

**URBAN REDEVELOPMENT AND  
RESIDENTIAL DISPLACEMENT IN  
SHENZHEN, CHINA**

TOWARDS INCLUSIVE AND SUSTAINABLE URBAN  
TRANSFORMATION

**YING LIU**

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ISBN: 978-90-6266-489-4

Cover design: Ping Huang & Ying Liu

Cover Photograph: Zhiwen Zou

Printed by: ProefschriftMaken || [www.proefschriftmaken.nl](http://www.proefschriftmaken.nl)

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# **Urban redevelopment and residential displacement in Shenzhen, China**

Towards inclusive and sustainable urban transformation

Stedelijke herontwikkeling en residentiële verplaatsing in Shenzhen, China

Naar een inclusieve en duurzame stedelijke transformatie

*(met een samenvatting in het Nederlands)*

## **PROEFSCHRIFT**

ter verkrijging van de graad van doctor aan de Universiteit Utrecht

op gezag van de rector magnificus, prof. dr. G.J. van der Zwaan,

ingevolge het besluit van het college voor promoties

in het openbaar te verdedigen

op vrijdag 1 december 2017

des middags te 4.15 uur

door

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This thesis was accomplished with financial support from the China Scholarship Council.

## Acknowledgements

Five years' PhD has made me know much more clearly, not only my potential, but more importantly, also my limits. There are too many people that I want to thank here. However, I often find myself short of words. They say words mislead, which I will use as an excuse for this relatively short acknowledgement.

First, I would like to thank my three wonderful supervisors: Prof. Stan Geertman, Prof. Frank van Oort, and Dr. Yanliu Lin. I cannot possibly finish this PhD thesis without their support and guidance. I still remember six years ago, in a bone-chilling winter in Northeast China, the joy I felt receiving the offer from Stan. I have always been grateful for this opportunity. Though it took me half a year to decide what to do for my PhD, Stan never pushed me, and I remember he sat there, smiling, and asking the question: "what do you want to do?" Now I know why this question is so important, and thanks for being patient and supportive since the very beginning. Frank, as knowledgeable and productive as he is, has made me learn a lot. Every time an article was returned from him, it was full of track changes and insightful comments. Frank's passion about research has encouraged me greatly. Yanliu is more a close friend than a supervisor. She is an excellent researcher, willing to share all her thoughts, knowledge and experiences with me; and her Chinese background has made things much easier for me. I am so grateful that I have Yanliu as my mentor for these five years.

I also want to thank my Master's supervisor Prof. Pingyu Zhang. It is lucky to have him as my supervisor. When deciding whether to do a PhD, it was him who encouraged me to pursue what I really wanted. Even after I graduated, he is still ready to offer any help and support.

During the two rounds of fieldwork in Shenzhen, I met many interesting and kind people and I am grateful to their generous help. Xingtang Qiu, a migrant worker, without him it would be impossible for me to find those migrants displaced from Huangbeiling village. Lao Si, a self-employed migrant in Baishizhou village, friendly to everyone, I enjoyed very much his kindness and humor. Honghong Fu, a lovely girl in Baishizhou village, thanks for generously sharing so many beautiful and touching photos that she took about the village and people living there. Na Fu, a brilliant researcher in a local NGO Retumu, thanks for being my local guide in several urban villages, and I will never forget the scene of a bulldozer demolishing the village while in the dust we were doing interviews...

I want to thank many friends and colleagues for their constructive ideas and supports while writing this thesis: data (Fangfang Cheng; Pu Hao; Xiao Qin); method and design (Hong Hu; Can Cui; Yafei Liu; Jianxi Feng; Xu Huang; Peter Pelzer; Jaap Nieuwenhuis; Nicola Cortinovis; Min Yang; Prof. Shenjing He); moral support (Bingsheng Lv; Lei Du; Xiuli Gong; Mengyuan Zhu; Nan Xiang; Amir Prior; Shuangshuang Tang; Xiaolin Zang; Zidan Mao; Xin Li; Xin Jin); and the company of other friends and colleagues (Xin Wang; Jiawang Wu; Jingchao Wu; Miao Zhang; Chaozhong Qin; Xiaoguang Yin; Haoran Yang; Qianfan Zhang;

Lin Zhang; Yongling Li; Dario Diodato; Jie Gao; Xing Su; Rika Theo; Jianglv Wei; Mo Chen; Jiayin Pei).

I also want to thank my housemates in Homeruslaan 28, Xue Bao, Heyuan Sun, Luwen Zhuang, Shaohui Zhang, for their companionship and care, and for being my family in the Netherlands for these four years.

Specially, I want to thank Klaas Danhof and his family, Frans Baggen, Ingrid Baggen, and others. Thanks for opening their door to a stranger and foreigner like me, and accepting me as one of theirs. Thanks for all those long and thought-provoking talks. Their way of viewing the world and human itself has influenced me greatly, and encouraged me to continue seeking inwards.

For Chinese, family is the most important part of life. Finally, I want to thank my family, my mother Mingying Liu (刘明英), my father Lixin Hu (胡立新), my mother-in-law Yan Chen (陈雁), my father-in-law Longgui Huang (黄龙贵), my sister Shushu Hu (胡舒姝), my brother-in-law Yanbing Liu (刘延兵), and my adorable niece Jinyu Liu (刘锦妤) and nephew Tianyu Liu (刘添瑜). Specially, I want to thank my husband, friend and colleague, Ping Huang (黄平), for his unconditional love, for not giving me up no matter what, and for making me a better person. Life is a long journey, and I am grateful that I have you by my side.

Shenzhen, August 2017

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# 1 Introduction

## 1.1 Urban transformation and residential displacement in China

Rapid urbanization is a global phenomenon, especially in developing countries. In 2008, for the first time in history, more than half of the world's human population lived in urban areas (UNFPA, 2007). In China, it is predicted that by 2020 60% of the population will live in cities (Normile, 2008). The initial stage of massive urbanization in China is fuelled by state-mandated industrialization because the central government was eager to revitalize the country's economy, and is then followed by rapid suburbanization in the post-reform era since 1978 (Liu et al., 2014). After decades of urban expansion, two trends come to the fore. On the one hand, numerous unused or under-used old industrial areas have emerged as a result of deindustrialization of the urban core. On the other hand, informal settlements have proliferated by virtue of massive rural-urban migration and the resultant increasing demand for affordable housing (ibid.). These trends both condition and fuel processes of transformations in many Chinese cities that are most visibly manifested in the built environment by thriving urban redevelopment projects (Li and Song, 2009).

In *'The Special Plan for the Revitalisation of Old Industrial-Base Cities (2013-2022)'*, 120 cities in China were identified as old industrial-base cities. One of the central foci of this plan is the redevelopment of old industrial areas located in the centres of these cities. More recently, in February 2016, the Chinese central government released the *"Opinions of the Central Committee of the Communist Party of China and the State Council on Further Strengthening the Administration of Urban Planning and Development"*, in which it is stated that 'by 2020, the transformation and renovation of existing shantytowns, urban villages and dilapidated houses in cities will be complete.'<sup>1</sup> The focus of policymakers on cities, neighbourhoods and redevelopment areas within cities, can be characterised as, what are called in the literature, *area-based policies*. Such policies are an integral part of the policy mix in many countries. In the United States, approximately 95 billion US dollars per year have been spent on area-based policies since the first decade of the 21st century (Kline and Moretti, 2014). The same holds true for the European Union (EU). Here, a significant fraction of the EU fiscal budget is transferred to member states via the Structural Funds to support economically lagging regions. In the 2007- 2013 programming period, expenditures amounted to 278 billion euros. The main goals of these policy measures are to increase employment and productivity, particularly in disadvantaged areas and to assist regions to better cope with and foster structural change. Thereby, area-based policies comprise a variety of measures, ranging from those that focus on enterprise zones, cluster policies or even large-scale regional development programs (Neumark and Simpson, 2015). From an economic theory perspective, it remains questionable whether these policies work in the way they were originally intended (Glaeser and Gottlieb, 2008). On the one hand, the presence of market

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<sup>1</sup> [http://www.mohurd.gov.cn/wjfb/201602/t20160222\\_226696.html](http://www.mohurd.gov.cn/wjfb/201602/t20160222_226696.html)

failures with a spatial dimension may justify intervention. Hausmann and Rodrik (2003) argue that market failures may prevent regional structural change because entrepreneurial activity might be hindered by spillovers and imitation by others. Moretti (2010) and Neumark and Simpson (2015) furthermore find agglomeration economies, spatial mismatch, network effects, or equity motivations as potential rationales that justify area-based policy schemes. On the other hand, the literature discusses the drawbacks of such interventions, all of which lead to non-productive factor allocations (Glaeser, 2008).

Nowadays Chinese local governments initiate urban redevelopment projects in Chinese larger cities, with intended goals such as value creation and capturing and environmental upgrading. However, these transformative processes will arguably also generate large social external effects in urban areas, manifesting itself in the form of residential displacement, that subsequently may cause problems for displacees concerning safe housing, income generation, travel to work efforts and costs, and social network distortion (Robinson, 2003; Mathur, 2006). Residential displacement can take several forms, either directly or indirectly. Direct displacement is defined by Grier and Grier (1978) as:

“Displacement occurs when any household is forced to move from its residence by conditions that affect the dwelling or its immediate surroundings, and that: 1) are beyond the household’s reasonable ability to control or prevent; 2) occur despite the household’s having met all previously imposed conditions of occupancy; and 3) make continued occupancy by that household impossible, hazardous, or unaffordable” (p. 8).

Marcuse (1985) broadened the concept of direct displacement by adding two types of indirect displacement: displacement pressure and exclusionary displacement. Displacement pressure refers to the households’ subjective fear of the possibility of displacement. Exclusionary displacement occurs when a household is excluded from a once-affordable dwelling because it has been gentrified (Slater, 2009). Nowadays in China, direct displacement takes place at a large scale due to urban redevelopment. In Shanghai, from 1995 to 2005, 41.88 million m<sup>2</sup> of housing were demolished, generating the relocation of more than 0.8 million households (He, 2007). In Guangzhou, according to a government document published in 2010, it was estimated that 10 million m<sup>2</sup> of buildings will be demolished, and about 0.6 million people will be relocated (He, 2012). Despite the magnitude of these displacement processes, there is a general lack of insight into the patterns, dynamics, and mechanisms of this urban phenomenon in China. The main reasons for this are that people are hard to trace once displaced, impacts of external effects are difficult to substantiate (even when people are traced), and the (monetary) valuation of alternative situations of displacees and of the intended policy effects are usually very difficult to quantify and compare. This dissertation attempts to shed light on the magnitude, causes and consequences of residential displacement, focusing in particular on Shenzhen, China.

## 1.2 Migrant enclaves in China: urban villages

In government documents on China's urban redevelopment strategy, the term "three olds" ("*san jiu*") is widely used, referring to three types of old land in urban areas: inner-city dilapidated residential areas, old industrial areas (including work unit compounds), and urban villages (also called "villages in the city")<sup>2</sup> (Lin et al., 2014; Schoon, 2014; Ye, 2014). Urban villages are urban neighbourhoods that are originally rural settlements, including long-standing land ownership rights, but are encircled by and eventually incorporated into new urban development (Lin et al., 2014). As many of the low-income residents reside in the "three olds" areas it is likely that those will be the first affected by redevelopment-induced displacement (He and Wu, 2007). In an article published last year in *The New York Times*<sup>3</sup>, Baishizhou, an urban village in Shenzhen city, was brought into the spotlight. Home to more than 100,000 rural migrants, Baishizhou village, vibrant and dynamic as it is, has been targeted for demolition and redevelopment in the government's newly-released plans. The fate of Baishizhou village resembles that of numerous informal migrant enclaves in Chinese cities, captured in China's current wave of urban transformation.

The emergence of urban villages is closely related to two sets of institutions: China's dual land system and the *hukou* (household registration) system. After the foundation of the People's Republic of China in 1949, land was nationalised and a dual land ownership system was established, wherein urban land is owned by the state and rural land is owned by collectives (Lin and Ho, 2005; Choy et al., 2013). Back then, the circulation of land in the market was not allowed, as it was stated in the Constitution of 1982: "No organizations or individuals may appropriate, buy, sell, or lease land, or unlawfully transfer it in any way". Furthermore, to restrict rural-urban migration, in the 1950s, the *hukou* system was introduced, under which all the residents were registered according to the birthplace, either as agricultural (rural) or non-agricultural (urban) status. Before the economic reform in 1978, rural-urban migration was strictly controlled by the state under the *hukou* system. One of the major reasons for launching this system was to ensure the benefits of urban residents, who have access to various urban services and amenities, such as local schools, public housing and citywide welfare programs (Wu, 2002).

After the economic reform, the central government started to launch a series of reforms in the dual land system. In 1988 an amendment was made to the Constitution of 1982 which legalized the separation of land ownership from land use rights of urban land and allowed the circulation of the latter (Zhang, 2000). However, the sale, transfer, or lease of agricultural land for non-agricultural use are still forbidden, and the only way to convert rural land to urban land is by state requisition (Lin, 2010)<sup>4</sup>. During the expansion of a city, local

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<sup>2</sup> In the literature, "urban village" is a more widely used term, while "village in the city" is considered as conceptually more accurate (Chung, 2010). In this dissertation, these two terms are used interchangeably.

<sup>3</sup> "Skyscrapers' Rise in China Marks the Fall of Immigrant Enclaves" ([http://www.nytimes.com/2016/07/20/world/asia/skyscrapers-rise-in-china-mark-the-fall-of-immigrant-enclaves.html?\\_r=2](http://www.nytimes.com/2016/07/20/world/asia/skyscrapers-rise-in-china-mark-the-fall-of-immigrant-enclaves.html?_r=2))

<sup>4</sup> Nowadays in some pilot cities the lease of collective land was allowed by local governments.

governments usually requisition crop land rather than built-up land (primarily villagers' settlements) in the villages, foremost due to the wish to pay for less compensation (Hao et al., 2012). As a result of building activities on these former crop lands gradually the existing built-up land of the village is surrounded by new urban built-up areas, which explains the name "urban village" for the original built-up land. In these urban villages the indigenous villagers - the property owners - enjoy considerable autonomy.

At the same time, in the 1980s, due to demand for cheap labor force in urban areas after the economic reform, the central government started to relax restrictions on rural-urban migration and ever since Chinese cities (especially coastal cities) have witnessed an unprecedented influx of rural migrants. However, for the rural migrants living in the urban areas the *hukou* system turned out to be institutionally discriminatory, in which they were excluded from access to various urban services like social housing, public education, and social welfares. For instance, manifested in housing, these rural migrants often resort to the informal private rental market, especially the one that can be found in urban villages to which the rural migrants frequently are also socially connected. This leads to the situation in which indigenous villagers who have lost their farmland and in that their main source of livelihood started to make a new living by fulfilling the need for affordable housing of millions of rural migrants entering the city (Chung, 2010; Wang et al., 2009). As a consequence, urban villages became the sites of unprecedented informal construction activities by indigenous villagers, giving birth to the well-known "handshake and kissing buildings" (Lin et al., 2011).

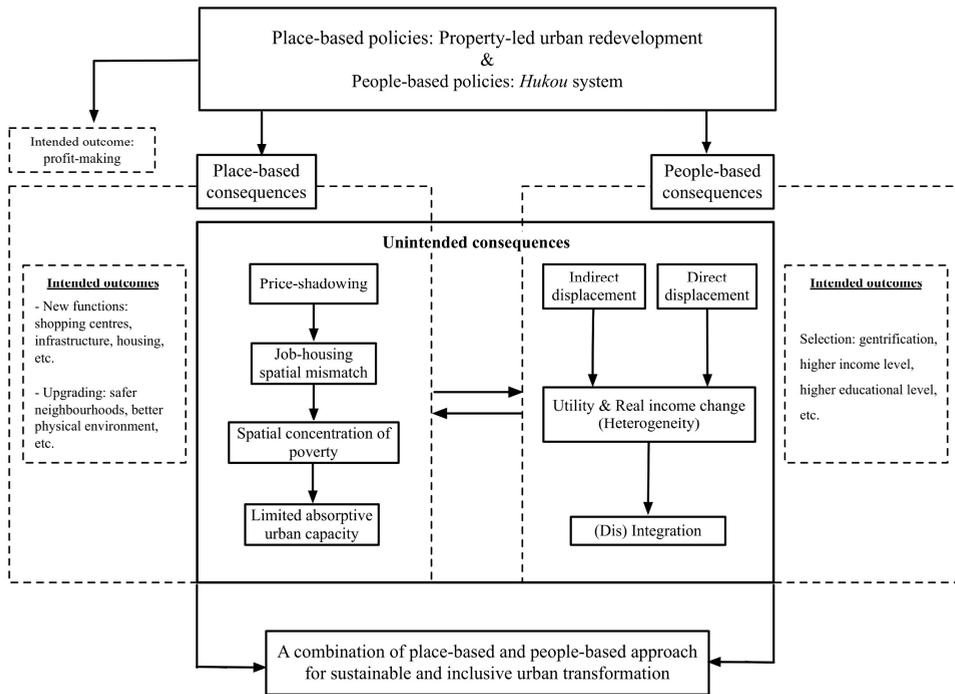
As a special form of urban community, besides relatively informal and unregulated physical environments, urban villages are also diverse and vibrant in a variety of dimensions (Chung, 2010). Rather than 'islands', urban villages have developed complex relationships with the surrounding urban areas. They not only provide affordable housing and cheap services for the majority of rural migrants, but also make a significant contribution to the urban economy. For instance, in Shenzhen, the collective land of urban villages accommodates a large percentage of the city's economic activities (Lai et al., 2016). Although these villages suffer from overcrowding and poor facilities, the spatial organizations offer mixed functions for a diverse population, reflected in the wide range of commercial and cultural enterprises. However, the unregulated houses and messy street profiles are considered as an urban pathology, and have hampered the local government's goal of building world-class cities. Overall, the inhabitants in urban villages are currently under the risk of eviction. Due to the rapid expansion of Chinese cities the relative location of quite some of these urban villages moved from the outskirts of the urban areas to a much more central location, which makes these very attractive as living areas for rural migrants on the one hand but meanwhile for redevelopment by developers and local governments on the other. Foremost because of the huge rent gap, developers and local governments too can gain high profits through the redevelopment of these urban villages. Furthermore, due to the fact that the rural migrants living in the urban villages possess very few or no tenancy rights, they can be easily 'removed' and are largely treated as "invisible" by local government as well as developers. They are simply uprooted from their dwelling without any room for bargaining.

