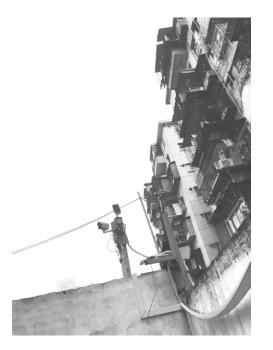
TRANSFORMING DANWEI HOUSING

P5 PRESENTATION

How can the old residential courts from the 1980s to 1990s in Guangzhou respond to diversified demands in urban renewal?

Xin Huang 30.06.2017



Introduction to Danwei housing and Guangzhou case

mono-functional

Typical Danwei housing from the 1980s' to 1990s'

Source: author

Typical residential environment from the 1980s' to 1990s' in China is Danwei housing.

gated

a stable and enclosing system

industry housing Danwei human capital

Danwei housing is part of the welfare built by the work unit(Danwei) to employees.

History of housing policy in China

public sector housing

public housing

public housing (welfare housing+low-profit housing) affordable housing

Danwei housing

Danwei housing

housing price

housing stock

private sector housing

1981

1988

Early practice: increase rent and price. providing the subsidy to encourage purchasing. Housing reform started: Public housing commercializing and the start of commodity housing.

Source: adapted from Lin Haotian, 2014

1998

Public housing distribution system ended.

Typical Danwei housing from the 1980s' to 1990s'

Source: autho

INTRODUCTION

Lack of maintenance in public space and buildings is commonly seen in Danwei housing.

粤A 40M05

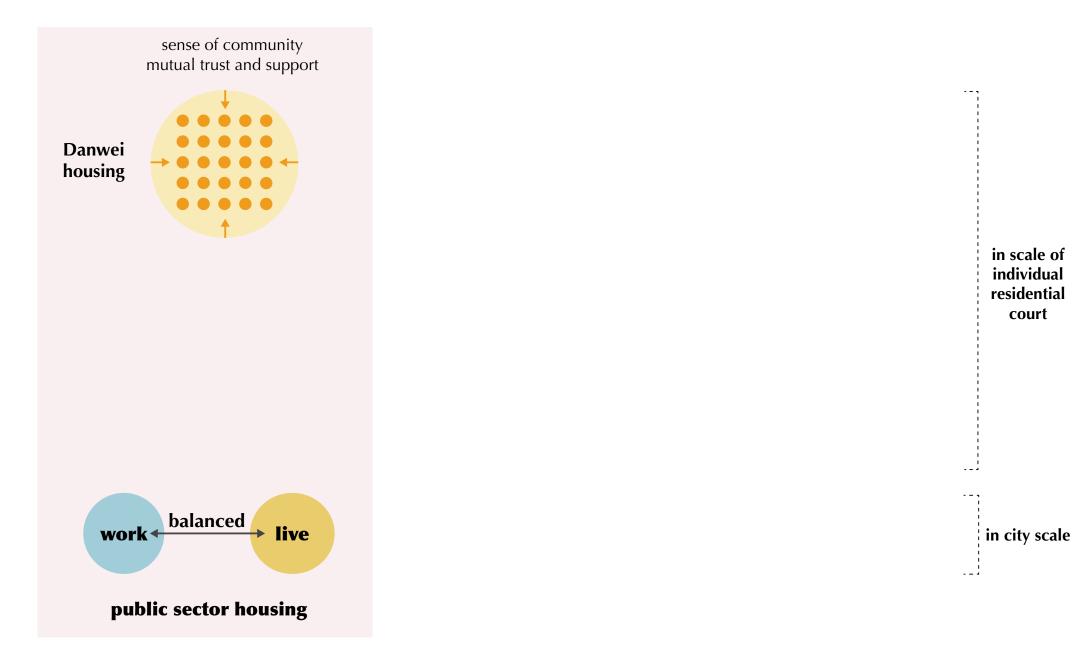
Privately occupied Random parking No elevator Lack of management

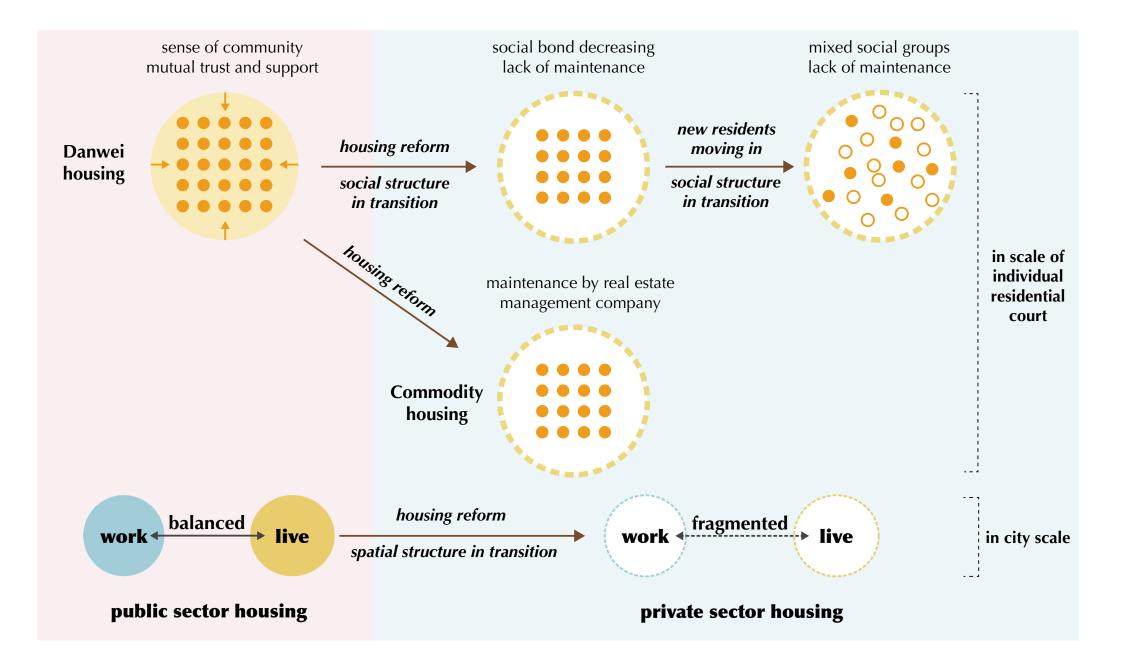
Typical Danwei housing from 1980s' to 1990s'

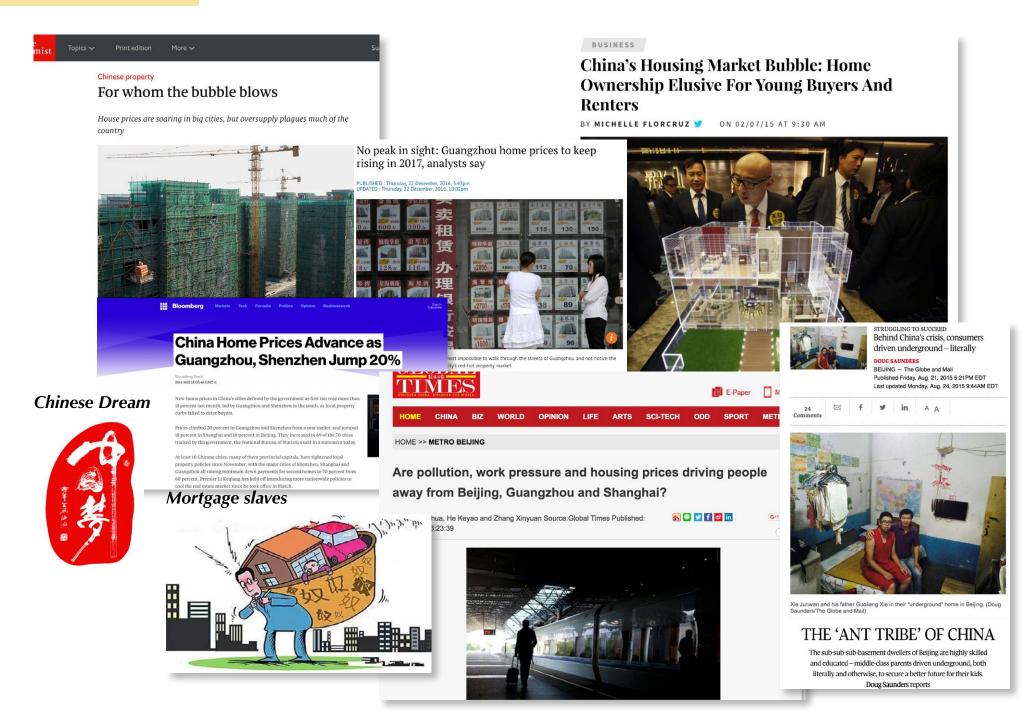
Lack of maintenance in public space and buildings is commonly seen in Danwei housing.

Privately occupied Random parking No elevator Lack of public space management

court







						Search:		
Rank	City ≎	Price To Income Ratio	Gross Rental Yield ≎ City Centre	Gross Rental Yield Outside of Centre	Price To Rent Ratio ≎ City Centre	Price To Rent Ratio Outside Of City Centre	Mortgage As A Percentage Of Income	Affordability Index
1	Shenzhen, China	38.36	1.54	1.56	64.83	64.12	313.71	0.32
2	Mumbai, India	37.67	1.84	2.60	54.20	38.48	447.08	0.22
3	Hanoi, Vietnam	35.86	3.72	5.70	26.91	17.54	377.99	0.26
4	Hong Kong, Hong Kong	34.95	2.21	2.21	45.25	45.29	218.31	0.46
5	Beijing, China	33.32	2.65	2.84	37.78	35.21	273.58	0.37
6	Shanghai, China	30.91	2.16	2.44	46.26	40.94	249.78	0.40
7	London, United Kingdom	30.88	2.25	3.03	44.53	33.00	213.89	0.47
8	Lviv, Ukraine	28.10	5.19	5.66	19.29	17.67	658.92	0.15
9	Kiev, Ukraine	25.96	5.02	5.73	19.93	17.44	626.54	0.16
10	Guangzhou, China	25.85	2.22	2.60	44.95	38.52	221.20	0.45
11	Tokyo, Japan	23.65	1.68	1.98	59.35	50.50	137.80	0.73
12	Ho Chi Minh City, Vietnam	23.62	5.91	7.10	16.93	14.09	260.09	0.38
13	Odesa, Ukraine	23.09	4.56	4.99	21.94	20.02	413.45	0.24
14	Kharkiv, Ukraine	22.92	6.67	6.40	15.00	15.62	554.91	0.18
15	Moscow, Russia	21.35	4.21	4.60	23.78	21.73	307.76	0.32

Property Prices Index of 2016 Mid-Year

Job opportunity in first-tier cities also means higher living expenditure.



S43 G94

Hangkang



G55

G94

S2

Zhaoqing

G80

suburban **RESEARCH AREA** Guangzhou central districts uangzhou

Dongguan Guangzhou is located in the strategic location of Pearl **River Delta.**

S43 G94

centra districts

Föshan

A traditional industry city

A migrant city A global city GIS Jiangmen Zhongshan

Source: author

S254

Huizhou

G25

A historical city

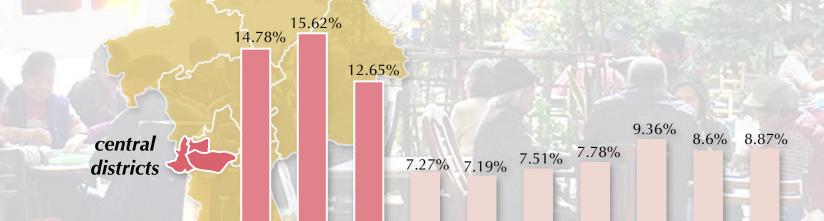
Honok

Like most Chinese cities, central districts of Guangzhou are aging rapidly.

Elderly people are mostly living in historical buildings in city center and Danwei housing.

Source: author

Percentage of old people(>65 year old) of total population in Guangzhou by districts compared with national data in 2010



Liwan Yuexiu Haizhu Tianhe Baiyun Huangpu Panyu Huadu Nansha national

Source: China National Bureau of Statistics

Guangzhou-an attractive migrant city

Elderly people enjoy resting in residential courts.

Rest and chat Supervise Play card with friends grandchildren game, Mahjong

Diversified social groups and demands

Or resting in urban public space such as square, commercial complex.

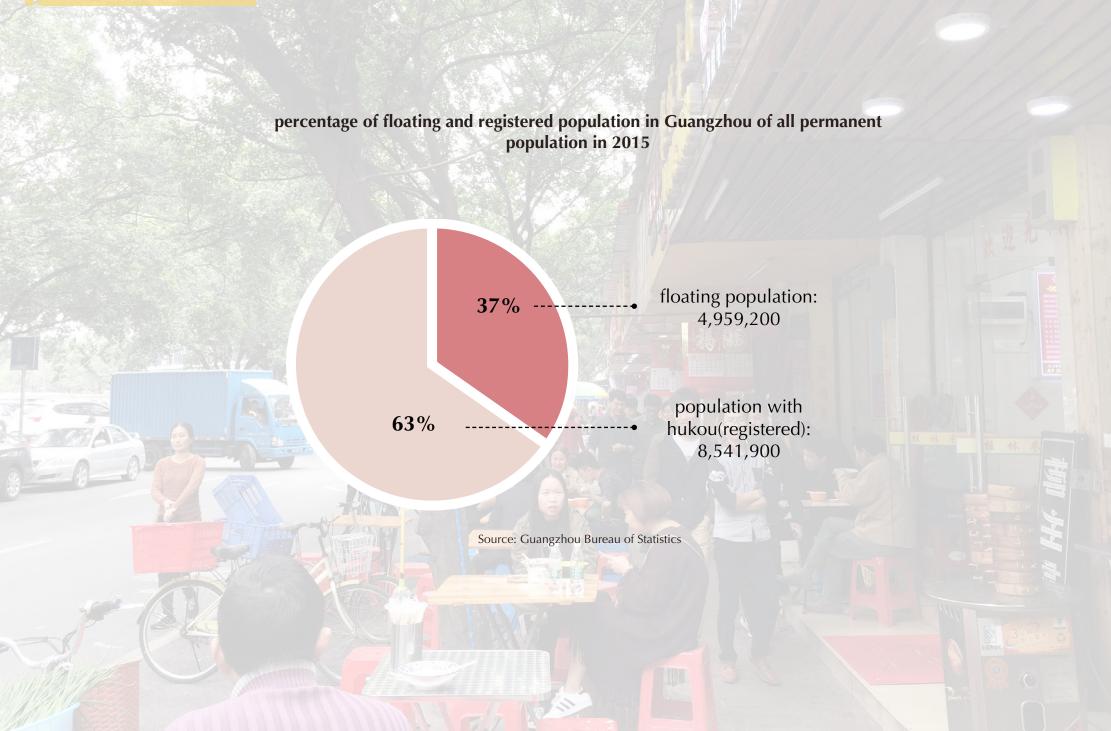
PROBLEM DEFINIT

Rest and chat Supervise Play card with friends grandchildren game, Mahjong

Guangzhou is one of the main cities with highest population mobility in China.

An attractive and prosperous city is partly reflected on the human capital it has accumulated.

Source: author



daily commuting

YCHR

1

Young people commute by public transport to work or school everyday.

Source: http://gz.leju.com/news/2016-12-22/07046217474663271154151.shtml

Diversified social groups and demands

24

They live fast-paced life, prefer eating out, meeting friends, shopping, exercising...

Source: http://www.starlight-walk.com/

intern

FATAVANA

From a grand vision in urban planning,





rendering image of the south section of Guangzhou new central axis Source: http://www.gznews.gowya, 2000



housing removal in Guangzhou Source: http://storage.slide.news.sina.com.cn/slidenews, 2015

to a global urban image.

