Inclusion of Migrants in Urban Redevelopment in Shenzhen

From Shantytown to Maker City

SZ+
**FROM SHANZHAI CITY TO MAKER CITY**

- Introduction
- New Phenomenon
- City Vision Change
- Urban Planning in Social-Economic Transformation
- Urban Structure and Typology
- Issues Behind Current Planning System
- Problem Statement
- Research Question
- Research Plan
- Relevance

**SHANZHAI CITY**

- Research Site and Scope
- History of HQB
- Shanzhai Model
- Conditions for Emerging of Maker Movement in HQB
- Conclusion

**MAKER CITY 1.0**

- Maker Movement in Shenzhen
- Research Methods
- Makerspace in Maker Movement
- From Shanzhai to Making
- Making as Manufacturing
- Maker Spaces in Shenzhen
- Conclusion

**MAKER CITY 2.0**

- Definition
- Research Area and Methods
- Analysis
- Objective and Vision
- Stakeholder Analysis
- Strategies
- Conclusion

**REFLECTION**
CONCLUSION

SHANZHAI CITY

SOCIAL EXCLUSION

MAKER CITY

- SPACE TRANSFORMATION
- SHIFTING EMPLOYMENT BASE
- POLITIC CHANGE
- URBAN STRUCTURE
- URBAN TYPOLOGIES
RESEARCH QUESTION

How to build a strategic design framework based on Maker Movement to revise the process from Shanzhai City to maker City thereby including rural migrants in urban redevelopment of Shenzhen?

+What are the conditions for emerging of Shanzhai movement in Huaqiangbei that could provide principles for fostering maker movement in urban redevelopment project? (SHANZHAI CITY)

+How could current maker movement be revised to meet demands of maker groups and bring new value? (MAKER CITY 1.0)

+How could maker movement be integrated for making a urban design framework to achieve inclusion of migrants in urban redevelopment? (MAKER 2.0)

KEY WORDS: STRATEGIC DESIGN FRAMEWORK, MAKER MOVEMENT, PROCESS,
SHANZHAI CITY

1. What are the conditions for emerging of maker movement in Huaqiangbei?

"I saw HQB as a success of grassroots innovation by collective efforts and it is the outcome of communication between Shanzhai entrepreneurs and District/ Municipal Government."
HQB industry area is seen as collective effort in transforming the zoning plan by Shanzhai entrepreneurs.
Early 1990s, “Securities Trading Mainly”,
1990 “Residential mainly”, “Sub district-level commercial service center” and so on
2005, Regional Electronic Market

图 3 2004年现状与1999年规划比较未按规划实施用地(深色部分)
Fig.3 Situation of 2004 and self-developed land compared with the planning of 1999 (dark color)
Shanzhai, which is synonymous with the **INNOVATION KNOW-HOW PROCESS**, is far more resilient than any existing economic structure based on capitalist rules, because it is based on the **COLLECTIVE OF MILLIONS OF INNOVATORS** instead of relying on a monolithic knowledge management system that can fail easily due to one wrong decision at the executive level.
How Can We Evaluate These Qualities?

As these examples show, there are no definitive criteria or rules that define the qualities of communities, but there are broad principles, each representing different strengths and opportunities.

However, in order to learn from these principles, it’s important to be able to evaluate them, and to ‘measure’ a community’s qualities. The Urban Community Quality Wheel (opposite) captures these 11 key qualities, using our own common sense. The Urban Community Quality Wheel is used as a tool throughout this book, to measure and compare projects researched and produced, and to test what works, and what doesn’t.

The quality of communities is their ability to combine two seemingly competing characteristics: density and individuality. On the one hand, communities are dense, public and collective; on the other, they enable individual freedom and identity, traits expressed through flexibility and diversity.

Two new urban models were developed in the twentieth century as responses to these desires – the individuality of suburbs, and the density of the tower block – neither of which is suitable for our increasingly populated and resource-source planet. Can these two competing impulses be reconciled?

