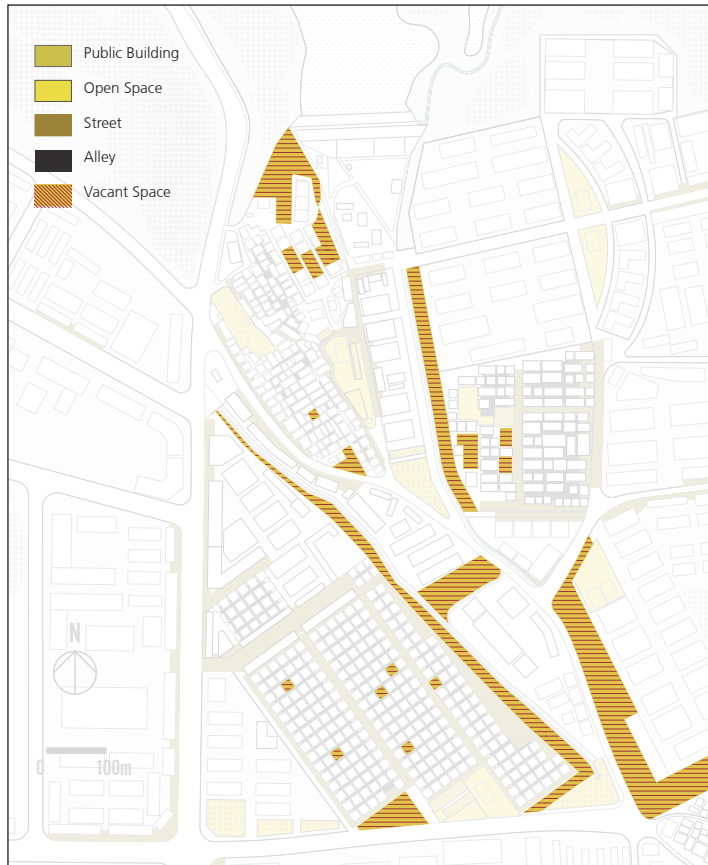


The linear space in urban villages involve two types: main street and alley. The street is form with the road and first floor of the building on both side. Though the first ground of streets are mainly for commercial use, social activities can still be observed. The street space are mingle with economic and social activities. However, the alley is less welcomed with its darkness and insecurity. The alley lost its quality when the buildings on both sides were growing.

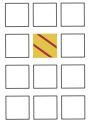


5.10 PUBLIC SPACE IN URBAN VILLAGES

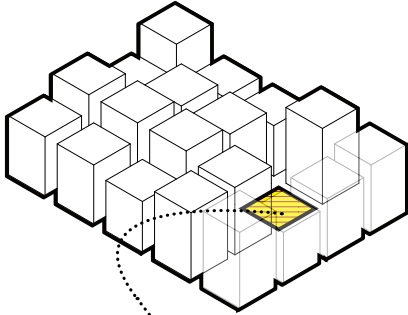
5.10.3 Vacant Space



There are a lot of vacant space in urban villages such as some void plots and slopes in this area. Lots of the slopes are located between different urban villages. These space usually has none public functions and usually used by no one. In the condition that the spatial resources are limited in urban villages. These space can be considered as potential area for public use with appropriate design and functions.



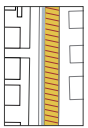
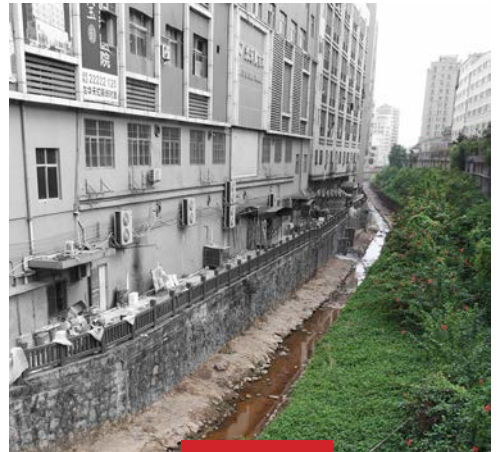
void plot



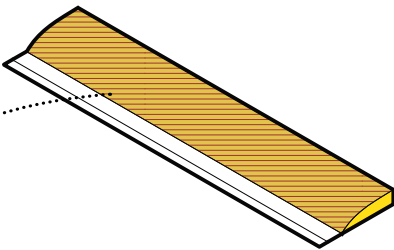
Joint-stock company



Villager



slope



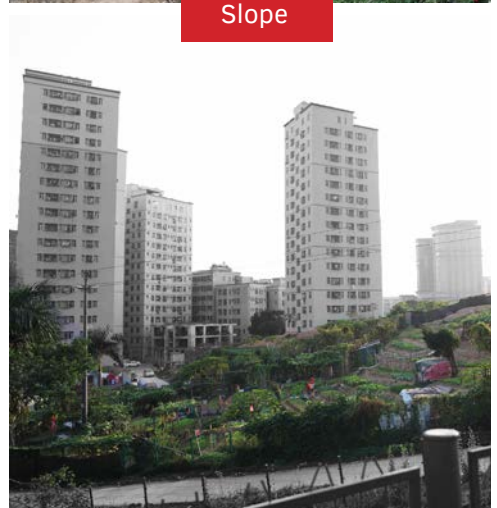
Factory Owner

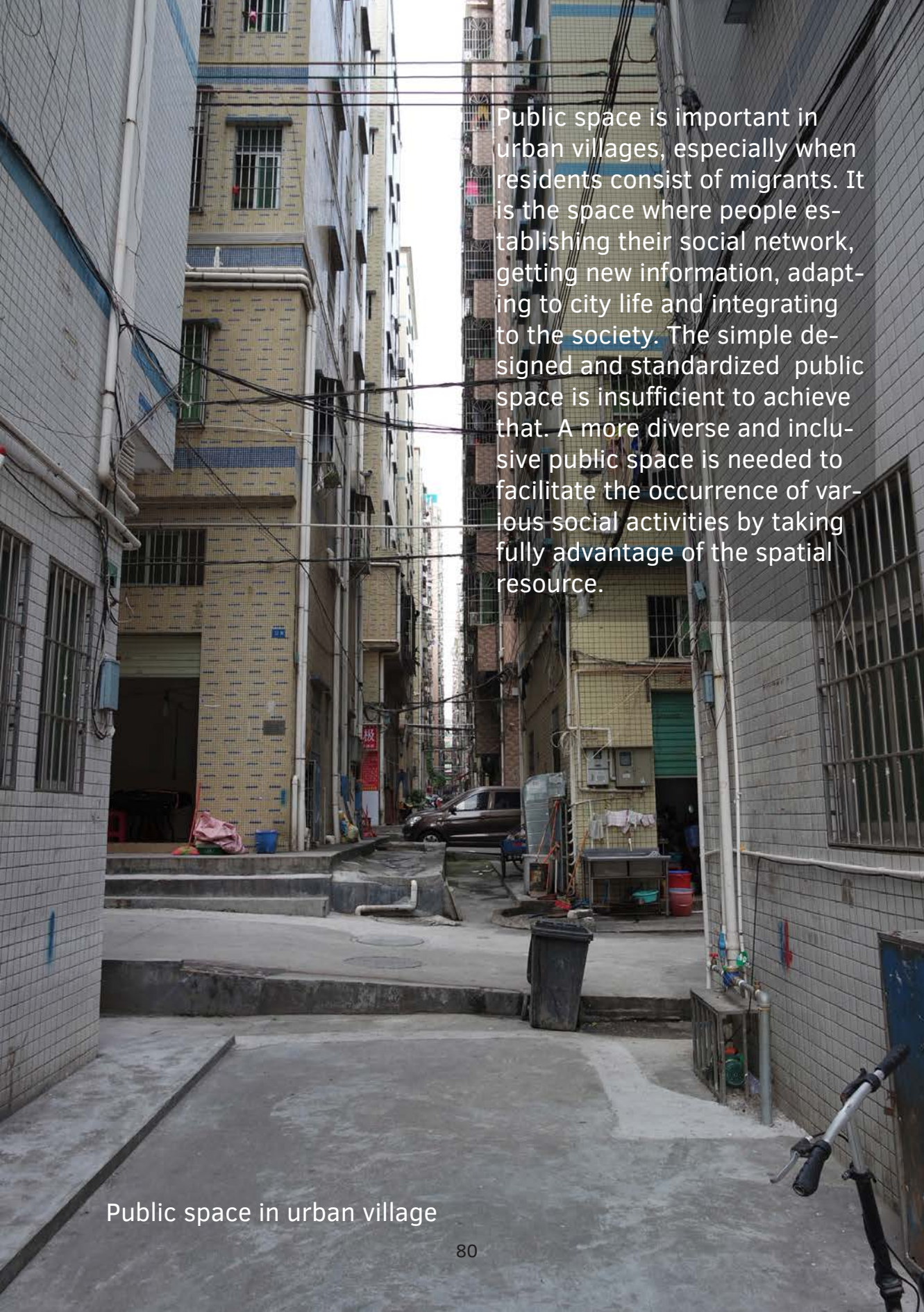


Government



Joint-stock company





Public space is important in urban villages, especially when residents consist of migrants. It is the space where people establishing their social network, getting new information, adapting to city life and integrating to the society. The simple designed and standardized public space is insufficient to achieve that. A more diverse and inclusive public space is needed to facilitate the occurrence of various social activities by taking fully advantage of the spatial resource.

Public space in urban village

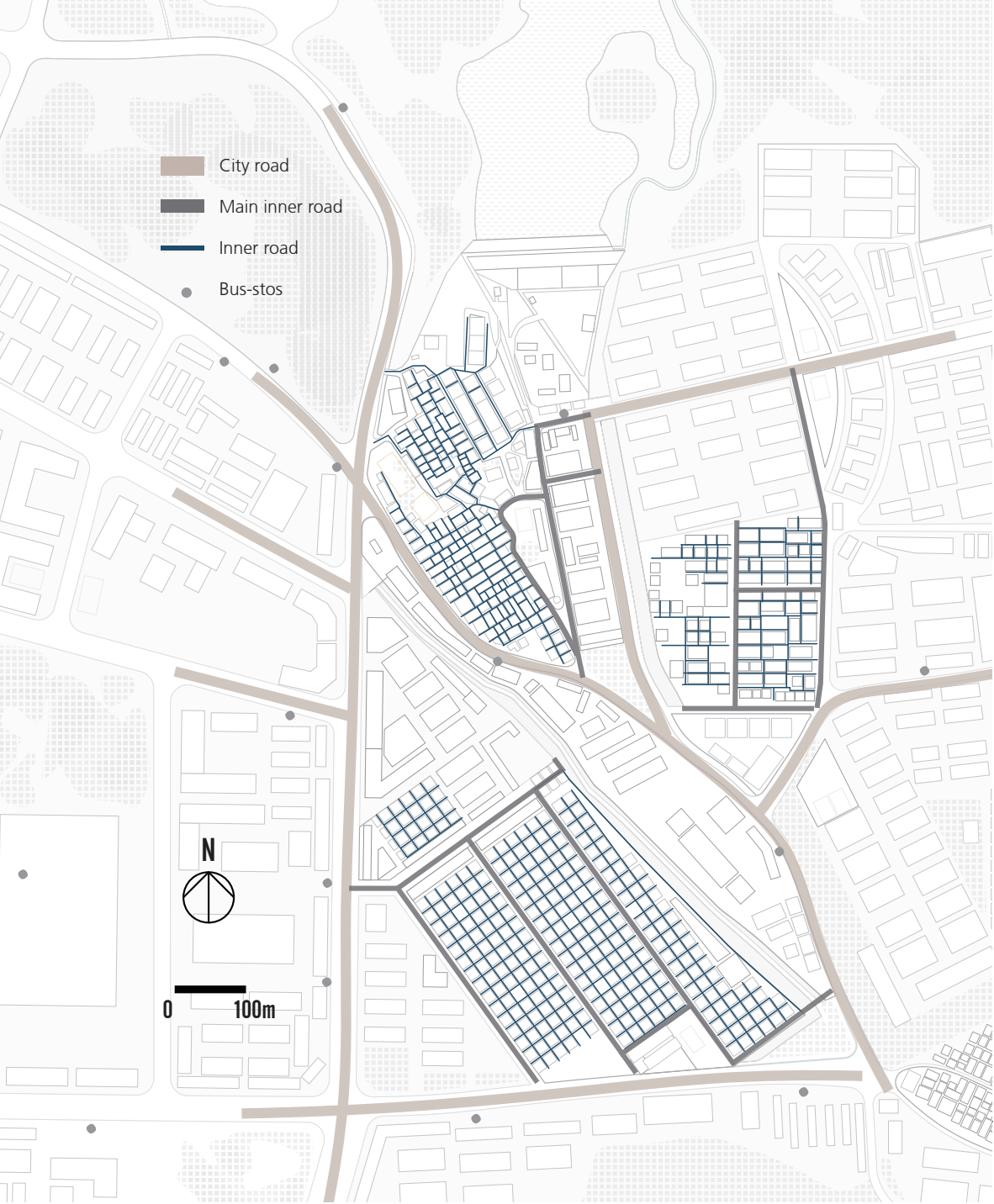
5.11 NETWORK

The connection between urban village and the urban village nearby is weak, since every urban village functions independently. The road network inside urban village is intensive than the in-between space.

With the canal flow through these area, there are lots of “hard edges“ in this area, dividing the urban villages into small fragments. It not only hinder the free movement between urban villages, limit the radius of residents' life circle, but also hinder the integration of spatial resources in this area to form a large system.