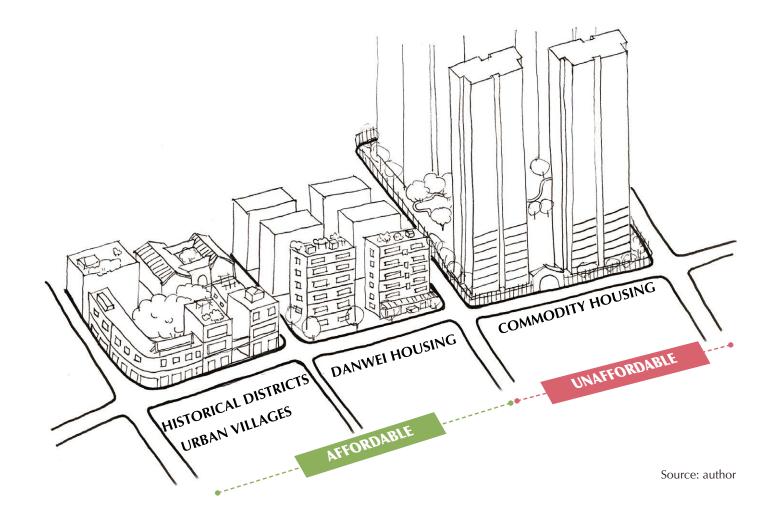
Urban renewal in Chinese cities is a market-driven process to achieve modernization in a short time.

Guangzhou new central axis Source: http://www.cantontower.com

Conflicts between interests of local stakeholders and the government have been revealed intensively in the urban renewal process.

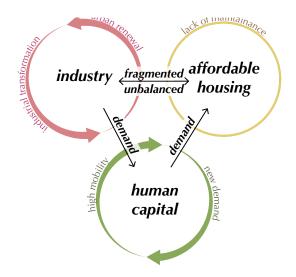
Baivun District





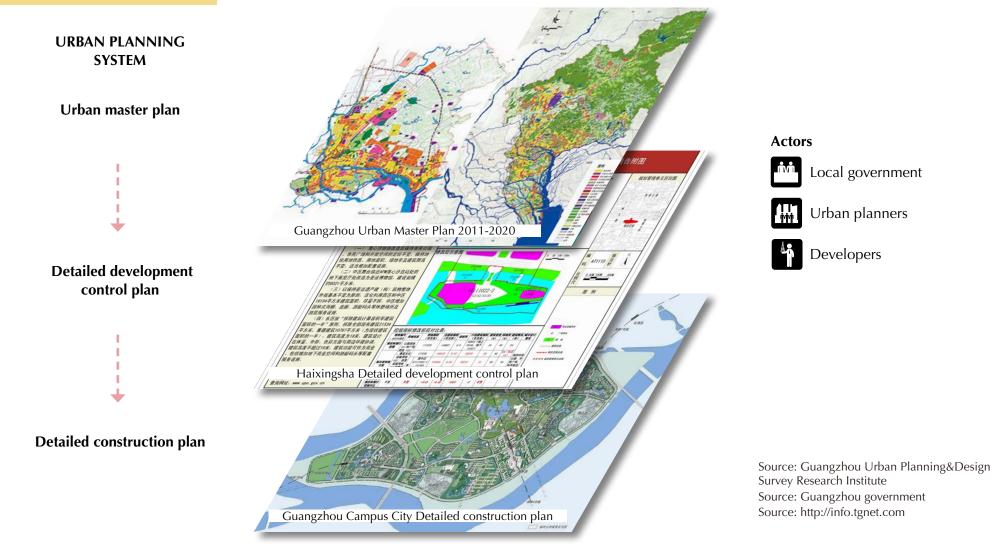
The promotion of commodity housing and urban renewal on other housing typologies have limited affordable housing options for diversified demands.





How to understand these phenomena from theoretical perspectives?

THEORETICAL FRAMEWORK



The spatial, economic, and social manifestation that we see in Chinese cities is a localized modernization process under the hierarchical urban planning system.

Homogeneous urban image





The top-down planning system together with the idea of rapid modernization have resulted in the contemporary city at present.

Industrial transformation and rising of new social groups

The Celel

ative industry parl

The elegant atmo refined flavor mix and finishes, a c create a suitable

which revealed Fabric refreshi

THEORETICAL FRAMEWORK

During the industrial transformation, new social groups are emerging, working in new industries, and embracing new lifestyle.



THEORETICAL FRAMEWORK

Compact

Industrial transformation and rising of new social groups

The concept "New Urbanization" has emphasized the essential concern of sustainability in urban development and industrial transformation.

Smart

Green

Source: htt

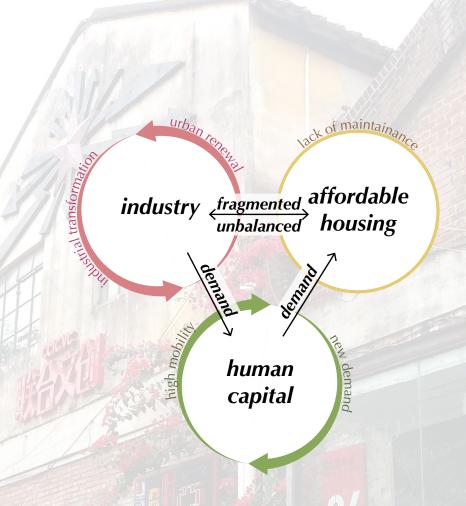
Low-carbon

nemall.com/Artic

nal clothes manufacturing factory %2Bp54ml5pyN6KOF5Y6C.html

Industrial transformation and rising of new social groups

THEORETICAL FRAMEWORK



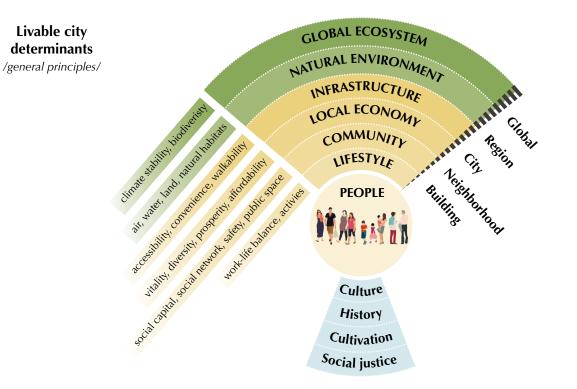
The dynamic balance is built up between industries and human capital in industrial transformation. On the contrary, the bond between industries and housing is lost.



Owing to the fast development of Internet platform, and logistics, new industries are becoming more flexible in demand of space.

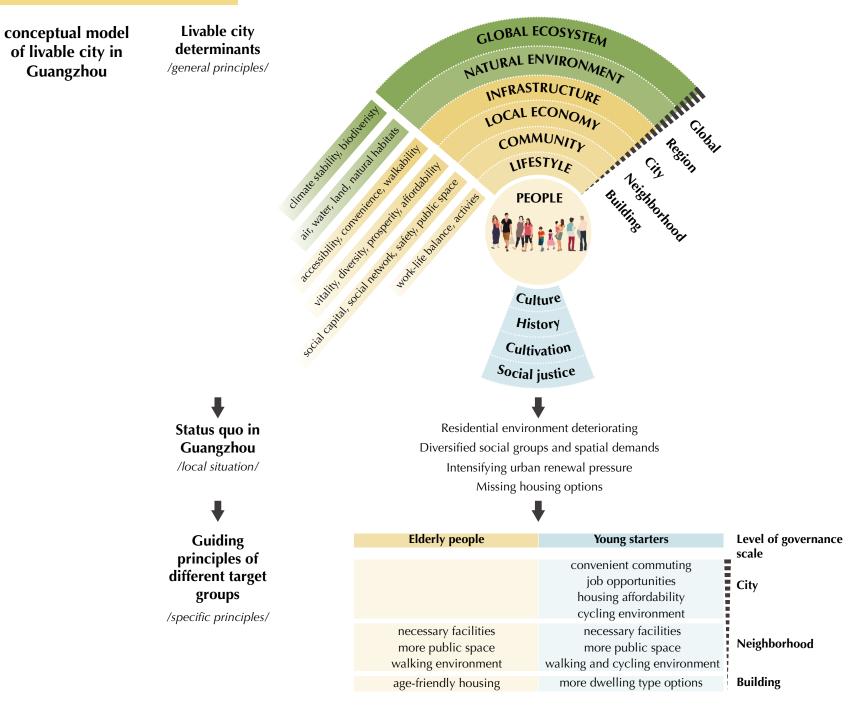


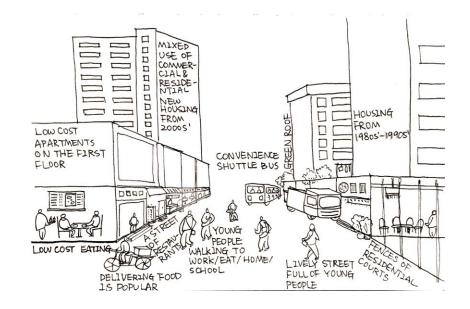
THEORETICAL FRAMEWORK



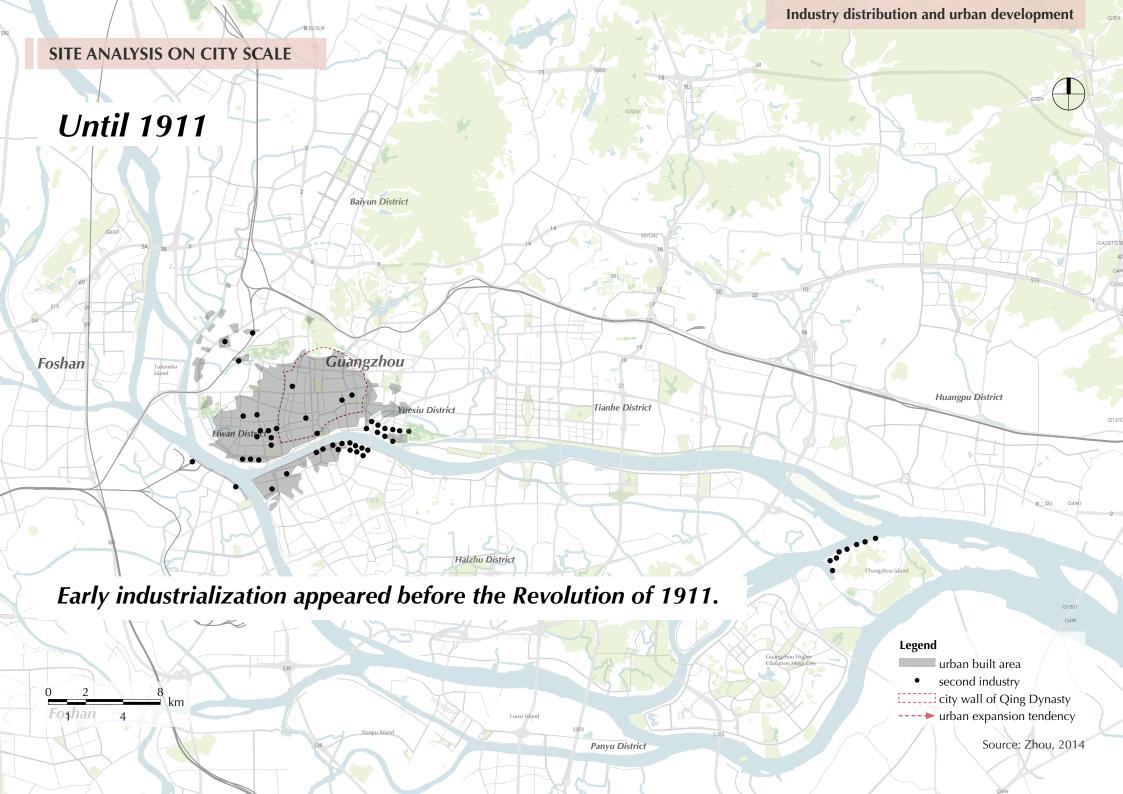
In response to "urban sicknesses" in Chinese cities, to build harmonious and livable city is listed as essential goal in "New Urbanization" strategy.

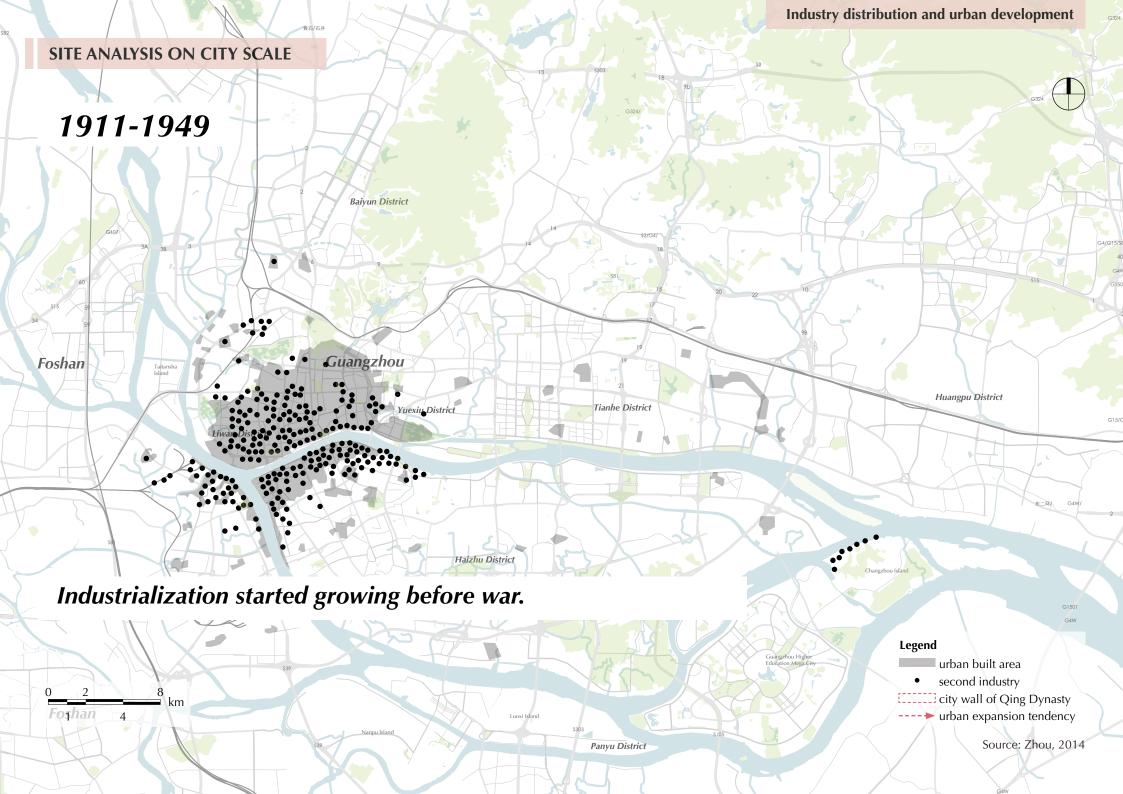
THEORETICAL FRAMEWORK

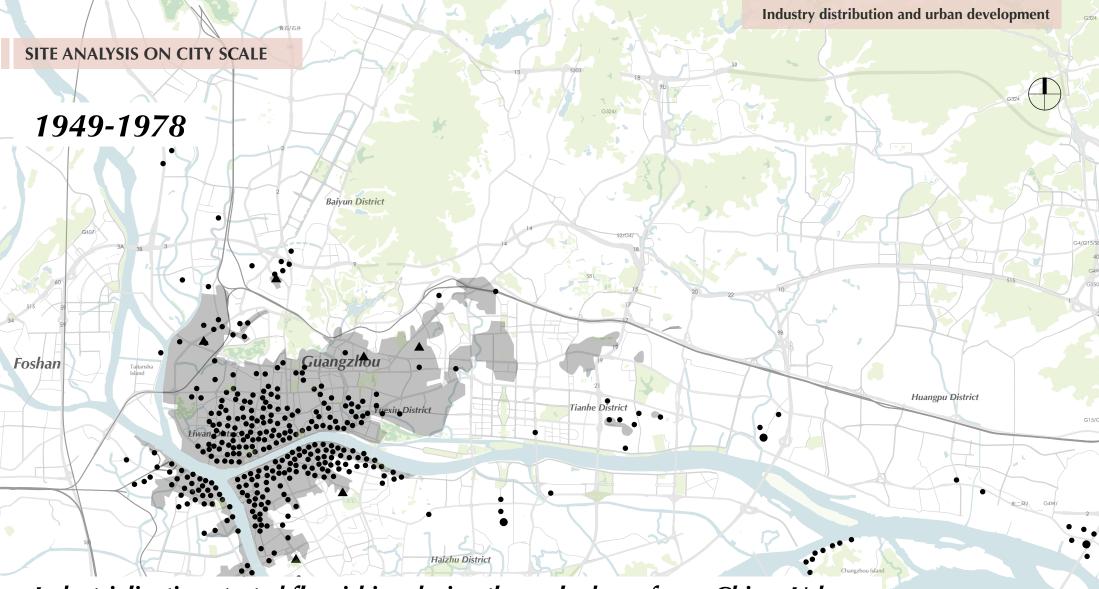




What can be concluded from the local situation in the Guangzhou case?







