REPAVING THE PATH TOWARDS ARRIVAL

AN ALTERNATIVE REDEVELOPMENT STRATEGY SUPPORTING MIGRANTS’ SMALL BUSINESSES FOR URBAN VILLAGES IN PERIPHERAL SHENZHEN

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First mentor: Qu Lei
Second mentor: Birgit Hausleitner
INTRODUCTION
THE FLASH CITY OF SHENZHEN

View from Lok Ma Chao metro station, Hong Kong rural land

View from Lok Ma Chao metro station, Shenzhen

REPAVING THE PATH TOWARDS ARRIVAL
CHINA BECOMING URBANIZED

What will be remembered about the twenty-first century, more than anything else except perhaps the effects of a changing climate, is the great, and final, shift of human populations out of rural, agricultural life and into cities. (Saunders, 2010, p. 1)
SHENZHEN SPEED
WORKING ON THE WORLD CITY...
SHENZHEN SPEED
...TO REPLACE THE OBSOLETE WORLD FACTORY
THE GLOBAL & THE LOCAL ECONOMY

REPAVING THE PATH TOWARDS ARRIVAL
EMERGENCE OF THE VIC

initial phase, original village

densification phase

expansion phase

intensification phase

(source: Hao, 2013)
EMERGENCE OF THE VIC

REPAVING THE PATH TOWARDS ARRIVAL

1949 Communist revolution; end of civil war
1950 Urbanisation of VIC's outside SEZ
1954 Establishment of Shenzhen SEZ
1955 Start of collectivisation of rural land
1978 Legalisation policy; building ownership and land leasing
1979 Incorporation of rest of Bao'an county
1980 1st building regulations;
- 150 m² courtyard
- 80 m² built-up area
1982 2nd building regulations;
- Max. 3 storeys
- <40 m² per person
1985 3rd building regulations;
- Max. 100 m² per household
- Max. 480 m² floor area
1986 Establishment of Shenzhen city
1992 Redevelopment plan for VIC's
2001 Only 3 of the 137 VIC redevelopments carried out
2005 Incorporation of all districts of Shenzhen in SEZ
2009 Urbanisation of VIC's in Shenzhen; Villagers get urban hukou
2003-2004 Economic reforms
Temporary migration allowed
Incorporation of rest of Bao'an county
2015

REFERENCES
SHENZHEN CENTER & PERIPHERY

DONGGUAN, GUANGZHOU

GUANGTUN

Shenzhen west

HONG KONG

MACAU

HUIZHOU

REPAVING THE PATH TOWARDS ARRIVAL
TWO DISTINCT URBAN LANDSCAPES OF SZ

Aerial and eye-level view of urban fabric within former SEZ

Aerial and eye-level view of urban fabric outside former SEZ

REPAVING THE PATH TOWARDS ARRIVAL
THE UNPLANNED PERIPHERY

Conformation of land uses to official planning (source: Hao, 2010)

Shenzhen Inner & Outer Area Population
1982 - 2010

Division of Shenzhen’s population over districts (source: Cox, 2013)

OUTER DISTRICTS

CORE DISTRICTS
THE VIC IN THE EYE OF THE GOVERNMENT

REPAVING THE PATH TOWARDS ARRIVAL
DEMOLITION OF VIC’S

REPAVING THE PATH TOWARDS ARRIVAL
LOSS OF MIGRANTS’ URBAN FOOTHOLD

Migrants’ small businesses:
- Self-employment and small business provide a recognized upward social mobility path
- Alternative for factory employment
- Business owners are less mobile => important in community building
- Provides local jobs
- A way to achieve mixed-use of neighborhoods
- Enhance the vitality of street life

REPAVING THE PATH TOWARDS ARRIVAL
PROBLEM STATEMENT

The current spatial planning and design practice in redeveloping Shenzhen’s urban villages does not properly address the permanent settlement conditions of present and future migrants.
RESEARCH QUESTIONS

MAIN RESEARCH QUESTION

How can Shenzhen’s peripheral districts preserve and enhance their spatial structures supporting self-employed migrants’ small businesses?