The challenge for the future design of living spaces is to combine density and individuality, serving both the global needs of the environment, and the personal needs of the inhabitant.
MAKER CITY 1.0

2. What is the situation of current maker movement and demands from makers in shaping their own spaces?

“Values behind current maker movement decided the purpose of majority maker spaces in Shenzhen. Relocating maker movement in Chinese Innovation System would the fact that mismatching between local demands in shaping their own environments and national culture.”
As the explanation given by The People’s Daily (renmin ribao),

“Makers are devoted to innovation passionately. They control the PRODUCTION TOOLS themselves. Taking ‘user-innovation’ as a core concept, they excel in discovering problems, unearthing (customer) needs, and providing solutions. Through creativity, design, and MANUFACTURING, they offer a variety of products and service.” (Yu and Deng 2015, cited in Wang, 2016)
**Rent**

**Funding**
- private
- government
- private
- enterprise
- enterprise
- enterprise

**Business Model**
- community-based
- facility-based
- facility-based
- resource-based
- resource-based
- community-based

**Target Group**
- Local Community
- Local Community
- General Public
- Start-up Teams
- Start-up Teams
- General Public
Rent Funding

Business Model
Target Group

enterprise private government private
community-based
Local Community Local Community General Public Start-up Teams Start-up Teams
facility-based facility-based resource-based resource-based
community-based community-based innovation-based
enterprise government self-organized private private

government
self-organized
private
private

resource-based
facility-based
community-based
innovation-based

Makers
Start-up Teams
Makers
Students
Flowing Children
GLOBAL

- Idea to Prototype
  - TechShop etc

- Prototype to Product
  - Highway 1

- Funding and Market Prediction
  - Kickstarter
    - VC from Los Angeles

- Small Scale Production
  - Industry Chain Supplier

LOCAL

- Chaihuo Makerspace
- TechSpace
- Makeblock

- HAXLR8R
- TechSpace
- World Maker

- KnewOne
- Demohour
- Shenzhen Bay

- Small Scale Production:
  - Seeed Studio
  - Offline Sale Center:
    - Huaqiang North
  - Online Sale Center:
    - Alibaba
Making as Manufacturing

CONFLICT

Doing For Fun

LIFESTYLE
Maker City 2.0 does not negate the significance of Maker 1.0 but saw it as a starting point for empowering migrants and subversion purposes. It intends to enlarge the influence of maker cities through including migrants and local social-economic production in this process. Meanwhile, the design interventions in urban villages intend to go beyond the physical structure of the urban village and bring an understanding of an intangible network of communities into discussion.
**ANALYSIS**

**SITE**

**URBAN VILLAGE**

**TYPOLOGY**

**SPATIAL ACTIONS**

**OBJECTIVES**

**BRIDGING**

+ Enhance the connection of Futian Village to larger social economic system
+ Create New Centrality

**AGGREGATING**

+ Provide more sharing places for Live and work of different groups of people especially for makers
+ Foster the local economy especially informal economy
+ Enhance the internal connection of Futian Village

**FRAMING**

+ Set Standards for transforming current typology to suitable living and working place for makers
Futian village is located in the southern part of the Huaqiangbei Area and it is surrounded by a variety of building typologies such as Danwei Buildings, Public buildings, Schools and Office. Such mixed typology threatened the existing of the urban village since the whole urban village is locked by the walls surrounding around. Die soon if the heat continues. However, only energy from interval could really give birth to a new life.
Large public system is segregated by highway and Meanwhile, infrastructures play an important role in opening up the urban village but in a negative way, occupying the previous pedestrian area which is used as public space before. Infrastructure and walls work together to squeeze the living space of urban village.
However, edge areas surrounding urban village all fenced by walls in a way claim the using right to certain typology. However, urban village provides important daily services to migrants as well as residents live nearby. Fresh food market, restaurants, Walmart Supermarket all important daily life service for guaranteeing the affordable lifestyle.
Futian village has a good connection to public transport including one main metro stop and several bus stops. However, it is in walking distance to these transport. No public transport available for public in urban village. Biking, walking and e-bike becomes the main transport means. With increasing of autos, roads are gradually occupied by parking area. However, the influence of cars and infrastructure does not stop people living in urban village to achieve autonomy through sharing bike system. What lacking in Urban village or does not correspond to the new phenomenon is that no bicycle lanes are in urban village. Sharing bikes provide an equal opportunity for all people to enjoy the cheap public facility.
ECONOMY MODEL IN URBAN VILLAGE

MIGRANTS

SMALL BUSINESS OWNERS

VILLAGE JOINT COMPANY

VILLAGERS
OBJECTIVENESS FOR LARGE SCALE

+ Increase the connection of urban village to larger public space system
+ Create new centrality through foster the economic system within urban village
+ Prevent the influence of car transport and foster the emerging transport means
Understanding the demands of migrants actually reflects the kind of evolution of demands in their environment. It indicates the
OBJECTIVENESS FOR MIDDLE SCALE