Industrialization started flourishing during the early days of new China. Urban structure was influenced by industrial distribution.

Luovi Island

Panyu District

8

4

Foshan

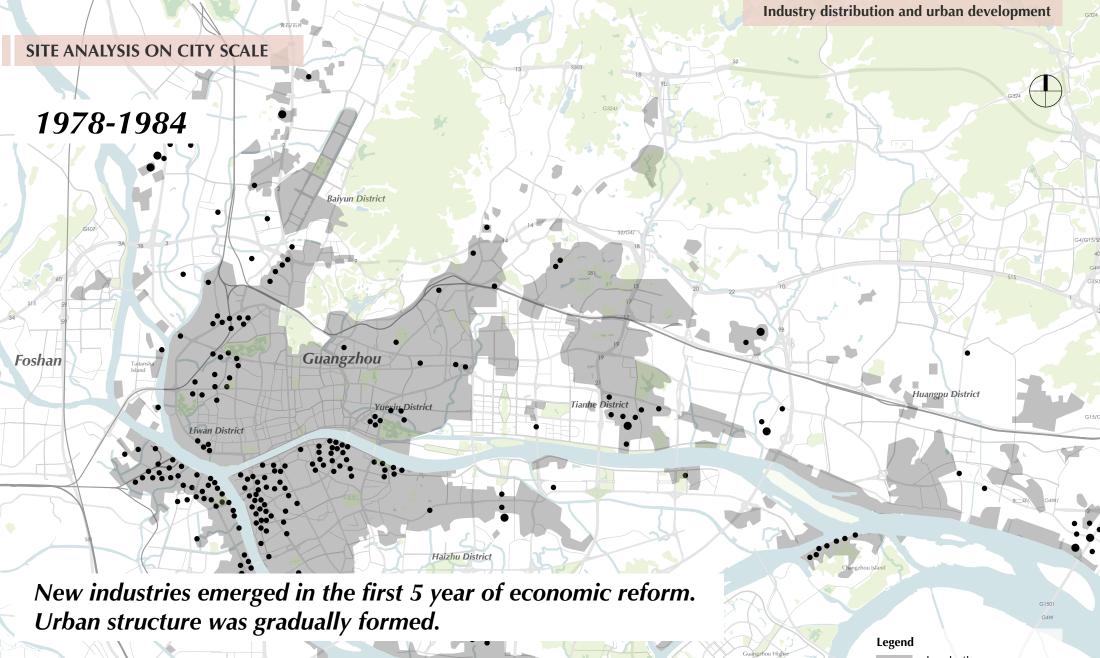
⊒ km

⊾egend

urban built area
second industry
city wall of Qing Dynasty

--> urban expansion tendency

Source: Zhou, 2014



urban built area • second industry • city wall of Qing Dynasty • urban expansion tendency

Source: Zhou, 2014

Panyu District

Luovi Island

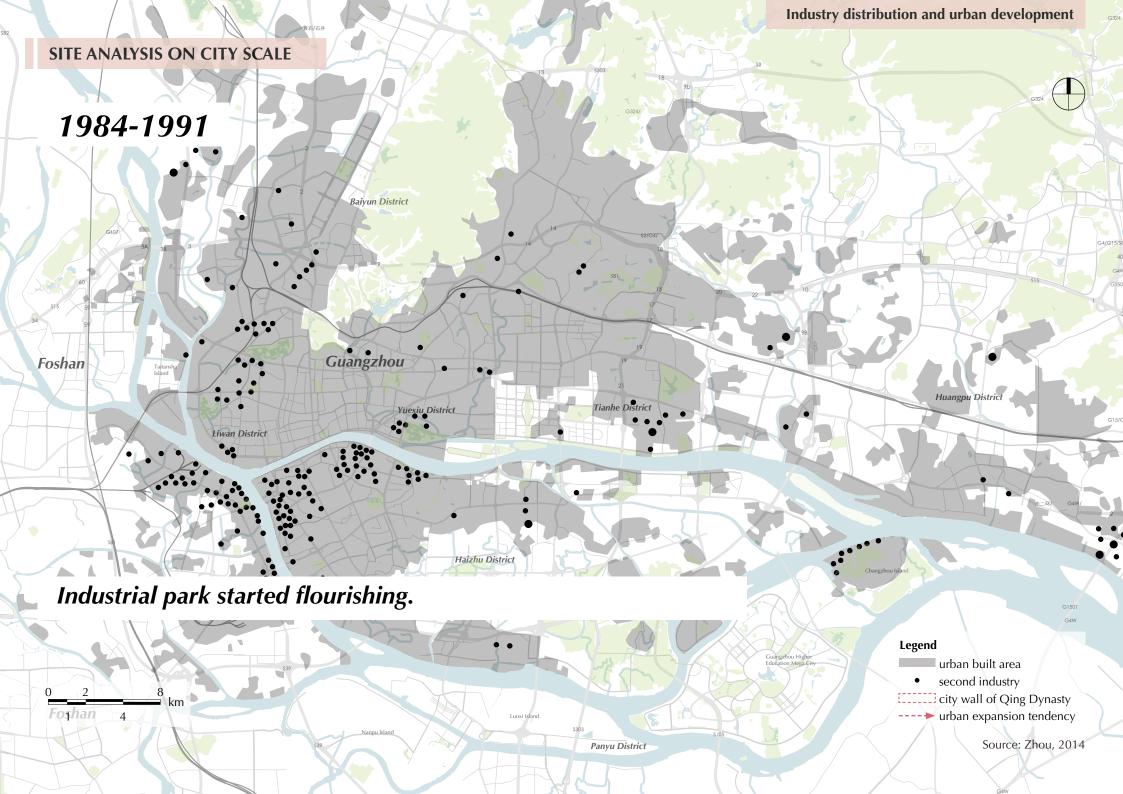
2-

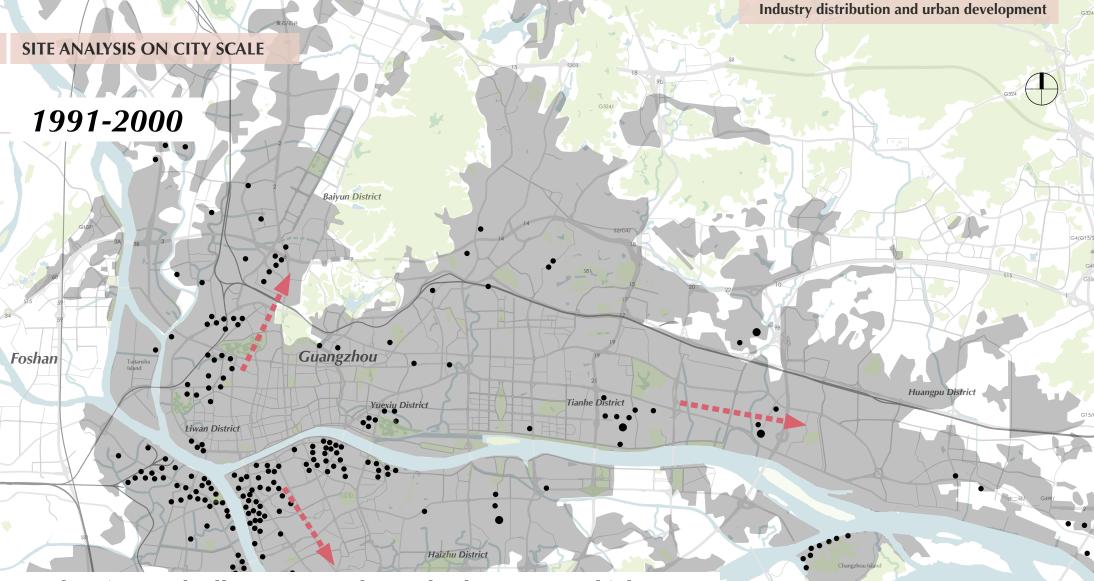
2

4

Foshan

8 ⊒ km





Panyu District

Industries gradually move to urban suburban areas, which determined contemporary Guangzhou urban structure.

8 ⊒ km

Foshan

4

Legend

Guangzhou High

urban built area
second industry
city wall of Qing Dynasty
urban expansion tendency

Source: Zhou, 2014



Manufacturing industries are guided to move to suburban districts. Central districts focus on developing modern service industries.







oriented area

Housing distribution and urban development

Huangpu District

SITE ANALYSIS ON CITY SCALE

Taitansha Island

00

Q Liwan District

Foshan

The development of housing and spatial distribution are closely related to industrial expansion.

2000

Fosh 9 2 8 km Luxi Island

Baiyun

Guangzhou

1949

1978 Yuexiu District

0

Q

Haizhu District

Panyu District

1984

Source: author

-2016

SITE ANALYSIS ON CITY SCALE

Foshan

Fosh0

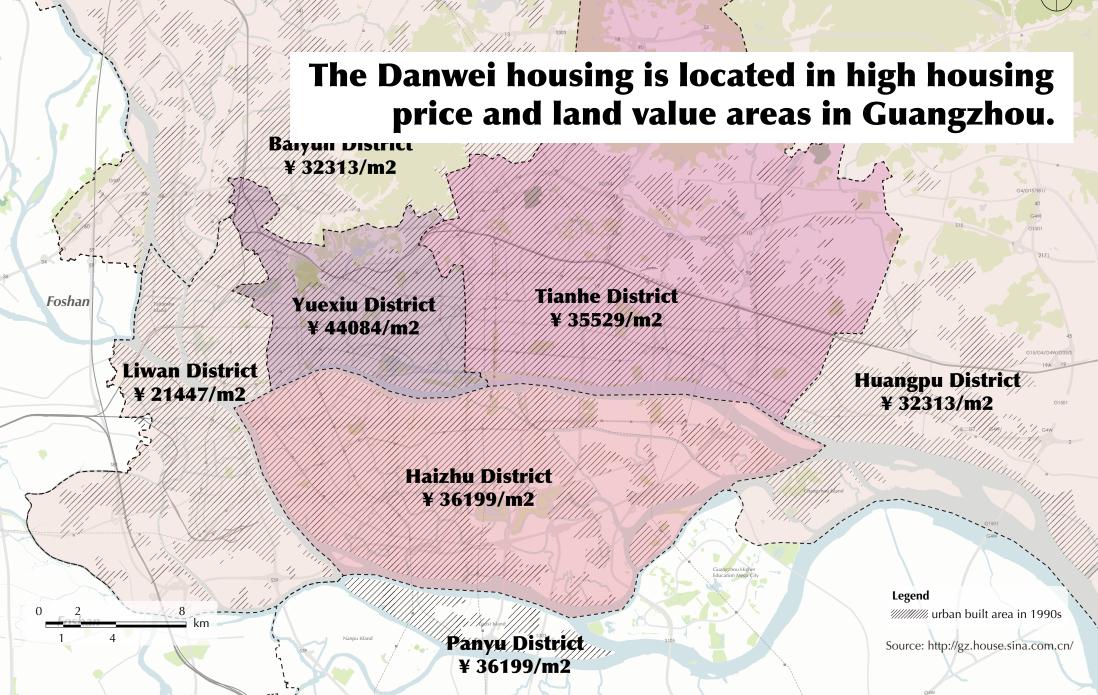


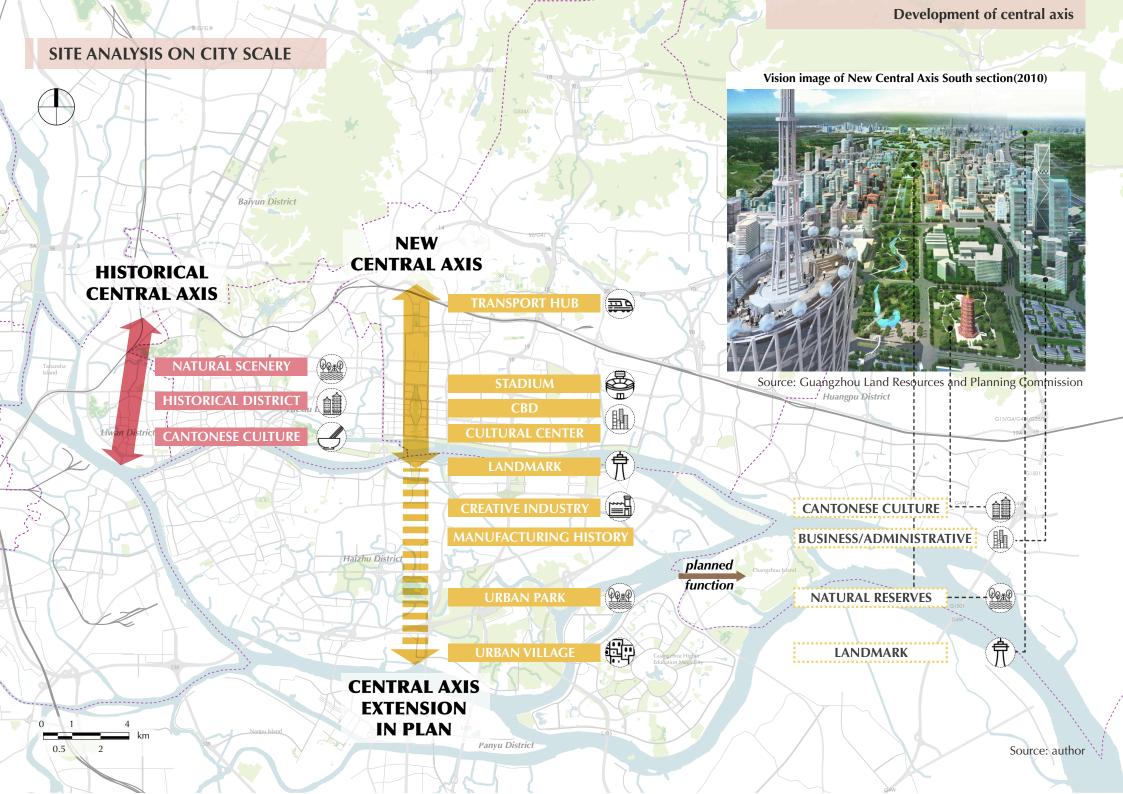
In each period, housing typology is also distinctive, and reflected on the spatial distribution.