It is this 'invisibility' that motivated us to have a closer look at displacement in the course of the redevelopment process of urban villages.

### **1.3 Research objectives and questions**

Urban redevelopment policies are part of the area-based revitalization strategies that have been widely implemented in distressed regions or neighbourhoods (Gobillon et al., 2012). Worldwide, governments spend considerable amounts of money to stimulate employment growth and productivity. These investments are made with specific goals that are formulated at regional, city and even neighbourhood levels. These area-based policies, with typical examples such as the Area-based Initiative (ABI) in the UK, and the Neighbourhood Revitalization Initiative (NRI) in the US (Khare, 2015), have been backed up by a burgeoning literature on agglomeration economies, urban land and real-estate premiums, spatial labor matching, governance dynamics, network building and spatial sorting processes of more productive and well-performing firms and employees on urban and neighbourhood levels. As noted by Carpenter (2006), area-based approaches can be either place-based or people-based. In short, place-based policies involve investments primarily in the physical environment; while people-based policies are more interested in helping residents who live in those targeted areas. For place-based approaches, although improvement of physical environments might attract external investment, there are substantial risks of property speculation, or population displacement (Larsen, 2005). On the other hand, people-based policies cannot guarantee the revitalization of distressed neighbourhoods since benefited residents usually choose to move out of the neighbourhood when they have the chance to leave (Taylor, 1998). Consequently, successful area-based policies have to strike a balance between place and people (Larsen, 2005), and policies may be simultaneously people-based besides place-based in character (Barca et al., 2012; Neumark and Simpson, 2015). In fact, from experiences in the developed countries, area-based policies normally incorporate both place-based and people-based objectives, with intended goals of environmental improvement, infrastructure renovation, as well as employment growth, and development of social capital in local communities.

Unfortunately, the property-led redevelopment policies of Chinese governments are extreme examples of place-based development strategies. Main focus is placed upon the improvement of the physical environment, rather than the support of the local community. This imbalance between place and people might generate unintended place- and people-based consequences, aside from those intended 'benefits' such as value capturing, environment improvement, and function upgrading (figure 1.1).



**Figure 1.1 Conceptual framework of the dissertation**

The aforementioned *hukou* system, one of the most influential and contentious people-based policies in China, has no doubt caused long-lasting discrimination that is imposing upon certain groups of the population. When it comes to the consequences of property-led redevelopment in Chinese cities, the *hukou* system not only contributes to the ‘invisibility’ of displaced migrants, but also substantially hampers the integration of migrants after displacement. Moreover, since displacement is not an isolated process, but is rather interacted and intertwined with broader urban dynamics, these unintended consequences do not merely take effect at the individual level, but are also manifested in the macro-level urban spatial structures. For instance, the originally very heterogeneous population might be displaced with certain patterns, which might further lead to changes in the general housing market, the spatial poverty concentration, and the job-housing mismatch of the broader urban system. Considering the always limited urban absorptive capacity (a city’s ability to properly accommodate displaced residents) for the displaced population, the ultimate question is: how to reach a balance between place-based and people-based policies, so as to minimize the unintended consequences? Identification of place- and/or people-based policies and their effects is at the core of the urban economic discipline (Neumark and Simpson, 2015). Opposed to experiences in Western economies, urban redevelopment projects in Chinese cities have not been subject to the process of identification of place-based and people-based effects systematically. The different institutional, social and economic circumstances in

Chinese urban growth give reason to believe that these unintended consequences may manifest themselves differently in the Chinese context. The main aim of this research is therefore to identify the mechanisms and selective socio-economic consequences of redevelopment-induced displacement. Situated within the specific Chinese policy context, the place- and people-based consequences of redevelopment policies in terms of income, housing, travel to work distances, job security, and social networks are discussed. Besides providing a critical view on displacement processes and place-based redevelopment, the research suggests pathways for socially inclusive and sustainable transformations of urban China. To accomplish this research objective, five research questions are developed:

*1. What are the institutional determinants that have shaped the formation of brownfields in Chinese urban villages and other urban areas?*

Urban redevelopment is generally recognized as a more sustainable and efficient approach for urban land utilization. In fact, limited land resources on the one hand and numerous unused or under-used urban areas on the other, act as important driving forces behind the redevelopment of derelict sites. However, there is a general lack of understanding of the development mechanisms of these derelict sites, especially within the context of China. With an emphasis on derelict industrial land in Chinese cities, namely of brownfields (urban areas that have previously been used for economic activities, but are now partly/fully abandoned and at least not fully in use anymore), and based on different typologies, chapter 2 depicts the institutional determinants that have shaped the formation of brownfields in both urban areas and urban villages.

*2. What are individual experiences of and socio-economic consequences for migrants who are displaced from urban villages?*

There has been a growing interest in urban redevelopment and the resultant residential displacement in China (He and Wu, 2007; He, 2010). However, mainstream redevelopment research mainly focuses on households who hold a legitimate right to get compensation from relocation, and limited scholarly attention has been paid to rural migrants who are displaced from urban villages. Despite the fact that these migrants form one of the main stakeholders during the redevelopment of urban villages, they are largely excluded from the decision-making process of urban redevelopment and have long been regarded as literally and figuratively “invisible” by local governments and developers. Chapter 3 first uncovers the informality of urban villages and the insecure tenure of migrant renters, which make them especially vulnerable, and even invisible, in the face of redevelopment-induced displacement. After that, in an attempt to make the “invisible” visible, individual experiences and locational strategies of displaced migrants are presented, and the corresponding socio-economic consequences are discussed.

### *3. Do property-led redevelopment processes lead to price-shadowing and indirect displacement in adjacent urban areas?*

As a main social consequence of urban redevelopment, residential displacement can occur either directly or indirectly. If direct displacement places more focus on ‘the spatial fact’ of displacement, indirect displacement is more concerned with the loss of sense of place (Davidson and Lees, 2010). Compared to direct displacement, indirect displacement is under-researched, and little knowledge is available on either the causes or the consequences of this urban phenomenon (Davidson, 2008; Slater, 2006, 2009). By combining quantitative and qualitative research methods, chapter 4 investigates property-led urban redevelopment in Shenzhen, and the chain effects of this process, namely of the price-shadowing and the induced indirect displacement. Considered as a primary driving force of indirect displacement, the price-shadowing effect of urban redevelopment is quantitatively analyzed. After that, based on qualitative materials, the characteristics of indirect displacement and the consequences for residents living in adjacent urban villages are scrutinized.

### *4. What are the perceptions of consequences and locational strategies of different social groups of migrants under the threat of imminent displacement?*

In chapter 5, we capture a unique situation in one urban village in Shenzhen, where people live under the threat of imminent displacement, and elucidate the heterogeneity of the affected population, as well as their perceptions of and residential choices after displacement. Different from conventional understandings that emphasize the homogeneity of migrant workers, we hypothesize that substantial heterogeneity exists between different social groups in urban villages concerning their perceptions and locational choices in the face of displacement. Therefore, a latent class analysis is first conducted to investigate the social stratification in urban villages. After that, the perceptions of consequences and residential choices of different social groups confronting imminent displacement are analyzed.

### *5. What are pathways to inclusive and sustainable urban transformation that help strengthen migrants’ socio-economic integration after urban redevelopment?*

Sustainable urban transformation is a socially inclusive process when urban residents, including the most marginalized groups, have a representative voice in urban planning and redevelopment. Findings from previous chapters reveal that place-based urban redevelopment in China, with a primary focus on the upgrading of the environment, is nonetheless often an exclusive process in which rural migrants are absent in decision-making and are simply uprooted from their neighbourhoods without any compensation arrangements. This approach is likely to cause disintegration of the social group, since their access to various urban resources tends to be affected by the displacement process and consequently they become more marginalized in the city. Chapter 6 explores the pathways to socially inclusive and sustainable transformation of urban China, with a central focus on integrating people-based elements (such as providing job training or empowering migrants in the redevelopment

process) into current place-centred policies, so as to foster migrants' socio-economic integration into the city.

#### 1.4 Study area: Shenzhen, China

Shenzhen City is located in the southeast of China (Figure 1.2). In 1978, Shenzhen was merely a tiny fishing village adjacent to the border of Hong Kong. In 1979, Shenzhen was designated as a special economic zone (SEZ)<sup>5</sup> to experiment China's open-door policy and to attract foreign investments. With its location advantage of being adjacent to Hong Kong, this city experienced an economic boom due to rapid growth in labor-intensive processing industries (Wang and Xu, 2002). Along with this economic prosperity came a huge influx of migrants and an unprecedented urban expansion. The population increased from 0.31 million in 1979 to 11.91 million in 2016 and the area of urban built-up land increased from less than 3 km<sup>2</sup> in 1979 to 923 km<sup>2</sup> in 2016, consequently comprising many urban villages.

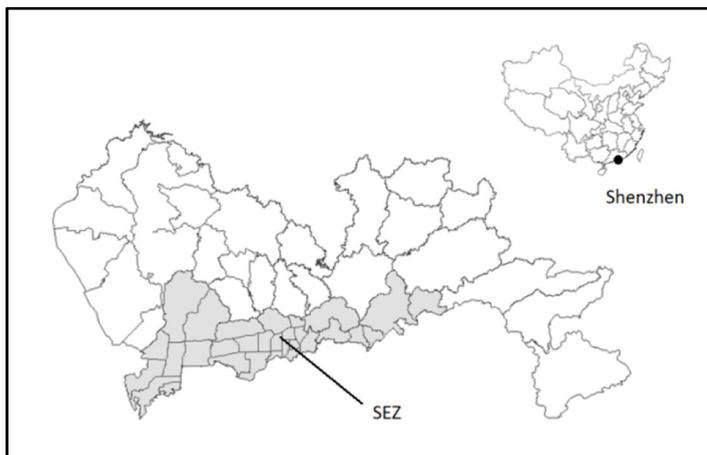
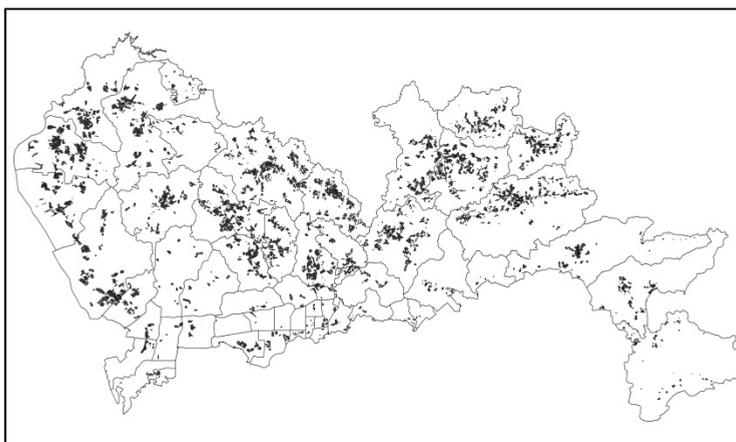


Figure 1.2 Location of Shenzhen city and the original special economic zone (SEZ)

After three decades of rapid expansion, Shenzhen encounters a development bottleneck. On the one hand, as a city on hilly terrain, land resources are extremely limited; on the other hand, a substantial amount of urban built land remains unused or is going through serious deterioration. For instance, in 2010, the aforementioned “*san jiu*” land within the municipal area was up to 240 km<sup>2</sup> (Liu, 2011). Therefore, compared with other large cities in China, Shenzhen is pioneering in the practice of urban redevelopment: it was one of the first cities in China to pursue urban renewal strategies, and it developed the country's first master plan for the redevelopment of urban villages (Chung, 2009; Lai and Zhang, 2015). As such, the process of residential displacement caused by thriving urban redevelopment projects is more prominent in Shenzhen than in other cities in China.

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<sup>5</sup> The SEZ was originally made up of four administrative districts—Nanshan, Futian, Luohu and Yantian—but in 2010 it was extended to cover the whole area of Shenzhen. The “SEZ” used in this dissertation retains its original meaning.



**Figure 1.3 Spatial distribution of urban villages in Shenzhen (2009)**

Moreover, Shenzhen is well-known for numerous urban villages scattering around the whole municipal area (Figure 1.3). As explained before, the growth of urban villages is associated with the need for cheap labor power which is delivered foremost by rural-urban migrants that are dependent for their affordable housing on the urban villages. In 2015, more than 300 urban villages accommodated over half of the city's total population, of whom about 80% are migrants (Lin et al., 2015). Since most of the urban villages in Shenzhen provide low-rent housing for migrants, the disparity between the potential ground rent (due to its mostly central urban location) and the actual ground rent is enormous, which is the so-called rent gap. Therefore, urban villages within the SEZ have undergone more redevelopment than other urban areas (Hao et al., 2012; Lai and Zhang, 2015), and most projects involve the demolition of informal buildings constructed by indigenous villagers and the displacement of rural migrants living over there. These contextual characteristics of Shenzhen, namely of pioneering in urban redevelopment and accommodating large amounts of urban villages, fit our research topic of urban redevelopment and residential displacement very well.

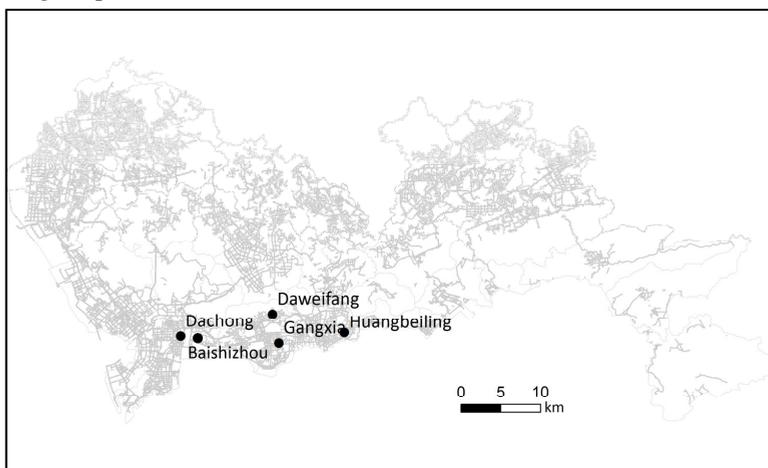
**Table 1.1 Statistics of urban villages in Shenzhen (2004)**

District	Number	Land area (10 <sup>4</sup> m <sup>2</sup> )	Number of buildings	Building density	Floor area ratio	Population of migrants (10 <sup>4</sup> )
Futian	15	195.62	9000	0.55	3.42	57.2
Luohu	35	235.68	12,400	0.53	2.75	74.8
Nanshan	29	291.21	16,800	0.54	2.47	50.9
Yantian	12	77.60	4100	0.45	1.30	14.8
Total SEZ	91	800.11	42,300	0.53	2.67	197.7
Baoan	138	4428.01	165,400	0.33	0.97	166.9
Longgang	91	4120.88	141,200	0.33	1.00	110.8
Total Non-SEZ	229	8548.89	306,600	0.33	0.99	277.7
Total	320	9349.00	348,900	0.35	1.13	475.4

Source: 'Annual report of redevelopment of urban villages in Shenzhen (2005)'

Aside from city-scale analysis in chapter 4, five urban villages in Shenzhen are selected for in-depth empirical research in other chapters, including Baishizhou village (chapter 5&6),

Huangbeiling village (chapter 3), Dachong village (chapter 6), Daweifang village (chapter 6), and Gangxia village (chapter 6). These villages were selected for two reasons. First, the selected villages are all located in the SEZ area. These urban villages possess a more central location and as such have undergone more redevelopment because of the huge rent gaps (Hao et al., 2012; Lai and Zhang, 2015). Also, as revealed in Table 1.1, urban villages in the SEZ have much higher building and population densities and consequently the redevelopment of which will disperse larger populations of migrants. Therefore, as regards the displacement of migrants, the redevelopment of these centrally located urban villages better reflects the urgency of this issue in the city. Second, because of the aforementioned difficulty in tracing displacees, timing plays an essential role in data collection in the study of displacement. When we conducted our fieldwork in Shenzhen, the redevelopment of these urban villages was about to start or already ongoing. This on the one hand improved the chances of being able to track displaced migrants, something that demands great efforts and many resources (for the cases of Huangbeiling, Dachong, Daweifang, and Gangxia village); and on the other hand in the case of Baishizhou village it enabled us to analyze migrants' perceptions and locational choices in the face of imminent displacement. Figure 1.4 shows the location of these urban villages, and their background information will be elaborated upon in corresponding chapters.



**Figure 1.4 Location of case study urban villages**

## **1.5 Thesis outline, data, and methodology**

This dissertation consists of seven chapters. Chapters 2 to 6 are based on articles that have been submitted to and/or published in international peer-reviewed journals. Therefore, there are some overlapping descriptions on for instance background information of the study areas.

Chapter 2 addresses Research question 1 and depicts the institutional determinants that have shaped the formation of derelict land in Chinese cities, with an emphasis on old industrial land, namely of brownfields. In this chapter, from an evolutionary perspective, a

systematic historical analysis is conducted to develop a three-stage conceptual model (industrialization, suburbanization, and deindustrialization) that explains the formation process of brownfields in both urban villages and other urban areas. A thorough review of relevant literature provides insights into this dual process of the formation of old industrial areas. After that, a comparative analysis is presented on varying characteristics between brownfields in urban areas and those in urban villages, in terms of land ownership, the size of the site, spatial distribution, the mechanisms by which the sites are created, and the stakeholders involved.