SUB RESEARCH QUESTIONS

1. How does self-employment and small business operation relate to migrants’ social mobility in China?

2. What are, theoretically, the spatial conditions influencing the potential for establishment of small businesses?

3. What does the migrant population of Shenzhen’s periphery demand from their environment?

4. What are the spatial conditions affecting the distribution of small businesses in the periphery of Shenzhen at present?

5. Where do opportunities lie to improve small business opportunities?
RESEARCH APPROACH

Research approach

DOMAINS

Theoretical framework

Socio-economic

q1: Relation small business and migrants’ social mobility

q2: Spatial conditions supporting small business

Spatial

Empirical research

q3: Migrants’ demands for living environment in peripheral Shenzhen

q4: Spatial conditions affecting small business distribution in peripheral Shenzhen

Planning & Design

q5: Opportunities for improving small business conditions

Synthesis

Q: How can Shenzhen’s peripheral districts preserve and enhance their spatial structures supporting self-employed migrants’ small businesses?

• Literature review on migrants’ social mobility, small business and related spatial conditions

PAVING THE PATH
RESEARCH APPROACH

- Interviewing migrant residents of Shenzhen’s periphery by means of a questionnaire
RESEARCH APPROACH

DOMAINS

Socio-economic

Spatial

Theoretical framework

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Planning & Design

q5: Opportunities for improving small business conditions

Synthesis

Q: How can Shenzhen’s peripheral districts preserve and enhance their spatial structures supporting self-employed migrants’ small businesses?

• Mapping various relevant spatial aspects of Shenzhen’s periphery, e.g. small business distribution and street integration
RESEARCH APPROACH

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q5: Opportunities for improving small business conditions

Synthesis

Q: How can Shenzhen’s peripheral districts preserve and enhance their spatial structures supporting self-employed migrants’ small businesses?

• Design case to research possibilities to intervene in existing structures of peripheral Shenzhen

PAVING THE PATH
RESEARCH FOCUS: DALANG

DONGGUAN, GUANGZHOU

HUIZHOU

MACAU

Guangming

SEZ border (<2010)

Shenzhen west

Railway station

High-speed railway

Planned high-speed railway

National railway

Highway

Planned highway

Main road

Dalang district
RESEARCH FOCUS: DALANG
THEORETICAL FRAMEWORK
THEORETICAL FRAMEWORK

- Relevance for the Chinese context
  - Upward social mobility and permanent settlement of rural-to-urban migrants
    - Can be achieved through Migrants’ self-employment/small businesses
  - Requires Spatial conditions supporting small businesses
    - Natural movement (Hillier et. al.)
    - Street vitality (Jacobs)

q1 (social) q2 (spatial)
SAUNDERS’ ARRIVAL CITY

- Saunders’ (2010) Arrival city: migrants’ first foothold in the city they intend to settle permanently into. The arrival city should be a place of upward social mobility, of which self-employment is a key driver. The spatial and institutional conditions of the arrival city determine whether it can be successful.
To assure sustainable growth, China will need to encourage migrants’ social mobility.

Self-employment and small business provide a recognized upward social mobility path.

In China, migrants who decide to go into self-employment and start small businesses appear to improve their social mobility, and are more likely to settle permanently.