Source: author

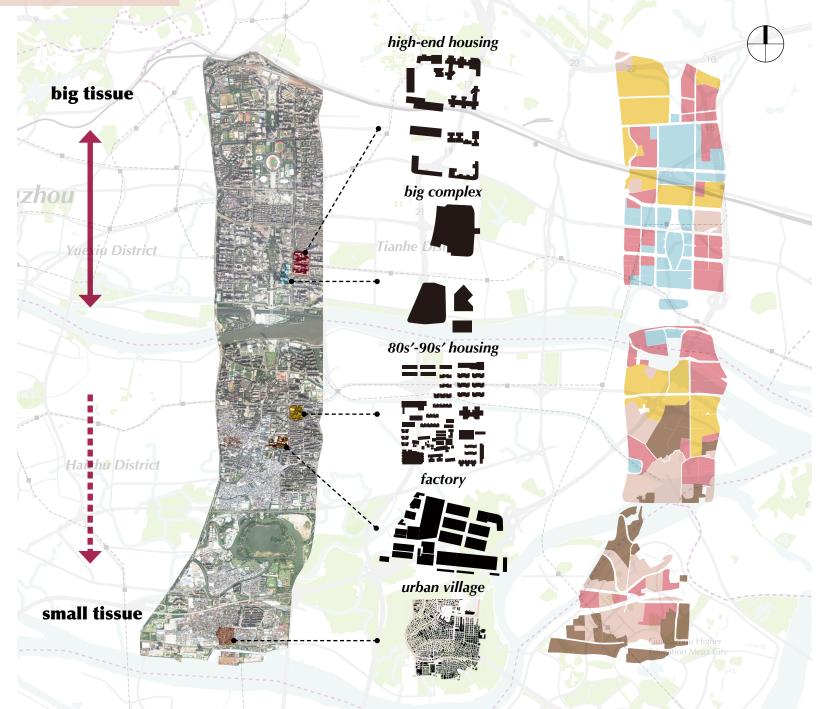
Housing distribution and urban development

SITE ANALYSIS ON CITY SCALE





SITE ANALYSIS ON CITY SCALE



Development of central axis

SITE ANALYSIS ON CITY SCALE

New Central Axis north section



http://www.bigpixel.cn/

SITE ANALYSIS ON CITY SCALE

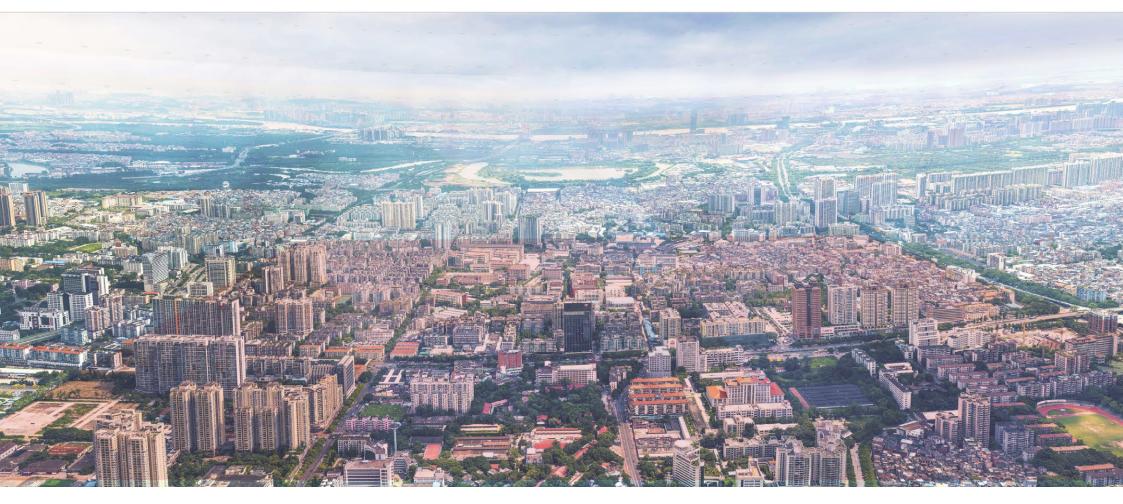
Haizhu District-planned area for New Central Axis extension

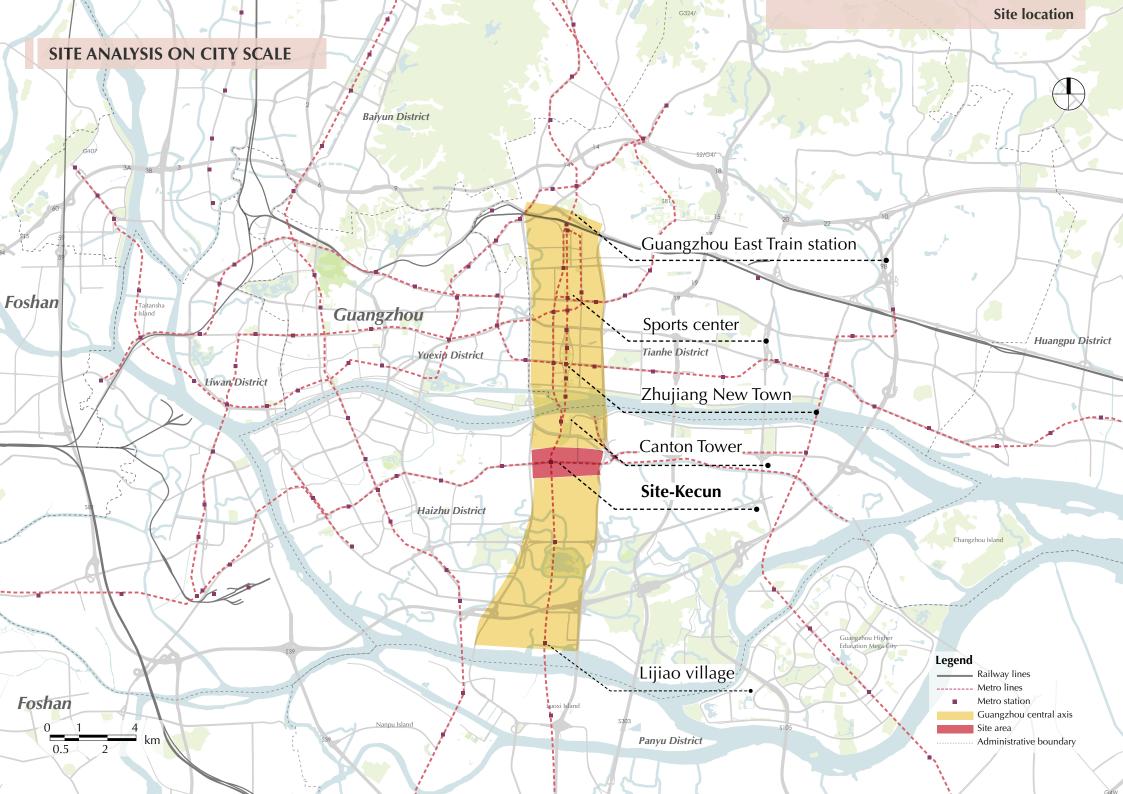


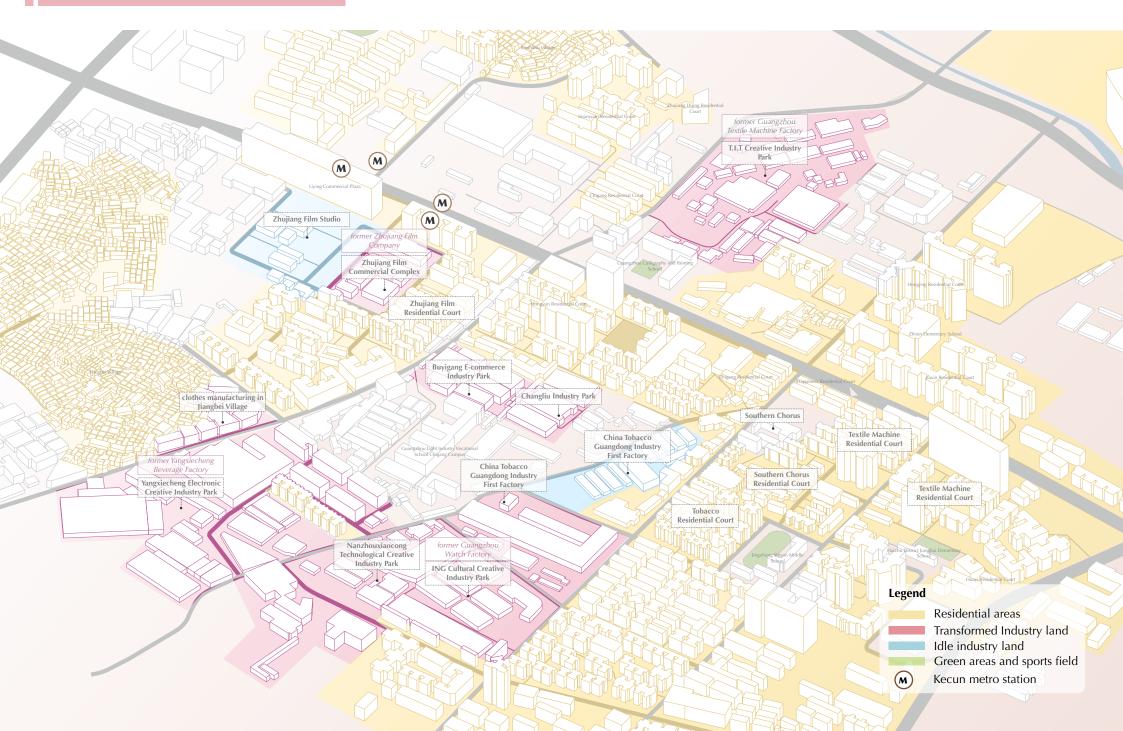
Development of central axis

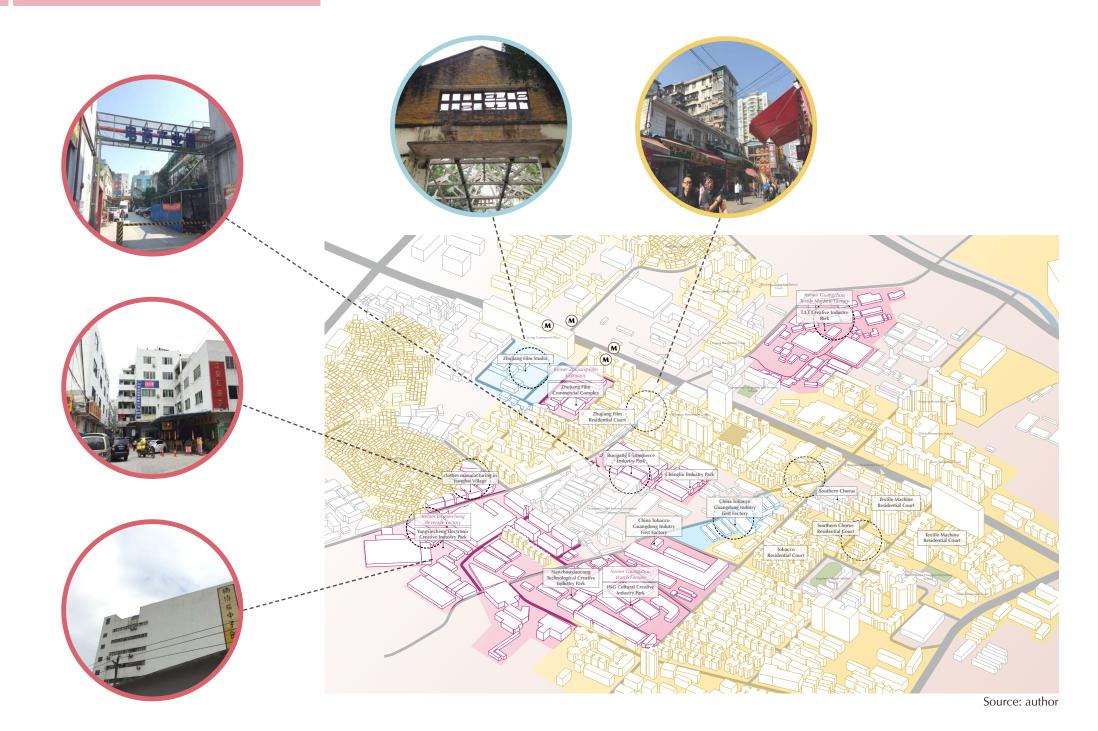
SITE ANALYSIS ON CITY SCALE

site area-Kecun



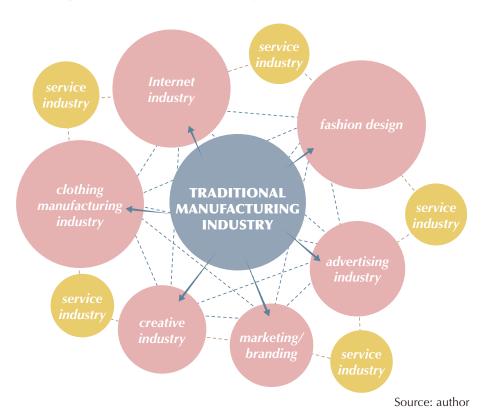






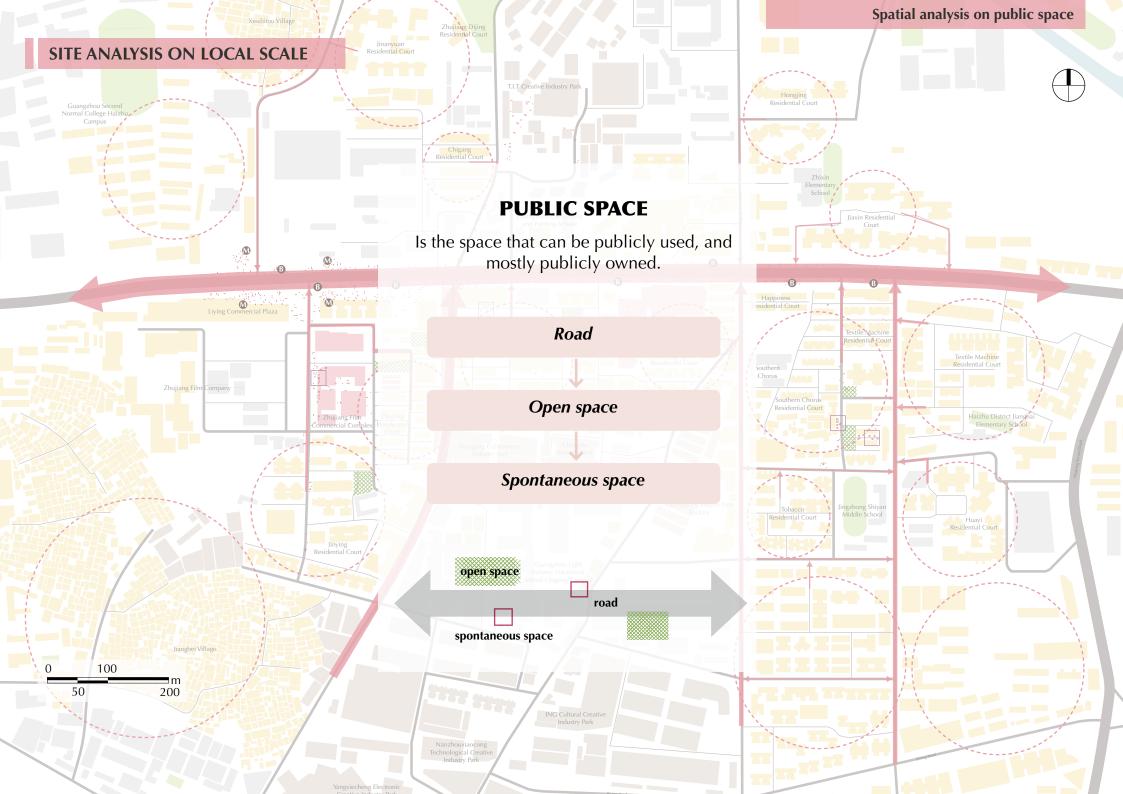


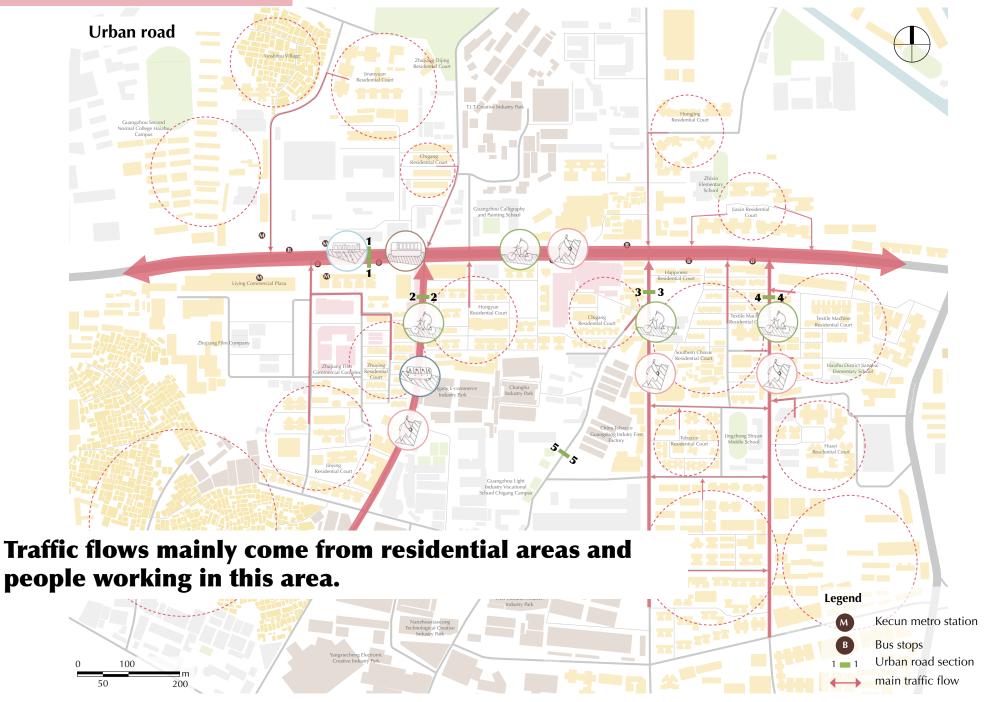
Source: author

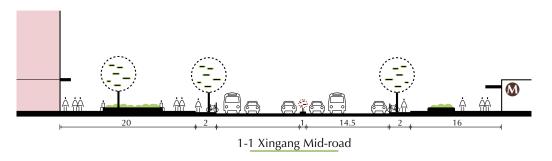


Conceptual network of industry transformation in site area

New industries are emerging from transforming former Danwei factories. Local economies are mutually supporting each other in a network.