To answer Research question 2, chapter 3 first uses a systematic literature review to uncover the institutional origins that have resulted in the informality of urban villages and insecure positions of migrants, which made migrants in these villages to become the most vulnerable social group in the face of redevelopment-induced displacement. Thereafter, based on a case study in Huangbeiling village, this chapter explores displacees' individual experiences of displacement as well as the socio-economic consequences of displacement in terms of decreasing proximity, rising living costs, and the loss of social networks and job opportunities. Empirical data were mainly collected during fieldwork from December 2013 to February 2014 and from March to May 2015 in Shenzhen. Semi-structured interviews were conducted with displaced migrants from the redevelopment of Huangbeiling village. Migrants were recruited by snowballing technique: an interviewee was asked to refer to others as potential interviewees. These semi-structured interviews provide important information concerning displaced migrants' experiences and the impacts of displacement on their livelihoods.

Chapter 4 addresses Research question 3, and investigates the causes and consequences of indirect displacement as a result of the spill-over effects of urban redevelopment. To reach conclusions, chapter 4 combines quantitative and qualitative research methods. Firstly, a multilevel hedonic model (MLM) is used to investigate the relationship between urban redevelopment and rising housing prices. MLM accounts for the hierarchical structure of data, and thus generates relatively unbiased modelling results. This model consists of three types of independent variables: structural characteristics, neighbourhood quality, and locational variables. Data for both dependent and independent variables were collected from Urban Planning Land and Resources Commission of Shenzhen Municipality. As a complement to the quantitative modeling, we used various materials from government reports, newspapers, and our own fieldwork interviews to illustrate the consequences of indirect displacement. During two periods of in-depth fieldwork (December 2013–February 2014 and March–May 2015) in Shenzhen, residents living in adjacent areas were randomly sampled and interviewed; the main focus was on the experiences of inflating housing prices/rents and the impacts on their daily lives and dwelling decisions.

Drawing upon a case study in Baishizhou village in Shenzhen, chapter 5 answers Research question 4. Latent class analysis (LCA) is used to investigate the socio-economic characteristics of migrants living in urban villages. It is hypothesized that the class of migrants is not socio-economically homogeneous, but can and should stratify into different

social groups. LCA is used to test this hypothesis, which enables objective identification of the heterogeneity of social classes out of manifest variables. First conceptualized by Lazarsfeld and Henry (1968), LCA can single out a categorical latent class variable measured by a number of observed manifest variables. Data used in this chapter were collected in a fieldwork from March to May 2015 in Shenzhen. A questionnaire survey was conducted in Baishizhou village, in which a combination of systematic sampling and random sampling methods were used to recruit respondents. Overall, a total number of 521 questionnaires were collected, including the respondents' socio-demographic information and their perceptions of and residential choices after the imminent displacement and eventually 497 valid questionnaires were identified.

In response to Research question 5, chapter 6 explores the pathways to socially inclusive and sustainable transformation of urban China, with a central focus on migrants' socio-economic integration into the city. We use mapping, field observations and semi-structured interviews to investigate the displacement patterns of migrants and their underlying driving forces. The data were mainly collected during two periods of in-depth fieldwork (December 2013–February 2014 and March–May 2015) in four urban villages in Shenzhen: Dachong village, Daweifang village, Gangxia village, and Huangbeiling village. Eventually, a total of 110 semi-structured interviews were conducted with displaced migrants. Migrants were identified through snowball sampling, and interviewed migrants were asked to refer to other migrants as potential interviewees. The interviews concentrated on the main issues concerning displacement, ranging from change of locations (in order to map the displacement pattern) to the reasons for locational choices (in order to interpret the mechanism behind the displacement process). Based on findings from previous steps and a thorough review of existing literature on planning approaches, critical perspectives are finally provided for the achievement of inclusive and sustainable transformation of urban villages in Shenzhen.

Chapter 7 summarizes and concludes the main research findings from previous chapters. In this chapter, we first return to each research question raised, and then provide theoretical and policy implications of this dissertation.

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## 2 Institutional Determinants of Brownfield Formation in Chinese Cities and Urban Villages

*This chapter is based on the article: Liu, Y., van Oort, F., Geertman, S., & Lin, Y. (2014). Institutional determinants of brownfield formation in Chinese cities and urban villages. Habitat International, 44, 72-78.*

### ABSTRACT

Brownfields are spatial manifestations of previous economic activities, and their redevelopment may contribute to a more sustainable urban land-use in the rapidly urbanising environment of post-reform China. Owing to China's unique institutional background, two types of brownfields can be distinguished in China, namely of brownfields in urban areas and brownfields in urban villages. Based on this twofold classification, a stage model consisting of three stages (industrialization, suburbanization, and deindustrialization) is introduced to conceptualize the formation process of brownfields in both types of locations in Chinese cities. Deindustrialization of economic activity in the urban core is considered as the main cause of brownfield creation. Differing characteristics of brownfields in urban areas and brown- fields in urban villages are interpreted in detail, consisting of land ownership, size of the site, spatial distribution, the mechanisms by which the sites are created, and the stakeholders involved. This article concludes that future research on brownfield redeveloping strategies in China needs to pay particular attention to different institutional settings of urban areas and urban villages.

**Keywords:** brownfield, formation mechanism, deindustrialization, urban villages

### 2.1 Introduction

The steady increase in urbanisation that is underway worldwide (UNFPA, 2007) is often accompanied by the conversion of large tracts of agricultural land into non-agriculture land. Paradoxically, in many fast growing cities, while urban land is expanding into rural areas in an uncontrolled fashion, many distressed inner-city sites are left unused. This has prompted a discussion on using urban land in a more sustainable and intensive way, and large-scale urban expansion is no longer encouraged. Brownfield redevelopment has therefore been recognised as an important means of pursuing sustainable urban development (Alberini, Longo, Tonin, Trombetta, & Turvani, 2005; De Sousa, 2008; Dixon, 2006; Hula, Reese, & Jackson-Elmoore, 2012).

Brownfield redevelopment has only recently begun to attract the attention of Chinese academics (Cao & Guan, 2007). Large-scale industrialisation has left a legacy of industrial districts in Chinese cities. After decades of continuous development, many urban industrial areas have become or have the potential to become brownfields. According to the World Bank (2005), there are at least 5000 brownfield sites in China. In the nearly one decade since the publication of the World Bank report, this number has certainly increased significantly. Having recognised the magnitude of the problem, in March 2013 the Chinese government

released the Special Plan for the Revitalisation of Old Industrial-Base Cities (2013-2022), one of the central focuses of which is the redevelopment of problematic, formerly industrial urban areas. The implementation of this plan is expected to lead to the development of policies and the allocation of considerable funds.

However, there is a lack of understanding of the formation mechanism of brownfields which is crucial for more successful practices of their redevelopment. The majority of the existing literature is based upon brownfields in the Western context, paying little attention to the specific Chinese context. The characteristics of brownfields in Chinese cities differ from those in western countries. Due to China's unique institutional settings such as the dual land system, two types of brownfields exist in Chinese cities, namely, brownfields in urban areas and brownfields in urban villages. They possess different attributes in terms of land ownership, size of the site, spatial distribution, the mechanisms by which the sites are created, and the stakeholders involved. These differences impose constraints on and produce challenges for redevelopment strategies. Based on the classification of these two types of brownfields, this article presents a conceptual stage model for dealing with the emergence of brownfield sites in Chinese cities.

The remainder of this paper is organised as follows. Section 2.2 reviews the literature on brownfields, and focus is placed on the driving forces of brownfield emergence. Section 2.3 explores the formation of two different types of brownfield redevelopment trajectories in China, namely of brownfields in urban areas and brownfields in urban villages. Section 2.4 elaborates on the differing characteristics of the two types of brownfields in China. Section 2.5 presents our conclusions as well as avenues for future research.

## **2.2 Literature review**

Despite a burgeoning literature on brownfields, a universally accepted definition of these sites remains elusive (Meyer & Estrin, 2001). In the US, brownfields are defined as 'abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination' (USEPA, 1997). Contamination is a central aspect of this definition, which is consistent with the condition of most brownfield sites in the US. The situation differs in many European countries. In Austria, for example, 85% of brownfields are not contaminated (Oliver, Ferber, Grimski, Millar, & Nathanail, 2005). Alker, Joy, Roberts, and Smith (2000) propose a more robust definition of a brownfield that we will adopt in our study: '*A brownfield site is any land or premises which has previously been used or developed and is not currently fully in use, although it may be partially occupied or utilized. It may also be vacant, derelict or contaminated. Therefore a brownfield site is not available for immediate use without intervention*'. In China, there is no formally accepted definition of a brownfield.

The issues of brownfields as well as their redevelopment have received substantial attention in Western countries ever since 1970s (Adams, De Sousa, & Tiesdell, 2010; Bjelland, 2004). Research concerned with this topic has been conducted through various

perspectives, including assessment and identification of brownfield sites (Bacot & O'Dell, 2006; Cao & Guan, 2007; Cheng, Geertman, Kuffer, & Zhan, 2011; Thomas, 2002), monitoring or evaluation of brownfield redevelopment projects (De Sousa, Wu, & Westphal, 2009; Mak, 2010; Wedding & Crawford-Brown, 2007), and barriers and incentives of brownfield redevelopment (Bartsch, 2002; Cao & Guan, 2007). Most existing literature on brownfields, as pointed out by Hula and Bromley (2010), focused largely on 'issues surrounding redevelopment efforts', whereas the main causes of this phenomenon have received little academic interest. Although it is widely recognised that the emergence of brownfields is closely related to the migration of industry (De Sousa, 2000; De Sousa, 2006; Hayek, Novak, Arku, & Gilliland, 2010), only few scholars have shed light on this relationship.

After WWII, owing to technological change as well as global competition (Bjelland, 2004), the process of deindustrialization has taken place in most western countries. According to Bluestone (1984), deindustrialization is a 'widespread, systematic disinvestment in basic industrial capacity', and it is often defined in terms of the share of manufacturing in total employment (Saeger, 1997). Owing to rising labour costs and more and more stringent environmental regulations (Marcus, 1985), many manufacturing plants in developed nations were shut down or moved abroad seeking cheaper production costs. Geographically, industrial migration processes occur on different scales: intra-regionally from urban to suburban, inter-regionally from one region to another, and internationally from one country to another (Rodwin & Sazanami, 1989). For many developed countries, deindustrialization occurred on an international scale. Taking the US for example, its manufacturing's share of total employment was 24 percent in the mid-1960s, while this number had fallen to 10.5 percent by 2003 (McKinnon, 2004). Bjelland (2004) tested the linkages between the formation of brownfields and the process of deindustrialization in Minneapolis–St. Paul metropolitan, and concluded that 'spatial restructuring of industrial activity over the past half century is at the root of the brownfield problem'. Li (2011) elaborated on the deindustrialization process in the US, and pointed out that brownfields were a consequence of deindustrialization. Recognising brownfields as an inevitable outcome of deindustrialization, Poindexter (1996) also took one step further to test statistically their different effects on cities and suburbs in the US.

Existing literature on brownfields in China is mostly confined to introducing western experiences or discussing specific brownfield redeveloping practices. No attention is paid to the different typologies of brownfields and the unique formation mechanisms, caused by specific institutional factors. In the period following the country's economic reforms, especially during the late 1980s and 1990s, Chinese cities (especially coastal cities) experienced rapid urban expansion (Deng, Huang, Rozelle, & Uchida, 2010; Lin, 2007). During this process, due to China's unique institutional characteristics such as the dual land system and residential registration system, the government faced a variety of new challenges. Of these challenges, urban villages (or 'villages in the city') have been among the most widely debated. There is a longstanding literature on the mechanisms by which urban villages

function (Bach, 2010; Wang, Wang, & Wu, 2009), their unique social (especially residential) functions in urban areas ((Liu, He, Wu, & Webster, 2010), and approaches to their redevelopment (Gao, 2011; Hao, Sliuzas, & Geertman, 2011; Lin & De Meulder, 2012). However, industrial activities in urban villages remain poorly studied, and few scholars have attempted to shed light on this issue. Wang et al. (2009) examined informal commercial and industrial developments in urban villages in Shenzhen and found that ‘industry is a very important economic sector in urban villages’. Xia, Zhao, Ouyang, and Liu (2012) investigated manufacturing firms in one of Guangzhou’s urban villages. They found that most industrial enterprises in urban villages are small-scale firms and exhibit a scattered spatial distribution. Lai, Peng, Li, and Lin (2014) investigated the institutional constraints on industrial land development in urban villages. These results lead to the hypotheses that research on brownfields in China must account for to the differences between brownfields in urban areas and those in urban villages, as their characteristics differ in terms of land ownership, size of the site, spatial distribution, the mechanisms by which the sites are created, and the stakeholders involved.

### 2.3 The Formation Mechanism of brownfields in China

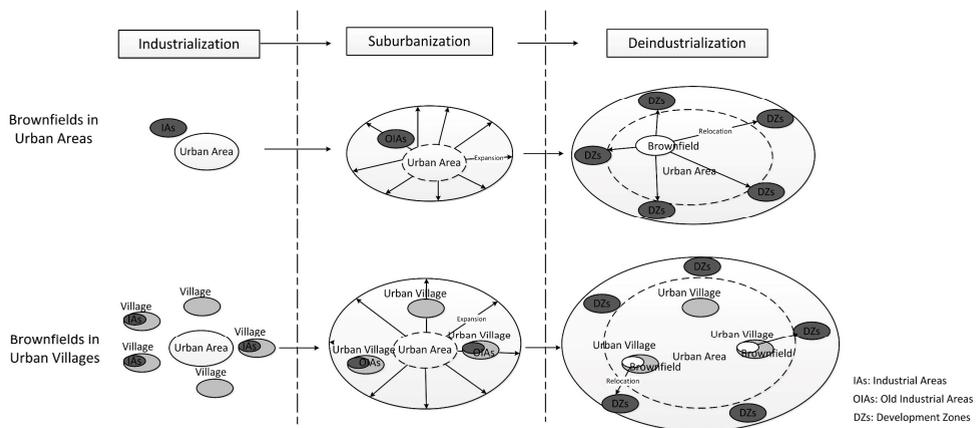


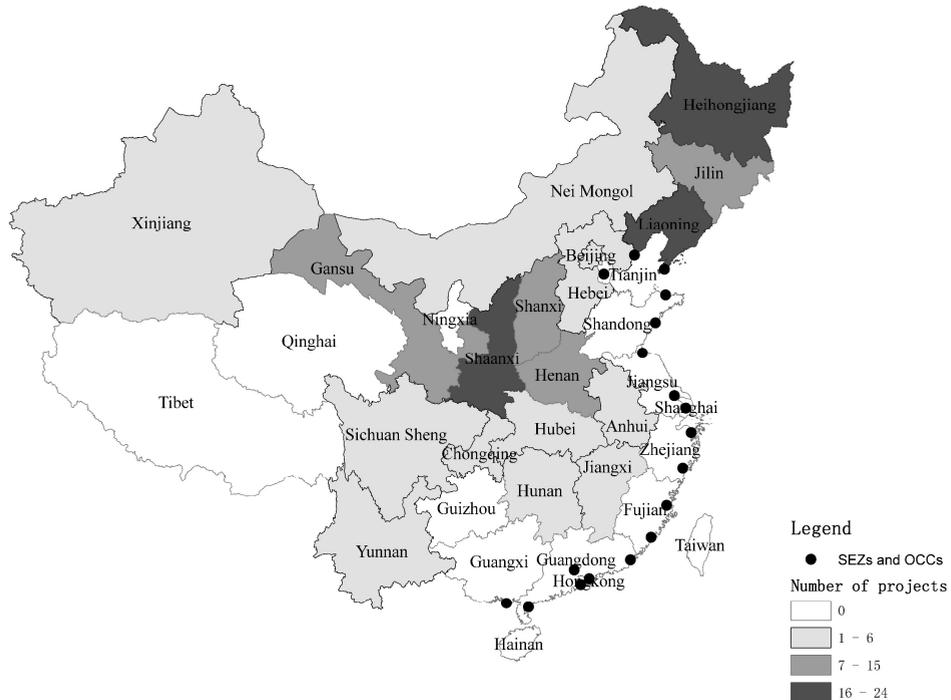
Figure 2.1 Stage model of brownfield formation in China

Regardless of their particular historical and institutional backgrounds, brownfields emerge as a result of the on-going interaction between industrialisation and urbanisation. The initial phase of industrialisation resulted in the emergence of industrial enterprises and simultaneously spurred the urbanisation process. Urban functions expanded to the suburbs, causing the decentralization of population and economic activities. Economies evolve as a result of technological innovation, and industries relocate in pursuit of lower costs. Figure 2.1 presents a stage model to conceptualize the process that produces brownfield sites in Chinese cities, consisting of three stages: industrialization, suburbanization, and deindustrialization. We discuss these three stages in more detail.

### **2.3.1 First stage: state-mandated urban industrialization and bottom-up rural industrialization**

Generally, Chinese development can be divided into two stages: the Maoist Development Strategy and the Post-Mao Development Strategy (Yang, 1981). The Maoist era (from 1949 to 1978) was characterized by the disproportionate focus on urban industrialization. After the foundation of People's Republic of China, the central government decided to modernise China's industrial system. During the first Five-Year Plan (1953-1957), with support from the Soviet Union, 156 showpiece or so-called key-point projects were planned in China (of which 150 were actually implemented). The construction of these key-point projects, most of which were located in northeastern and mid-western China, substantially advanced the process of industrialisation in China. After the Great Leap Forward (1958-1960) and the adjustment period that followed, China began its famous Third Front Construction (1964-1971) programme, which was primarily motivated by national security considerations (Wei, 2001). During the Third Front Period, most state investments in industry were allocated to China's remote southwestern and northwestern provinces. Moreover, many enterprises that were once located in coastal areas were moved to interior regions. During this process, many industrial-base cities were formed by establishing Industrial Areas (IAs). These IAs were mainly located in urban fringe areas (Li & Xie, 2010). In contrast to the vigorous promotion of industrialisation in urban areas, the government placed strict controls on rural-to-urban migration. Under the country's planned economy, the state took the responsibility for supplying urban citizens with all types of essentials and amenities, while rural areas lacked such benefits. To maintain this situation, a *hukou* system was introduced in the 1950s, in which all the residents were registered as either agricultural (rural) or non-agricultural (urban) residents according to their places of birth (Lin, De Meulder, & Wang, 2011; Wang et al., 2009). As people possess a rural *hukou* are restricted to get employment in urban areas, the *hukou* system directly resulted in widespread under-urbanisation during the Maoist era (Zhang, 2008).