5.11 NETWORK

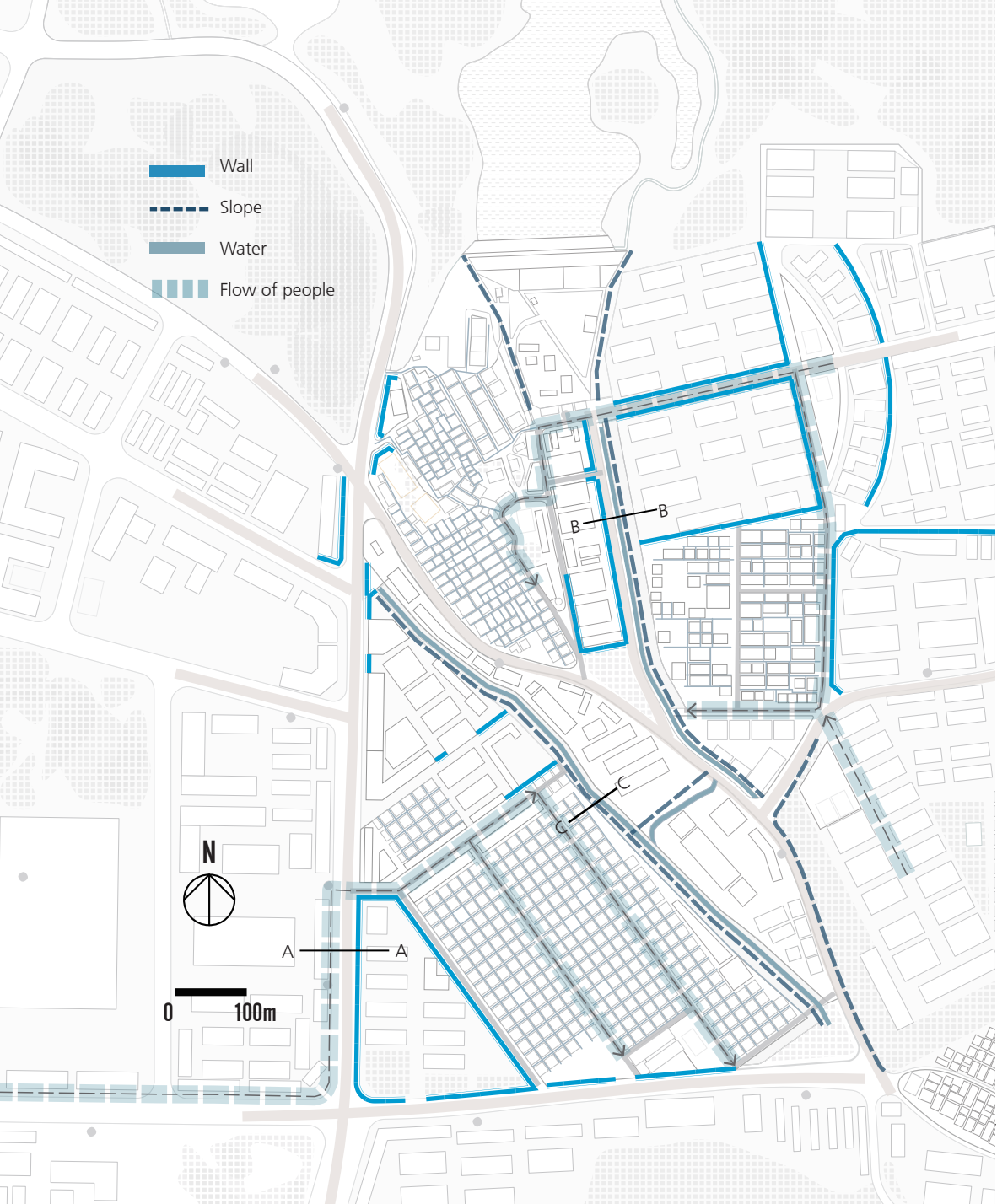
5.11.1 Road Hierarchy



Road hierarchy

5.11 NETWORK

5.11.2 Edges and People Flow

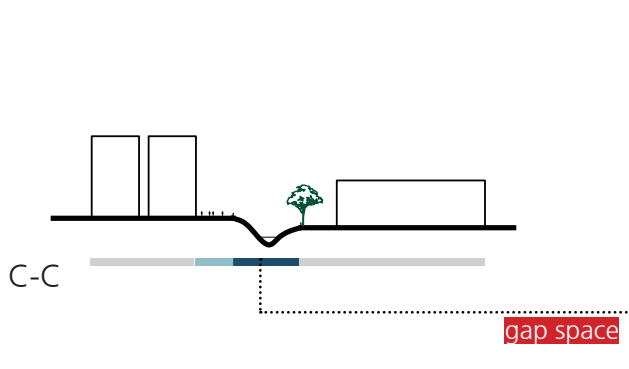
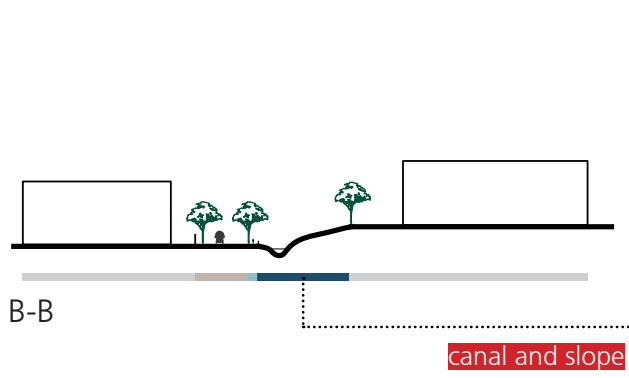
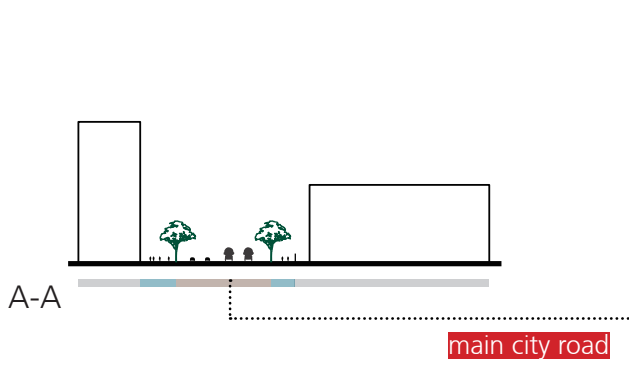


Edges and people flow

5.11 NETWORK

5.11.2 Edges and People Flow

The city roads, gap space ,canals and walls functioned as hard edges in this area. On one hand, it hinder the free movement between urban villages, and limit the radius of residents' life circle. On the other hand, these in-between space did not facilitates the integration of spatial resources in this area.

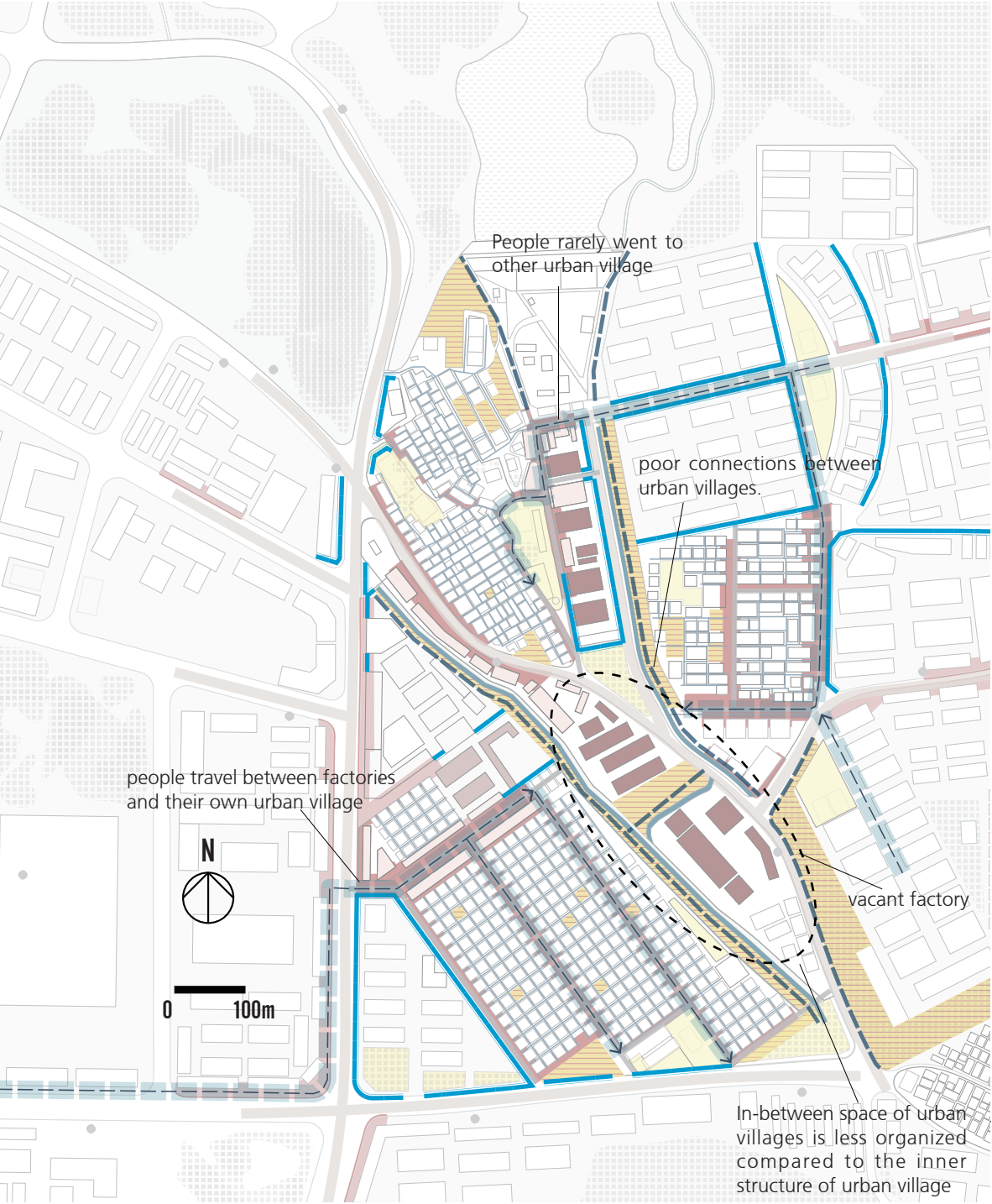




Space between urban villages

5.12 SUMMARY

5.12.1 Overlaps



5.12 SUMMARY



5.13 URBAN VILLAGE AS SELF-ORGANIZING SYSTEM

Urban village is an self-organizing system. On one hand, self-organizing system is complex with its numerous parts interacting in nonlinear way. According to Portugali(2000), self-organizing system is unpredictable and uncontrollable since the its parts are so numerous, and “changing, and the parts and components are interconnected in a non-linear fashion by a complex network of feedback loops”.

On the other hand, self-organizing system self-organizes its internal structure independent of external causes(Portugali,2000). Portugali(2000) argued that external forces acting on system trigger an internal and independent process by which the system spontaneously self-organizes itself.

The involvement of self-organizing system is in non-equilibrium states, through exchange of energy, matter and entropy with the external environment.(Prigogine,1969) The process is spontaneous that the system self-organizes its internal structure in response to external causes.(Portugali, 2000)

In order to do the transformation in urban villages, its complexity and self-organizing mechanism need to be involved. Though spatially urban village is comprised of different physical components, what's driving the evolution is the interests of various actors and stakeholders. So approach the spatial transformation in urban villages, to clarify the relation between components and stakeholders helps to deal with its complexity.

5.14 STAKEHOLDERS



Government

Development of Dalang(and Fashion Valley), economic growth and urban village improvement



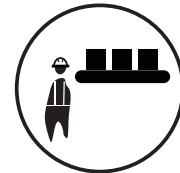
Joint-stock company

Income of the village-owned properties and development of urban village



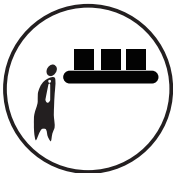
Villager

Income of the rental housing and quality improvement of life



Migrant worker

Incomes, low-rent housing, low-cost life and opportunity for self-upgrade



Small businessman

better living environment



Factory owner

housing for employees, cheap labours



Small businessman

more consumers, better shop location and low rent

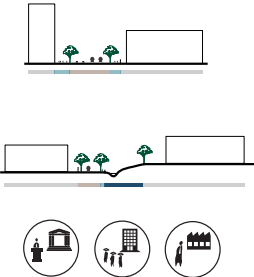


small enterprise

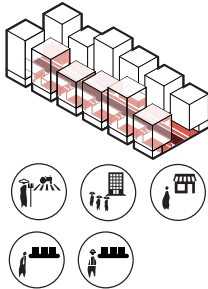
affordable office space

5.15 COMPONENTS

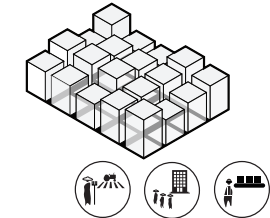
city road



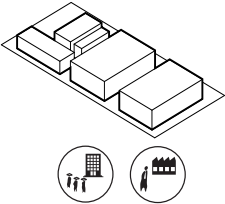
street



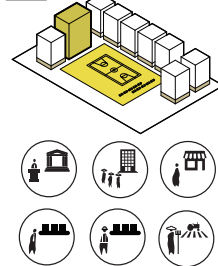
alley



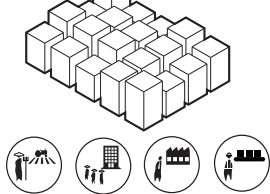
village-owned factory



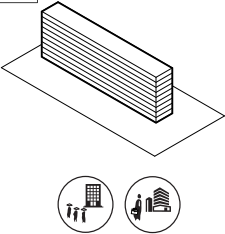
square



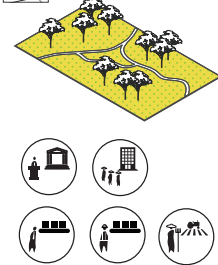
housing



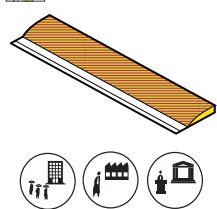
office building



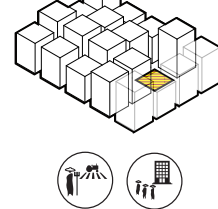
park



slope



void plot



Initiative

Top down

Collaboration

Self-organization

The complexity of urban villages is that the stakeholder, such as the individual villager, take actions based on his own interests and reflected on space, which is uncontrollable and unpredictable. To clarify the relations between space and stakeholders helps to deal with the complexity.

Here the components of urban villages are ranked by its initiative. They should be treated differently in terms of spatial transformation. With different ways of collaboration from top-down, collaboration to self-organization, it not only helps to motivate positivity of the stakeholders, but also helps to do the spatial transformation more efficiently in urban villages.

The improvement of city road could be finished with top-down approach where government could take actions. The transformation of the village-owned properties require collaboration between government and joint-stock companies of different urban villages. The the transformation of the housing need to in a self-organizing way since the interests of the individual villagers are involved.

5.16 CONCLUSION

1. The space of urban village related to its economies has its own characters: flexibility and adaptability. When it combines with informal and small business, it has the strengths to make differentiated competition to the formal economy as well as to benefit the development of each other.

The economies in urban villages remain low-end, indicating the single industry and mono social groups. Fashion Valley is an opportunity for the urban villages to develop more diverse economies and make differentiated competition with the formal industrial parks with the transformation of its spatial resource, in order to take advantage of its flexibility and adaptability.

2. Public space is important in urban villages, especially when residents consist of migrants. Influenced by the rural cultural background, their needs for social life require spatial support as places in which people establish their social network, get new information, adapt to city life and integrating to the society. The simple designed and poor quality public space is not enough to achieve that.

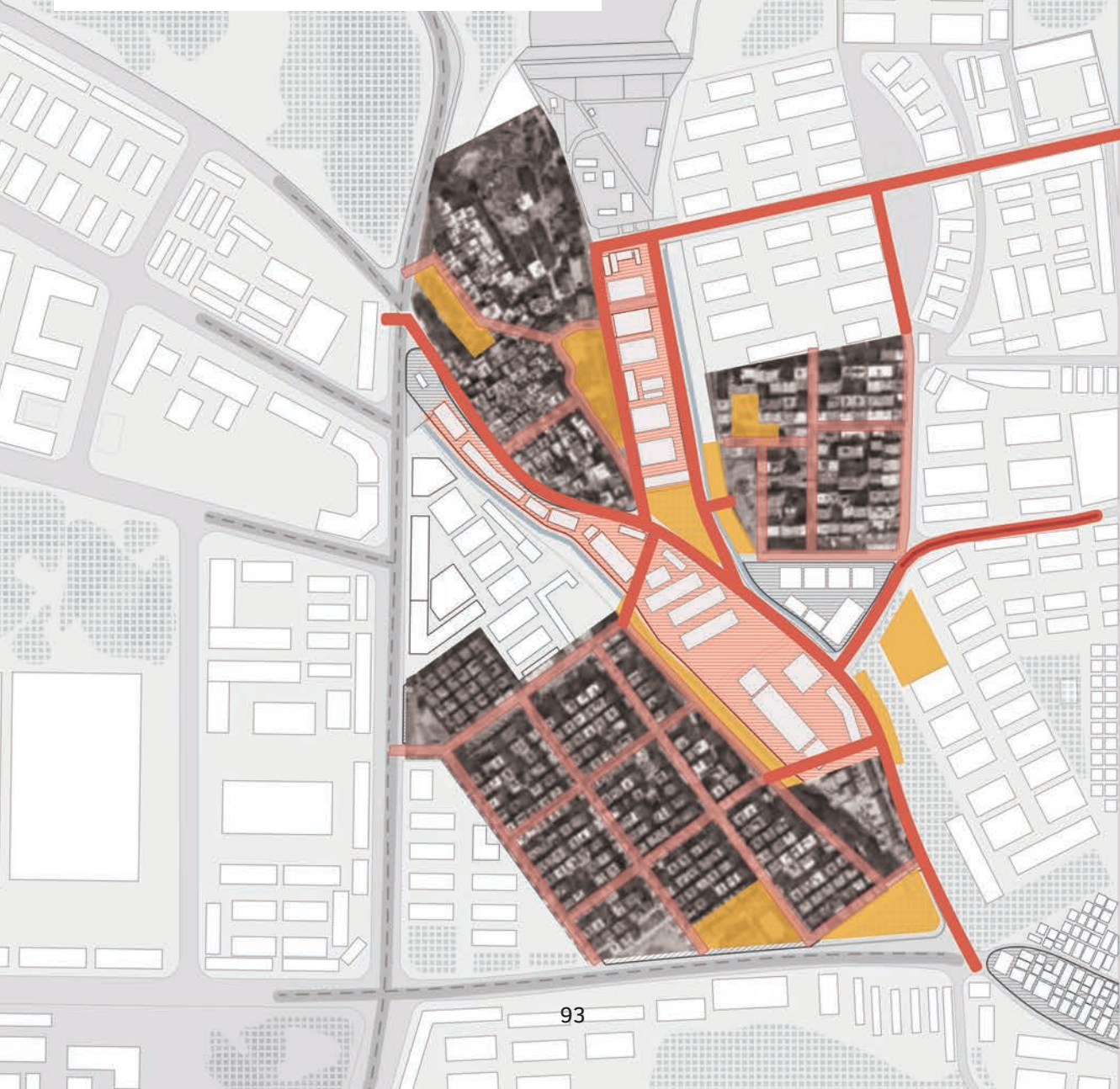
A more diverse and inclusive public space is needed to facilitate the occurrence of various social activities by taking fully advantage of the spatial resource.