+ Provide Sharing Facilities for different group of people,
+ Provide Facilities for Makers which could help them work better in Urban Village,
+ Intergrade maker production with informal economy in urban village to achieve more resilience, critical mass
Government Recognized the Legal Statue of Changing Industry Block to Commercial Purpose

Keep Outdoor advertisements and Organize Commercial Promotional Events in HCB
SMALL SCALE STRATEGIES

MIXED-USE

PUBLIC SPACE

ROOF AREA AS COMMUNITY SPACE

EXTENSION BETWEEN BUILDINGS

STREET CONNECTION

Intervention will focus on single building and strategies proposed will use building itself as source of sharing space. Instead of only for residential usage, new group people-maker would bring new facilities to buildings along with economy model for micro scale.
In term of co-development model, villagers will be involved long term investment. Around 10-20% of the buildings could be used for makers specific. Makers are allowed to change interior space by themselves and get cheap renting fee. As a return, villagers could get certain amount of the interest by maker or government.
Based on the value of sharing to enlarge the chance for communication among migrants and also create more income for house owners.

SHARING FACILITIES
ECONOMY MODEL IN URBAN VILLAGE

Migrants → Small Business Owners → Village Joint Company → Villagers

Money Flow in Futian Village
Infrastructure Investment
ECONOMY MODEL IN URBAN VILLAGE

- MIGRANTS
- SMALL BUSINESS OWNERS
- MAKERS
- VILLAGERS
- VILLAGE JOINT COMPANY

Money Flow in Futian Village
Infrastructure Investment
RECYCLE CENTER

ELECTRONIC SHOP
PROTOTYPE FACTORY
CO-WORKING SPACE
FLOW OF KNOWLEDGE
FLOW OF MONEY
FLOW OF MATERIALS
1.0 GOVERNMENT LED URBAN REGENERATION MODEL
2.0 VILLAGE-JOINT COMPANY LED URBAN REGENERATION MODEL
3.0 VILLAGE-JOINT COMPANY AND DEVELOPER LED REGENERATION MODEL
Scenario 1
Developers take charge of development but still keep the local essence

Scenario 2
Villagers become developers

Scenario 3
Influence from Outside Maker City, “Dafen”

Creative Workers
Social Economic Connections
New Centrality
The thinking behind first scenario is that developers would seek for profit maximum and its geographical location would create additional profit by real estate development. Chasing after money but still keeping the most functional part of the urban village as a marketing strategy for attracting renters and potential investors. High density will compensate for the money they paid for purchasing the lands from villagers but local building design strategy may be kept for high rise building design. It will become a marketing project directly which will be used by both developer and government as a new maker business area.
Business as usual would rest on growth of current spatial development which is about adaptation of building typology. Negative space will be taken use but these spaces may not fully satisfy future demand for connection with formal economy and governmental vision. In order to bring new function, root area will be used as strategy for new group people. This strategy will respect current typology while creating new space for creative class and quality working and living space. Instead of conflicting in land right, air right will be new aspect villagers could control. In that sense, urban village become symbolic project and place itself which will become attractive for creative workers. It will represent a experimentalism in both innovation development and urban space development.
Governmental attitude towards maker city 2.0 will be positive from the case of Dafen. However, new functions will be proposed by government to increase the influence of these grassroots development which will rely on different typology. Analysis on context of Futian Village, central park, industry building along the river, one port will be potential assets government will take use. Instead of seeking transforming space in urban village, using flagship projects could be a win-win strategy for integration local development with governmental vision. These space would provide a large stage for makers while create a new node in current place.
politics and Design are not understood separately, but rather as politics as an essential aspect of design along with the simultaneous situation that design is an equally tool for political action.
MAP OF URBAN VILLAGES DISTRIBUTION IN SHENZHEN
As Lam (2016) emphasized, it is an explanation and interpretation that grassroots innovation in Shenzhen is not an end, but a means to next phase of innovation in Shenzhen inevitably triggers our imagination about how its citizens will be treated in next phase, especially the grassroots communities that have been underrepresented for a long time. The analogy he used in the article may be appropriate for Shenzhen, an egg: impacting from the outside would provide food for others, but impacting it from within would breed a life of its own."