In the late 1970s, China abandoned the self-reliant development strategy that dominated the Maoist era and launched a series of economic reforms (Lin & Ho, 2005). As a consequence of the policy of liberalisation (the so-called opening up policy), four Special Economic Zones were established in Shenzhen, Zhuhai, Shantou and Xiamen in 1980, and 14 coastal cities were subsequently opened to foreign investment in 1984 (See Figure 2.2) (Wei, 2001). During the course of China's transition from a planned economy to a market economy, the coastal areas experienced an unprecedentedly intensive industrialisation process, in which the rural regions of coastal areas played a prominent role. This process is referred to by Lin (2001, 2007) as 'the bottom-up rural industrialization'. Estimates indicate that more than half of the factories in the Pearl River Delta (PRD) were constructed on land owned by rural collectives (Po, 2008). The substantial popularity of this system among investors primarily results from the availability of inexpensive land and labour in rural areas (Lin & De Meulder, 2012).



**Figure 2.2 Spatial distribution of 150 key-point projects across the administrative divisions, 4 Special Economic Zones and 14 Open Coastal Cities in 1980s**

### 2.3.2 Second stage: urban land reform and rapid suburbanization

While the initial phase of urbanization was driven by centripetal forces such as the concentration of population and industries, it is widely recognized that the post-reform China has witnessed a centrifugal process of urban expansion (Lin, 2007): suburbanization. The main institutional background behind this phenomenon is twofold. The first is the policy of decentralisation implemented after the reform, in which local governments were awarded greater power in decision-making (Zhang, 2000). Decentralisation provided local governments with substantial incentives for economic development and enabled them to attract investment based on local resource endowments (Wei, 2001). The second is the urban land reform. After the foundation of the People's Republic of China, land was nationalized and a dual land ownership system was established, wherein urban land is owned by the state and rural land is owned by collectives (Lin & Ho, 2005). It was stated in the Constitution of 1982 that 'No organizations or individuals may appropriate, buy, sell, or lease land, or unlawfully transfer it in any way'. With the implementation of a market economy, the economic value of land has been gradually recognized by the government, and in 1988 an amendment was made to the Constitution of 1982 which legalized the separation of land ownership from land use rights of urban land and allowed the transfer of the latter (Zhang,

2000; Lin, 2010). These two institutional changes have enabled local governments to take land as a valuable 'commodity', and 'selling' land became a main source for local revenue (Wu, 2001). The spatial manifestation of this is prominent suburbanization, especially in the period from early 1980s to early 1990s (Lin & Ho, 2005). According to Lin's investigation, from 1984 to 1996, the urban built-up area of 284 cities in China had increased by 62 percent (Lin, 2007). This is especially true for Special Economic Zones and Open Coastal Cities mentioned before, as in the initial stage of economic reform, foreign investments flew into these areas. Taking Shenzhen, one of the Special Economic Zones, for example, its built-up area increased by 143.6 percent from 1989 to 1996 (Ji et al., 2001). It is believed that the construction of numerous Development Zones (DZs) contributed to urban expansion in China (Zhang, 2000). In the 1990s, local governments rushed to construct DZs to attract foreign investment, resulting in 'development zone fever' (Montinola, Qian, & Weingast, 1995). It is documented that in only one year (1991 to 1992) the number of DZs increased from 117 to 8,700, occupying 16,000 km<sup>2</sup> of land (Zhao, Bao, & Hou, 1998). These DZs were primarily distributed on the margins of urban areas, occupying large scales of farmland (Zhang, 2000).

There are two consequences of significant urban expansion in post-reform China. On the one hand, numerous IAs once located in peri-urban areas during Mao's era were gradually integrated into the central city. Over several decades of development, these areas have hosted multiple functions and the land has been used in a complex and disordered fashion. In the recently released 'The Special Plan for the Revitalisation of Old Industrial-Base Cities (2013-2022)', 120 cities in China were identified as old industrial-base cities. As mentioned, one of the central focuses of this plan is the redevelopment of IAs (now called Old Industrial Areas) in the centre part of these old industrial-base cities. On the other hand, owing to China's dual land system and residential registration system, one unique phenomenon called 'urban village' emerged in Chinese cities, especially in the eastern coast. Land reform in the 1980s created a dual land system, in which rural land is collectively owned while urban land is owned by the state. Urban land is allowed to be transferred in the market, but the sale, transfer or leasing of rural land by villagers and their collectives are illegal. The only way to change a parcel's status from rural to urban is by state requisition (Zhao & Webster, 2011; Lin, 2010). From a land use perspective, there are three types of land in a village: farmland, residential land for the construction of villagers' houses, and collective industrial land for commercial and industrial purposes (Hao et al., 2011; Wang et al., 2009). In the preliminary stage, villages emerge and are scattered along the urban fringe or in the suburbs of cities, and some of them have developed small-scale processing industries (Wang et al., 2009). As a city expands, because of high compensation costs for residents, local governments typically requisition cropland rather than built-up land in the village (Lin et al., 2011). As a result, built-up areas in the village, which consist of residential land and collective industrial land, remain untouched. While the farmlands were incorporated into the urban areas of the town, villages evolved into urban villages. This also means that a large proportion of a city's industrial developments then are on the collective industrial land of urban villages. For instance, the collective industrial land of urban villages in Shenzhen occupies more than half of the total

industrial land in the city. This land accommodates a wide range of manufacturing industries, such as textile, electronics, and pharmaceutical.

### **2.3.3 Third stage: economic restructuring and deindustrialization of the urban core**

As China's economic reforms progressed, especially after urban land reform, the concentration of Old Industrial Areas (OIAs) in the central urban areas has gradually been recognized as a serious problem. Under economic as well as environmental considerations, these industrial enterprises have to be relocated. It is under this background that many regulations were enacted by local governments to implement industrial relocation from urban cores to suburbs. Different from developed economies, there is by now no evidence indicating national deindustrialization in China; the manufacturing's share of total employment increased steadily from 2003 to 2008 and fluctuated a little bit from 2009 to 2012 but still remained at around 28%<sup>6</sup>. However, regional deindustrialization did happen in many big Chinese cities such as Beijing, Shanghai, Tianjin (Wang, Wang, & Du, 2012). This deindustrialization process is promoted by the government under official expressions such as '*teng long huan niao*' (meaning to make old space available for new developments). Taking Beijing as an example, from 2000 to 2005, up to 144 traditional manufacturing plants were relocated outside the urban area (Li, 2011). In 1986, 20.96% of all the manufacturing enterprises in Beijing were located in the central urban area, 60.18% in inner suburbs, and 18.86 in outer suburbs; while in 2004, these three figures changed to 6.55%, 41.43%, and 52.02% respectively (Gao, Liu, Norcliffe, & Du, 2010). Moreover, the share of manufacturing employment and output of the central urban area decreased from 15.17% to 5.32%, 13.89% to 4.19% respectively (Gao et al., 2010). These evidences indicated an obvious process of deindustrialization of the urban core. DZs in peri-urban areas have become the main receivers of manufacturing enterprises which are originally located in OIAs (Zhang & Liu, 2003). It is documented that by 2004, various DZs in Beijing had accommodated nearly half of the city's large and medium manufacturing enterprises, and produced 64.66% of the total industrial output value (Gao et al., 2010). With the relocation of manufacturing enterprises from OIAs to DZs, many brownfield sites have been created in OIAs.

The tide of deindustrialization also captured manufacturing enterprises in urban villages besides those in urban areas (Hao, Geertman, Hooimeijer, & Sliuzas, 2012). As industrial activities in urban villages are mostly informal, it is hard to find official statistics demonstrating this process. However, fragmented evidence can still be gathered from the literature concerning urban villages. For instance, Hao et al. (2012) investigated the land-use diversity in urban villages, and found that urban villages in the central location of Shenzhen

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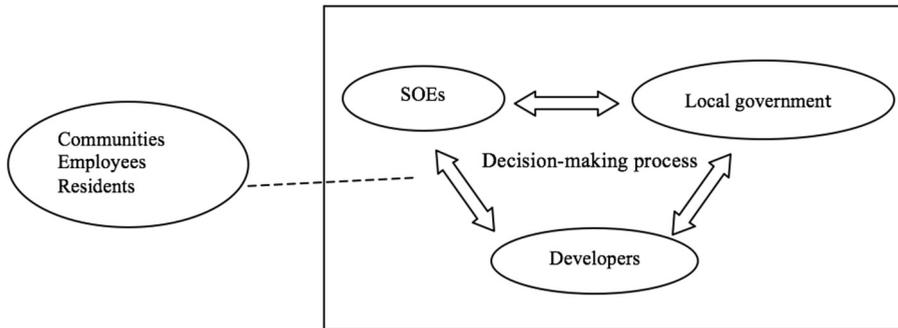
<sup>6</sup> Calculated from data provided by National Bureau of Statistics of China (<http://data.stats.gov.cn/workspace/index?m=hgnd>)

represented lower land-use diversity, with smaller proportion of industrial land use. They pointed out that this was part of a larger economic restructuring process, in which industrial activities were driven away from the central urban area to suburbs owing mainly to high costs of industrial production. Consequently, the relocation of manufacturing enterprises in urban villages results in a considerable amount of brownfield sites which may be polluted, derelict or have been partly redeveloped.

Therefore, the formulation of brownfields in China is a consequence of three stages, namely of industrialization, suburbanization and deindustrialization. Two distinct types of brownfields emerge in urban areas and urban villages during the stage of deindustrialization. It is worth noting that each stage is not absolutely isolated from but rather intertwined with other stages. For instance, evidence can be found that urban expansion (suburbanization) in China is closely related to or even driven by deindustrialization of the urban core (Zhou & Ma, 2000). As the aim of this paper is to conceptualize the formation mechanism of brownfields, we believe that it is necessary to distinguish these three stages in order to provide a clear picture of the brownfield emergence. Moreover, analysing the stages also helps the understanding of different characteristics of the two types of brownfields.

#### **2.4 A comparison of brownfields in urban areas and urban villages**

Brownfields in urban areas thus are the result of the abandonment of formerly industrial areas. During the Maoist era, the central government selected and invested in these areas to promote industrialisation. The enterprises in these industrial areas were generally large State-Owned Enterprises (SOEs). Typically, several enterprises were situated in close proximity, occupying large tracts of land for industrial use. These parcels, while allocated to SOEs, are owned by the state. Thus, key stakeholders involved are simple and clear, consisting of SOEs, local governments, and developers (Figure 2.3). One typical example is Hadawan old industrial area in Jilin province in China. Hadawan is located in the northwest of Jilin City, the second-largest city of Jilin province. It has a total area of 6.93 km<sup>2</sup>, half of which is occupied by four large SOEs established during the Maoist era, including a ferroalloy plant, a carbon plant, a cement plant, and a paper mill (Liu, 2012). Jilin Municipal Government established a special leading group responsible for instructing the process of redeveloping Hadawan old industrial areas. In particular, the leading group negotiated with the four SOEs about relocation strategies. Jilin Urban Construction Development Limited Company (the developer) is responsible for the design and reconstruction of the whole area (Liu, 2012). The redevelopment project of Hadawan old industrial area was launched in 2010; however, many residents were totally unaware of the ongoing project in 2011(Liu, 2012). This reflects a common situation in China, that ‘the common people’ (communities, employees, and residents) are usually excluded from the core decision-making process.



**Figure 2.3 Stakeholders involved in urban brownfield sites**

**Table 2.1 Characteristics of two different types of brownfields**

Characteristics	Brownfields in urban areas	Brownfields in urban villages
Formation mechanism	top-down/ formal	bottom-up/ informal
Size of the site	large	small
Spatial Distribution	concentrated	scattered
Ownership status	state	collective
Stakeholders involved	simple and clear	complex and unclear

The characteristics of brownfields in urban villages are much different (Table 2.1). Although brownfields in urban villages are also created by the abandonment of formerly industrial land, in contrast to the large SOEs observed in urban areas, industrial enterprises in urban villages are generally small processing enterprises. All land in urban villages is de jure owned by the collective, and the policies or regulations which the municipal government issues for urban areas cannot be applied to land in urban villages. As a result, unlike that in urban areas, the real estate market in urban villages is quite informal (Liu et al., 2010), and the land use system is much more disordered and complex. Xia et al. (2012) investigated processing enterprises in one of Guangzhou's urban villages. They found that most of the enterprises are small-scale. Nearly 80% of all the 422 enterprises investigated have fewer than 20 employees; half of the 392 enterprises investigated only occupy an area of less than 100 m<sup>2</sup> and are widely distributed throughout the village. Moreover, the key stakeholders involved are more complex (also see Lin et al., 2011; Lin, De Meulder, & Wang, 2012). As shown in Figure 2.4, while the collective owns the land, who is actually eligible to represent the collective remains unclear. In many cases, village cadres exploit institutional ambiguities and conduct negotiations with the local government or developers to pursue their personal interests while excluding ordinary villagers (Chung, 2009). However, reforms have been implemented in many urban villages in coastal areas, in which shareholding companies are established to represent the interests of all villagers (Liu et al. 2010). Because they hold shares in the company, local villagers are able to participate in the negotiating process. As mentioned above, urban villages serve unique social functions in urban areas, as they provide

low-rent housing for large numbers of low-income rural migrants. It is not uncommon for the number of migrants residing in urban villages to exceed that of indigenous villagers. Redevelopment activities are likely to substantially affect these migrants. Unlike villagers who are landlords, migrants can be forced to leave without receiving compensation. As the most vulnerable social groups, migrants are largely excluded from the decision-making process.

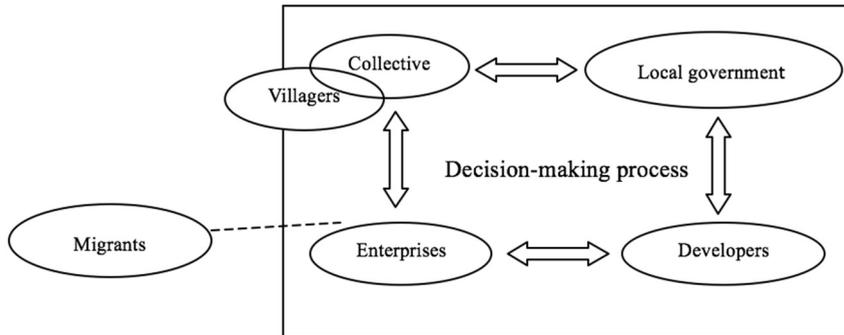


Figure 2.4 Stakeholders in brownfield sites in urban villages

## 2.5 Discussion and conclusion

Compared to Western countries, both research and practice related to brownfield redevelopment in China are in their infancy. Adams et al. (2010) provide a three-stage ‘policy maturity’ model for brownfield redevelopment, of which the first stage is ‘clearly grasping and understanding the brownfield problem’. It is the goal of this article to provide insights into the understanding of brownfield problems in China: how brownfields are formed, what their characteristics are, and what institutional heterogeneity determines this.

A conceptual model consisting of three stages (industrialization, suburbanization, and deindustrialization) demonstrated the formation process of brownfields in China. During the Maoist era, large scales of state-mandated industrialization took place in urban areas, spatially resulting in the formation of numerous industrial areas. Since the economic reform, a process of bottom-up rural industrialization occurred in the majority of villages, especially those in the eastern coastal area. Consequently, a substantial amount of collective industrial land in the villages was used for industrial purposes. As the city expands, industrial areas once located in the urban periphery were gradually integrated into the city centre, meanwhile traditional villages were incorporated into urban built-up areas and became urban villages. Lastly, during the process of economic restructuring triggered mainly by the urban land reform, Chinese cities have generally experienced a process of deindustrialization of their urban cores. Many industrial enterprises in old industrial areas or urban villages located in the city centre either went bankrupt or moved to development zones built by the government; thus, brownfields emerged.

It is a main contribution of this article to distinguish two types of brownfields in China, namely brownfields in urban areas and brownfields in urban villages. The redevelopment of brownfields in urban areas is usually embedded in a centralised decision-making process. Local governments, state-owned enterprises, and developers are the key stakeholders. Brownfield redevelopment in urban villages accommodates a much wider range of stakeholders. Although the land of urban villages is theoretically owned by 'the collective', it is actually managed by villagers, entrepreneurs, shareholding companies and informal organizations. The redevelopment of brownfields in urban villages usually leads to conflicts of interest between these stakeholders and the displacement of vulnerable migrants.

The classification of different typologies of brownfields in China is conducive to more successful practices of brownfield redevelopment, as the different attributes they possess can lead to differing redeveloping strategies. For instance, brownfield sites in urban villages are on a small scale and scattered. They have complex relationships with their adjacent plots in terms of land ownership and social and economic activities. An integrated redevelopment strategy is properly required for the sustainable redevelopment of brownfields and other lands (e.g. residential areas) in urban villages. In contrast, there are large-scale and separated brownfields in urban areas. The redevelopment of these areas usually does not involve their adjacent areas. This study suggests that future research should pay more attention to specific case studies to explore different redeveloping strategies of brownfields in urban areas and urban villages as well as their environmental, economic and social impacts. Most of the extant literature tends to focus on the positive implications of brownfield redevelopment. For instance, brownfield redevelopment helps to improve the environment, encourage reinvestment, and revive local economies. However, brownfield redevelopment can also have negative impacts, such as low-income communities being displaced from their former, derelict but affordable, neighbourhoods (Hao et al., 2011). In addition to direct replacement (the replacement housing stock is not suitable for the original population), brownfield redevelopment may also result in increased housing prices in surrounding neighbourhoods, driving individuals from their former homes. Additional research on the effects of brownfield redevelopments on society and sustainability is needed, and future studies must consider the varying institutional settings of urban areas and urban villages.