3. The connection between urban villages are weak with the independent operation of each urban village and the hard edges in-between. It hindered the free movement of the area as a whole and segmented the public and economic spatial resource. The improvement of the road network is needed.

4. Urban village is a self-organizing system and its evolution is driven by the different interests of various stakeholders. In order to do the spatial transformation in urban villages, to clarify the relation between components and stakeholders helps to deal with its complexity. To encourage the collaboration and self-organized transformation based on the interests and ownership will activate the initiative of different stakeholders.

6. VISION

The vision is that the economies in urban villages are more diverse and targeting starters and young people. The public life is rich and inclusive with more social groups moving in. And the connections between the urban villages are integrated that people can move freely and easily in this area.



6 VISION

6.1 Diverse and Adaptable Economy





diverse and adaptable economy

Adaptable economies accommodate the fashion industry while targeting young people and starters instead of attracting large companies like what the government did in fashion Valley. So new social groups may moving in, leading the upgrade of local economies in urban villages. The economy is more diverse while maintaining as affordable place for migrant workers.

6 VISION

6.2 Rich and Inclusive Public Life

Rich and inclusive public life that involved the needs of different social groups and people are encouraged to participate and behave in public domain. With the diverse social activities and public events, migrants start to get used to urban life and establish their social network. With the improvement of the environment, villagers are more enjoyable when holding the traditional events.





rich and inclusive public life

6 VISION

6.3 Intergrated and Accessible Road Network



The road network is highly integrated and people can move freely between different urban villages, the fragmented area are gradually integrated and spatial resources are organized and functions as a large system.



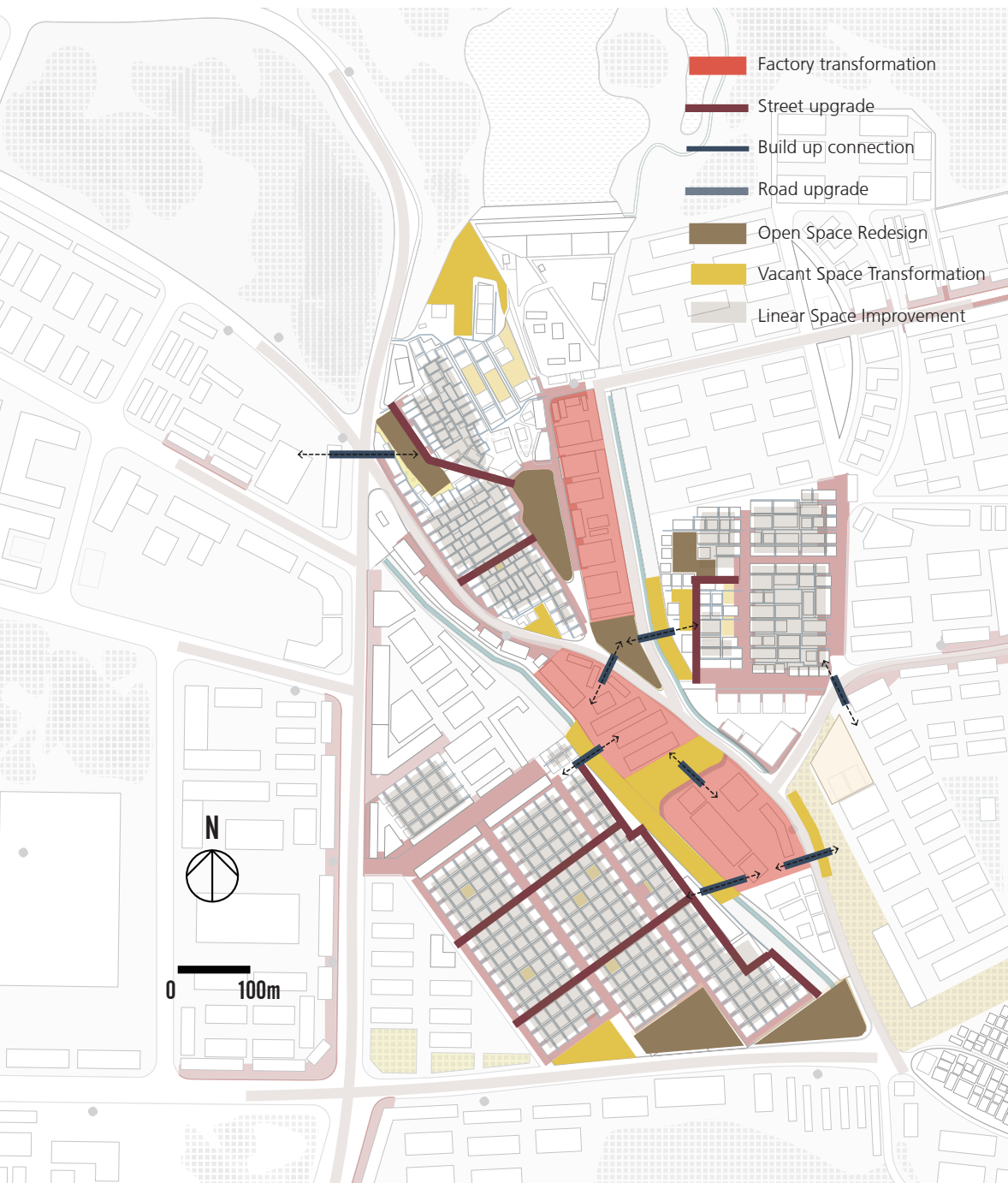
intergrated and accessible road network

7. Strategy

7.1 HYPOTHESIS

The improvement of the accessibility, the spatial transformation that adapting to the fashion industry and the construction of flexible and inclusive public space, can enhance the profound vitality of urban villages in Dalang.

7.2 STRATEGIC MAP



Strategic map

7.3 STRATEGY

Three strategies are proposed named: 1.network strategy;
2.economic space strategy; 3. public space strategy.

NETWORK STRATEGY

1. Strengthen the connection between urban village and the near by urban villages and industrial parks.
2. Upgrade the road hierarchy of the inner roads of urban villages.

ECONOMIC SPACE STRATEGY

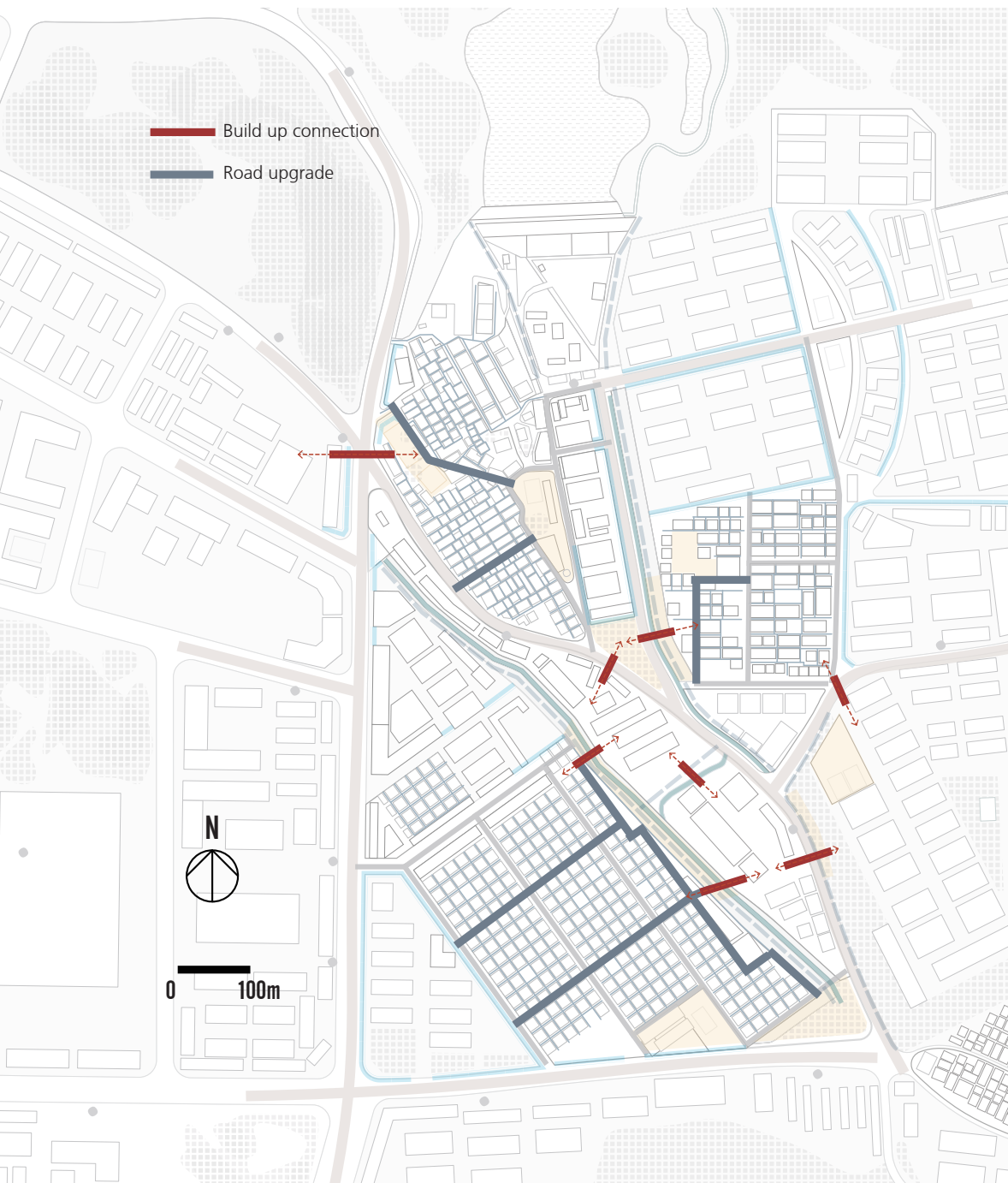
1. Transform the village-owned factory to creative incubator centre, targeting small enterprises and young starters.
- 2.Create more first floor space for lease.

PUBLIC SPACE STRATEGY

1. Redesign open space adapting to various social and cultural activities of different groups.
- 2.Transform vacant space to public space.
3. Enhance the quality of linear space.

7.3 STRATEGY

7.3.1 Network Strategy



Network strategic map

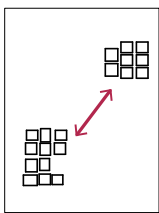
1. Strengthen the connection between urban village and the nearby urban villages and industrial parks.

The goal is to facilitate the free movement between urban villages, and to integrate the spatial resource of the area. Besides, it can activate the in-between space and transform them into functional use.

2. Upgrade the road hierarchy of the inner roads of urban villages.

The goal is to activate more street space and release more first floor for functional uses and better integrate with the city roads and main roads.

Action:



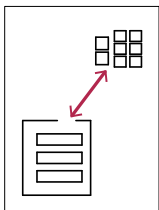
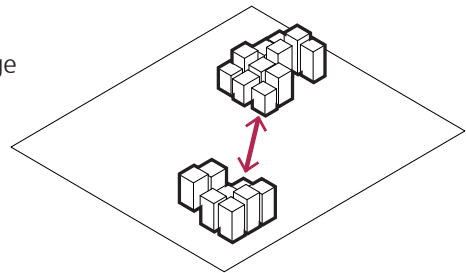
a. build connections between urban village and urban village



government



joint-stock company



b. strengthen connections between urban village and industrial park



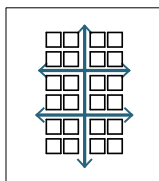
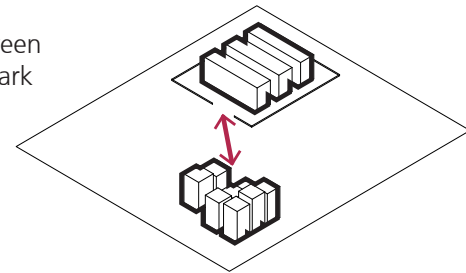
government



joint-stock company



factory owner



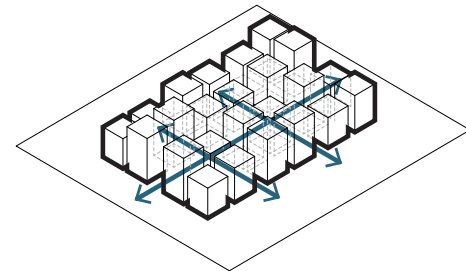
c. upgrade the road hierarchy



joint-stock company

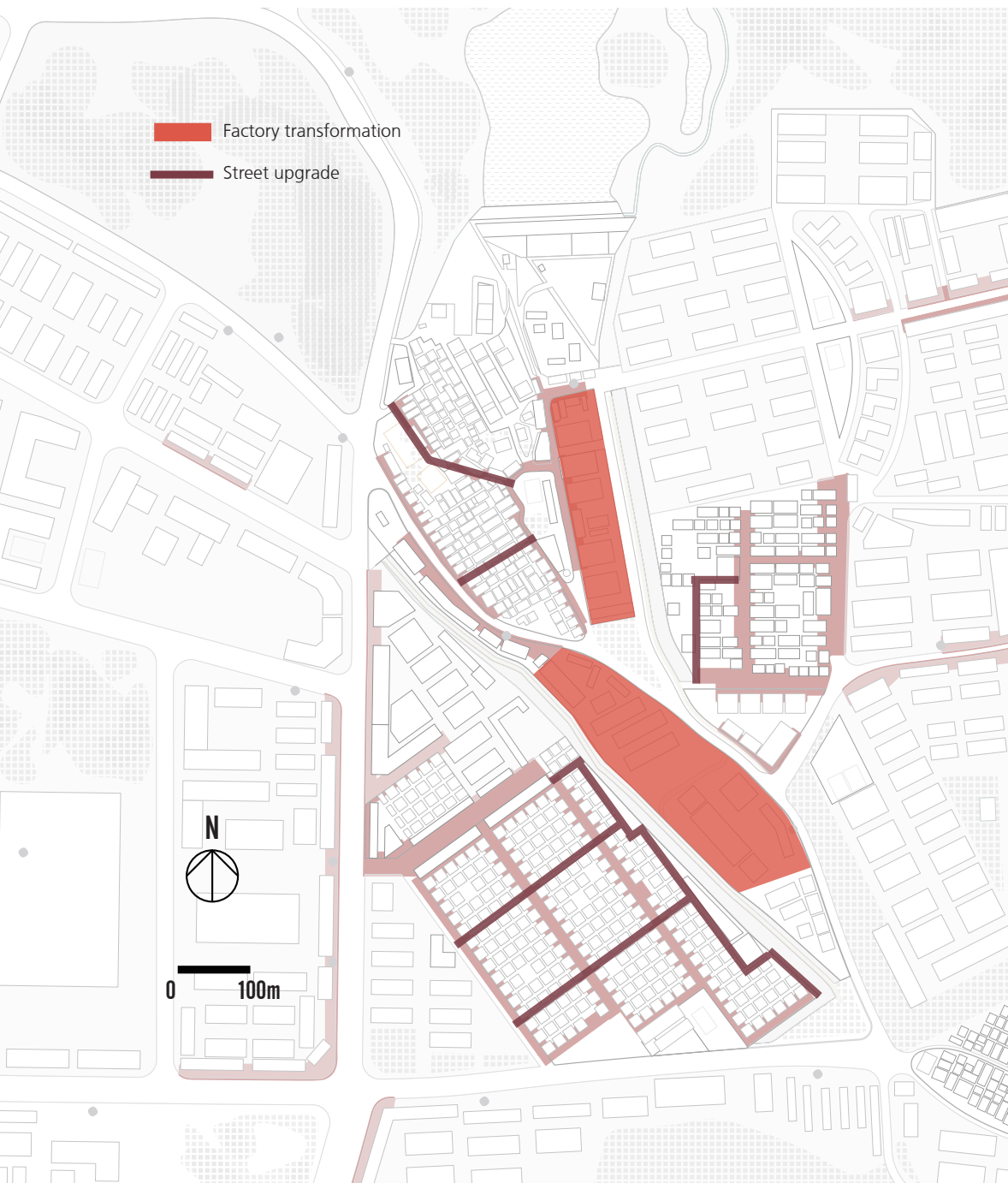


villager



7.3 STRATEGY

7.3.2 Economic Space Strategy



Economic space strategic map

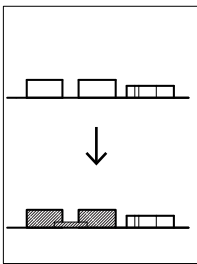
1. Transform the village-owned factory to creative incubator centre, targeting small enterprises and young starters.