The share of self-employed migrants in China is substantial (ca. 25%) and growing.
Street vending is a very accessible form of entrepreneurship for migrants, since it does not require a big initial investment, nor paying rent for a premises. Successful street vendors could eventually move into fixed premises, so street vending can be seen as a ‘laboratory of entrepreneurship’ (Bromley, 2000).
**SMALL BUSINESS & SPATIAL CONDITIONS**

- The presence of enough permeable space, which preferably prioritize slow mobility, is essential for small business.
- Enough affordable and adequate business space should be available, either in fixed premises or out on the street.
- Businesses will locate themselves where the most people are.
- The mixture of primary functions and the urban form determine to a large extent the amount of people in the streets.
• Theory of natural movement: the spaces that are part of most routes from any origination to any destination in the city, because of their configuration in the urban grid, will generate most traffic. These spaces are called ‘highly integrated’. (Hillier, 1997)
• Businesses will locate themselves on the most integrated places.
• Changes in the configuration of street, will result in a change in natural movement.

The theory of the natural movement economic process

How political and organisational constraints can overrun the natural location process

(source: Van Nes, 2007)

(source: Sevtsuk, 2014)
The migrant population of Dalang originates from all over China. There are representatives from 16 provinces among the respondents. The majority of the respondents (53 out of 93) come from the provinces close to Shenzhen (Guangdong, Guangxi, Hunan, Jiangxi).
• Most respondents knew someone in Shenzhen before they migrated
• Respondents are young
• Even though the biggest category has been in Shenzhen for less than three years, the majority has been there for at least 3 years.
HOUSING

Found rent prizes:
- Village house:
  Average: 576 RMB
  Median: 450
- Dormitory:
  OFTEN FREE
  Average: 288
  Median: 275

- Almost everybody lives either in an urban village or in a dormitory. Most live in a village house.
- The most commonly found monthly income lies between 3000 and 4500 RMB.
- Most respondents spend between 10-15% of their income on housing.
**PREFERRED JOBS AND MOBILITY**

- Almost 60% of respondents works in a factory (manufacturing, R&D, operator)
- One third of the respondents would prefer to be self-employed in the future
- Hardly anyone uses a private car to go to work, the majority walks
A PRRECIATION OF ENVIRONMENT & INTENTION TO STAY IN SHENZHEN

- The appreciation of the living environment is very mixed
- A big share of the respondents does not want to stay in Shenzhen or has not decided yet
LAND ALLOCATED TO STREETS

(source: UN-habitat, 2013b)

<table>
<thead>
<tr>
<th></th>
<th>Proportion of Land Allocated to streets (%)</th>
<th>Street density (m²/km²)</th>
<th>Intersection density (km²)</th>
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(source: UN-Habitat, 2013b)
STREET INTERSECTION DENSITY

(source: UN-habitat, 2013b)

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DOMINANT TYPES OF STREETS

Big city roads, widened by government

Typical urban village street
INTERMEDIATE LEVEL STREET DISTRIBUTION
LACKING INTERMEDIATE CONNECTORS
OBSTACLES IMPEDING CROSSING

PAVING THE PATH
CROSSABLE SPOTS ON CITY ROADS
GLOBAL INTEGRATION

Global angular integration (r=n) on metropolitan scale

Global angular integration on district scale

Global angular integration on neighborhood scale
LOCAL INTEGRATION

Local angular integration (r=3) on metropolitan scale

Local angular integration on district scale

Local angular integration on neighborhood scale
MAPPING OF SMALL BUSINESSES

Retail

Services

Workshops

Unknown businesses

PAVING THE PATH
SMALL BUSINESS DISTRIBUTION
BUSINESS DISTRIBUTION & LOCAL INTEGRATION OF STREETS

Legend:
- Main road
- Secondary road
- Metro line
- Metro station
- Planned metro line
- Planned metro station
- Water
- Building
- Park
- Vacant land
- Connecting side street
- Zone without connecting side streets
- Crossable place on main streets
- Retail / food
- Services
- Workshops
- Unknown business
- Unused space

PAVING THE PATH
Correlation shops and integration of streets

Local angular integration ($r^2$)

(work)shops & services per 100m street side

$R = 0.7659$

$R^2 = 0.5864$
MAIN CONCLUSIONS FROM RESEARCH

• Self-employment and small business provides Chinese migrants a decent upward social mobility path
• Many migrants have the ambition to become self-employed in the future