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### 3 Making the ‘Invisible’ Visible: Redevelopment-induced Displacement of Migrants in Shenzhen, China

*This chapter is based on a manuscript accepted by the International Journal of Urban and Regional Research. Co-authors: Stan Geertman, Frank van Oort, and Yanliu Lin*

#### ABSTRACT

Gentrification in China is intertwined with urban redevelopment projects, which cause the large-scale displacement of rural-urban migrants from “villages in the city” (ViCs). Deeply rooted in the informality of ViCs, migrant renters possess very insecure tenure, and they are treated as a negligible (‘invisible’) social group during redevelopment. As they are very difficult to trace after displacement, they are also literally invisible to researchers. In an attempt to make the invisible visible, this study traced a sample of displaced migrants from Huangbeiling village in Shenzhen. The focus is on the displacement process and on identifying the induced consequences for the displaced. We found that various forms of displacement manifested themselves during the redevelopment process. Nearby ViCs were prioritized by displaced migrants to mediate as much utility loss as possible. However, they generally suffer from decreasing proximity, rising living costs and the loss of social networks and job opportunities. Remarkably, some migrants choose to return to the gentrifying village, bearing displacement *in situ* engendered by rising rents, drastic physical neighbourhood changes and declining liveability, in exchange for maintaining the original social and economic networks. Against a quickly shrinking pool of informal housing incurred by large-scale urban redevelopment, it is urgent to recognize and address the pressing housing need of this impoverished social group.

**Keywords:** displacement, gentrification, urban redevelopment, villages in the city, rural-urban migrants

#### 3.1 Introduction

After nearly four decades of China’s economic reform, Chinese cities have undergone a profound transformation that has been accompanied by large-scale rural-urban migration and the restructuring of urban space. Land value capture has long been a hotly debated topic, and it has influenced a wide variety of land ownership regimes. One debatable outcome—gentrification, intertwined with urban redevelopment—has manifested itself in many Chinese cities, such as Shanghai (He, 2010; Wang and Lau, 2009), Nanjing (Song and Wu, 2010) and Guangzhou (He, 2012). Gentrification is a multifaceted process that can generate radical changes in the urban landscape and socioeconomic profiles of neighbourhoods. The displacement of low-income residents is one of the most worrying, albeit not always directly observed consequences. It may exert profound impacts upon displaced households, resulting in external economic and social injustice.

Land marketization and administrative decentralization following China’s 1978 economic reform have facilitated massive urban redevelopment aimed at capturing the unleashed rent gap, of which a main target is the so-called “villages in the city” (ViCs, also called urban

villages<sup>7</sup>). ViCs refer to urban neighbourhoods that were originally rural settlements, with long-standing land ownership rights, but are now encircled by and will eventually be incorporated into new urban development (Lin et al., 2014; Schoon, 2014; Ye, 2014). As a typical type of informal settlements in Chinese cities, ViCs are inhabited by millions of rural-urban migrants, who possess no tenancy security and are largely treated as invisible by both local governments and developers. When ViCs are demolished, migrants are simply uprooted without any room for bargaining. Although there is an established literature on the institutional disadvantages of migrants, their inferior position has seldom been examined within the context of gentrification and displacement, and there are very few, if any, empirical studies on the individual experience of displaced migrants. This study tries to understand the invisibility of migrant renters in the process of redevelopment of ViCs, and, to identify the impacts of redevelopment on this social group ('make the 'invisible' visible'). Reliable quantitative data on this issue is absent. Therefore, we collected primary information by tracking and interviewing a sample of displaced migrants from Huangbeiling village in Shenzhen.

The remainder of this article is structured as follows. In section 3.2, we briefly review the literature on gentrification, urban redevelopment and the induced residential displacement in urban neighbourhoods. In section 3.3, we delineate the informality of ViCs and the invisibility of migrant renters in the course of redevelopment. In an attempt to make the invisible visible, in section 3.4 we present the outcomes of our case study in Shenzhen, starting with the empirical methodology and data used, and subsequently providing evidence on the spatial (relocation), economic and social consequences of redevelopment-induced displacement of migrants. We present our concluding remarks in section 3.5.

### **3.2 Literature review: gentrification, urban redevelopment and the induced displacement in neighbourhoods**

Ever since Glass (1964) first identified the phenomenon in London, gentrification has mutated both temporally and spatially. Despite clear distinctions that early literature made between gentrification and urban redevelopment, the past few decades have seen a blurring of this distinction, especially in developing countries. Smith (2002) observed an emerging global urban strategy in which gentrification is increasingly embraced by both the market and the state as effective means in promoting urban prosperity, mainly through large-scale urban renewal projects. In the past few decades, urban redevelopment and its consequences, namely of redevelopment-induced displacement, are thus often viewed through the lens of gentrification discourses (Lees et al., 2010). However, it is noteworthy that although gentrification tends to go hand in hand with urban redevelopment nowadays, the interactions between them are highly dynamic. For instance, recent observations by Wu (2016a) in Shanghai showed that urban redevelopment has gone beyond gentrification, and is more

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<sup>7</sup> Although "urban village" is more widely used in the literature, as pointed out by Chung (2010), this term leads to substantial misconceptions. This study therefore uses the term "villages in the city".

properly characterised as a state-mandated formalization process of informal settlements. These newly-emerging cases warn against simply treating urban redevelopment and gentrification as the same process. The dynamics between them are rather context sensitive and need to be examined case by case. In our case (the redevelopment of Huangbeiling village in Shenzhen), based on the observations that radical changes have been brought about to the informal neighbourhood, along with a social upgrading process in which low-income migrants are going to be replaced by more well-off classes, we situate this redevelopment project as well as our discussions within the broader gentrification narratives.

The issue of residential displacement constitutes the fundamental essence of gentrification (Lees et al., 2010). Compared to sporadic gentrification triggered by the return-to-the-city movement of the middle class, gentrification by means of urban renewal strategy is more directly, overtly, and immediately associated with physical eviction of incumbent residents. This form of direct displacement (Grier and Grier, 1978) has been extensively documented in the literature because it is most evident and observable. Besides physical eviction, urban redevelopment projects are also very often related to a price-shadowing effect (Liu et al., 2017). As noted by Davidson (2008), urban redevelopment not only causes changes in the housing market but also generates a property 'hot spot'. By creating contrasting and distinct urban landscapes, property hot spots represent a strong image of urban revitalization and thus attract the inflow of capital into the area. These changes, which can also be viewed as part of a broader gentrification process, contribute to housing price increases in adjacent areas, and engender economic displacement (Marcuse, 1986; Davidson, 2008; Bernt and Holm, 2009). Economic displacement occurs when incumbent households cannot afford housing costs and are thus priced out from the neighbourhood (direct economic displacement); or other households of the same income-level are denied access to the neighbourhood due to the rent increases (indirect economic displacement or exclusionary displacement) (ibid).

Relating to economic displacement, and using moving costs and utility levels as leading concepts, Vigdor (2002) conceptualized the locational strategies of poor renters suffering from rising housing costs in gentrifying neighbourhoods. Vigdor argued that, compared to households who are priced out (direct economic displacement), those who choose to stay in the neighbourhood tend to experience the largest utility loss, since they have to absorb any (unreasonable) increase in housing costs. This situation, although has been touched upon in Marcuse's (1986) examination of displacement pressure, is only recently more fully conceptualized and discussed by a burgeoning body of literature (see for instance: Davidson, 2009; Sakizlioğlu, 2014; Stabrowski, 2014; Atkinson, 2015; Shaw and Hagemans, 2015; Liu et al., 2017) that focus on displacement *in situ*, namely the displacement of residents who still reside in the gentrifying neighbourhood. A seminal work is delivered by Davidson (2009), who, by tracing back to the philosophical thinking of Lefebvre and Heidegger, approached displacement from a phenomenological perspective and emphasizes the social facet of place. As he argued, besides the predominant displacement-as-out-migration perspective, displacement is also about the loss of place. This perception of place is, at its core, the lived experiences of individuals. As delineated by Atkinson (2015) in the notion of 'symbolic

displacement’, a loss of sense of place represents complex emotions of alienation and estrangement engendered by drastic changes that take place in both the physical and social fabric of the neighbourhood. This is a gradual but constant process of ‘incumbent unanchoring to dwelling in place’ (ibid: p. 377).

Overall, by reviewing extant literature, we elucidate the dynamic relationship between the two processes of gentrification and urban redevelopment, and delineate how redevelopment engenders varied forms of residential displacement in urban neighbourhoods. In the following two sections, we first unravel the historical and institutional origins that have caused the disadvantaged position, or more accurately, the ‘invisibility’ of migrants in the process of redevelopment of ViCs. After that, we examine how various forms of displacement manifest themselves in the case of Huangbeiling village, through lived experiences of those displaced.

### **3.3 The “invisible” social group during the redevelopment of villages in the city**

Roughly speaking, two different classes inhabit in ViCs: the landlord class (indigenous villagers) and the tenant class (Chung, 2010). Migrant workers constitute the majority of the tenant class in ViCs. The reason for this can be traced back to China’s *hukou* (household registration) system introduced in the 1950s. Under this system, all residents in China were registered according to their birthplace as either rural or urban residents. Rural-urban migration was strictly controlled by the state before the economic reform. In cities, local urban residents have access to various services and amenities, such as local schools, public housing and welfare programmes, which those without a local urban *hukou* cannot possibly enjoy (Wu, 2002). In the 1980s, the central government started to relax restrictions on rural-urban migration, and since then Chinese cities (especially coastal cities) have seen an unprecedented influx of migrant workers. However, the discriminatory urban/rural and local/nonlocal divisions still exist as a result of the *hukou* system (Chung, 2010). Rural-urban migrants are largely excluded from formal labor markets as well as various urban services such as the education and welfare systems (Zhao and Howden-Chapman, 2010). This exclusion, manifested in housing too, results in the clustering of migrant workers in ViCs. On the one hand, the formal rental housing market in the city is too expensive for the majority of migrants with low-income levels. On the other hand, because of the *hukou* system, they are denied access to the formal social housing system, in which affordable housing is provided by the government to low-income residents with a local urban *hukou*. As a result, migrants can only resort to informal sources for affordable housing - the ViCs (He, 2013).

Nowadays in many Chinese cities, these migrant enclaves are subject to large-scale demolition and redevelopment, as part of the ‘global urban strategy’ (Smith, 2002). Recently in February 2016, the Chinese central government released the “*Opinions of the Central Committee of the Communist Party of China and the State Council on Further Strengthening the Administration of Urban Planning and Development*”, in which it is stated that ‘by 2020, the transformation and renovation of existing shantytowns, villages in the city and dilapidated

houses in cities will be complete.’<sup>8</sup> It is foreseeable that booming urban redevelopment will have enormous social impacts on urban areas in various forms of direct or indirect residential displacement. This leads us to the contrasting fates of the two distinctive classes living in ViCs (Wu, 2016a).

Although local villagers are also under the threat of displacement, unlike migrants, they hold a very strong position during redevelopment. Chung (2013) and Wu (2016a) delineated the development of local villagers’ strong property right in ViCs, which is recognized by local governments during urban redevelopment. They are the main stakeholders with strong bargaining power and are entitled to considerable compensation for displacement. After the redevelopment, local villagers may even choose to move back to their original neighbourhood, since in some cases part of the land is used for the construction of new properties to compensate villagers. Therefore, for many local villagers, redevelopment is more a once in a lifetime opportunity to acquire a large fortune. In contrast, migrant renters are excluded from the decision-making process of urban redevelopment and are largely treated as ‘invisible’ by key stakeholders (Chung, 2013; Liu *et al.*, 2014; Sun, 2015). As described by Wu (2016b), migrant tenants’ rights have not yet been recognized during redevelopment of ViCs, contrasting with the situation of local villagers, who are entitled to considerable compensation.

Displaced migrants’ vulnerable position during demolition is deeply rooted in the informality of ViCs, which can be traced back to the dualistic and fragmented landownership and a lack of regulation and governance (Wu *et al.*, 2013). In the process of rapid urbanization, on the one hand, indigenous villagers have lost their farmland and thus their main source of livelihood; on the other hand, millions of migrant workers are in urgent need of affordable housing (Chung, 2010; Wang *et al.*, 2009). This situation has fuelled unprecedented informal construction activities in ViCs over the past two or three decades. Villagers replace their traditional 1- or 2-storey dwellings with concrete houses of up to four or five storeys, sometimes even seven or eight storeys, resulting in the well-known ‘handshake and kissing buildings’ street profile (He, 2013; Lin *et al.*, 2011; Tian, 2008; Wang *et al.*, 2009). The informality of ViCs not only manifests in the built environment, but is also reflected in the rental practices (Wu, 2016b). Unlike the case in formal rental market, in which a written contract is signed between landlord and tenant and both are required to register with the local police, the rental market in ViCs is quite informal. It is common practice for migrant renters to merely reach a verbal agreement with landlords, especially for lower income migrants (Zhang *et al.*, 2003; Wu, 2016b; Webster *et al.*, 2016). In general, the informality of ViCs has led to the absence of secure tenancy of migrant renters in the face of demolition and eviction. Nevertheless, compared to substantial attention paid to informal housing development in ViCs, the issue of insecure tenure of migrant renters is only recently addressed (see for instance: Wu, 2016b).

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<sup>8</sup> [http://www.mohurd.gov.cn/wjfb/201602/t20160222\\_226696.html](http://www.mohurd.gov.cn/wjfb/201602/t20160222_226696.html)

Relating to this lack of academic attention is another dimension of the invisibility of displaced migrants: the extreme difficulty in tracing them. It is always a considerable challenge for researchers to find those who have been displaced, talk to them and give them a voice in academic narratives (Lees et al., 2010). As pointed out by Newman and Wyly (2006, p. 27):

Estimating the scope and scale of displacement and exploring what happens to people who are displaced have proved somewhat elusive. In short, it is difficult to find people who have been displaced, particularly if those people are poor. By definition, displaced residents have disappeared from the very places where researchers or census-takers go to look for them.

Wu (2004) also noted that in China it was ‘impossible to trace residents of demolished houses’ (p. 12). Atkinson (2004) described this situation as the literal ‘invisibility’ of those who have been displaced. This is especially the case for migrant renters in ViCs. On the one hand, they are not entitled to any resettlement housing; on the other hand, this social group is highly mobile since many do not have a steady job. In the literature, despite the advocacy for qualitative accounts of residential displacement (Slater, 2006; Watt, 2008), up to now empirical studies on the redevelopment-induced displacement of this social group are particularly rare, partly because of the difficulty in tracing this group.

Overall, the long-standing institutional neglect of migrants’ housing demand and housing right manifests most significantly in the face of urban redevelopment. When demolishing ViCs, migrants are not considered as an interest group and are rather ‘invisible’ to main stakeholders in the process, and they are also literary invisible unless traced with high research efforts. In an attempt to make this ‘invisible’ social group visible, we carried out in-depth interviews with traced displaced migrants from a case study area in Shenzhen, focusing on their locational strategies and individual experiences of displacement.

### **3.4 Making the invisible visible: a case study in Shenzhen**

#### **3.4.1 Data and research method**

Shenzhen City is located in the southeast of China. We choose Shenzhen as the study area for two reasons. Firstly, the process of gentrification driven by urban redevelopment projects is more prominent in large cities. Compared with other large cities in China, Shenzhen is at the forefront of urban redevelopment. It was one of the first cities in China to pursue urban renewal strategies. As early as 1992, Shenzhen started to redevelop ViCs, and it devised the country’s first master plan for the redevelopment of ViCs (Chung, 2009). Secondly, Shenzhen is the city where ViCs first emerged and there are now numerous such villages scattered throughout the city. The issue of the displacement of migrants arising from the demolition of ViCs is therefore more serious and urgent in this city.

We used various sources of data in our empirical research, including government documents, interviews, photographs and maps. These data were mainly collected during fieldwork carried out in Shenzhen in two periods of December 2013 to February 2014 and

March to May 2015. Government documents were obtained from government bureaus. The municipal government's website was made use of to collect information on Shenzhen's urban renewal projects. We used mapping, field observations and semi-structured interviews to investigate the redevelopment of Huangbeiling village in Shenzhen and the spatial, economic and social consequences of redevelopment-induced displacement for migrants. Interviews with government officials in Huangbeiling sub-district office provided general information about the project, and interviews with displaced migrants gave us insights into the individual experiences of displacement. Migrants were recruited by the snowballing technique: interviewees were asked to refer others as potential interviewees. Although this sampling technique might generate unrepresentative sample groups, it is widely used for populations that are difficult to access. This method is indeed suitable for our research, since it is extremely difficult to trace migrants displaced from the redeveloped village. In this sense, this study did not intend to recruit a representative sample for displaced migrant renters in the city. Rather, through the limited number of interviews, it aimed to explore the individualised experiences of residential displacement and provide a rich understanding of this process. Eventually, we found 22 displaced migrants. After 22 interviews, saturation was reached; that is, no new information could be obtained concerning the main aspects of consequences of displacement. It is worth noting that, in this study, we apply a broader definition of "migrants". Following studies such as Jiang et al. (2012) and Zhao and Howden-Chapman (2010), migrant workers in this study refer to those who work in Shenzhen but do not possess a Shenzhen *hukou*.