The goal is to activate the use of vacant factory, making differentiate competition to the Fashion and serving as compliment to facilitate the diverse economies in urban village. Besides, more social groups will moving in urban villages, by attracting the young people and small enterprises, which will also promote the upgrade of the economy.

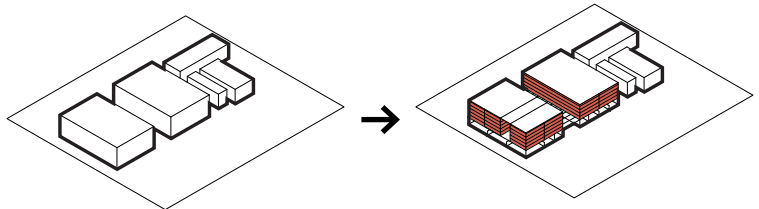
2. Create more first floor space for lease.

The goal is to get more space for lease, providing people flexible and affordable space. And let different the small businessman or starter to have a place in urban villages.

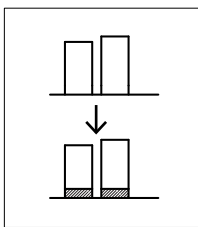
Action:



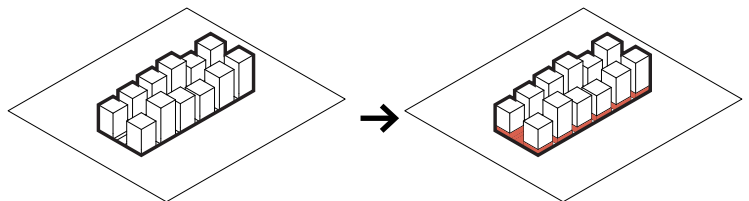
a. transform village-owned factory to creative incubator centre



- joint-stock company
- small enterprise
- government
- young starter



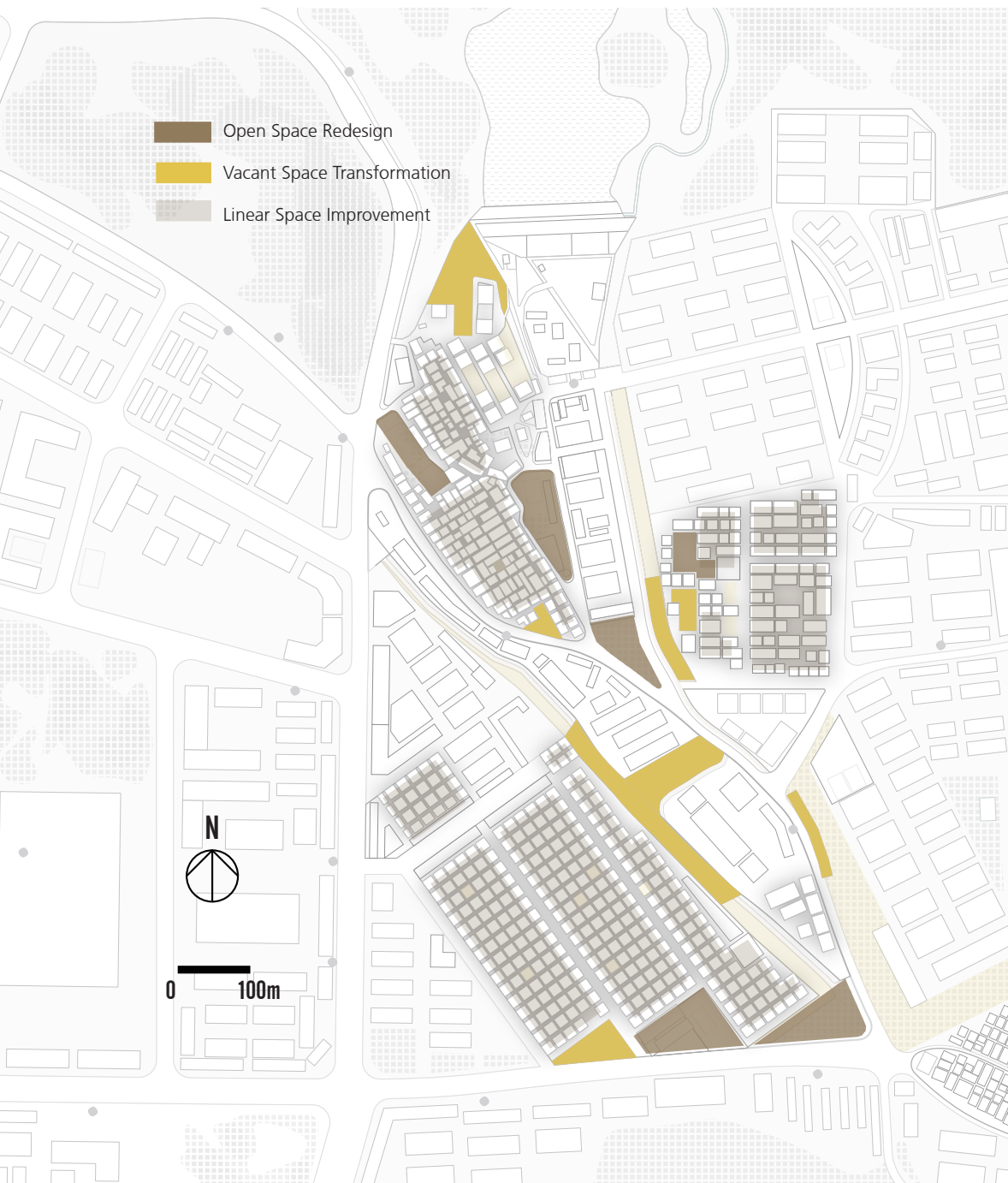
b. transform buildings' first floor



- joint-stock company
- villager
- small businessman

7.3 STRATEGY

7.3.3 Public Space Strategy



Public space strategic map

1. Redesign open space adapting to various social and cultural activities of different groups.

The goal is to integrate people's needs to spatial design, encouraging more activities to happen and organized. And it is a way to facilitate the use of space, in order to create a better public life.

2.Transform vacant space to public space.

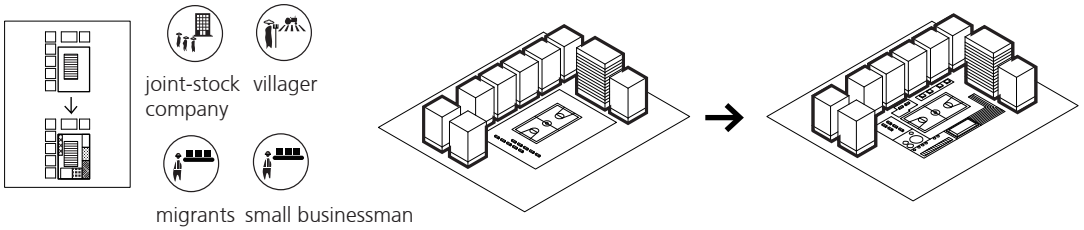
To create more public space for people to use, and facilitate the diversity of public space for different activities.

3. Enhance the quality of linear space.

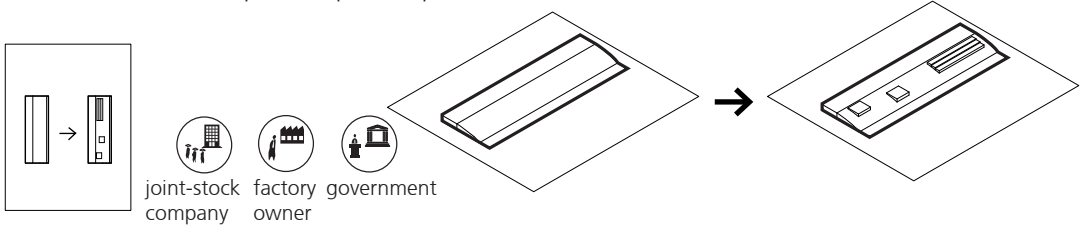
To reduce the negative impact of the linear space with darkness and insecurity.

Action:

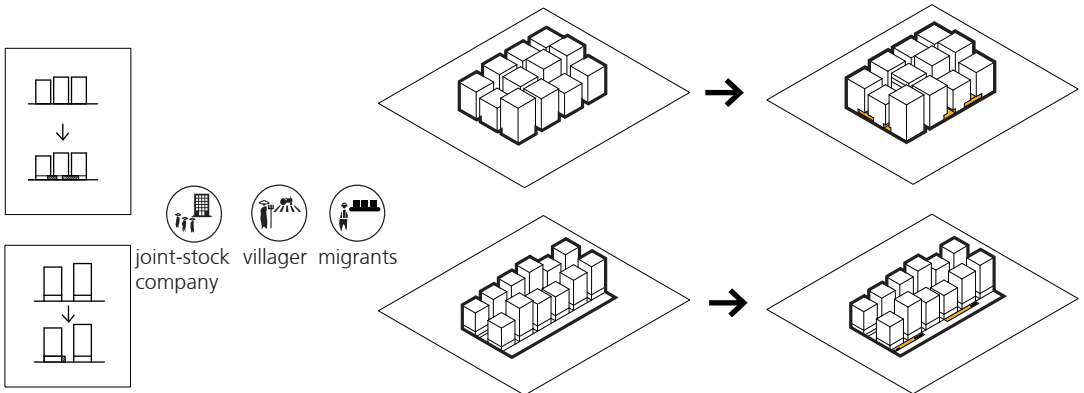
a. redesign open space



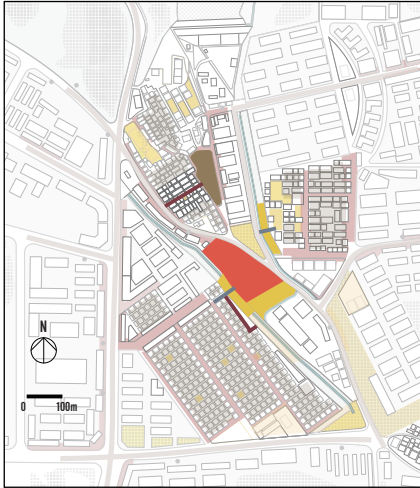
b. transform vacant space to public space



c. improvement on linear space

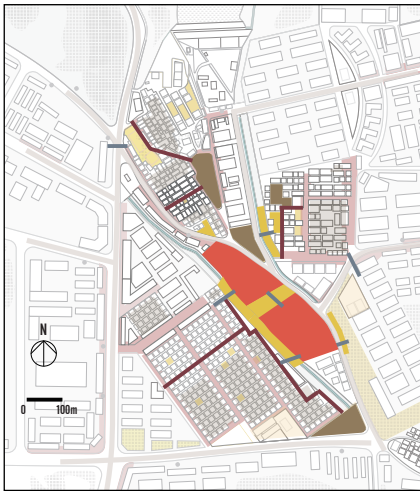


7.4 PHASING



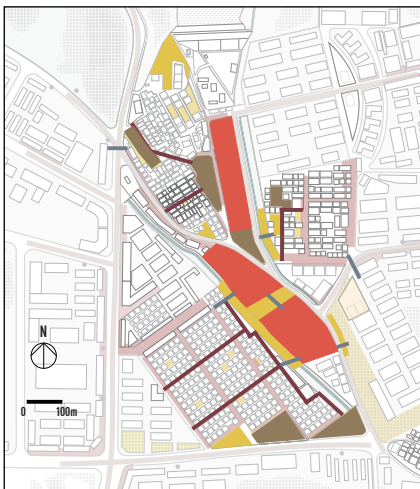
Phase 1

Pilot projects are proposed as show cases to have an impact on people’s mind-set and also as test. The pilot projects in this phase include the vacant factory transformation, redesign of one square and the improvement on the linear space in one village.



Phase 2

More projects are proposed in this phase. More village-owned factories will be transformed and street will be upgraded according to the changes of the road structure.



Phase 3

Projects are proposed to integrate the spatial resources of the area, and facilitate the integration between urban villages, thus enhance the vitality of urban villages.

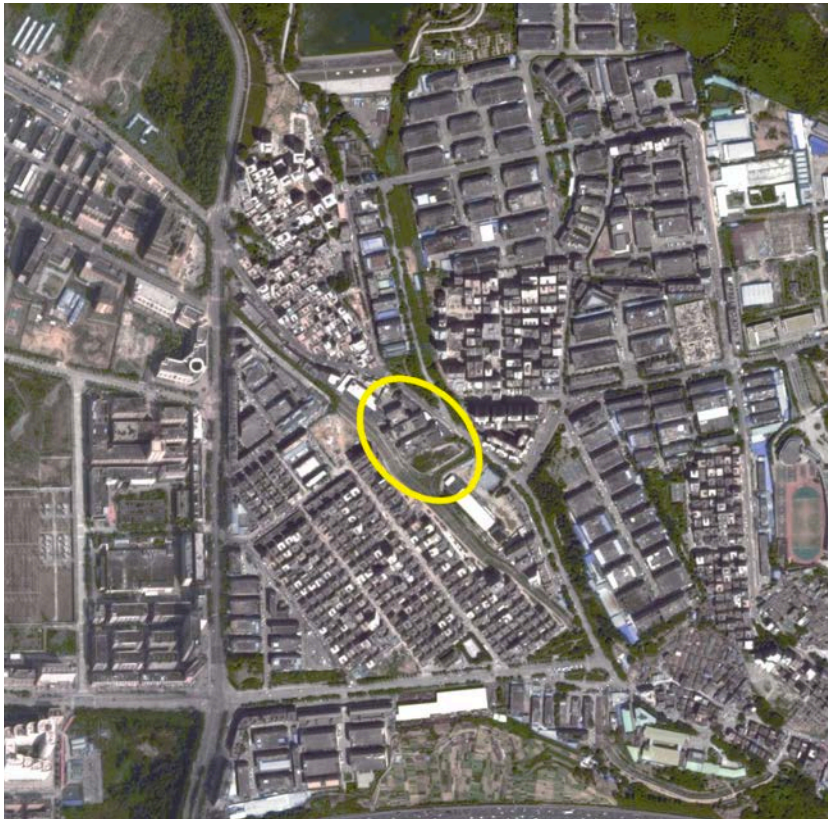
8. Pilot Projects

8 PILOT PROJECTS



8.1 PILOT PROJECT A

8.1.1 Location and Objective

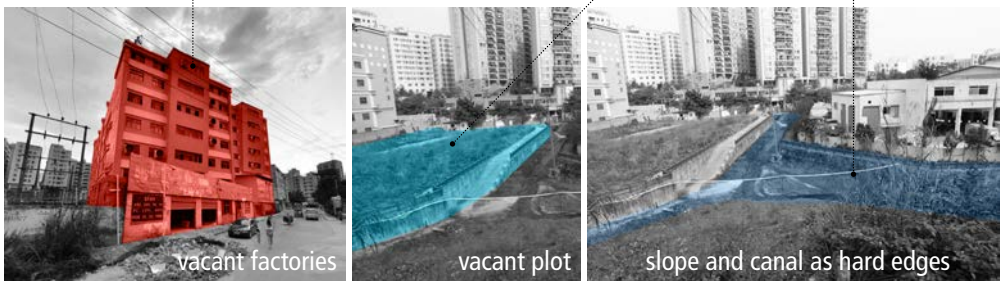


Pilot project A, as a key project to diversify the economy of urban villages, locates in the centre of the area. It consists of four vacant buildings and a vacant plot in the south part and two sides of the project faced hard edges.