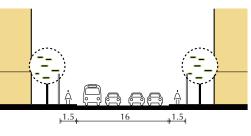
walk talk



wait&sit walk talk rest



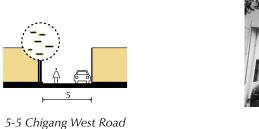
walk wait&sit stand&talk



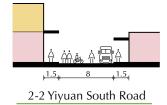
4-4 Chigang East Road

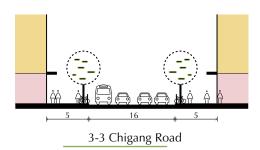


walk rest



parking walk parking



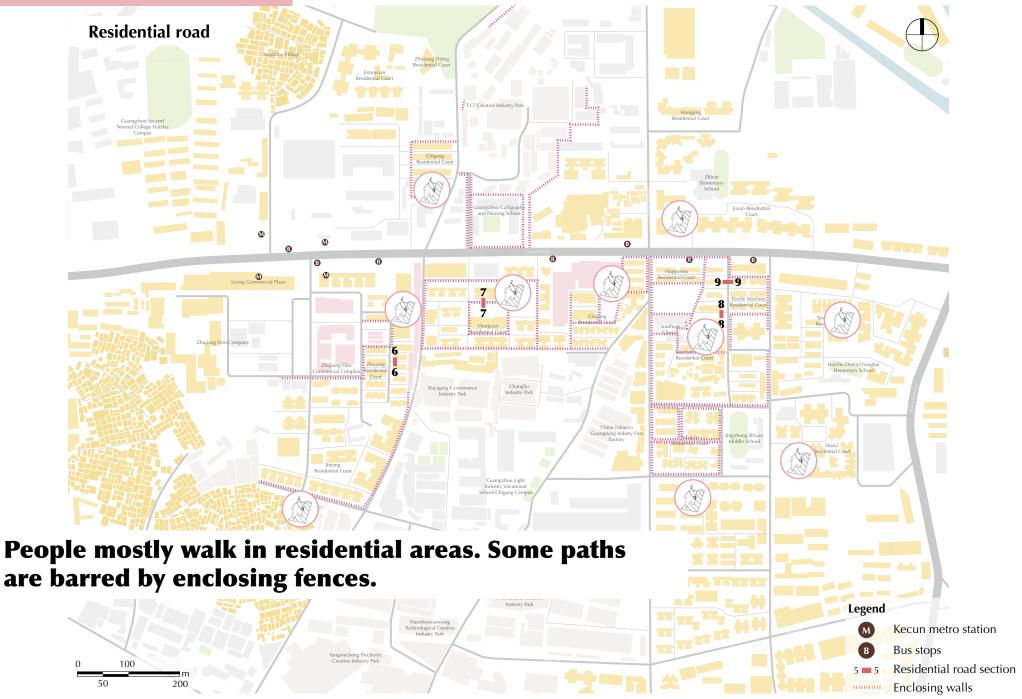


Ground floor openness is an essential element for a lively, walkable and safe street.



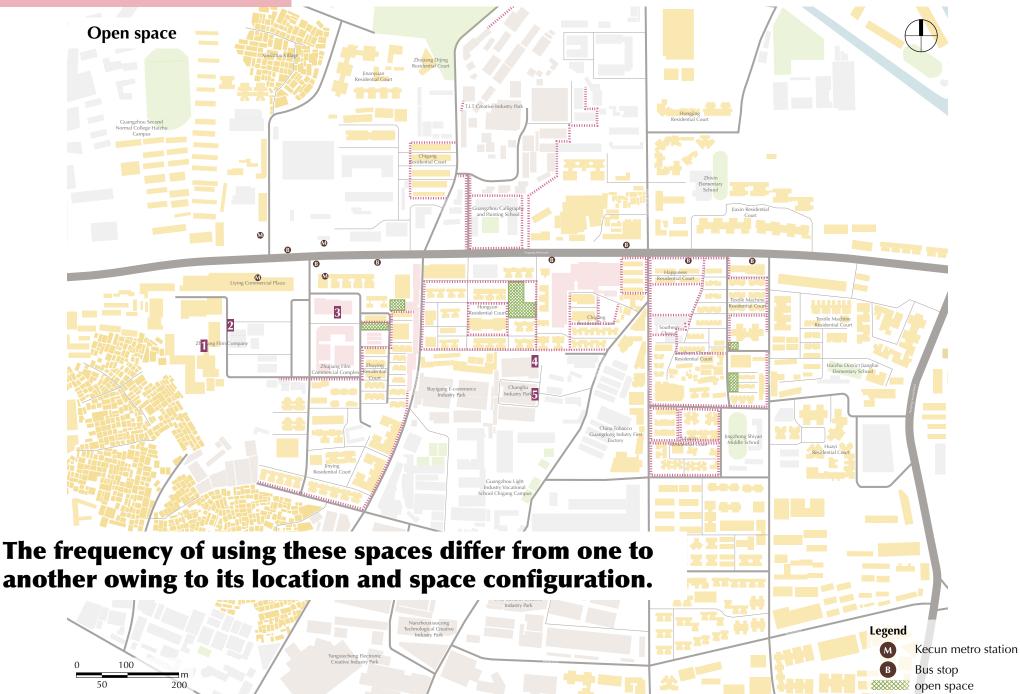
Spatial analysis on public space

Spatial analysis on public space-roads





The conflicts of elderly people taking rest, pedestrians walking and parking are shown in the use of public space.

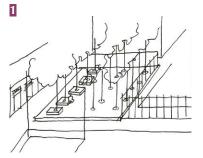


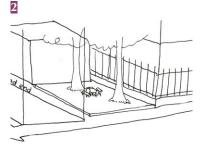
Spatial analysis on public space

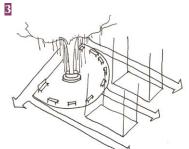
Spatial analysis on public space-open space

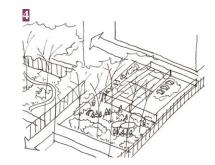
SITE ANALYSIS ON LOCAL SCALE

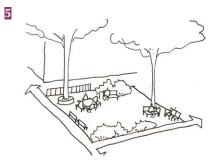
space configuration-isometric image



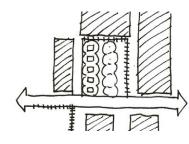




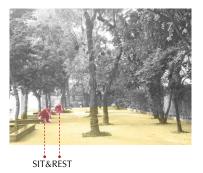




space configuration

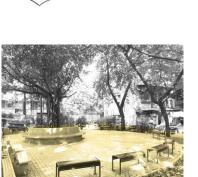


photo





SIT&REST





P

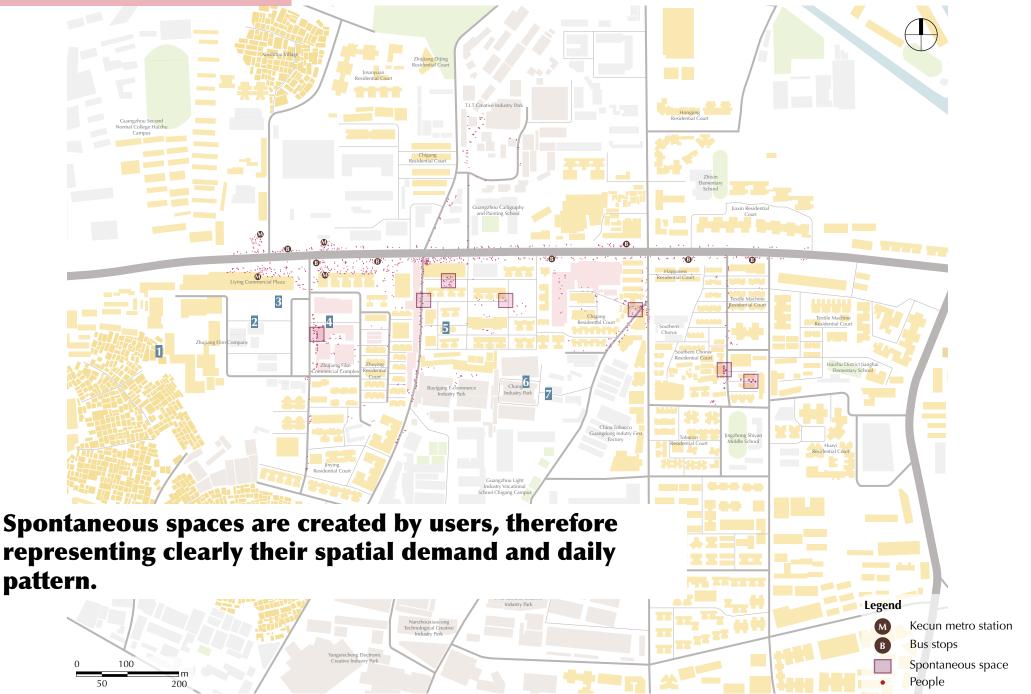
WALK SIT&TALK PLAY





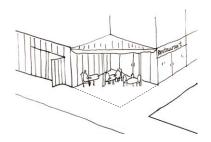
PLAY SIT&REST

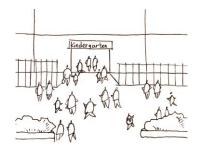
Spatial analysis on public space-spontaneous space

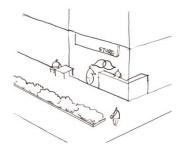


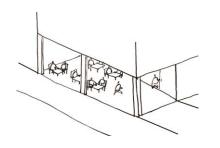
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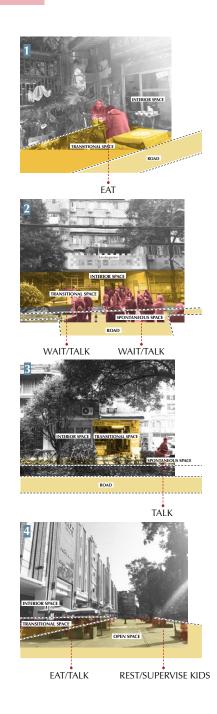
SITE ANALYSIS ON LOCAL SCALE

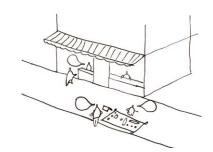


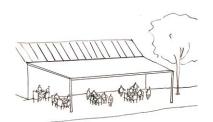






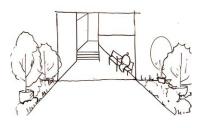








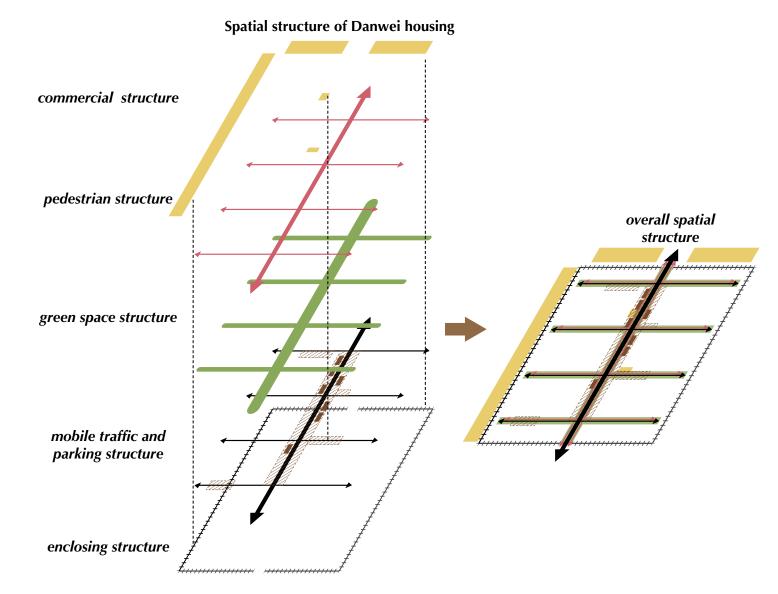




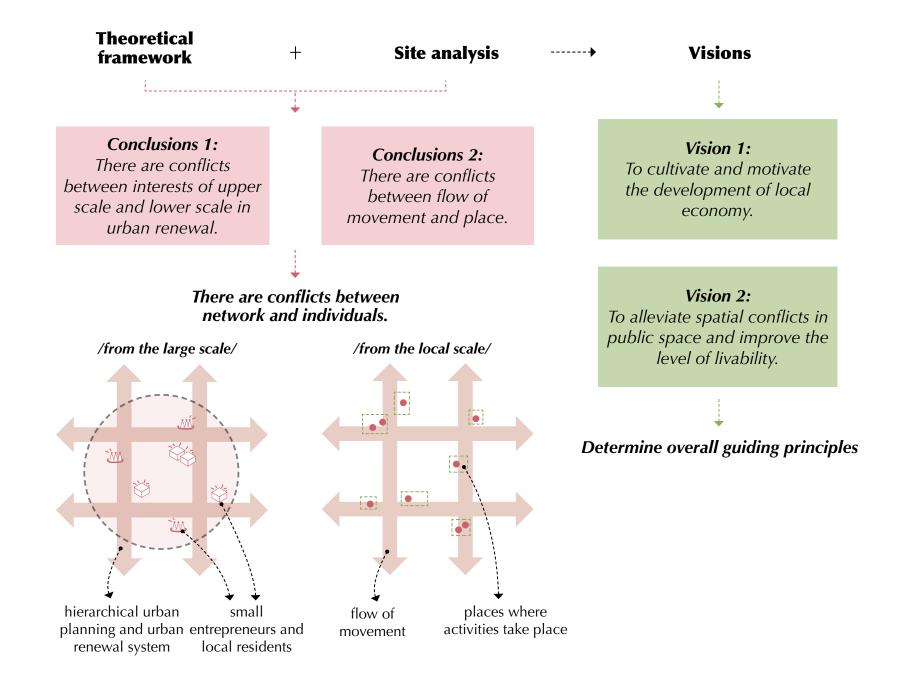


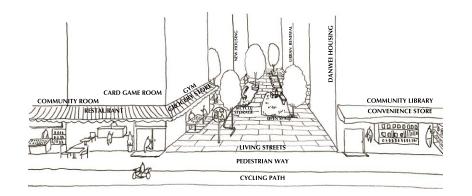
SIT/REST

Good public space should be flexible to include different activities to happen.



Conflicts of using public space have asked Danwei housing to improve walkability, connection to public transport, parking for cars and bicycles, open space for activities, mixed functions such as gym, convenience store and teahouse for different residents.