### **3.4.2 Redevelopment of ViCs in Shenzhen and the resultant large-scale displacement of migrant renters**

In 1979, Shenzhen was designated as a special economic zone<sup>9</sup> (SEZ). Due to the combination of rapid urbanization and limited land resources, Shenzhen has encountered a development bottleneck: a severe lack of land resources (Song *et al.*, 2011). Therefore, the municipal government started exploring urban renewal policies and a series of regulations and master plans have been enacted to manage urban redevelopment practices in Shenzhen, in which a main focus is the redevelopment of ViCs. In 2005, the *Master Plan of "Villages in the City" Redevelopment (2005–2010)* was enacted. Chung (2009) attributed the coming out of this master plan as the beginning of Shenzhen's aggressive state-led redevelopment of ViCs. In 2009, the announcement of Shenzhen's *Urban Redevelopment Measures* represented a more systematic implementation of urban renewal projects. Very recently (November 2016), the municipal government announced the *13<sup>th</sup> Five Year Plan of Urban Redevelopment (2016–2020)*. It is planned that till 2020, one hundred redevelopment projects of ViCs and old residential and commercial urban areas will be accomplished. These projects are often aimed at improving the built environment of ViCs, and they target upper-middle

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<sup>9</sup> The SEZ was originally made up of four administrative districts—Nanshan, Futian, Luohu and Yantian—but in 2010 it was extended to cover the whole area of Shenzhen. The 'SEZ' used in this paper retains its original meaning.

income groups. Old, shabby buildings constructed by villagers are demolished, making way for high-end residential and commercial complexes.

As aforementioned, in the process of the redevelopment of ViCs, local villagers' property rights are well recognized by the government. In the *Provisional Regulations of "Villages in the City" Redevelopment*, it is stated that those who are entitled to compensation are the property owners of the demolished buildings.<sup>10</sup> However, this does not come easily but is rather an outcome of a decades-long bargaining process between the municipal government and indigenous villagers. Wang *et al.* (2009) depicted this engrossing process and they showed the changing attitude of the municipal government towards villagers' illegal construction activities in ViCs from sympathy to intolerance and finally to compromise. However, compared to the strong position of their landlords, the tenant class in ViCs possess a far inferior status. There is never any room for bargaining, and they are not entitled to any compensation. An extreme and persuasive example of this is the definition of 'residents' in ViCs provided in the above government document: "'Residents' in this regulation refer to members of the original village collectives (indigenous villagers) who possess a Shenzhen *hukou*, as well as other residents in the village who have procured the housing through legal means". This narrow definition of 'residents' by the municipal government has simply excluded millions of migrant renters in ViCs. Because on the one hand, they are not members of the village collectives and do not possess a Shenzhen *hukou*, and on the other hand, owing to the informality of the rental markets in ViCs, they can hardly obtain their housing "through legal means". In the official narratives of the government, migrant renters are never considered as an interest group and are rather intentionally ignored.

In ShenZhen, nearly a third of the ViCs are in the SEZ, and many are centrally located. Because of the huge rent gap, ViCs within SEZ have recently undergone more redevelopment (Hao *et al.*, 2012; Lai and Zhang, 2016). From 2008 to 2015, 35 projects within SEZ were initiated by the municipal government, covering a total area of 1.92 km<sup>2</sup>. It is estimated that these projects would cause the displacement of approximately 247,091 migrants<sup>11</sup>. To our surprise, physical displacement at such a large scale encountered hardly any resistance from migrants. Attention from academics and policymakers is also rare. In the following section, we use the redevelopment of Huangbeiling village to reveal the dispersal and struggles of this invisible social group.

### **3.4.3 Redevelopment-induced displacement of migrants in Huangbeiling village**

#### **1) Demolition of Huangbeiling village**

Huangbeiling village is one of the oldest ViCs in Shenzhen. As the largest ViC in Luohu district, Huangbeiling village has strong locational advantages in terms of transport

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<sup>10</sup> <http://www.szns.gov.cn/gtj/xxgk21/zcfg10/zcfgjgfwj42/5152744/index.html> (lastly visited in 07/04/2017)

<sup>11</sup> The population density of migrants in ViCs within the SEZ was based on the "Annual report of redevelopment of villages in the city in Shenzhen (2005)", since no updated data is available. Therefore, the results should be treated with caution. Because of the continuing influx of migrants during the last decade, calculations based on data in 2004 tend to underestimate the scale of displacement.

accessibility. It is situated at the north side of Shennan road, one of the main roads in Shenzhen. Besides many bus lines that stop at this village, Huangbeiling station is also the transfer station of Shenzhen subway Line 2 and Line 5. In addition, Huangbeiling village is in proximity to many urban amenities. For instance, a large park, the Huangbeiling Park, is located to the west of the village.

The redevelopment project of Huangbeiling village was initiated in 2011, consisting of two phases. The first phase entailed the development of new buildings covering an area of 0.4 km<sup>2</sup>, and a total investment of approximately 3.5 billion yuan (approximately 0.5 billion US dollars). More than 1,400 buildings were bulldozed and approximately 30,000 residents were uprooted.<sup>12</sup> Figure 3.1 shows the urban fabric of the redeveloped part and the remaining part of Huangbeiling village. On the demolished area, a multifunctional complex will be constructed, consisting of a shopping mall, office buildings and high-end apartments.

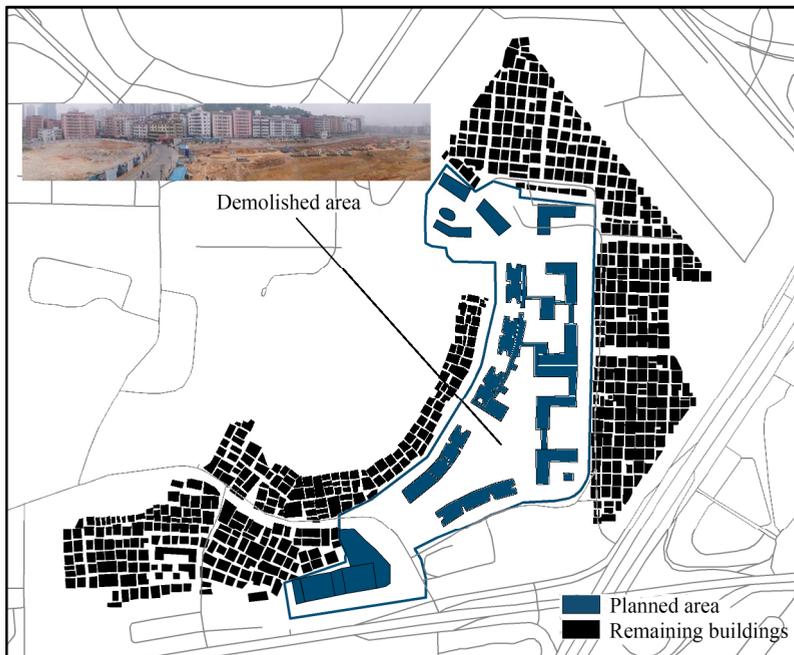


Figure 3.1 Demolished area of Huangbeiling village and the urban fabric of the remaining area

Our interviews confirmed the informality of the rental market in ViCs and the insecure situation of migrants' tenancy. None of the migrants interviewed had signed a formal contract with their landlords, and mostly they just reached verbal agreements:

*"We never signed a contract with our landlord, just by verbal agreement."* (Interview, December 2013)

<sup>12</sup> Information provided by Huangbeiling sub-district office.

They also stated that there was no official notice from either government or developers about the demolition. As recalled by a migrant:

*“We did not know the exact date of demolition. They had never officially informed us. In those days, we were always wondering: do we need to move tomorrow? Or the day after tomorrow? We could not be sure...”* (Interview, April 2015)

This reflects the precarious situation of these migrant workers before the eviction: they knew they were going to be evicted, but did not know when that would happen. They experienced a constant threat, in terms of the occurrence of actual eviction, the consequences it might incur, and the availability of resources to mitigate the adverse impacts on their daily lives. This uncertainty about the future already, to a certain extent, exerted substantial displacement pressure among them.

Most of the migrant renters had heard about the planned demolition only from their landlords, in a very informal way. Therefore, when we asked them how many days they were given to look for a new place, the answers differed a lot, ranging from half a year, to one month, and to only several days. Interestingly, we were told that, for those who got to know about the news very late, the reason behind was actually a dirty trick played by their landlord:

*“They [landlords] just kept the news to themselves until they [migrant tenants] have paid the rent for next month!”* (Interview, April 2015)

This well illustrates the inferior position of migrants in ViCs. They were largely treated as peripheral, irrelevant and unimportant. It seems that migrants not only accepted their marginalized position in the process of redevelopment, but also agreed with it:

*“At that time, we only had 10 days to look for a new place, but we had no choice. We are just migrant workers. Who will listen to our complaints? No one will.”* (Interview, January 2014)

*“Only the landlord can get compensation, we cannot. We are just outsiders. They asked us to move, we had no choice.”* (Interview, January 2014)

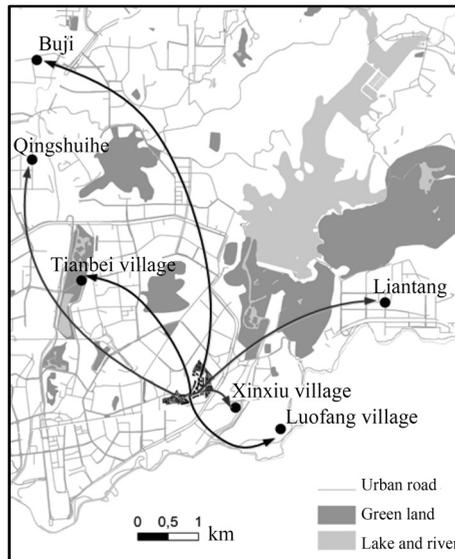
*“The government wants to demolish the whole area. They want to construct new buildings. What can we do? We are merely renters here. When we are asked to leave, we just leave.”* (Interview, January 2014)

Migrants' attitudes towards their displacement show a strong sense of subordination, obedience, and even fatalism. They consider themselves as outsiders in the city, and they do not want to cause any troubles or be involved in any conflicts. Although constituting the majority of the residents in ViCs, they are actually the 'silent majority'. As observed by Zhao (2008), migrant tenants simply disappear from the site shortly after the announcement of the planned demolition, which well illustrates their literary 'invisibility'.

## 2) Dispersal and struggles of displaced migrants from Huangbeiling village

Urban redevelopment through the demolition-reconstruction approach is immediately associated with physical eviction of incumbent residents. When the day finally came, 30,000 migrant renters living in the demolished area were directly displaced from Huangbeiling

village, and they had to find a new place. According to interviews with migrants, the majority of them moved to the remaining buildings of Huangbeiling (figure 3.1). For others who left the village, since there is no official record concerning where they moved to, information can only be obtained through interviews. Eventually, we identified six locations to which displaced residents had moved: Luofang village, Xinxiu village, Tianbei village, Qingshuihe sub-district, Buji sub-district and Liantang sub-district (as shown in figure 3.2).



**Figure 3.2 Dispersal of migrant renters from Huangbeiling village**

Two patterns can be observed from the dispersal of sampled migrants from Huangbeiling village.

First, they continue to cluster in ViCs, and cases of relocating to other types of urban neighbourhoods are very rare. This seems to be a logical outcome, based on what we have discussed in the previous section. On the one hand, migrants generally earn a low income, and they cannot afford commercial apartments. On the other hand, as a result of the *hukou* system, they are denied opportunities to enter the social housing system. This highlights the imperative role of ViCs in fulfilling migrants' pressing demand for affordable housing, as suggested in the literature (see for instance: Song *et al.*, 2008).

Second, displaced migrants tend to prioritize nearby locations. This spatial attachment reflects migrants' strong desires in maintaining the proximity to social groups, workplace and various public facilities, which are all linked to the original neighbourhood. In other words, nearby locations are sought, within their budget constraints, to mediate as much as possible the utility loss from decreasing proximity and accessibility. For instance, a displaced migrant who had moved to Luofang village (a ViC only 1.5 km away from Huangbeiling) said that she still went to Huangbeiling village to buy meat, since meat there is much cheaper. By staying close to Huangbeiling, it is possible to use these kind of tactics to minimize utility

loss. This contrasts with experiences of greater inconveniences for those who moved to places farther away:

*“After the demolition, we found a place in Caopu village [a ViC in Buji]. The transportation was quite inconvenient, so we just lived there for half a year.”* (Interview, December 2013)

Similar situation was described by another migrant concerning access to commercial facilities:

*“There are many supermarkets in Huangbeiling village, everything is cheaper. But in the place where I moved to, there is only one supermarket and pork is very expensive.”* (Interview, December 2013)

These inconveniences, a result of reduced accessibility to various urban services, can all be translated into higher living costs. In other words, as a direct consequence of displacement, migrants spent more on their day-to-day needs. However, no matter how hard they try to re-optimize their location strategies, utility loss is unavoidable. For instance, even for those who moved to the nearby Luofang village, substantial increases in commuting costs were reported:

*“Living in Luofang village, you have to transfer wherever you want to go. It is so inconvenient. Compared to commuting in Huangbeiling village, I have to spend one hour more every day, and approximately 100 yuan more on the costs of commuting every month.”* (Interview, January 2014)

Besides the above hardships, what is more devastating to displaced migrants seems to be the loss of social and economic networks. Different from proximity and accessibility, which can possibly be retained by moving to places with similar locational advantages, the destroyed social network is much harder to re-establish elsewhere.

In the literature, ViCs are regarded as transitional neighbourhoods that retain traditional kinship-based and place-based networks originated from rural villages (Liu et al., 2010). Because of many exclusions and discriminations imposed on them through the *hukou* system, to make their survival in the city easier, migrants from the same hometown tend to cluster together, resulting in the emergence of ‘*tong xiang*’ (fellow townsman) ViCs in big cities. Huangbeiling village is a typical *tong xiang* village, and most of the migrants are from Sichuan province. For migrant renters in Huangbeiling village, social network not only generates the sense of belonging and provides social support and assistance, but more importantly, also is an important source for obtaining employment opportunities. Since the majority of them do not have a steady job, they rely heavily on kinship and social networks in their job-search strategies. As described by an interviewee:

*“We don’t have a steady job, so we rely heavily on our social network for job opportunities. For instance, if I hear about a job opportunity today, first I will ask my family, relatives or friends. After that I just go out and ask some *tong xiang* if they need a job. If you know very few people, you will get very few job opportunities, and you earn less.”* (Interview, December 2013)

Moreover, the clustering of *tong xiang* usually results in high degrees of occupational specialization, an outcome of a mutual learning process in low-skilled jobs between *tong*

*xiang*. In Huangbeiling village, men usually work in construction sector, and women as house cleaners. Out of this occupational specialization, an informal ‘employment office’ gradually formed in front of a supermarket<sup>13</sup> in the village. Migrants gather there to exchange information about job opportunities every morning and every evening. This place is so well-known that labour contractors in other areas of the city even go there to look for and hire workers.

Thus, for those who left Huangbeiling village, they were deprived of an imperative source of job opportunities. As described by one migrant:

*“Our job situation is unstable, and we rely a lot on social networks. My husband is a construction worker. Since moving to the new neighbourhood, he gets fewer job opportunities.”* (Interview, January 2014)

Overall, for those who were displaced to other locations of the city, they encountered difficulties in travelling to work, they have to pay more for their day-to-day needs, and they get fewer job opportunities mainly due to the loss of social and economic networks.

### 3) Moving back to Huangbeiling: the least bad option?

Turning our sight back to Huangbeiling village, the 2-phase redevelopment has in a sense enabled the maintenance of the old social fabric, since part of the village was left intact. As aforementioned, after the demolition, displaced migrants prioritized the remaining part of the village, where the majority of them moved to. As recalled by a migrant:

*“We wanted to stay in the remaining part of Huangbeiling village when they demolished the central part. However, that area was packed at that time since everyone wanted to stay there. After searching for about ten days, eventually, we managed to find a place in Luofang village.”* (Interview, May 2015)

This shows that for those who were relocated to other places, leaving Huangbeiling was a rather reluctant decision, since they were left with no other options. Nevertheless, staying in the gentrifying village is not without costs. In fact, after the demolition, tenants in the remaining part of Huangbeiling village have been suffering from severe rent speculation. This is the spill-over effect of urban redevelopment that poses on the rent levels of surrounding houses and in the remaining villages (Zhang *et al.*, 2016):

*“The rent for a one-bedroom apartment in Huangbeiling village before the redevelopment was approximately 800 to 900 yuan per month. After the demolition, the rent in the remaining part of Huangbeiling village rose to about 1,400 to 1,500 yuan per month.”* (Interview, January 2014)

To cope with increasing rents, migrants had to resort to various strategies. For instance, the group renting (*qunzu*) was prevalent in the area. Group renting is a survival strategy in which migrants respond to higher rents by consuming smaller living space (Wu, 2016a). In Huangbeiling village, it was very common for ten or more people to share a two-bedroom

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<sup>13</sup> This is a new one that emerged after the demolition. The previous location was in the demolition area. Information provided by officials in Huangbeiling subdistrict office.

apartment, and migrants had extremely poor living conditions in such arrangements. A migrant reported the following:

*“In Huangbeiling, normally three or four families, sometimes even five families, live in a three-bedroom apartment. It is so common to house two families in the living room. Since every family has their own gas cooker, there are often five or six gas cookers in one apartment.”* (Interview, April 2015)

In addition, drastic changes were engendered in the physical environment of the village. For instance, the informal market that sold cheap meat and vegetables was replaced by a formal market with higher rents and prices; a mobile phone mast was torn down and they got very poor network signal in the village; and every day there were loud noises from the busy construction site nearby. The village has become less and less livable because of the rocketing rents, worsening living conditions, and reducing access to local resources. Changes in the built environment also contributed to an increasing sense of instability and precariousness, exerting symbolic displacement as conceptualized by Atkinson (2015).