The object is to transform the vacant factories to 1. creative centre targeting young people and starters; 2.get more public space for different users, and 3.strengthen the connection between the site and the urban village in the west side.

8.1 PILOT PROJECT A

8.1.2 Current Conditions



- Vacant building
- Vacant plot
- Hard edges

There are four vacant buildings in the centre with a main street on the east side. A vacant plot in the south is currently for no use. And the canal combined with the slop flow across the site and functioned as hard edges dividing this area. Xinwei village is to the southwest of the vacant buildings and currently there is no direct connections between them.

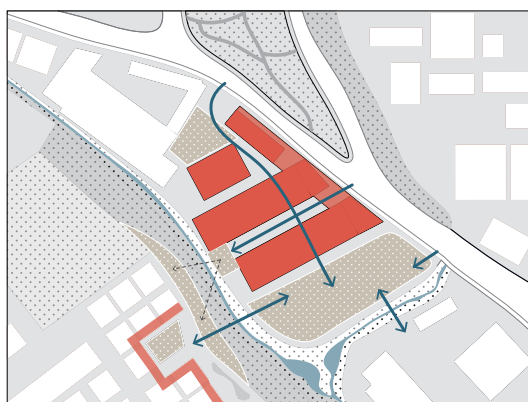
8.1 PILOT PROJECT A

8.1.3 Diagram and Actions

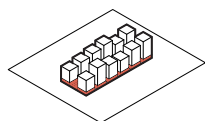
Transform the vacant factories to creative incubator centre to attract the young people and starters and to diversify the economy of urban villages.

And then to transform the vacant plot in the south to square that serve the workers, villagers and the public.

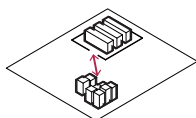
The accessibility is improved by adding the two bridges, which not only leading the upgrade of the street of Xinwei village, but also activate the transformation of the slope area inbetween.



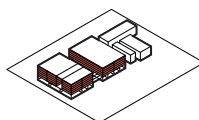
Diagram



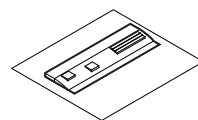
street upgrade



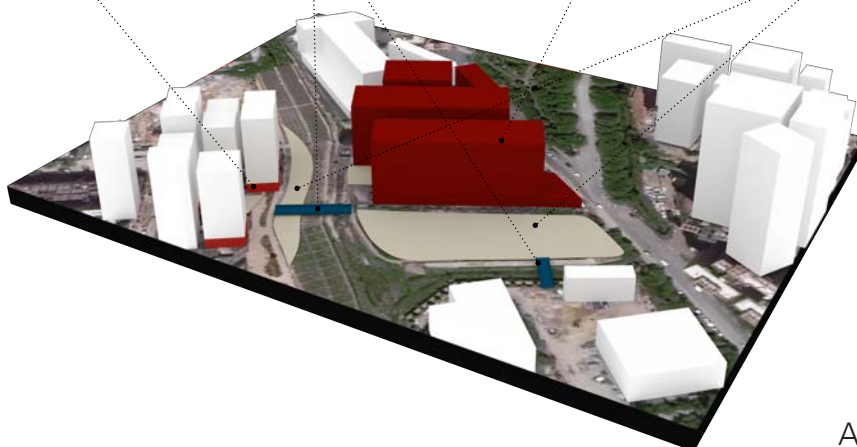
build connection



factory transformation



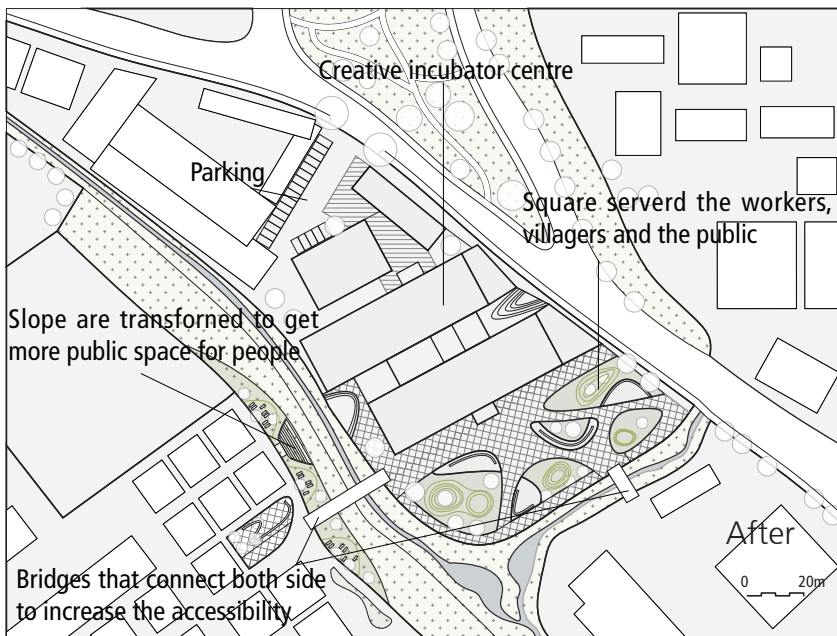
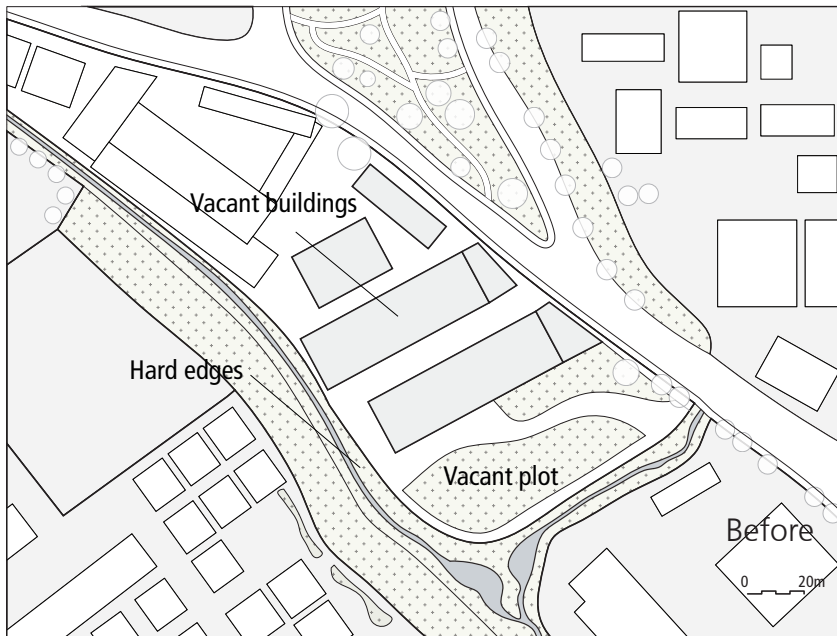
transform void space for public use



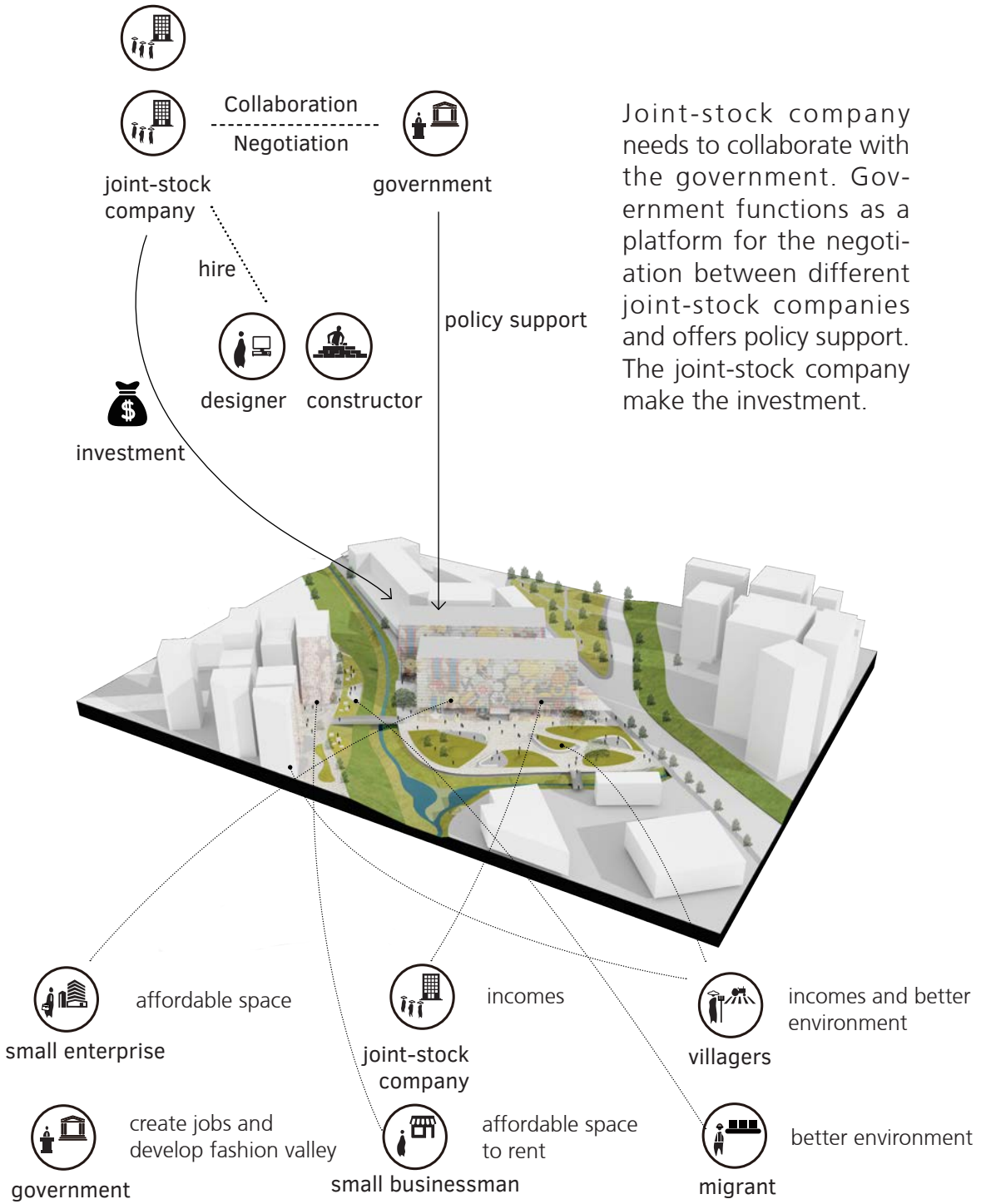
Actions

8.1 PILOT PROJECT A

8.1.4 Plan



8.1 PILOT PROJECT A



Joint-stock company needs to collaborate with the government. Government functions as a platform for the negotiation between different joint-stock companies and offers policy support. The joint-stock company make the investment.