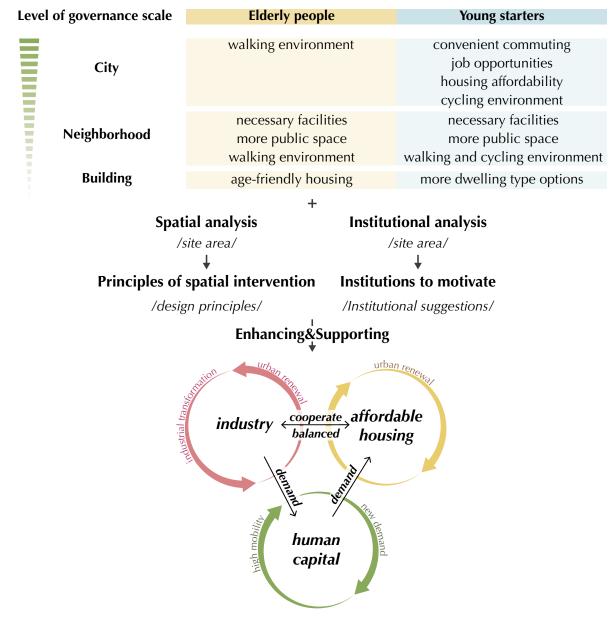




What strategies can be explored in multiple scales to achieve the visions?

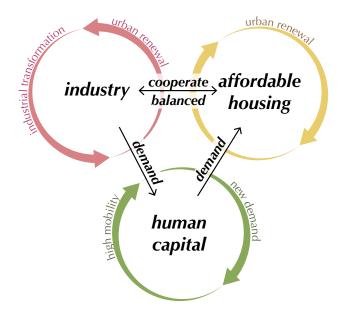
Guiding principles of different target groups

/specific principles/

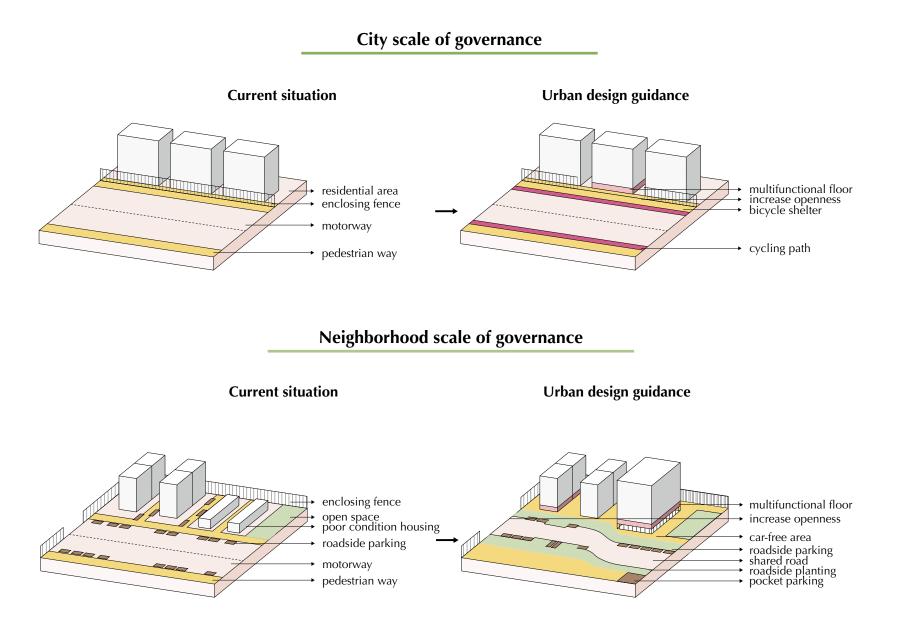


Source: author

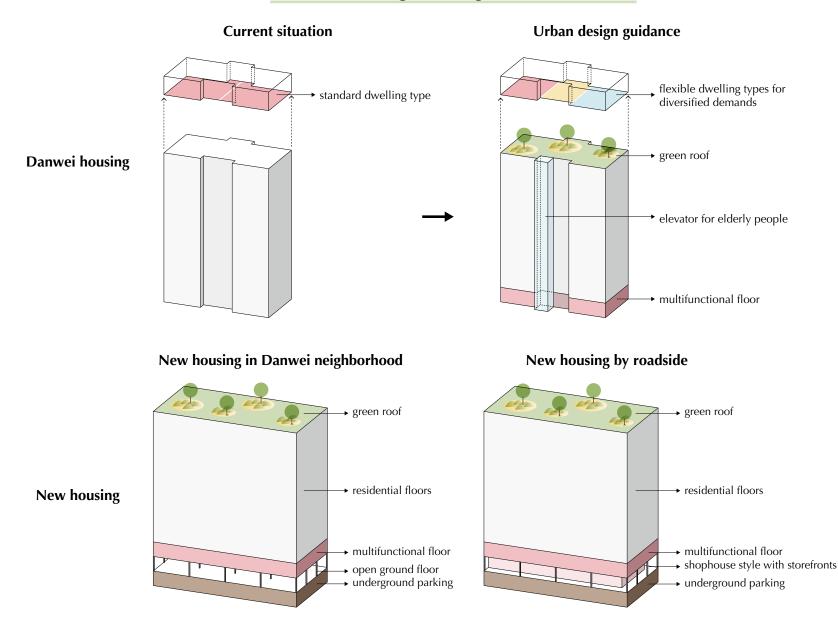
a new industry-housing-human capital relationship



The vision is based on bottom-up collaboration mode in urban renewal to create a cooperated and balanced relationship between industry, affordable housing in urban development and urban renewal.



Design principles



Building scale of governance

Strategies on city scale

Positioning of the New Central Axis

STRATEGIES

Liwan District

Baryun Distric

HISTORICAL CENTRAL AXIS

Historical district with authentic Cantonese culture experience.

strict

Haizhu District

Luoxi Islan

NEW CENTRAL AXIS

Modern and global Guangzhou urban experience.

NEW CENTRAL AXIS EXTENSION

Creative, livable and green urban experience.

POSITIONING

new positioning based on the modern and contemporary industrial culture that reflects the Haizhu identity

GOALS Huangpu District

INDUSTRIAL TRANSFORMATION

support high-tech, low-carbon industry, creative new industries in industrial transformation

promote creative urban renewal mode and multiple collaboration in industrial transformation and old residential areas upgrade

LIVING QUALITY

improve living quality in old residential areas by urban renewal

increase public rental housing supply

SPATIAL QUALITY

more open space

7

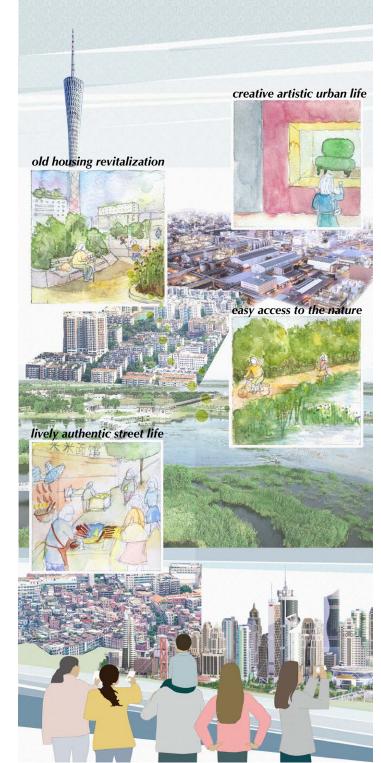
INFRASTRUCTURE

improve cycling infrastructure

improve public transport accessibility

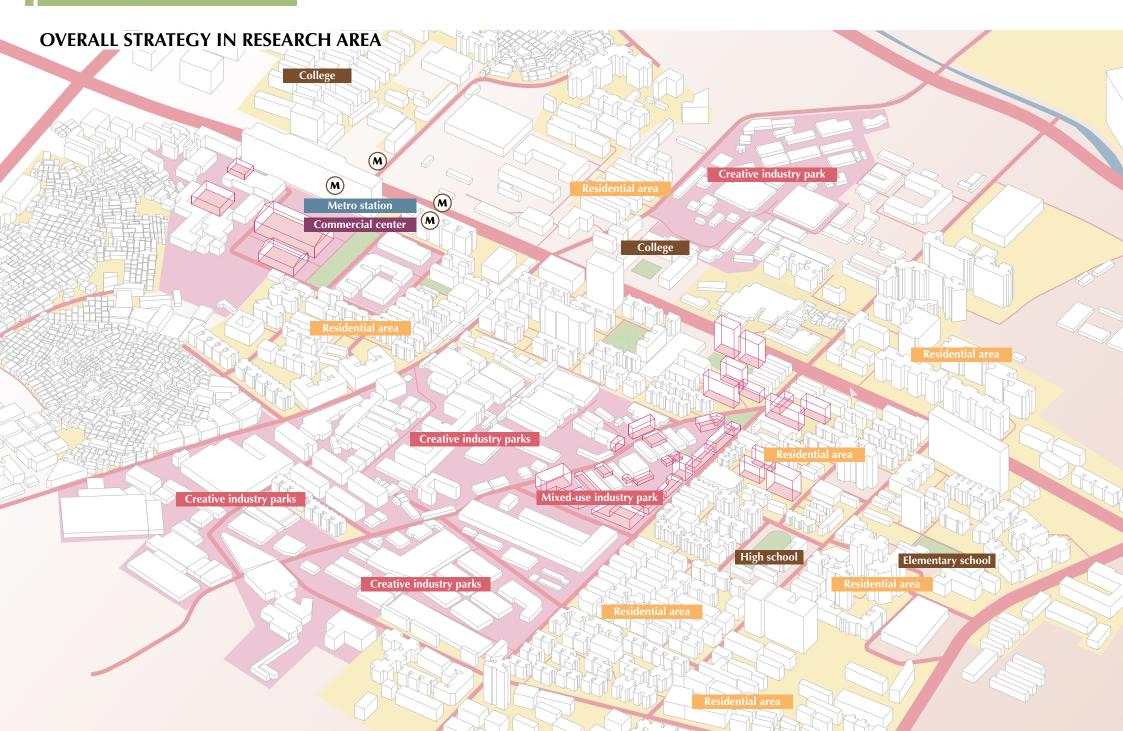
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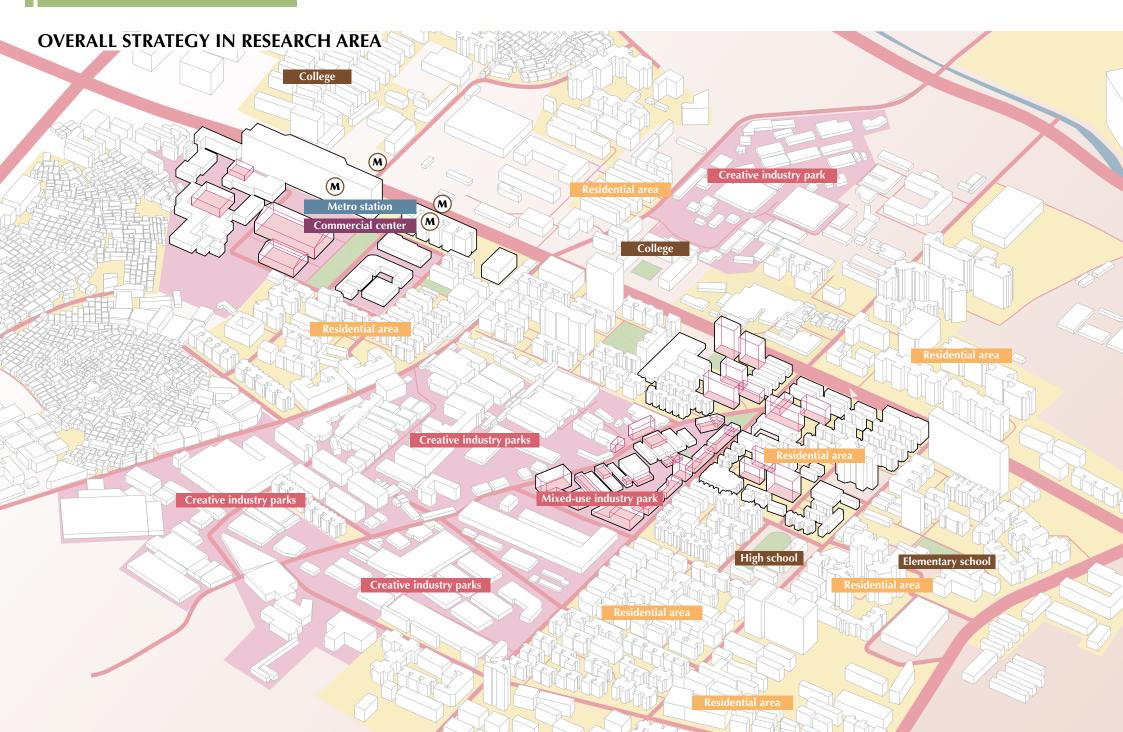
Panyu District



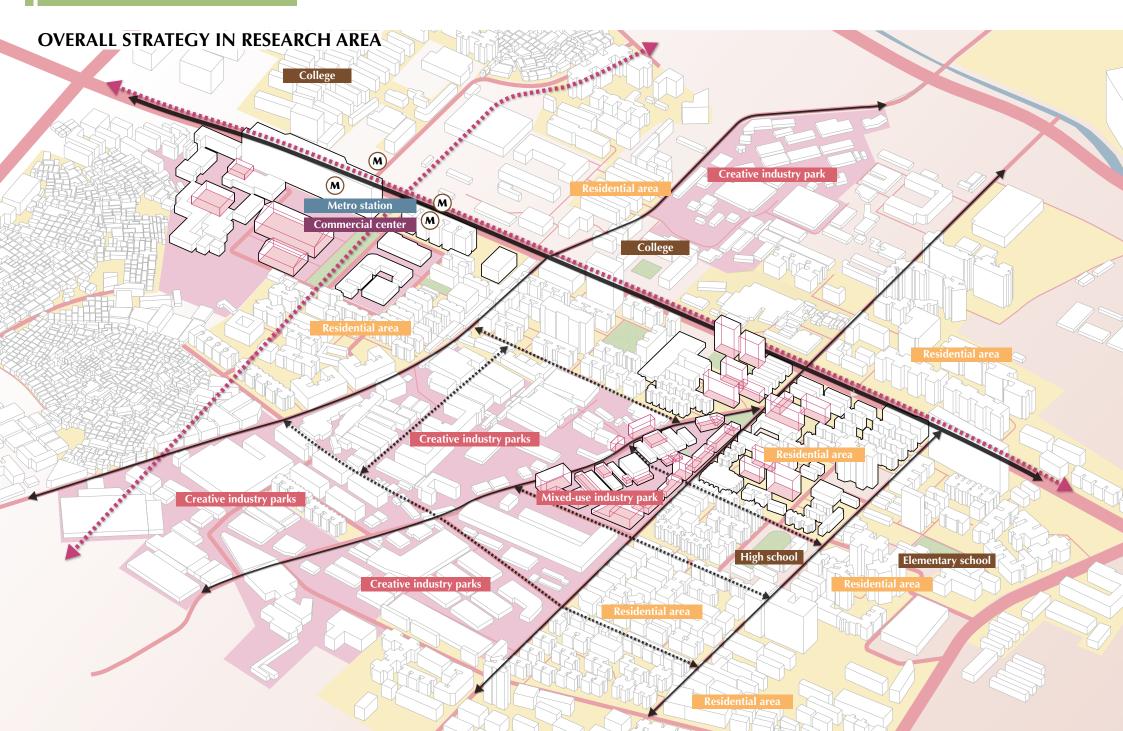
A new city center with diversified experiences, from modern CBD, to natural park, to authentic street taste.