Despite all these disadvantages, remarkably, we found that 5 out of 22 sampled migrants decided to move back to the gentrifying village. And this was not uncommon, as revealed by one interviewee:

*“As far as I know, there were plenty of them who moved back to Huangbeiling. Some returned after just one month. Some even gave up the deposit for the new place, just to be able to move back immediately.”* (Interview, December 2013)

This interesting phenomenon indicates a re-optimization process of displaced migrants' locational choices in the city. To explore the reasons behind is of importance, because in the western context, the gentrifying neighbourhood is usually where low-income residents suffer greatest impacts from rising rents and radical changes and where they tend to escape from. While in the Huangbeiling case, the fact that displaced migrants eventually moved back to the village indicates the essential role of social and economic networks in their livelihoods. A trade-off was clearly made by these migrants: they chose to suffer from displacement *in situ*, just in exchange for the restoration of the original social and economic networks. As discussed above, social networks play an imperative role in their income generation, and because of this, compared to the places where they originally moved to, the remaining part of Huangbeiling village was where they can obtain a maximum level of utility. Since rebuilding such networks is both time and resource consuming and is of greater uncertainty, for them, moving back was rather the best alternative among the worst ones.

### **3.5 Conclusion**

China's current wave of gentrification is intertwined with booming urban redevelopment, engendering large-scale residential displacement of low-income residents. Insights into the processes, descriptive characteristics of displaced residents, and the institutional shaping of the system are evidently needed. By situating an urban redevelopment project within the

narratives of gentrification, this study provides a detailed examination of the fate of the most impoverished social group that is confronted with redevelopment-induced displacement: migrant renters living in ViCs. Owing to an absence of tenancy security that is deeply rooted in the informality of ViCs, migrants are not considered as an interest group when demolishing these informal settlements and are rather invisible to the main stakeholders in the process. The displaced are also literally invisible unless they are traced by researchers with substantial efforts. In an attempt to make the invisible visible, we conduct a case study in Huangbeiling village in Shenzhen to disentangle the displacement processes of a sample of migrant workers.

We observed varied forms of displacement that manifested themselves in the course of the whole process of redevelopment. Even before the initiation of the demolition, a constant threat of physical displacement was imposed on migrant renters. Their inferior situation caused by the *hukou* system is reflected in limited options of relocation settlements available to them. In general, displacement in the form of short-distance relocation occurred most frequently, with substantial utility loss, in terms of decreasing proximity to workplace and various urban services, rising living costs and the destruction of social and economic networks. The long-standing institutional neglect of migrants' housing needs and housing rights has resulted their disproportionate concentration in ViCs. Contrasting with this is the government's ambitious urban strategy in eliminating these stigmatized informal settlements, out of which ViCs might become gentrified and restructured one by one, and at a rapid tempo. A quickly shrinking pool of affordable housing for low-income migrants, especially in the central urban areas, can make their survival in the city more and more difficult. They are either displaced to periphery areas of the city, bearing rising commuting time and costs on a daily basis; or they resort to tactics such as group renting, enjoying proximity and accessibility but suffering from extremely poor living conditions and a constant threat of displacement. This already marginalized social group has been further marginalized as a result of redevelopment-induced displacement.

An interesting and important finding is that, after a while, some migrants decided to return to the gentrifying village. The main reason, as we have captured, is the imperative role of social networks in their income generation. The restoration of social and economic networks is, however, at the expenses of displacement *in situ*, imposed on them through rocketing rents, drastic physical changes, and declining liveability. This indicates that, the maintenance of social and economic networks is viewed by migrant renters in Huangbeiling village as more important for their survival in the city. This is, in our opinion, a very important difference unrevealed in our study compared with mainstream displacement discourses in western societies. It is mentioned that the redevelopment of ViCs is initiating by the municipal government at a large-scale in Shenzhen. Through only one case study on a sample of migrants, this study does not intend to draw a representative case for the general situation in Shenzhen, and empirical studies on other cases might uncover dissimilar characteristics and mechanisms of the process. However, what we have observed in the Huangbeiling case is well worth attention for more nuanced research on displacement, especially within the Chinese context.

A key question arising from our research is how to provide affordable housing to low-income groups in large cities. Recent years have witnessed gradual reforms in the approaches applied by local governments for urban redevelopment in China. For instance, in Shenzhen, in recognition of the urgent need for affordable housing, the municipal government combines the redevelopment of ViCs with the provision of social housing by requiring that for demolition-redevelopment projects, at least 8 percent of the construction area must be set aside for social housing units<sup>14</sup>. However, as assumed, rural-urban migrants are not among the low-income groups who can benefit from these reforms. The disadvantaged position of migrant renters during gentrification and urban redevelopment is embedded in complicated and rather locked-in institutional arrangements, like the *hukou* system. Although this system has undergone substantial reforms in recent years, these reforms mostly benefit those migrants who have higher incomes or educational levels. Low-income migrants with low educational levels are still largely excluded by the system in various ways, and they are incapable of voicing their needs and concerns during displacement processes. More research is needed to investigate redevelopment-induced displacement from the perspective of those who experience it (especially low-income migrants), in order to provide empirical evidence for possible reform in institutional settings in China.

## Acknowledgements

The authors should like to thank Xingtang Qiu and Dr Ping Huang for their generous help and support during the fieldwork. We also wish to thank our interviewees for sharing their experiences of displacement.

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<sup>14</sup> [http://www.szft.gov.cn/bmxx/qcsqxb/tzgg/201601/t20160113\\_483046.html](http://www.szft.gov.cn/bmxx/qcsqxb/tzgg/201601/t20160113_483046.html)

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## 4 The Chain Effects of Property-led Redevelopment in Shenzhen: Price-shadowing and Indirect Displacement

*This chapter is based on the article: Liu, Y., Tang, S., Geertman, S., Lin, Y., & van Oort, F. (2017). The chain effects of property-led redevelopment in Shenzhen: Price-shadowing and indirect displacement. Cities, 67, 31-42.*

### ABSTRACT

Many Chinese cities are undergoing large-scale property-led redevelopment, which can result in both direct and indirect residential displacement. Although a number of studies on direct displacement have been carried out, insights into the mechanisms underlying indirect displacement are lacking. The present research investigated property-led redevelopment in Shenzhen and the induced chain effects of price-shadowing and indirect residential displacement. It was found that property-led urban redevelopment exhibits strong effects of price-shadowing on adjacent housing prices by creating property hot spots and bringing about changes in the housing market. A multilevel hedonic model quantitatively confirmed the price-shadowing effect of urban redevelopment, by showing that perceived or actual redevelopment increases housing prices in the vicinity. Interviews with residents of neighbourhoods adjacent to three typical redevelopment projects revealed that redevelopment-induced indirect displacement is closely related to rising property values and that residents suffer from both exclusionary displacement and displacement pressure. Residential displacement in China has gone beyond forced eviction and has taken on more indirect and latent forms. Property-led urban redevelopment is a key catalyst for this.

**Keywords:** property-led urban redevelopment, indirect displacement, price-shadowing, villages in the city, Shenzhen

### 4.1 Introduction

For decades, urban redevelopment policies have been implemented in many countries because the continuous processes of industrialization, urbanization and deindustrialization have left a legacy of unused and/or underused sites in urban areas (De Sousa, 2008; Liu et al., 2014). Both the USA and western European countries have introduced regulations governing the redevelopment of brownfield sites and deprived neighbourhoods (Li, 2011a; Atkinson, 2008). In China, urban redevelopment has also received increasing attention (Leaf, 1995). In 2013, the Chinese central government issued the *Special Plan for the Revitalization of Old Industrial-Base Cities* (2013–2022). One of the central focuses of this plan is the transformation of ‘problematic’ brownfield sites. More recently (February 2016), the Chinese government released the “*Opinions of the Central Committee of the Communist Party of China and the State Council on Further Strengthening the Administration of Urban Planning and Development*”, in which it is stated that ‘by 2020, the transformation and renovation of existing shantytowns, villages in the city [urban villages] and dilapidated houses in cities will

be complete.’ It is foreseeable that booming urban redevelopment will have enormous social impacts on urban areas in various forms of direct or indirect residential displacement. If direct displacement research places more emphasis on ‘the spatial fact’ of displacement, indirect displacement research is more concerned with the ‘loss of sense of place’ (Davidson and Lees, 2010, p. 403). Although indirect displacement is less noticeable than direct displacement, it has just as many negative impacts on residents and thus urgently needs the attention of scholars and policymakers. However, China’s urban restructuring processes are characterized by property-led redevelopment and strong coalitions between local governments and developers to capture economic benefits (He and Wu, 2005). The main focus has been on the economic outcomes of urban redevelopment projects, whereas the induced residential displacement, especially indirect displacement, has received scant attention.

Similarly, in the academic literature, indirect displacement remains under-researched (Davidson, 2008). Studies on gentrification often fail to recognize indirect displacement as a serious consequence, and thus legitimize the implementation of pro-gentrification policies (Slater, 2006, 2009). Gentrification processes are, in many cases driven by urban redevelopment activities (Atkinson, 2004; Newman and Wyly, 2006). Urban redevelopment, and especially property-led redevelopment, can have price-shadowing effect on the value of adjacent properties, which further causes indirect residential displacement. Nevertheless, little knowledge is available on either the causes or the consequences of indirect displacement (Slater, 2006, 2009). It has been noted by many scholars (e.g. Slater, 2009) that as a result of the under-theorisation of indirect displacement, the price-shadowing of redevelopment activities is very often celebrated as an economic benefit, rather than seen as one of the main driving forces behind social dispossession. Moreover, this spill-over effect of urban redevelopment on housing prices/rents is very often taken for granted in the displacement literature and is rarely quantitatively investigated (Atkinson, 2002). This is especially the case with respect to China, where indirect displacement caused by large-scale property-centred redevelopment is largely absent from both academic and public discourses.

To bridge these gaps, the present research explored the chain effects of property-led redevelopment. The remainder of this article is structured as follows. In section 4.2, we review the existing literature on indirect displacement and property-led redevelopment in China. In section 4.3, we briefly introduce the study area, research methods and data. After that, in section 4.4, we turn to the empirical study in Shenzhen and provide the background to and general characteristics of property-led redevelopment. Then, in section 4.5, we discuss the chain effects of property-led redevelopment on the basis of both quantitative and qualitative methods. We present our main findings and policy implications in section 4.6.

## 4.2 Literature review

### 4.2.1 Gentrification and indirect displacement

Residential displacement has been widely discussed in the gentrification literature. Grier and Grier (1978, p. 8) conceptualize displacement as:

Displacement occurs when any household is forced to move from its residence by conditions that affect the dwelling or its immediate surroundings, and that: 1) are beyond the household's reasonable ability to control or prevent; 2) occur despite the household's having met all previously imposed conditions of occupancy; and 3) make continued occupancy by that household impossible, hazardous, or unaffordable.

Residential displacement can be caused either directly or indirectly. Building upon the Griers' widely accepted conceptualization of direct displacement, Marcuse (1985) proposed two types of indirect displacement, namely displacement pressure and exclusionary displacement. Displacement pressure refers to households' subjective fear of the possibility of displacement (Doucet, 2009). It emphasizes the psychological and emotional dimensions of displacement, which is experienced by residents although they are physically inhabiting the neighbourhood (Mazer and Rankin, 2011):

When a family sees the neighbourhood around it changing dramatically, when their friends are leaving the neighbourhood, when the stores they patronise are liquidating and new stores for other clientele are taking their places, and when changes in public facilities, in transportation patterns, and in support services all clearly are making the area less and less livable, then the pressure of displacement already is severe. Its actuality is only a matter of time. Families living under these circumstances may move as soon as they can, rather than wait for the inevitable; nonetheless they are displaced. (Marcuse, 1985, p. 207)

Exclusionary displacement is closely related with the dynamics in housing markets (Millard-ball, 2002; Twigge-Molecey, 2014). It occurs when households cannot access dwellings because they have been gentrified:

When one household vacates a housing unit voluntarily and that unit is then gentrified or abandoned so that another similar household is prevented from moving in, the number of units available to the second household in that housing market is reduced. The second household, therefore, is excluded from living where it would otherwise have lived. (Marcuse, 1985, p. 206)

As noted by Bernt and Holm (2009), exclusionary displacement and displacement pressure focus more on changes at the neighbourhood level.

Unlike direct displacement, indirect displacement does not involve households being forcefully evicted from their current dwellings and is thus less visible in affected areas. In gentrification literature, there are ongoing debates on to what extent gentrification harms the poor, since direct displacement is proved to be limited or even absent in many cases (Hamnett and Whitelegg, 2007). For instance, in the UK, urban redevelopment often takes place on brownfield sites or on vacant or abandoned land, and this form of new-build gentrification

does not lead to the direct displacement of residents (Davidson and Lees, 2010). In a longitudinal study in London, Hamnett (2003) argued that the slow reduction of the lower-income class in many inner-city neighbourhoods is a result of the shrinking working class population. In other words, what has often been interpreted as displacement is arguably a replacement process. Similarly, Freeman (2005) doubted the immediate link between gentrification and displacement, and stated that there is possibly gentrification without widespread displacement.

Hamnett and Freeman represent a body of knowledge (see others for instance: Vigdor et al., 2002; Butler, 2007; Butler et al., 2008) that, in Slater's (2009) words, "celebrate gentrification and/or deny displacement" (p. 294). Nevertheless, Slater (2009) pointed out that absence of direct displacement does not necessarily imply absence of displacement in general. For instance, low mobility among poor residents in gentrifying neighbourhoods, which is viewed as solid evidence of 'absence of displacement' in many studies, is actually a form of exclusionary displacement as conceptualized by Marcuse. Slater (2009) therefore strongly highlighted the importance of turning to Marcuse's conceptualization of indirect displacement. Indirect displacement provides new insights into the overall consequences of gentrification, aside from widely researched direct forms of displacement. As warned by Millard-ball (2002), the impacts of gentrification can be significantly underestimated if indirect or 'invisible' forms of displacement are left out from the radar of researchers.

Davidson and Lees's (2005) research on new-build gentrification and displacement on the banks of the Thames in London is one of the few studies on indirect displacement. The authors presented qualitative evidence that long-term residents felt a growing sense of disconnection and displacement from their neighbourhood, with reduced accessibility to basic facilities. From the perspective of everyday life experience, Mazer and Rankin's (2011) research in Toronto's gentrifying neighbourhoods revealed substantial displacement pressure among local residents, caused by rising rents, the disintegration of community networks, a reduction in affordable services, and increasing hostility from the authorities and middle-class incomers. Similarly, linking to Marcuse's (1985) concept of displacement pressure, Stabrowski (2014) conceptualized 'everyday displacement', whereby worsening living conditions, a loss of sense of security and restricted access to local resources exert pressure on residents. Sakizlioğlu (2014) had spent five years observing a neighbourhood in Istanbul to investigate the residents' experiences of displacement threat before actual physical displacement. Residents experienced increasing pressure of displacement since housing prices in the area have been going up ever since the announcement of the renewal project. Reduced community livability pushed remaining residents to move out even before the implementation of actual demolition and eviction. More recently, Shaw and Hagemans's (2015) observations in a gentrifying neighbourhood in Melbourne showed that low-income residents who managed to stay put experience a strong sense of loss of place that comes from the closure of low-cost shops, relocation of friends, and loss of meeting places. Overall, the small body of existing empirical research on indirect displacement reveals that indirect displacement can have serious consequences: when rents soar, friends and neighbours leave,

and affordable services become unaffordable, households are already excluded in a variety of ways and experience a constant threat before the actual displacement (Marcuse, 1985).

#### **4.2.2 Property-led redevelopment, price-shadowing and indirect displacement**

In developing countries, gentrification process is, in many cases, driven by urban redevelopment activities. In this study, we limit the scope to property-led redevelopment in China and the induced indirect displacement. In existing research on indirect displacement reviewed above, it is indicated that among the multifaceted driving forces behind indirect displacement, the main impetus is still economic-oriented, namely the price-shadowing effect: urban redevelopment practices not only cause a sudden change in the housing market but also create property hot spots<sup>15</sup> that change the image, cultural value and desirability of the area (Lambert and Boddy, 2002). These factors together contribute to housing price increases in adjacent areas (Davidson, 2008; Rérat et al., 2010). However, this issue is rarely quantitatively researched. As noted by Atkinson (2002), in the gentrification/displacement literature, in contrast to qualitative evidence of experiences of indirect displacement, the inherent cause of this process – namely the correlation between urban redevelopment activities and roaring housing prices/rents – is very often taken for granted by researchers, and the ‘price increases are mentioned as a logical rather than researched outcome (p. 14)’. It is also noted that the price-shadowing of redevelopment is more pronounced for projects that are driven by real estate development, that is, property-led redevelopment. This brings us directly to the Chinese case.

China’s urban restructuring processes in the post-reform era (i.e. since 1978) are characterized by property-led redevelopment (He and Wu, 2005). The concept of property-led redevelopment, which originated in the UK, is a redevelopment approach that relies on private-sector real estate development as the primary driving force (Turok, 1992). This approach is increasingly applied in the redevelopment strategies of many Chinese cities. Because local governments are strongly motivated to restructure their inner cities, and real estate developers are eager to reap profits by taking advantage of favourable policies, a strategic alliance is formed between the two parties (He and Wu, 2007). Research findings from western countries have already shown that property-led redevelopment can not only substantially shape rebuilt urban areas in terms of restructuring urban spaces and producing urban landscapes, but also spill over into surrounding neighbourhoods, which is manifested most evidently in surging housing prices (Vicario and Monje, 2003). Nevertheless, in China the current research focus is mainly on the social consequences of urban redevelopment for directly displaced residents or their legitimate right to decent compensation (He and Wu, 2005, 2007). Insights into the mechanisms underlying indirect displacement are generally lacking. The situation is similar in the public discourses: social conflicts as a consequence of direct eviction have attracted considerable public attention and have even resulted in criticism.

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<sup>15</sup> Urban areas with intensive property investment/development activities and usually high property values.