8.1 PILOT PROJECT A

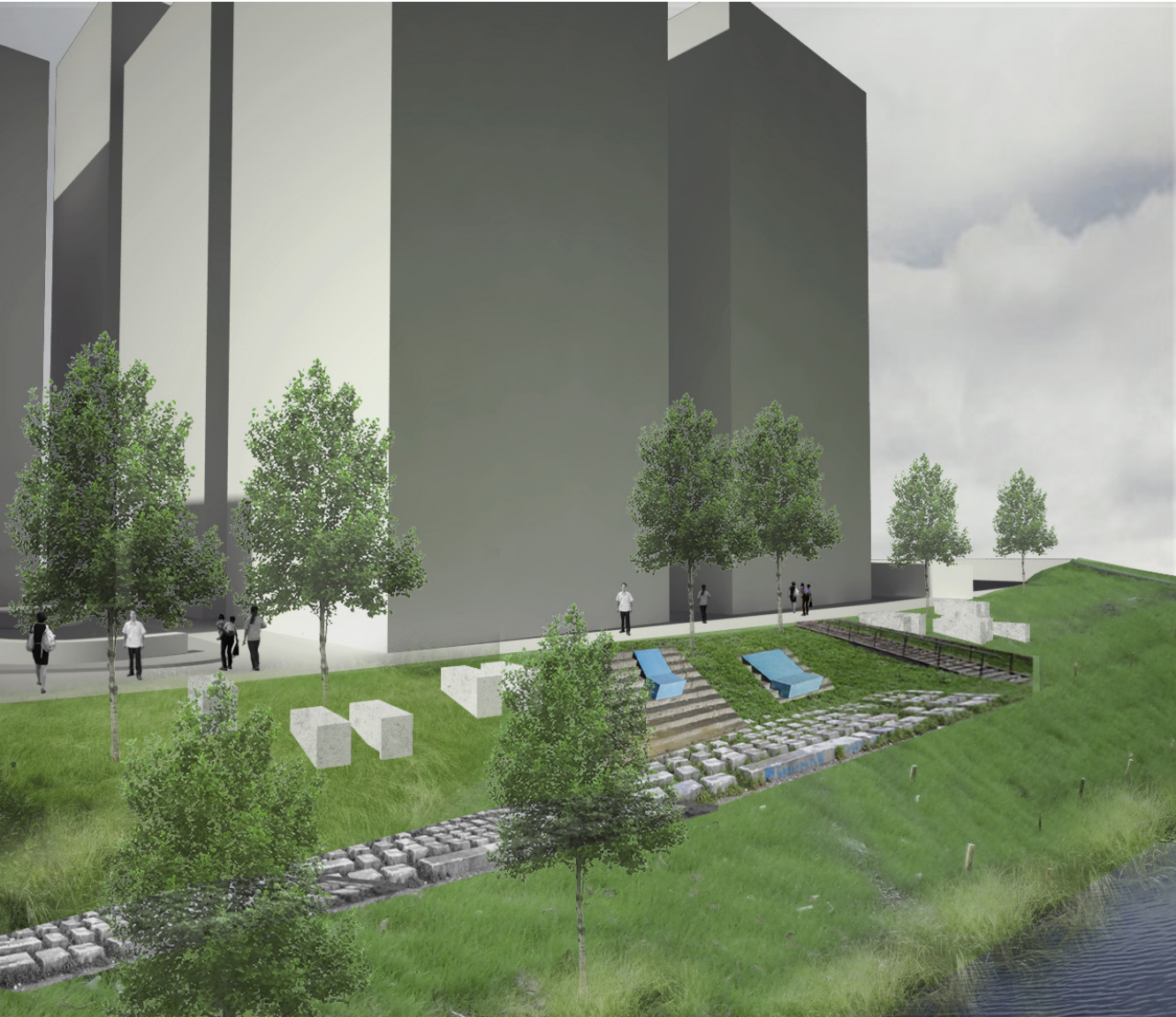


creative incubator park



square in the centre

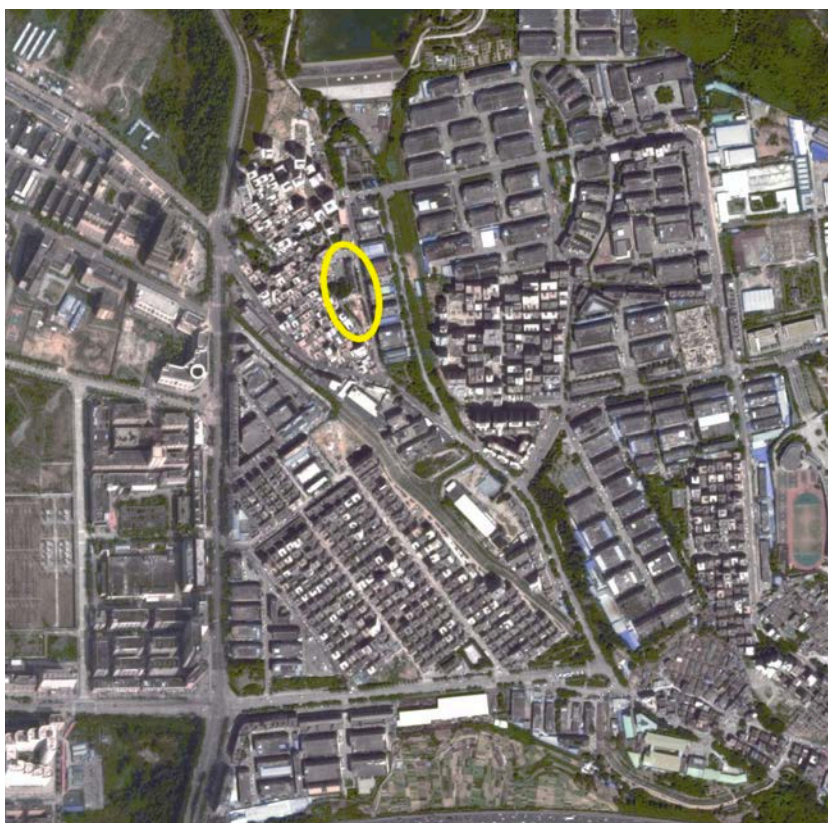
8.1 PILOT PROJECT A



transform slope to public space

8.2 PILOT PROJECT B

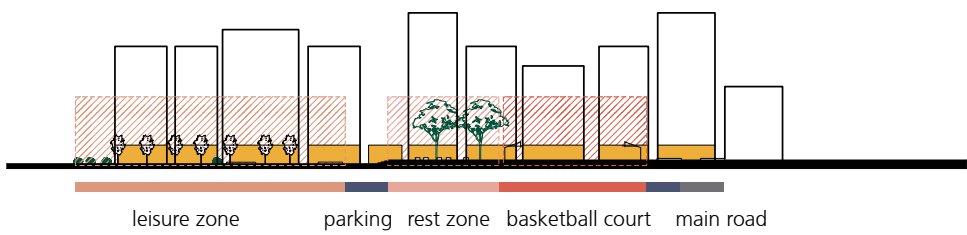
8.2.1 Location and Objective



Pilot project B locates in north part of the area and the centre of Shiao Village. As a show case, the redesign of the square aims to show a more flexible and diverse use of public space so as to enhance the quality of public life and facilitate different activities to occur.

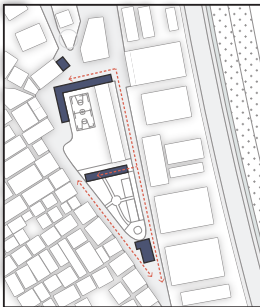
8.2 PILOT PROJECT B

8.2.2 Current Conditions



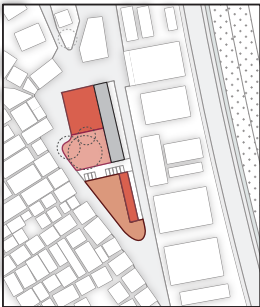
A-A section

Currently, the square is consisted of three parts: basketball court surrounded by parking plots and official building in the north; a rest zone organized by old trees and seats in the middle; and a leisure zone with in the south. The parking area are located between each parts and the pedestrian streets are along with the edge of the square.



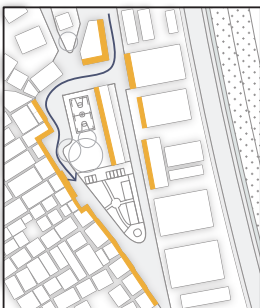
Parking area

The parking area is occupying a lot of street space and dividing the square into segments, which contributed to an pedestrian unfriendly environment.



Functions

The basketball court is functioned as sport field and place holding traditional events. The rest zone in the middle are welcomed. But the leisure zone in the south are less welcomed because of the cars and inappropriate design.



Pedestrian

The main flow of people is across the west side of the square, and there is potential to create a more pedestrian friendly environment that cover all area.

8.2 PILOT PROJECT B

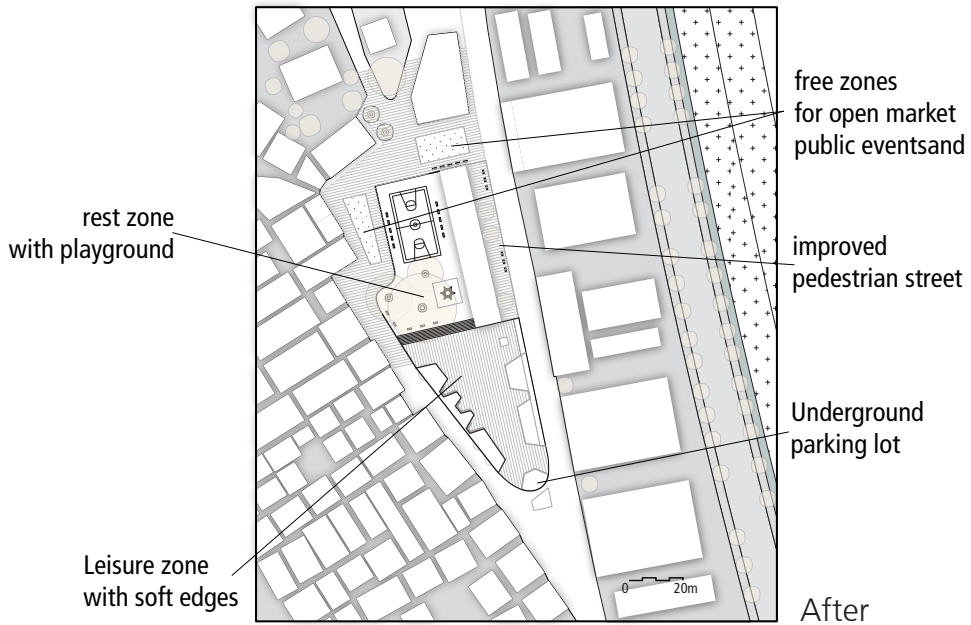
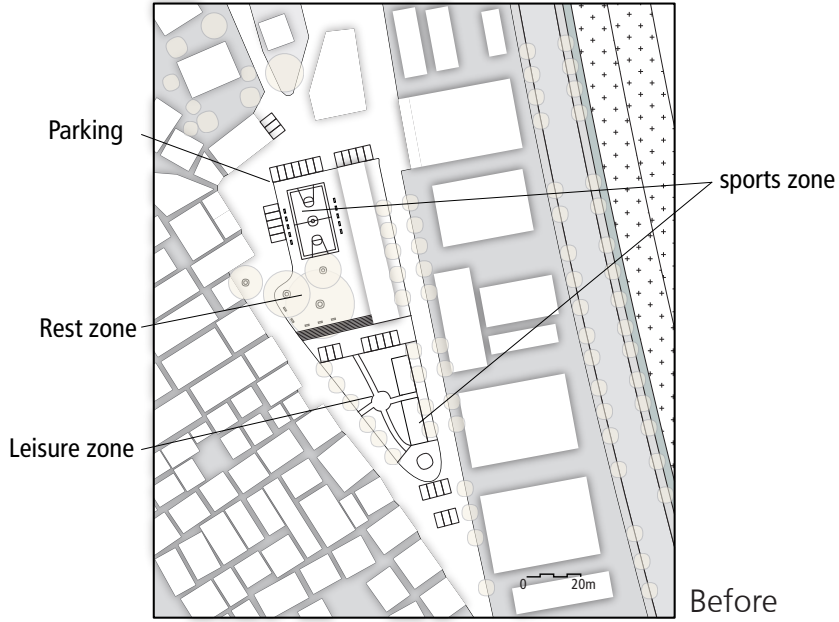
8.2.3 Diagram



- 1.The underground parking plot beneath the existing leisure space could release the street space.
- 2.The squares are with more flexible zone in the main streets for open markets and for holding contemporary public events. The leisure zone are refined with more soft edges to provide different space for the users to have activities.
3. The improvement of the pedestrian streets, especially on the east side of the square helps to create a more pedestrian friendly environment.

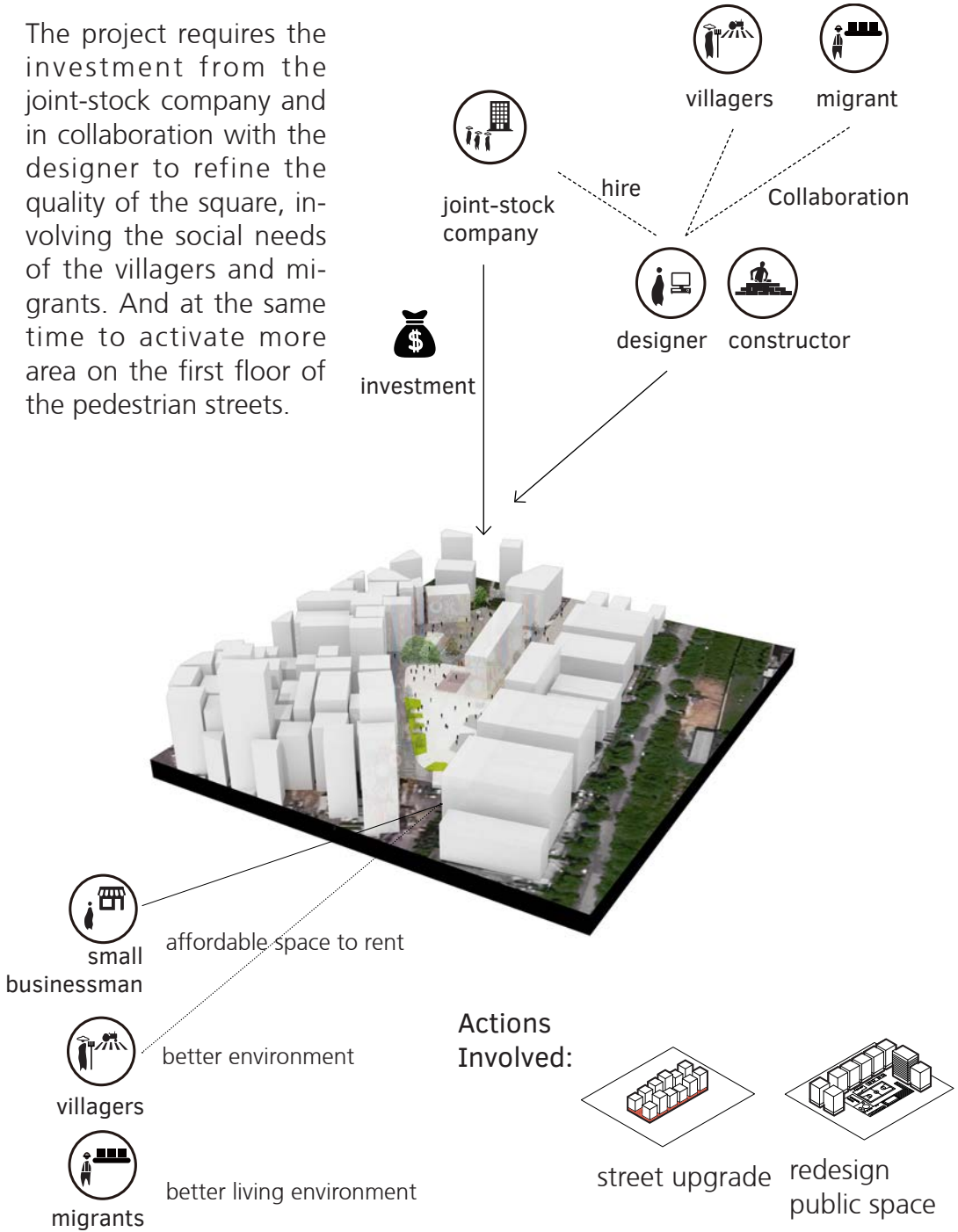
8.2 PILOT PROJECT B

8.2.4 Plan



8.2 PILOT PROJECT B

The project requires the investment from the joint-stock company and in collaboration with the designer to refine the quality of the square, involving the social needs of the villagers and migrants. And at the same time to activate more area on the first floor of the pedestrian streets.



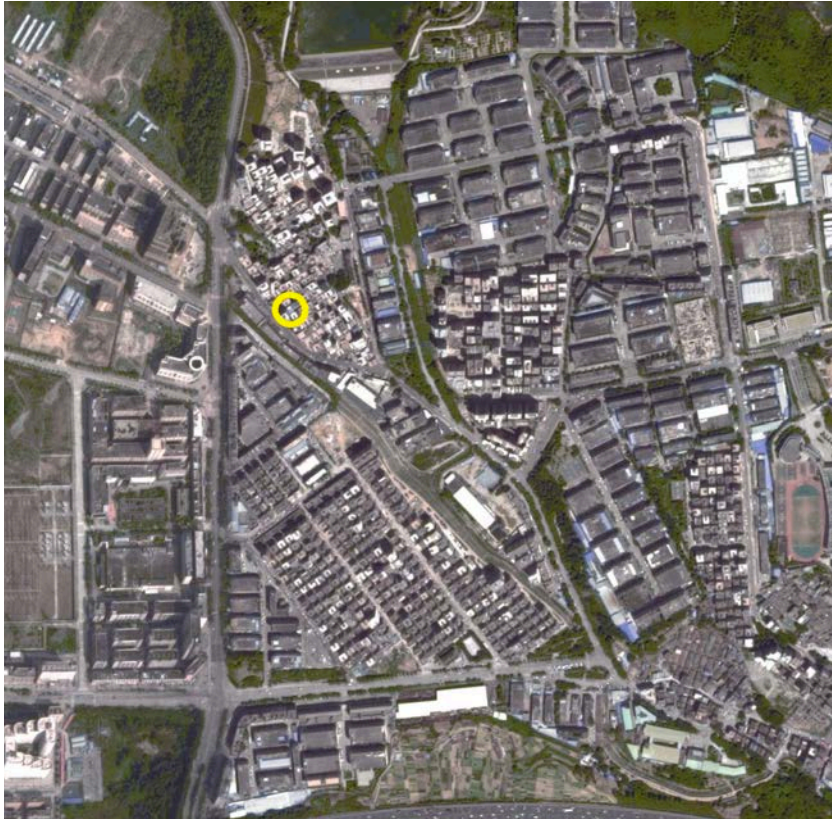


open market and open space for public event



Leisure space for users with soft edges

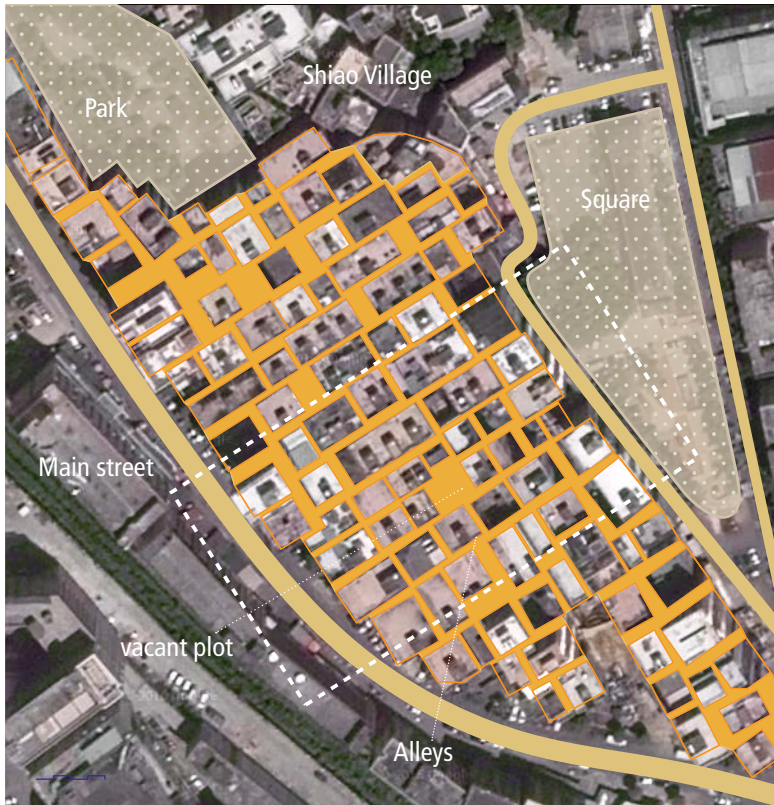
8.3 PILOT PROJECT C



This project is a pilot project to show how to improve the quality of linear space on local scale with the collaboration of villagers and joint-stock company, and to explore the possibilities of improving the structure of urban village on bigger scale. The area selected is in Shiao village where the quality of alleys are unsatisfied.