New Central Axis south section vision image

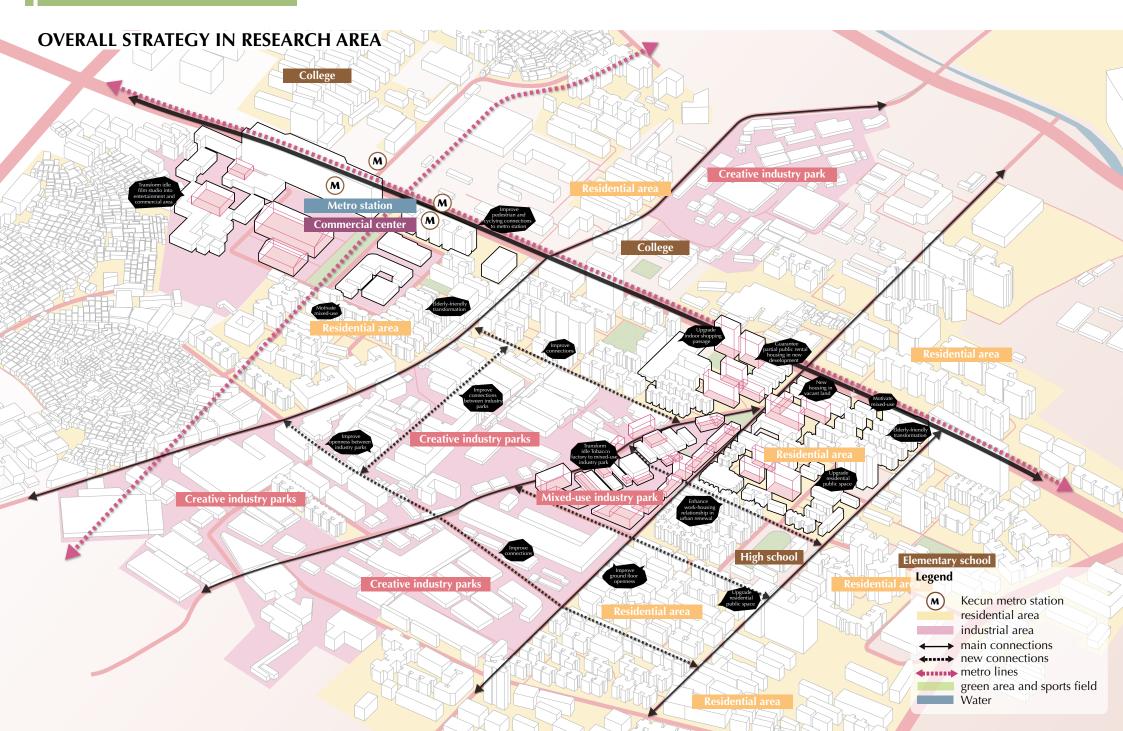


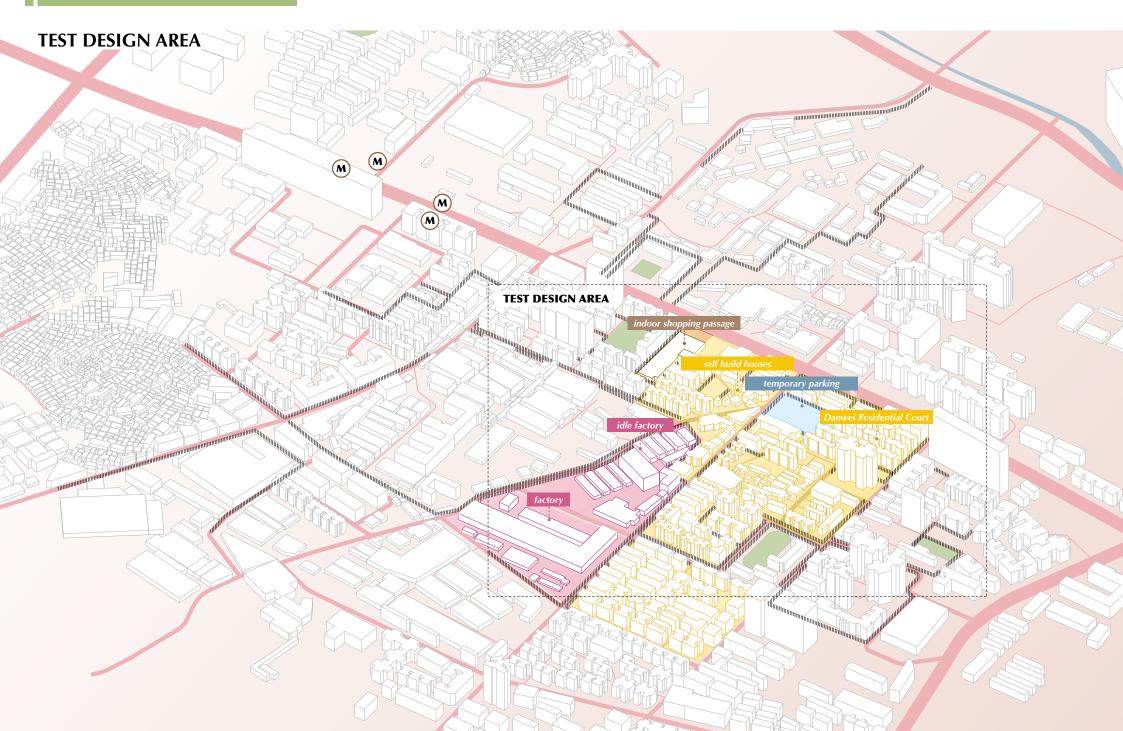


Strategies of research area

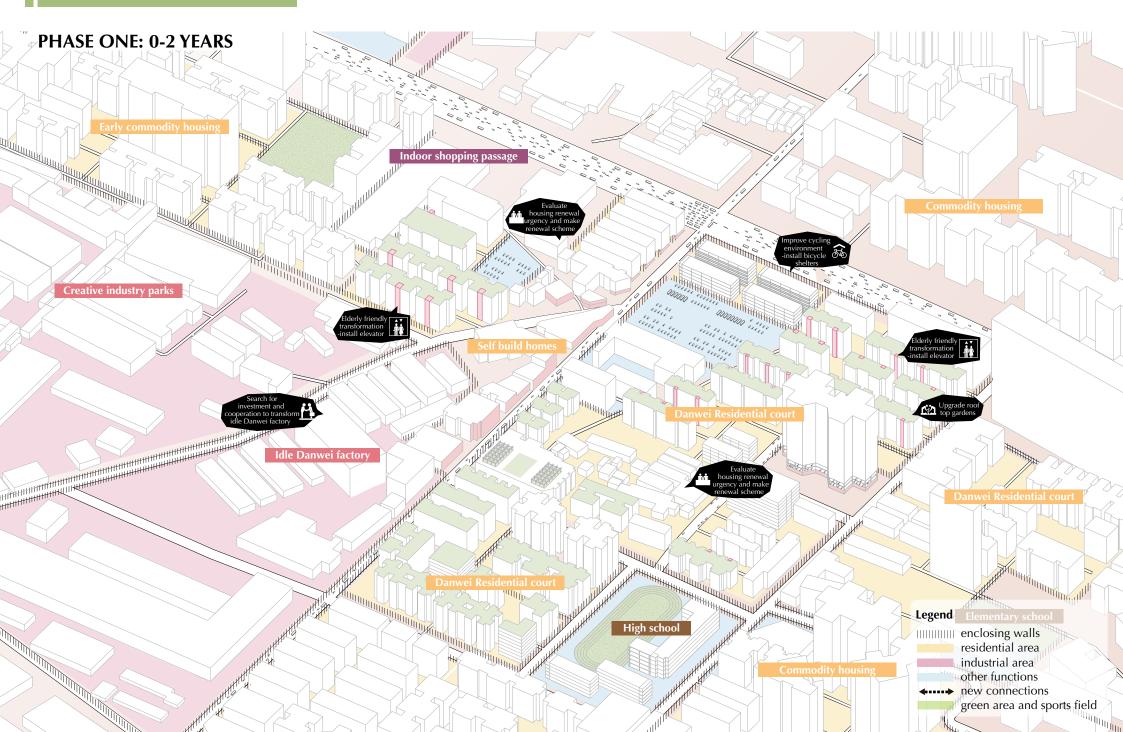


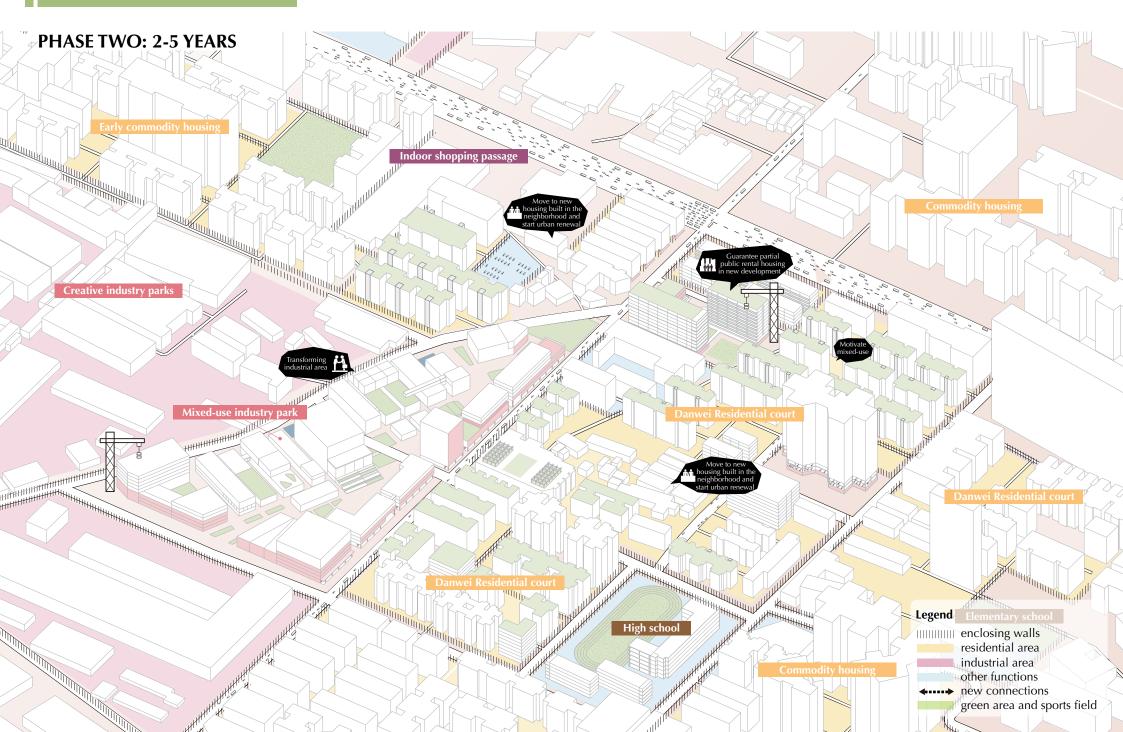
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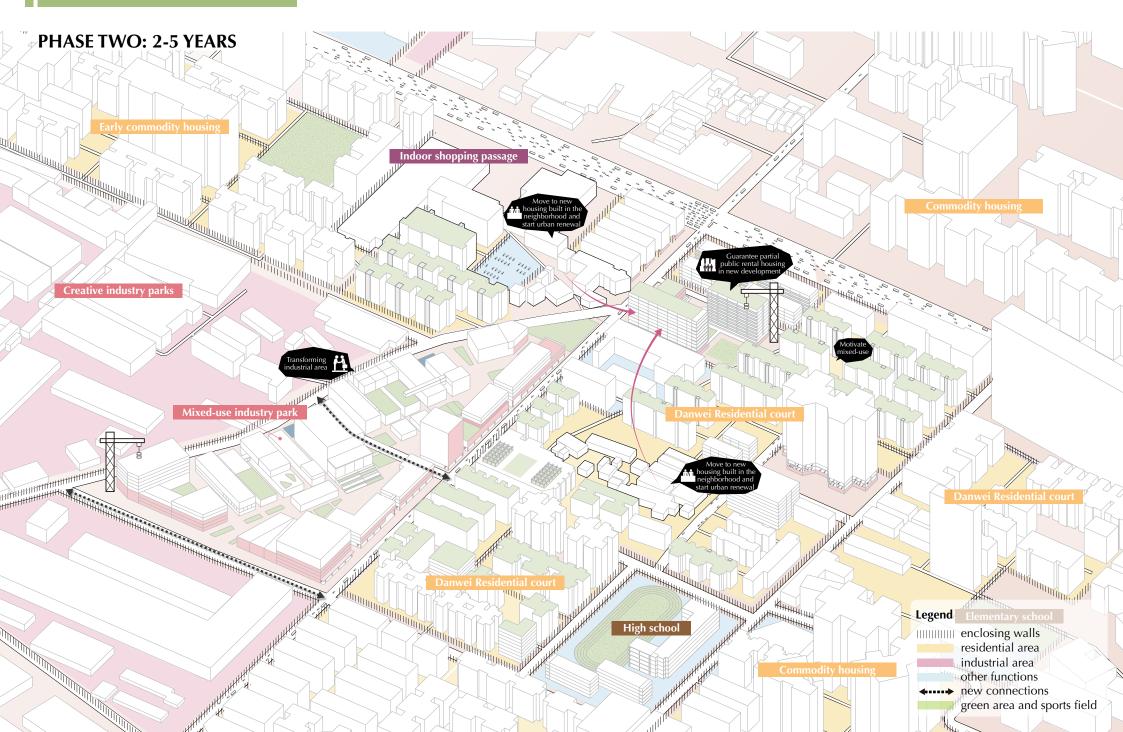