• Most migrants work in factories and live in urban village houses
• The majority uses walking as their main means of transport
• Street design does not sufficiently facilitate walking; cars are prioritized

• Businesses tend to locate themselves in the most integrated spaces, where most people move along
• There is a lack of well integrated street on the intermediate level between the village streets and the big city roads
STRATEGY

- Enhancing spatial conditions
- Supporting migrants’ small businesses

**Actions**

- Increase walkability
- Preserve a variety of plot/building sizes
- Preserve a variety of plot/building sizes
- Limited plot sizes / minimum permeability when redeveloping
- New collaborations & property right security

**Planning**

- Strategic planning framework
- Planning
- Planning
- Planning

**Framework**

- New collaborations & property right security
- New collaborations & property right security
- New collaborations & property right security
- New collaborations & property right security

**INTEGRATION**

- Diversify public space
- Diversify public space

**ENHANCEMENT**

- Increase street integration
- Increase street integration
- Increase street integration
- Increase street integration

**PAVING THE PATH**
INCREASE STREET INTEGRATION

- More integrated space will mean more profitable business locations. Increase the integration of the street grid by connecting existing dead end streets of urban villages and factory compounds or creating new streets.
INCREASE WALKABILITY

- To attract potential customers to small businesses, streets should be designed to prioritize slow mobility. More safe and comfortable street crossings are needed.
Providing accessibility should not be the only function of public space; it should be redesigned so it can be used for a variety of uses such as mobile commerce and leisure. Different uses result in more people in the streets on different times of day.
A mix of different sizes of plots should be preserved on a neighborhood level because most traffic will be between small and large plots. Also, businesses should be able to move to a bigger accommodation when they expand.
LIMITED PLOT SIZE WHEN REDEVELOPING

There should be a limit to plot sizes when redeveloping to assure adequate permeability for the surrounding urban fabric.
Provide Property Right Security

Secure property rights will village collectives to invest in the quality of their assets.
PILOT PROJECT: THE CANAL
PILOT PROJECT: THE CANAL

PAVING THE PATH
INTERVENTION PRINCIPLE

- Redefining the canal banks as public space
- Removing obstacles, constructing bridges and redesigning leftover space along the canal
ACTIVATING THE CANAL BANKS
ACTIVATING THE CANAL BANKS
A NEW ROUTE ON AN INTERMEDIATE LEVEL
INCREASE OF STREET INTEGRATION
PRIORITIZING SLOW MOBILITY
INSURING PERMEABILITY IN REDEVELOPMENTS

PAVING THE PATH
INSURING PERMEABILITY IN REDEVELOPMENTS
INSURING PERMEABILITY IN REDEVELOPMENTS
DIVERSIFYING PUBLIC SPACE USE
MOVEMENT SPACE

PAVING THE PATH
MOBILE COMMERCE SPACE
FIXED COMMERCE EXPANSION SPACE
LEISURE SPACE

PAVING THE PATH
LEFTOVER SPACE ALONG THE CANAL
LEFTOVER SPACE ACTIVATED
ACCOMMODATING DIFFERENT USES

BUSINESS SPACE

OUTDOOR BUSINESS SPACE

MOVEMENT SPACE

LEISURE SPACE

PAVING THE PATH
LEISURE SPACE IN AND ALONG CANAL
INSPIRATION: FUZHOU CANAL RECOVERER

(source: John Todd Ecological Design)
UPGRADING THE CANAL
UPGRADING THE CANAL
PROACTIVELY INSURING CONNECTIVITY

PAVING THE PATH
PROACTIVELY INSURING CONNECTIVITY
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TOWARDS A NETWORK OF NEIGHBORHOOD STREETS
TOWARDS A NETWORK OF NEIGHBORHOOD STREETS
TOWARDS A NETWORK OF NEIGHBORHOOD STREETS
THANK YOU