8.3 PILOT PROJECT C

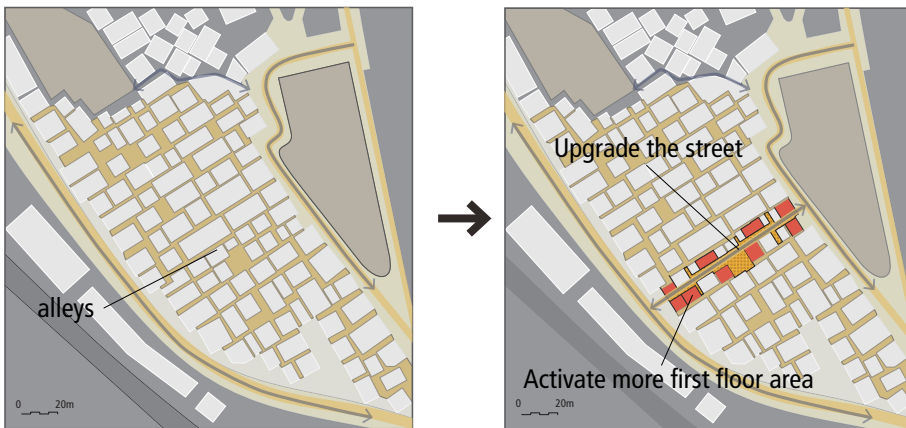
8.3.1 Current Conditions



The quality of alleys are unsatisfied since buildings on both side is too high that the alley space remain functions for passing. And there is no functions on first floor.

8.3 PILOT PROJECT C

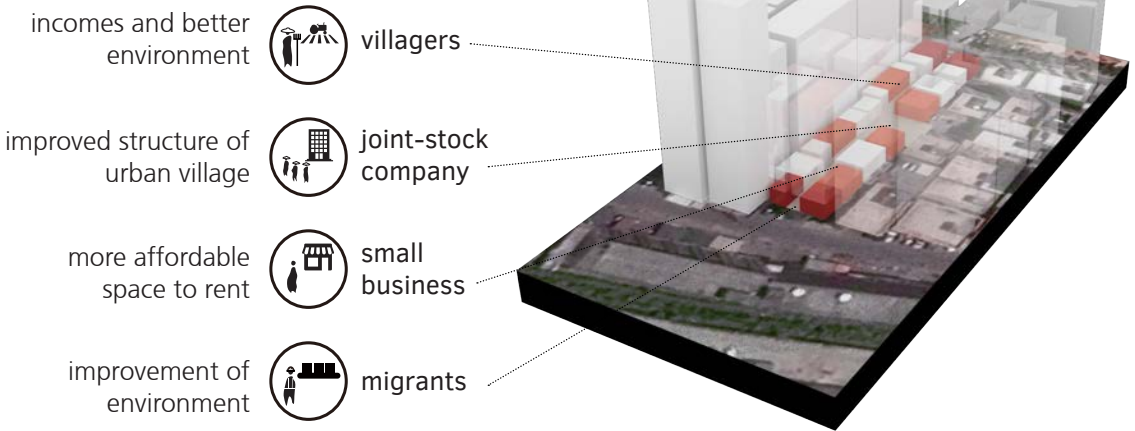
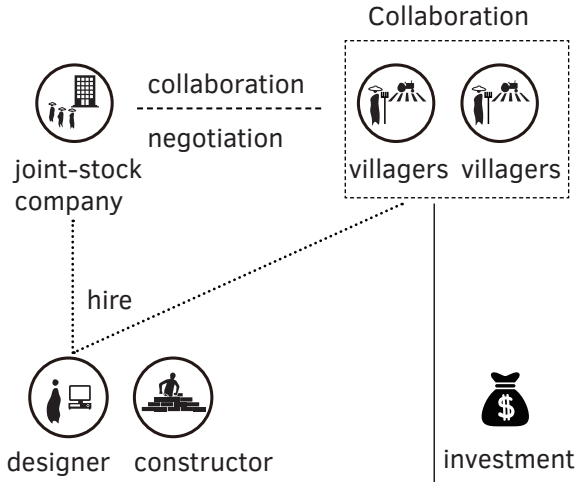
8.3.2 Diagram



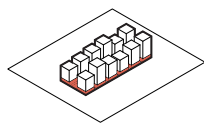
Upgrade the street and improve the quality of alley space to open the structure of Shiao village and activate more first floor space for commercial or public use.

8.3 PILOT PROJECT C

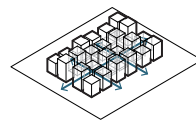
Villagers collaborate with each other and make the investment together. Joint-stock company functioned as a negotiation platform and also control the whole structure of urban village. Designers and constructors are hired by both the villager groups and the joint-stock company to do the project.



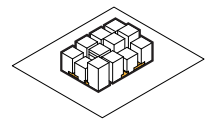
Actions Involved:



street upgrade



hierarchy upgrade



linear space improvement



9. Conclusion

9 CONCLUSION

Approaching the profound urban vitality

To enhance the profound urban vitality, it is first important to understand the relation between urban form and the socio-economic configuration since the physical structure and the socio-economic configuration are highly integrated and in a way represent one another. Such relation can be reflected on the intensity, diversity and continuity of human activities which are highly related to urban vitality.

Though urban villages has different locations with various economic statues and societal conditions, there are similarities between them with huge mounts of migrant people and the vibrant informal economy. So to enhance the profound urban vitality is to build integrations in terms of economic configurations and societal structure. In search of better ways to connect and integrate with the opportunities and trends in its own context, and reflect on the form of space. And the urban vitality that it presented can be profound and continuous.

Matching the space and needs of the users

Human activities are the result of people's need and environment conditions. Different people and social groups have different priority of their needs and spatial quality could facilitate or hinder the occurrence of human activities. Public life became vibrant when the space matches needs of users. It is in a dynamic process that both the needs of users and space are not static.

So it is important to understand users' real need and find appropriate spatial support to bridge them together. In dealing with the public space of urban villages, it is necessary to take the needs of different groups into account and fulfill their diverse needs, so as to encourage people to participate and behave in public domain.

Dealing with the complexity of urban villages

In urban villages, the individual, especially the key stakeholder, takes his own initiative. They make decisions and take actions based on their own interests and reflected on space, which is uncontrollable and unpredictable. And it is also where the complexity exists in dealing with the spatial transformation in urban villages.

But what they did is, in fact, in close relation to their interests. So to understand the interests of relevant stakeholders and to clarify the relations between space and stakeholders helps to deal with the complexity. With different ways of collaboration in terms of the initiative of the stakeholders, it not only helps to motivate positivity of the stakeholders, but also helps to do the spatial transformation more efficiently in urban villages.

On the other hand, the complexity of urban villages is accompanied with flexibility and adaptability, which is key qualities of urban villages. These qualities should be maintained since they are strengths when adapting to the changes and trend, which make urban villages dynamic areas. Take advantage of the strengths of urban village could also contribute to the vitality of the whole city.

REFLECTION

1. the relationship between the theme of the graduation lab and the subject/case study chosen by the student within this framework(location/object).

This thesis focuses on urban villages in China, which is a complex topic formed in the context of China's fast urbanization and involved a lot of issues such as economy development, migrant workers, land ownership system and so on. The selected research area is Dalang in which large number of urban villages exist. As a study case, Dalang, located in the north part of Shenzhen, is a typical case to discuss the transformation of urban villages and the relationship between urban villages and the city as a whole.

This thesis is in the Complex Cities Lab and Inclusive Cities studio. On one hand, this thesis tackle the complexity of urban villages in China ranging from the the unpredictability of the individual housing block to relation between the physical form of urban village and the social-economic configuration. On the other hand, this thesis paid attention to the lives and needs of migrant workers, who are are the majority of the tenants in urban villages.

The object of the thesis is to enhance urban villages' profound vitality in a way to benefits the migrant workers and city's development. In this thesis, urban village is considered one type of city forms with complexity and interacting social-economic configuration and various actors with their interests. It requires not only a comprehensive understanding of the context, but also a framework to deal with its complexity so as to avoid using simple solution to deal with complex problems.

2. the relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework.

The flow of progress of the thesis is in the framework of the complex cities studio, following the methodical line approach, from context and spatial analysis, vision, to the strategy, and then pilot projects.

System thinking is involved in constructing the analytical framework by considering urban village as a system to discuss the relationship between social-economic configuration and space, human activities functioned as bridges to connect both sides. And theoretical framework is built based on the literature review of the definition of the key words such as urban vitality, urban village and self-organizing system and the relations between the social-economic configuration and space.

Besides, to approach the complexity, the space of urban village is divided into several components based on the landownership and interests of various stakeholders. The way of categorizing sub components by its initiative could help to deal with its complexity in a way that strategies are taking the stakeholders into consideration.

3. the relationship between research and design

This thesis integrated design and research, each of which plays an important role in the progress of the thesis.

The research helps to answer the questions related to “why”. In this thesis, on one hand, the research helps to figure out the reasons behind the phenomenon, so as to answer why the urban villages were formed and functioned in such way. On the other hand, it also clarified the interrelationship between different factors, which not only facilitated a comprehensive understanding of the problem and the contexts, but also reveal the logic and relationship behind the surface. The result of the research provides a clear network of various elements and lay the foundation for designers who work on solutions. And by describing the problems clearly as well as the relationships between different elements, the design process could have clear targets to deal with and could widen the solutions from different perspective.

The design process aims to find solutions, which, in other words, answer the “how” question. The design is closely related to the results and answer can be various. In the design process, different spatial resource and elements are organized to make the result products as response to the vision and goal. So designers could take a position on this design process by making connection and recompositions. The relationship between research and design is integrated instead of separated. It’s a mutual process that the conclusion of the research could also have impacts on the design process and even the design products, and new questions raised during the design process requires research to give an answer.

As for this project, the research revealed the reasons leads to the urban village problem by narrowing down and specifying the relationships between different factors. Besides, it contributed to the framework of approaching the research question resulted in conclusions and vision to be achieved. Design products show visualizations of the abstract conclusions with spatial design, and what’s driving the design is the conclusions from the research.

4. the relationship between the project and the wider social context

This thesis focuses on alternative spatial transformation of urban villages, which is moderate compared to the previous “demolish-and-rebuild” model. By rethinking the urban villages and rediscovering its value, urban village still functioned as the gathering place for the migrant workers and new arrival people but with diverse economy and more social groups. Migrant workers still find their opportunities to survive and live in big cities, which provides vitality to the city’s sustainable development in a big picture. And the enhancement on social aspect does good to the integration between the local people and migrants, which helps to achieve a diverse and harmonious society.

Besides, Shenzhen is one of the emerging cities drawing people’s attentions in the last few decades. And Dalang, located in the periphery zone of Shenzhen, functioned as a typical area in which the manufactory industry meets urban village. “As a “role model” in China’s cities, the discussion and experiment on Shenzhen’s urban village issue could also provide more perspective in dealing with the complex issue to other cities in China that facing similar problems.

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Enhance The Vitality In Urban Villages

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Abstract

Urban village in China is one type of informal settlements that widely exist in China's major cities where rapid urbanization led to city expansion. The role urban villages played is often considered negative in terms of city development. This article focuses on the urban vitality in urban villages and discusses the vitality enhancement in urban villages. The approaches to the topic are consisted of three parts: 1. definitions of the key concepts, 2. urban vitality in urban villages in terms of human activities, and 3. principles to enhance urban vitality in urban villages. For the first part, the definitions and contents of the two concepts—urban villages and urban vitality— will be discussed based on previous studies, leading to the understanding of the characters of urban villages and the composition of urban vitality: economic, social and cultural life constitute urban vitality. After that, main discussion will focus on the economic and socio-cultural vitality in urban villages, ranging from the flexible and vibrant informal economy to the vital and inclusive public life in urban villages. And lastly, this article concluded that: 1. consider informal economy as resources, 2. promote vital and inclusive public life and 3. self-organization, are three principles that should be adapted in order to enhance the urban vitality in urban villages.

Key words: urban vitality urban villages human activities

1. Introduction

“Urban village” in China is a unique but commonly seen city form as the product of China's fast urbanization. Urban villages usually have organic patterns surrounded by regular urban grids and keep their ancient spatial structure in conflict with modern city's demands. And the “urban village” issue itself is full of charms and challenges. On one hand, urban villages leave an negative impression to the general public with the unregulated buildings and the poor living conditions. On the other hand, urban villages are lively areas with vibrant and flexible small business and high density population. Besides, it is home to mounts of migrant people who ultimately want to settle down in cities where more opportunities are offered. Instead of completely demolishing the urban villages, rethinking the values of urban villages attracts more attentions from professionalists and researchers. Considering the fact that these urban villages usually have a history of at least few hundreds years, it is a chance to maintain the diversity of city form by preserving and upgrading the urban villages. So new perspective on urban villages is needed to activate the potential of urban villages. Since urban villages are lively areas with high population density and vibrant small business, the enhancement of its urban vitality not only benefits the self-transformation in urban villages, but also contributes to the city development in a big picture. Thus, having a full appreciation of “urban villages” and “urban vitality” is necessary.

2. Urban Village

2.1 Definition

Urban villages in China refer to those rural villages which keep the physical structures but lost the agricultural functions under the influence of rapid urbanization(Gao, 2006, Liu, 2010, Him, 2010,Zacharias,2013). With the city expansion, the influx of migrants and capital reshaped the economic structure and generated mounts demands of space, thus leading to the formation of an urban village(Figure 1).

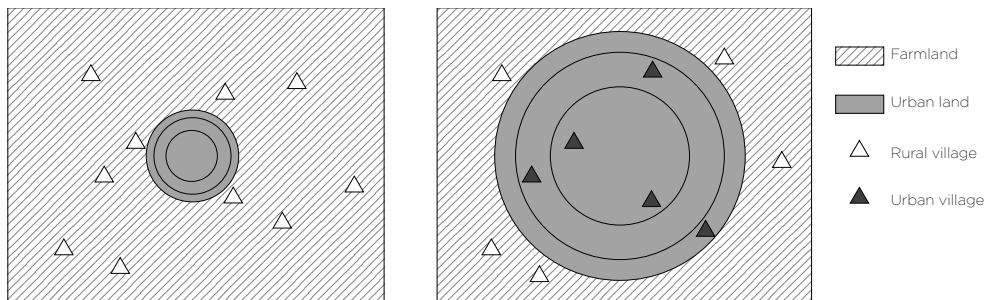


Figure 1. the transformation of rural villages to urban villages(Hao, 2011,redraw by author)

2.2 Characters Of Urban Villages

The development of urban villages is spontaneous and profit-orientated, leading to its irregular layout. Urban villages usually are in the absence of formal regulating and planning and retain the layouts handed down from early times when urbanization was not introduced. (Zacharias, 2013, Him, 2010) So the scale of the street network, which accommodated to pedestrian, is in contrast to a regular urban block. Another character of urban villages is the high building density since the villagers reconstruct their buildings to gain more rental spaces in response to the housing demands from the floating population(Liu,2010. Him 2010, Hao,2012). Besides, the infrastructures in urban villages, involving water, sewerage, drainage, power and road works system, are usually decrepit or not accommodate for the demands.(Hao, 2012) And the public and green space resources are limited in an urban village both in quantity and quality.