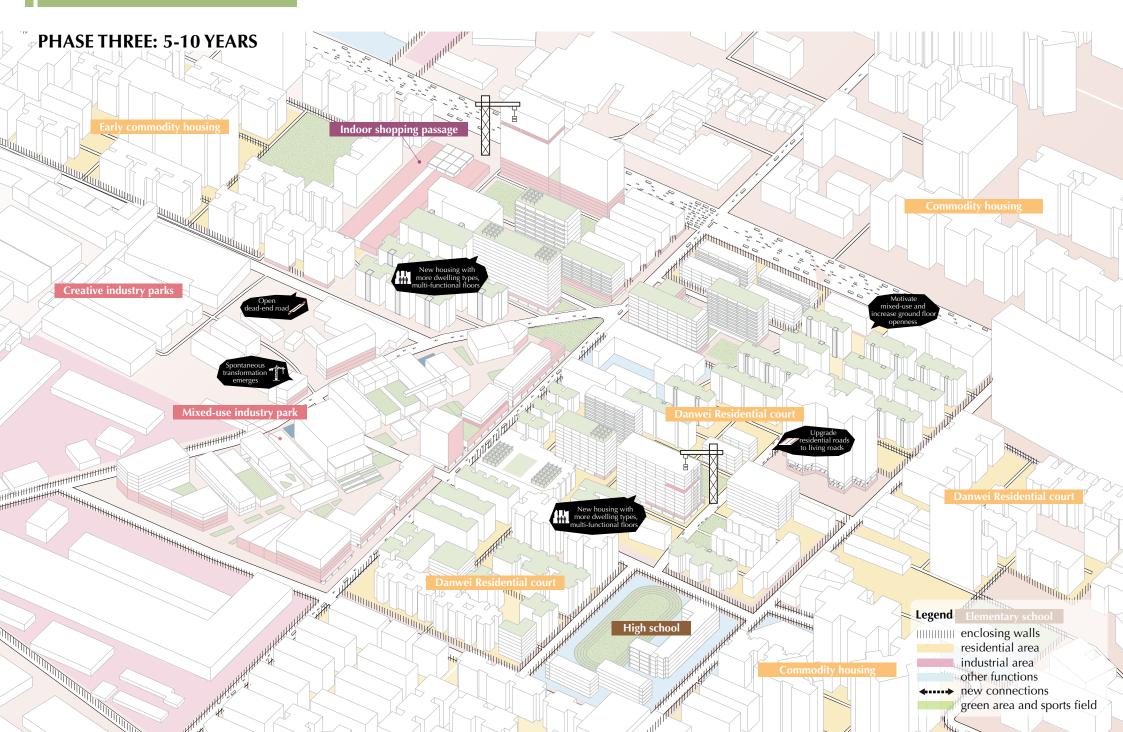






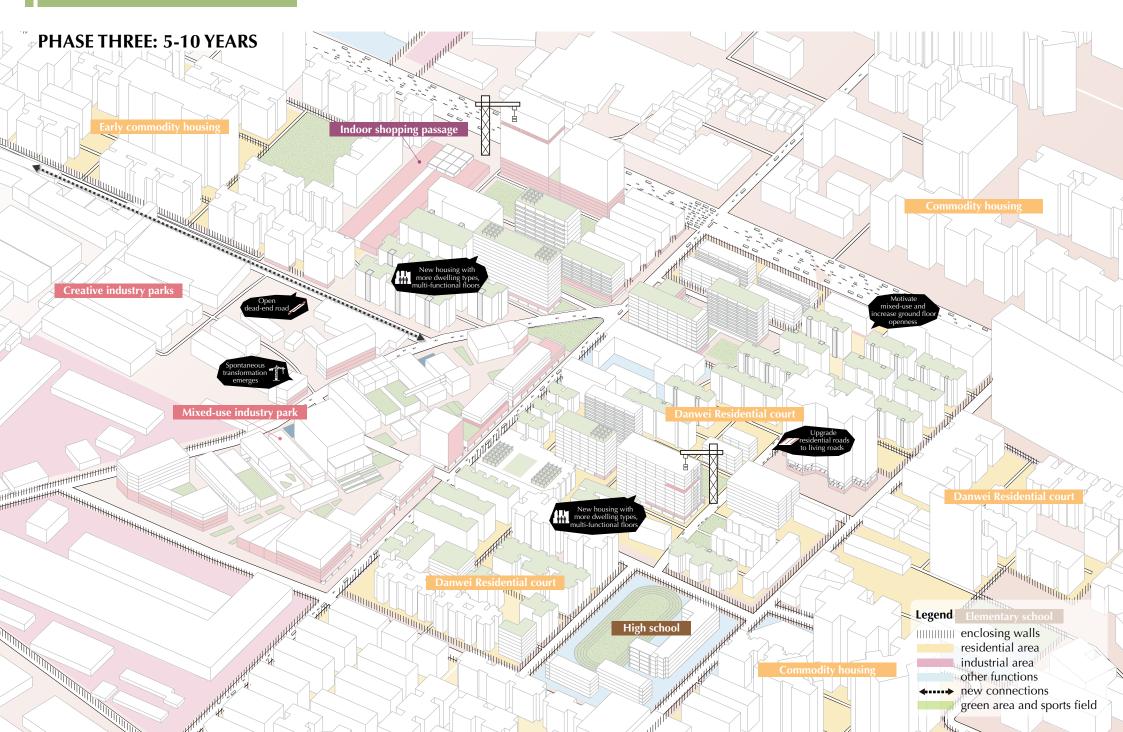
Strategies of test design area

Strategies in test design area



Strategies of test design area

Strategies in test design area



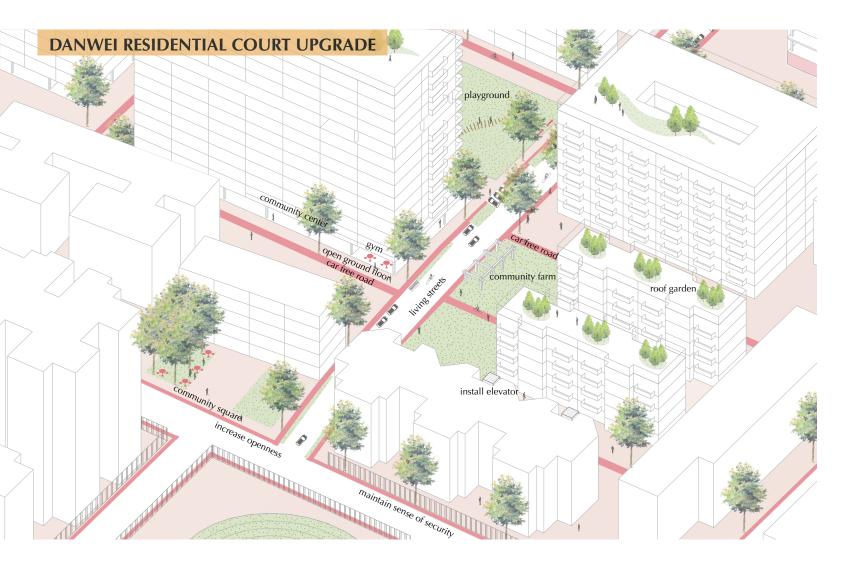
Test projects

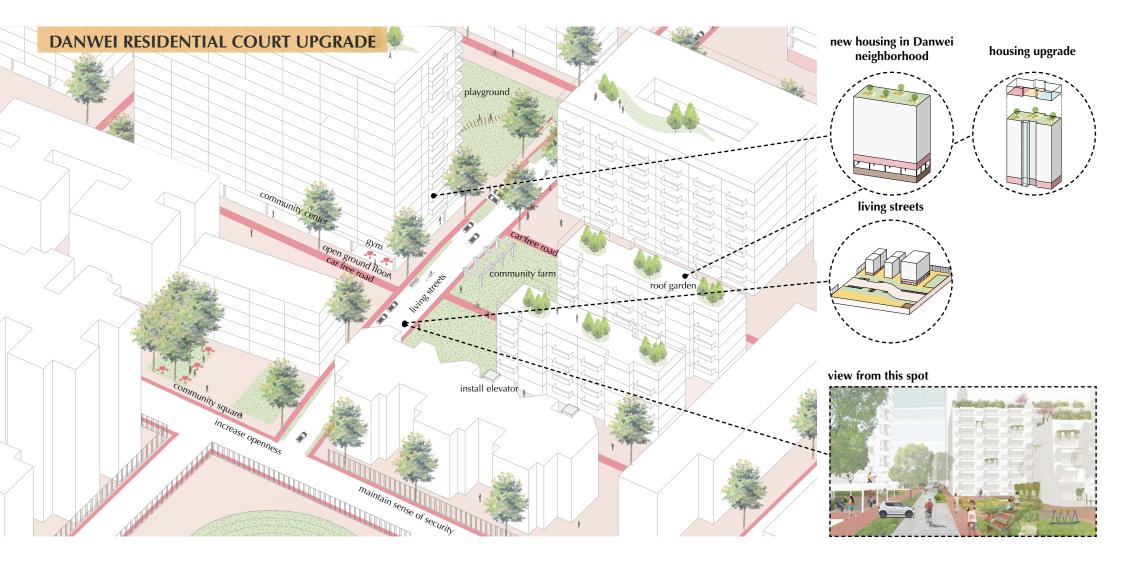
test projects location



Test projects

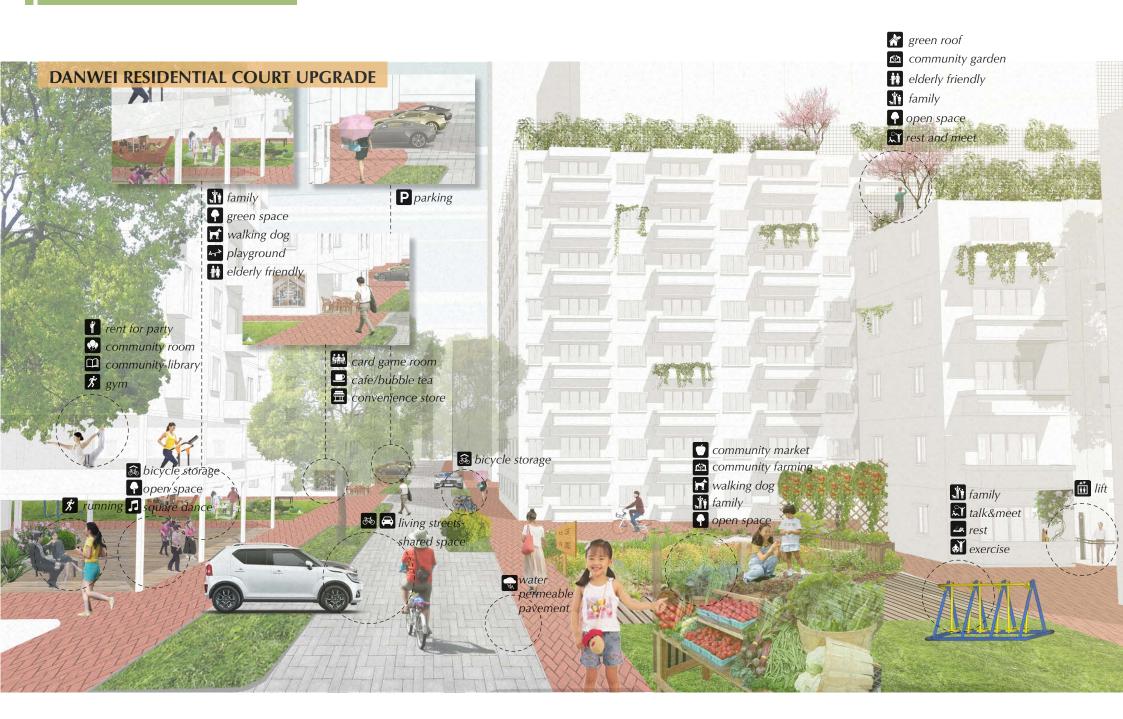
test projects- Danwei residential court upgrade

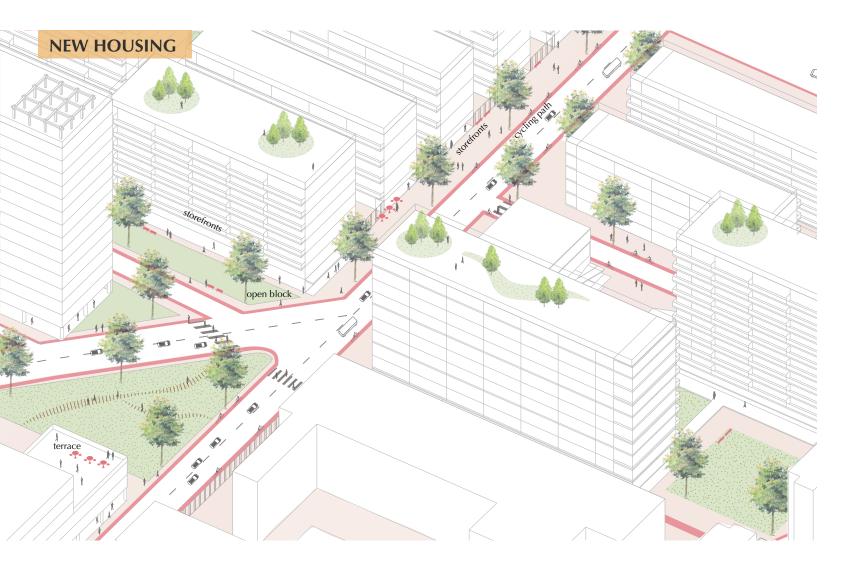


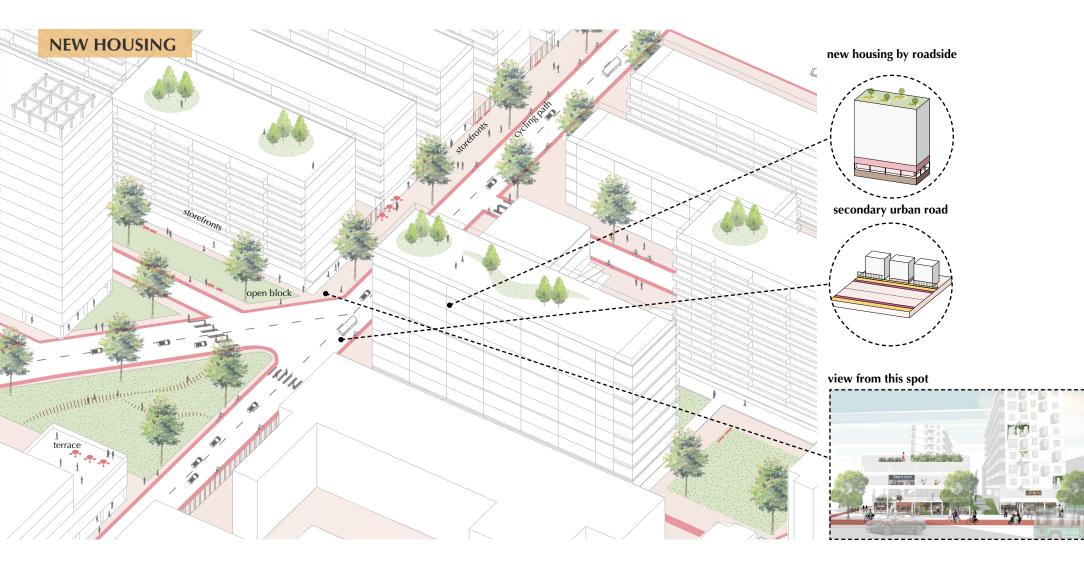


test projects- Danwei residential court upgrade









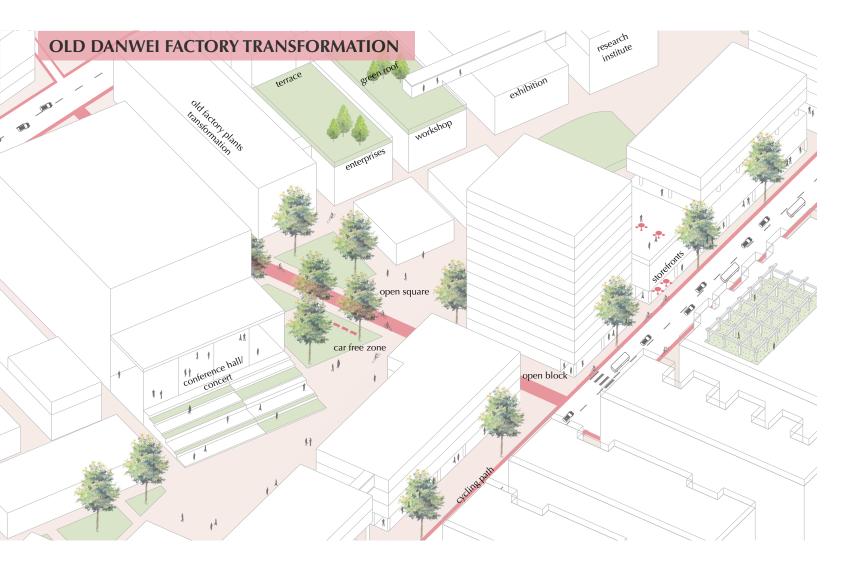
test projects- new housing

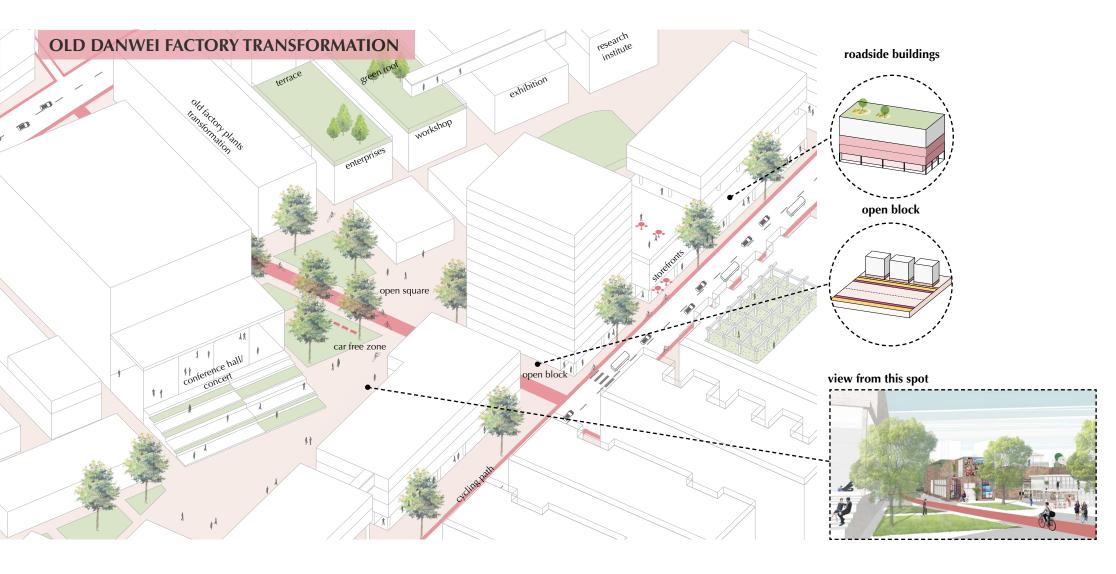




Test projects

test projects- old Danwei factory transformation





Test projects

test projects- old Danwei factory transformation

OLD DANWEI FACTORY TRANSFORMATION



test projects- old Danwei factory transformation

OLD DANWEI FACTORY TRANSFORMATION



Test projects

THANK YOU!

Xin Huang 30.06.2017