2.3 Self-Organization In Urban Villages

Because the land of urban village is collective owned by all the villagers not owned by the state. The individual villagers, legally or illegally, reconstruct their housing into higher buildings with less supervision or control from the government side. As a result, urban village itself becomes as a comparatively independent subsystem which has less exchange of matter and energy with the surrounding areas. In fact, urban village is functioning as a self-organization system: 1. The numerous interactions of mounts of participants have made urban village a complex system which is uncontrollable and unpredictable; 2. The local villagers made their own decisions in response to changes of global surroundings, while their behaviors together constitute the global surroundings. And thus, the evolvement of urban

villages should be based on the self-organization mechanism that the non-linear interactions between the various local stakeholders are in a circular-causation relationship (Figure 2).

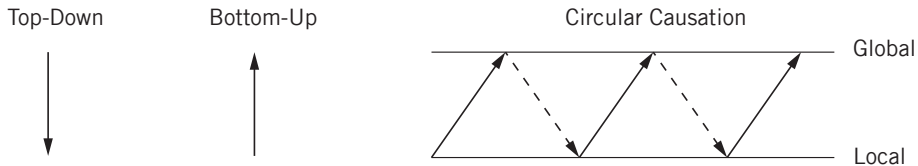


Figure 2. Top-Down, Bottom-Up And Circular Causation

3. Urban Vitality

John Montgomery (1988) portrayed urban vitality as combinations of mixtures of activities. "It (Vitality) refers to the numbers of people in and around the street (pedestrian flows) across different times of the day and night, the uptake of facilities, the number of cultural events and celebrations over the year, the presence of an active street life, and generally the extent to which a place feels alive or lively."

Jane Jacobs (1961) put her attention on sidewalks, parks and city neighborhoods in relation to daily life. In her opinion, mixed uses of buildings to provide more opportunities for people to come, small blocks increase accessibility, and dense population facilitates the intensity of activities. And she appreciates the old buildings, with different ages and styles, contribute to the economics of cities. For her, density, short blocks, old buildings and mixed uses lead to diversity.

Similarly, Jan Gehl (2010) holds the view that three types of human activities— necessary, optional and social activities— in the public domain weave a lively city. As he mentioned, "the potential for a lively city is strengthened when more people are invited to walk, bike and stay in city space". Therefore, he is in favor of slow traffic and human scale which facilitate the occurrence of those activities.

Another perspective provided by Christopher Alexander revealed the secrets of those successful "nature cities" who have arisen spontaneously over many years. City is regarded as a large and complex system consisted of many small systems (Alexander, 1965). In the small system, the physical part like traffic lights and sidewalk, and the changing part such as people, light and impulses, can interact and work with each other. And he believes the multiple overlaps of these small systems are key to the "artificial cities" to "acquire the patina of life".

A different definition is given by Kevin Lynch (1981) who argues that "vitality, the degree to which the form of places supports the functions, biological requirements and capabilities of human beings." He focused on the health and sustainability of city forms and described sustenance, safety and consonance as three fundamental features of the environment that people and creatures, can survive.

Though “urban vitality” is defined from different perspectives, the core of the concept they described is similar: the intensity, diversity, and continuity of human activities in one place over time.

First, discussions link vitality to intensity of human activities. High density and short blocks enable the concentration of a number of people and increase the accessibility, facilitating the intensity of activities. And human scale design in public space encourages people to present in outdoor spaces and thus create more opportunities for social interactions.

Second, their statements try to portrait diversity. The mixed uses of functions and the buildings of different ages can offer various motivations and uses for different groups. And Alexandra’s description on overlaps of small systems also reveals a multi-related but diverse network system. Besides, the weave of necessary, optional and social activities contributes to diverse outcome with various people’s behaviors.

Third, continuity in time dimension is involved. Lynch bridges the vitality to a health and environmental friendly city form in a long term. And Montgomery’s statement on the time duration of the activities and events put the focal point on the time dimension.

Since the core of urban vitality is closely related human activities, to approach the urban vitality, the focus should be on economic, social and cultural urban life which constitutes urban vitality(Figure 3).

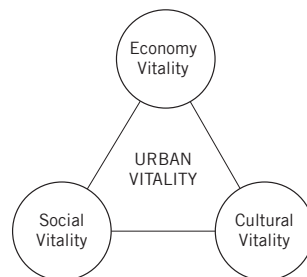


Figure 3. Constitution of Urban Vitality (Adapted from Zhou,2012)

4. Economic Vitality In Urban Villages

Informal economy is the majority of urban villages’s economy for the low barrier to entry and avoidance of taxes and regulations(Yin et al, 2009). With many informal enterprises located in, urban village is the center of informal economic activities, involving mainly three parts: the informal housing market, land lease to factories, and small business.(Tan, 2005, Zhang, 2014) Firstly, rents collected from informal market are the primary source of income for villagers. The economy of urban village has actually become rental-based economy. Villagers invest on their own house reconstruction to gain more rooms and rent them to outsiders so as to get a long term return. Besides, many urban villages lease the collective-owned land to factories to get commercial benefits. And it also creates jobs for migrant workers, contributing to the villages’ economy. In addition, small businesses are the third pillar of the village economy. Almost every urban village has a market zone including grocery stores and service shops targeting migrant workers as their main service group.

4.1 The Strengths And Weakness Of Informal Economy

The strength of informal economy lies within its flexibility and vitality. Informal economy, lacks of defined structures, has the ability to quickly respond to the needs and market conditions. As one major driving force, informal economy contributes to both employment and sustainable economic growth(Brown et al, 2014, Margolis, 2012). As result, the scale of the informal economy is huge and create mounts of job opportunities. Informality provided vitality and flexibility to energize formality, and existing in a symbiotic relationship with formality.(Barnard, 1938)

However, informal enterprises have obvious weaknesses. They are small, unproductive and stagnant, and they rarely become formal.(Porta&Shleifer, 2014) The competition and efficiency are low, which restricts the development in the formal market. Besides, migrant workers lacked the proper education, skills, and value-orientations. And the effort try to formalize the informality always unsuccessful for lack of educated entrepreneurs, skilled workers and external support.

4.2 Change The Mind Set: The Functions Of “Arrival City”

Doug Saunders(2010) come up with the concept of “Arrival City” to see the informal settlement as “neighborhoods where the transition from poverty occurs, where the next middle class is forged, where the next generation’s dreams.”, instead of seeing informal settlement as places with potential conflicts and crimes. He pointed out the dynamic nature of the informal settlement and argued that the role of arrival city should be appreciated in relation to economic opportunity, social mobility and socio-economic transformation.

Though arrival city can be success or failure, his view could change the mind set and give an alternative perspective to review the informality. Arrival city functioned as entry mechanism and it should create more economic opportunities to flow the social mobility. And the informal economy should be accepted and improved.

4.3 Mixed Use Concept

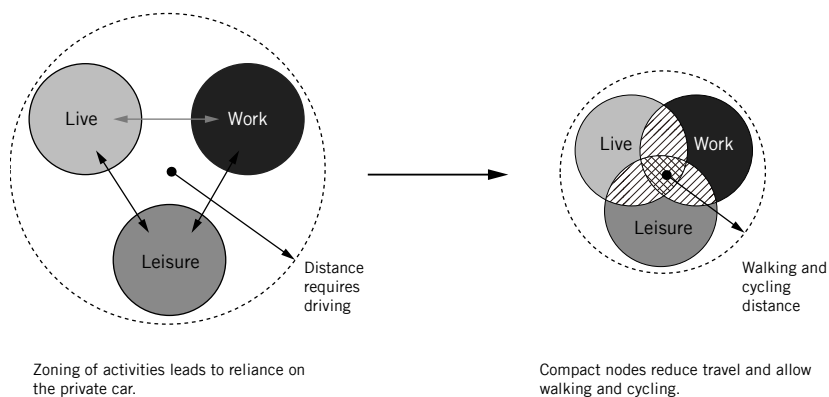


Figure 4 Compact mixed use node(Rogers, 1997)

Mixed-use is of fundamental principle to promote vitality that first advocated by Jane Jacobs(1961) and then reinforced in New Urbanism and compact city theory(Figure 4). Mixed-use concept makes the activities overlapped in space, attracting people with different primary uses. It entails diversity and intensity of activities. And mixed uses development enables high efficiency of land use and increase economic sustainability for local businesses with less car requirement, since a great number of people located in close proximity and encourage to use “foot-traffic”.(Arbury, 2009) Besides, mixed use associated with high density, leads to spatial proximity which not only facilitates cultural activities and social interactions by making space compact, but also contributes to agglomeration economics through distance reduction.

5. Socio-Cultural Vitality In Urban Villages

5.1 City In Human Dimension

Jan Gehl(1971) categorized activities in city space into three types: necessary activities, optional activities and social activities. He pointed out necessary activities like going to work will happened under all conditions, optional activities like going for a leisure walk depend on the quality of outdoor space, and social activities are “all activities that depend on the presence of others in public spaces”(Figure 5). The social activities, as “resultant” activities, evolve from the other two types of activities. The overlapping and shifting of the diverse activities between purposeful walking, stopping, resting, staying and conversing portray the image of vibrant public life.

In his discussion, optional activities and social activities depend on the physical conditions and quality of place. Big events need spatial support, and places in human scale facilities the occurrence of potential activities. He believes human scale and safety are of the key principles to enhance the diversity and intensity of activities in the public domain.

	Quality of the physical environment	
	Poor	Good
Necessary activities	●	●
Optional activities	•	●●●
“Resultant” activities (Social activities)	●	●

Figure 5. relation between activities and space quality(J.Gehl,1961)

One example he mentioned showing the diversity of city life is Copenhagen, where streets and open spaces had been transformed to a pedestrian friendly environment with good

spatial quality. The versatility of urban life thrived, and more people stay in public spaces behavior variously to weave the diversity of public life.

Another example he showed how safety and security can affect intensity of activities is from Donald Appleyard(1969), who has reveal the relation between the intensity of social interaction and the traffic level(figure): the heavy traffic will weaken the intensity of street activities since the heavy traffic generate a sense of insecurity and suppress the occurrence of people's outdoor behaviors. It gives reasons to support the priority of pedestrian-orientation network and slow traffic.

Thus, to create a safe environment that fit human scale can make the space "inviting": people are encouraged to participate, exchange and share, and thus generate a sense of belongings.

5.2 The Essence Of Public Domain

Public space, in contrast to "private space", is the place where different groups of people take various social and cultural activities to have public life. The main discussions focus on the streets, parks and squares. Hajer and Reijndorp(2001) discuss the public space from cultural geography perspective, addressing "the technical and functional-spatial orientation of space and the neglect of a cultural construction of all kinds of places that are imbued with meaning". They argued that since people can organize their own city life with the increase of mobility, and avoid the meeting with the people they don't want to meet, public space as "meeting" place gradually lost its original function. Public space is in essence a space that is freely accessible for everyone. But in reality, public space is either occupied by the same social group or place for different social groups with no "exchange". They come up with the concept "public domain" as "those places where an exchange between different social groups is possible and also actually occurs." It not only extents the public domain to private or collective own space but also points out the essence of the public domain: "different groups become attached to a particular place and somehow or other they must reach a compromise". Public domain experiences occur at the boundary between friction and freedom. "There is always the tension of a confrontation with the unfamiliar", and public domain experiences are "in fact related to entering the parochial of the "others"".(Hajer and Reijndorp, 2001)

5.3 Meaning Behind Space

Furthermore, Hajer and Reijndorp(2001) focus on the cultural meaning behind places. They talked about "place" and "non-place" that "Places are marked by identity, social relations and history, while non-places have no identity and are difficult to define in social or historical terms". It relates to the difference between "sense of place" and "sense of space"(Figure 6). If the activity, physical form and meaning are combined properly, "sense of place" will be produce to get urban quality, while "sense of space" doesn't.(Montgomery, 1998) From the cultural geography perspective, "urban field is no longer the domain of civic openness" but the territory of culture, representing different needs and interests. And public space needs new meanings and uses responding to the changes, since the process is a dynamic one. "Otherwise it will just be a protected and museum-like, and thus no more than a lifeless imitation of vital public domain."

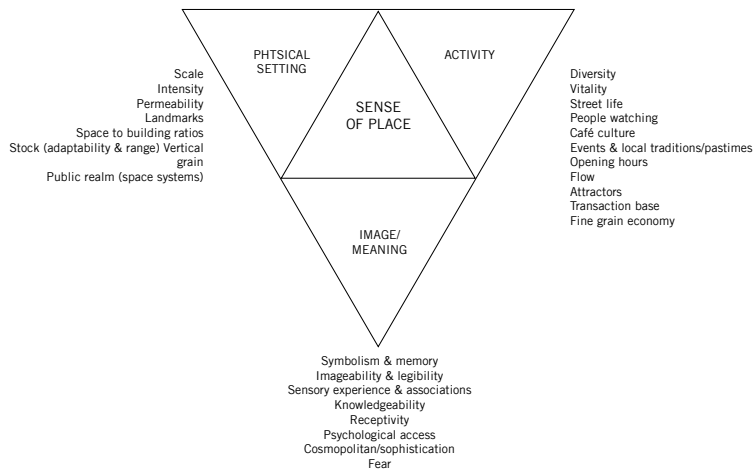


Figure 6 Sense Of Place(Adapted From Montgomery, 1998)

6. Conclusion

In conclusion, three principles should be adapted to enhance the vitality of urban villages:

1. Consider informal economy as resources;
2. Promote vital and inclusive public life; and
3. Self-organization.

6.1 Informal Economy As Resources.

Urban villages are the center of informal economy which create mounts of economic values and job opportunities. Dealing with the informal economy, it is first important to recognize its flexibility and vitality and accept the symbiotic relationship between the informal and formal economy. The focus should be how to improve upon the existing informal economy, not to formalize it or to protect it from formalization so as to make them more adaptive with local support. And then the mind set of informal settlement should be changed: informal settlement should function as an entry mechanism. More economic opportunities should be created to flow the social mobility. Thus, spatial quality should be able to support the improvement of informal economy by upgrading the infrastructure follows the mixed use concept. The aim is to enhance the vitality of the informal economy while maintain the flexibility to become a diverse and adaptive economy, which, of course, requires for suitable spatial conditions.

6.2 Vital And Inclusive Public Life

Public life is unflattering in urban villages, and the public space is unsatisfied both in quantity and quality. In search of more space that has the property of the public domain, is important to people's public life in urban villages. And, bigger role public space can play when the scatter and fragmented public space integrate into a network system, since a system is greater than the sums of its parts.

Besides, human scale should be respected when enhancing the quality of public space. A safe environment where different social groups can find shared interests makes a place inviting. The public space needs cultural meanings in combination with the physical forms, so as to maintain the vibrancy of place in a dynamic adaptive process. And all together contributes to a more vital and inclusive public life in urban villages.

6.3 Self-Organization

Urban village is functioning as a self-organization system and its evolvement and transformation should base on the self-organization mechanism. On one hand, it is important to maintain the openness of urban villages that enable the continual interchange of flows of energy, information, people and matters with the surrounding. People from outside should be able to find reasons to come and feel free to enter the urban villages, and people lived inside should also feel ease to enter the surrounding areas. And on the other hand, the flexibility and initiative of the individuals should be reflected in the self-organization process. Self-organization with various stakeholders as participants could function in a dynamic circle, which not only influences the physical forms but also makes the economic and public space more adaptable.

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