In contrast, indirect displacement is largely accepted as or legitimated by the ‘rule of the market’. With the prevalence of property-led redevelopment in many Chinese cities, this phenomenon deserves further exploration.

A review of the displacement literature revealed several research gaps. First, indirect displacement has been under-researched. This has caused the underestimation of the social consequences of gentrification process, which is in many cases driven by large-scale urban redevelopment activities. Second, the very few studies there are on indirect displacement have a disproportionate focus on qualitatively describing experiences of indirect displacement, whereas the relationship between urban redevelopment and rising housing prices is often not seriously researched. Third, compared with western countries, indirect displacement in China is severely under-researched. China’s urban restructuring processes are characterized by property-led redevelopment (He and Wu, 2005) and the main focus is on the economic outcomes of urban redevelopment projects. Therefore, insights into the social effects of urban redevelopment are urgently needed in China. To bridge these research gaps, we adopted a more robust approach by first using quantitative methods to identify the relationship between urban redevelopment activities and housing prices, and then presenting qualitative evidence of indirect displacement in China.

## **4.3 Methodology and data**

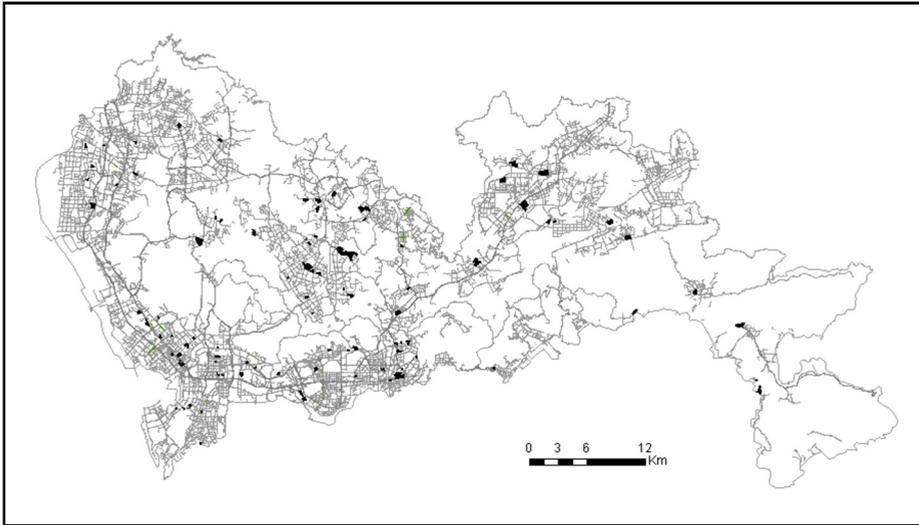
### **4.3.1 Study area**

Shenzhen city, in southeast China, was selected as the study area. The city has grown rapidly since China’s central government designated it as a special economic zone (SEZ) in 1979: the area of urban built-up land increased from less than 3 km<sup>2</sup> in 1979<sup>16</sup> to 890 km<sup>2</sup> in 2014 (Statistics Bureau of Shenzhen Municipality, 2014). Shenzhen is also famous for its numerous ‘villages in the city’ (ViCs). After three decades of rapid urbanization, the city encountered an unprecedented development bottleneck: a shortage of land resources. Shenzhen therefore became a pioneer in the practice of urban redevelopment: it was one of the first cities in China to pursue urban renewal strategies, and it developed the country’s first master plan for the redevelopment of ViCs (Chung, 2009; Lai and Zhang, 2015). As such, the process of residential displacement caused by urban redevelopment projects is more prominent in Shenzhen than in other cities in China.

In Shenzhen’s *Urban Renewal Measures* (2009), the concept of the urban renewal unit (URU) was first used as the basic spatial unit for urban redevelopment (Lai and Zhang, 2015). To investigate the price-shadowing effect of urban redevelopment, we collected the information on URUs issued by the Urban Planning Land and Resources Commission of Shenzhen Municipality (Shenzhen UPLRC) in 2012 and 2013. A total of 101 URUs were entered into our database for quantitative research (figure 4.1).

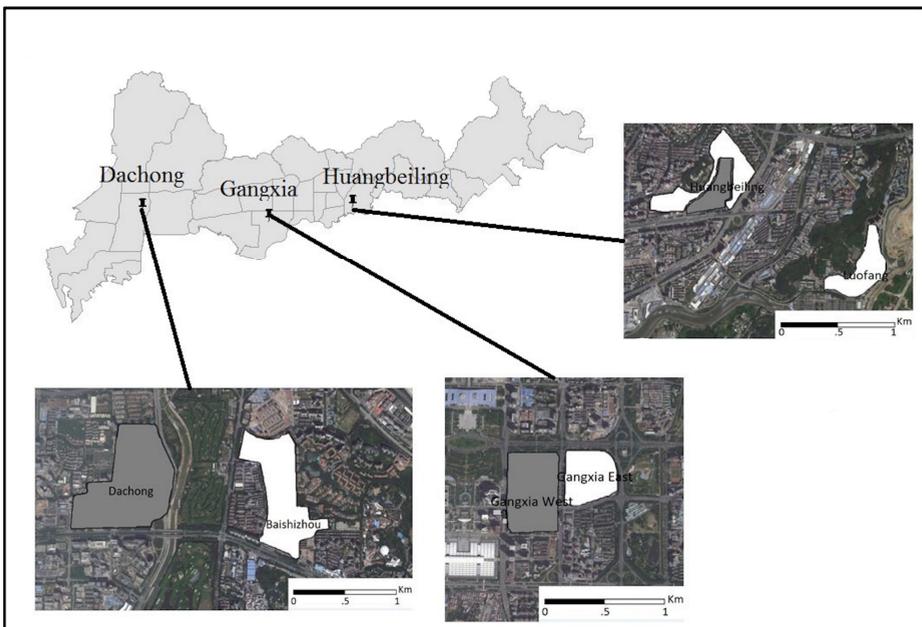
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<sup>16</sup> Government news report: [http://www.mlr.gov.cn/xwdt/jrxw/201012/t20101221\\_806581\\_3.htm](http://www.mlr.gov.cn/xwdt/jrxw/201012/t20101221_806581_3.htm) (last visited 10/02/2017)



**Figure 4.1 Spatial distribution of 101 urban redevelopment sites**

To investigate the experiences of indirect displacement associated with rising housing prices/rents, residents of ViCs adjacent to three typical redevelopment projects were interviewed. In figure 4.2, the dark grey areas have been demolished, and the white areas are the neighbourhoods in which we conducted our interviews. We selected these three projects because they led to the creation of prominent property hot spots and the dispersal of large numbers of residents. The price-shadowing effect of these projects is thus easier to observe.



**Figure 4.2 Location of three urban redevelopment projects and the interviewed neighbourhoods**

The Dachong, Gangxia and Huangbeiling redevelopment projects are typical property-led projects in Shenzhen, in terms of their geographically central locations, the scale of reconstruction, their profit-oriented nature, and the widespread interest from the public and the media.

Dachong village is in Nanshan district. In 2011, this project was the largest redevelopment project in Shenzhen: 1,500 old buildings were demolished and more than 70,000 migrants displaced. In this area, a 300-metre high office building, a 5-star hotel, two 4-star hotels, a shopping mall and numerous apartments will be built (Li, 2011b).

Gangxia village is the only ViC located within Shenzhen's CBD in the Futian district. Therefore, the effect of property hot spots is likely to be more significant than it is for other villages. It consists of two parts: Gangxia West (Heyuan area) and Gangxia East (Louyuan area). Gangxia West has already been demolished, and a new multifunctional district, with shopping malls, apartments and office spaces, will be constructed. It is estimated that the demolition of Gangxia West involved a total area of 0.15 km<sup>2</sup> and the displacement of nearly 100,000 migrants (Li, 2010).

Huangbeiling village is the largest ViC in Luohu district. The project consists of two stages. During the first stage, the central part of the village (0.40 km<sup>2</sup>) was demolished. This area will be transformed into an urban complex with both commercial and residential functions. More than 1,400 buildings were demolished and approximately 30,000 migrants were uprooted from their neighbourhood.<sup>17</sup>

We conducted qualitative interviews in ViCs adjacent to the above three projects rather than in formal urban neighbourhoods because ViCs accommodate a substantial number of low-income migrants (Lin et al., 2014), who have relatively fewer options and tend to suffer more from indirect displacement. As shown in figure 4.2, Baishizhou village is approximately 1 km from Dachong village; Gangxia East is adjacent to Gangxia West; and Luofang village is approximately 2 km southeast of Huangbeiling village.

### **4.3.2 Research method and data**

We used a combination of quantitative and qualitative research approaches.

We first investigated the general characteristics of Shenzhen's property-led urban redevelopment. Here, we presented government documents to demonstrate policy support for property-led redevelopment and used land supply and housing transaction data obtained from the Shenzhen UPLRC, as well as photographs, to describe the property hot spots created by these projects.

We then used quantitative methods to investigate the spill-over effect of urban redevelopment on housing prices/rents. Drawing upon previous studies (e.g. Kaufman and Cloutier, 2006; De Sousa et al., 2009), we applied a hedonic price model to quantify the relationship between urban redevelopment and housing prices. The hedonic price method

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<sup>17</sup> Information obtained from Huangbeiling subdistrict office.

considers that goods or services can be seen as a bundle of characteristics or attributes and are valued for these characteristics (Rosen, 1974). These inherent attributes are generally classified into structural attributes, neighbourhood attributes and locational attributes. Instead of the traditional hedonic model, we applied a multilevel hedonic model (MLM, or a hierarchical linear model), which can recognize the hierarchical features of variables and separate the effects of different levels of the hierarchical data on housing prices (Jones, 1991; Brown and Uyar, 2004). Although MLM has advantages in handling nested data, it is not without limitations. For instance, in MLM the dependent variable is restricted to the lowest level and it requires larger sample sizes to ensure sufficient statistical power, which have to a certain extent limited the application of this approach (Castro, 2002; Kreft et al., 1998).

We chose MLM mainly based on the following considerations: first, purchasing a house is a hierarchical decision-making process since households first choose a city to live in, then choose a neighbourhood and finally choose a house, whereas the traditional hedonic model, using ordinary least squares (OLS) to estimate regression coefficients, has ignored this hierarchical nature (Brown and Uyar, 2004; Djurdjevic et al., 2008; Quigley, 1985); second, in the traditional hedonic model, the fundamental OLS assumption of independent observations is violated, since apartments within the same neighbourhood tend to have very similar prices (Mihaescu and vom Hofe, 2012; Hu et al., 2014). This is especially so for China, where gated communities<sup>18</sup> are prevalent in big cities. MLM can account for these limitations, and generate unbiased modelling results (Goldstein 2011; Raudenbush and Bryk 2002).

In our data, we have two levels: the apartment level (level 1) and the neighbourhood level (level 2). Our multilevel hedonic model takes the following random intercept form:

$$LN(P_{ij}) = \gamma_{00} + \gamma_{01}N_j + \gamma_{02}LN(L_j) + \gamma_{03}LN(U_j) + \gamma_{10}S_{ij} + \mu_{0j} + \varepsilon_{ij} \quad (1)$$

where  $LN(P_{ij})$  represents the natural logarithm of the transaction price of residential property at level 1;  $S_{ij}$  represents structural house characteristics at level 1;  $N_j$  represents neighbourhood characteristics at level 2;  $LN(L_j)$  represents the natural logarithm of the locational variables at level 2; also at level 2,  $LN(U_j)$  represents the natural logarithm of our focus variable, distance to nearest URU;  $\varepsilon_{ij}$  is residual at level 1;  $\mu_{0j}$  is residual at level 2. The variance of the residual error  $\varepsilon_{ij}$  is specified as  $\sigma^2$ , and the variance of the residual errors  $\mu_{0j}$  is specified as  $\tau_{00}$ . The extent to which observations within a group are related can be expressed as an estimate of the ratio of the between-group variation relative to the total variation, which is called the intra-class correlation coefficient (ICC):

$$\rho = \frac{\tau_{00}}{\sigma^2 + \tau_{00}} \quad (2)$$

For the dependent variable, apartment transaction data were collected from the database of Shenzhen UPLRC. In order to ensure the significance of the effects of urban

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<sup>18</sup> A gated community is 'a walled or fenced housing development with secured and/or guarded entrances' (Huang, 2006, p. 508).

redevelopment on property values, we selected those transactions within 2 km of the 101 URUs in the database. In total, we obtained 7287 transactions in the year 2014, when those URUs were announced or carried out. These apartments are all located in large-scale newly built gated communities. We focused on large-scale newly built communities for several reasons. First, new-build housing is not affected by depreciation, which made our model more reliable. Second, as our research was focused on the impacts of urban redevelopment on housing prices, large-scale communities, with a substantial number of apartments, can reflect this spill-over effect better than small-scale communities can. Finally, compared with the transaction price of second-hand housing, that of new-build housing is relatively more real, because in China people often sign ‘yin-yang’ (under-the-table) contracts in order to evade taxes when buying and selling second-hand housing, and thus the reported prices can be very low.

Regarding the independent variables, as mentioned, there are three types of variables in hedonic models: structural variables, neighbourhood variables and locational variables. In the literature, frequently used structural variables are floor area, age of house, floor level, number of bathrooms and number of bedrooms (Hamilton and Morgan, 2010; Hu et al., 2014). In China, whether or not an apartment, especially a new-build apartment, is furnished and decorated has a significant impact on its price (Tian, 2006). We signalled collinearity between floor area and the number of bedrooms. Eventually, we included three structural variables: floor area, floor level and furnishment (furnished and decorated, or not).

Neighbourhood quality can be related to both characteristics within the neighbourhood and those outside but in proximity to the neighbourhood (Hu et al., 2014). In that, school quality is an important factor affecting housing prices (Haurin and Brasington, 1996). We measured whether or not a community is located within a good school district. Moreover, it is suggested in the literature that proximity to water bodies has a positive effect on neighbourhood qualities (Chen and Jim, 2010). To control for this effect, we included proximity to the beach as an independent variable. Lastly, Shenzhen is well known for its numerous ViCs. Emerging from informal construction activities by indigenous villagers and home to numerous rural migrants, these ViCs are constantly criticized by the media or local governments for their unregulated houses, untidy street profiles and unhealthy living environment (see for instance: Zhang et al., 2003; Zhu, 2004; Tian, 2008; Liu et al., 2010). Related to the housing prices, there is evidence in the literature that property values can be lower for housing in the proximity of ViCs (Chen and Jim, 2010; Song and Zenou, 2012). Therefore, the presence of ViCs in the vicinity was included in the model as a disamenity effect on adjacent residential properties.

The influence of accessibility on housing prices has long been recognized in the literature (McMillan et al., 1992; Palmquist, 1992; Ridker and Henning, 1967). Accessibility is often interpreted as accessibility to public transport, to workplace and to various urban amenities, such as open spaces. To measure accessibility, we included three accessibility variables: access to bus stops, access to metro stations and access to job opportunities. It is worth noting that accessibility to workplace was approximated by job opportunities of large manufacturing

enterprises. In that, it is good to be aware of the fact that job opportunities offered by large manufacturing enterprises are very diversified, including both low-skilled and high-skilled jobs. Therefore, we believe that job opportunity of large manufacturing enterprises is an acceptable indicator that sufficiently represents the impact of job accessibility on housing prices. For our focus variable, since it is the presence of URUs that will have impacts on housing prices (Eiser et al., 2007; Mihaescu and vom Hofe, 2012), we calculated the Euclidean distance of a gated community to the nearest URU.

Table 4.1 gives definitions and descriptive statistics of the dependent and independent variables in the multilevel hedonic model.

**Table 4.1 Descriptive statistics of the variables in the multilevel hedonic model**

Variable	Description	Level	Minimum	Maximum	Mean	Standard deviation
<b>DEPENDENT VARIABLE</b>						
LN_PRICE	Logarithm of gross price (10 <sup>4</sup> RMB)	Level 1	3.633	6.771	4.979	0.434
<b>STRUCTURAL CHARACTERISTICS</b>						
FLOOR	Floor level	Level 1	1	47	15.440	9.743
AREA	Floor area of an apartment (m <sup>2</sup> )	Level 1	34.000	310.000	93.002	27.354
FURNISHMENT	Dummy: 1 when an apartment is furnished	Level 1	0	1	0.338	0.473
<b>NEIGHBOURHOOD CHARACTERISTICS</b>						
SCHOOL	Dummy: 1 when an apartment is in a high-quality school district	Level 2	0	1	0.150	0.359
BEACH	Dummy: 1 when the beach is within 1000 m	Level 2	0	1	0.048	0.214
VILLAGE	Dummy: 1 when there is a ViC within 100 m	Level 2	0	1	0.577	0.494
<b>ACCESSIBILITY</b>						
BUS	Dummy: 1 when there is a bus stop within 500 m	Level 2	0	1	0.724	0.447
METRO	Dummy: 1 when there is a metro station within 500 m	Level 2	0	1	0.191	0.393
LN_JOB	The negative value of the logarithm of route distance to the nearest job opportunity (m)	Level 2	-7.831	-3.974	-6.416	0.861
<b>FOCUS VARIABLE</b>						
LN_URU	Logarithm of Euclidean distance to nearest urban renewal unit (m)	Level 2	0.693	7.549	6.012	2.000

Finally, we used various materials from government reports, newspapers and our interviews to investigate the consequences of indirect displacement, which are closely

associated with rising housing prices/rents. During two periods of in-depth fieldwork (December 2013–February 2014 and March–May 2015), residents of the aforementioned neighbourhoods adjacent to urban redevelopment projects were interviewed; the main focus was on the experiences of rising housing prices/rents and the impacts on their daily lives and dwelling decisions. In addition, we used field observations and photo documentations to establish the living conditions in neighbourhoods in which rents were increasing.

It should be noted that although the residents of ViCs also include local villagers (i.e. landlords who own properties in ViCs), our interviews about indirect displacement mainly focused on the situation of migrant renters. First, local villagers constitute only a very small proportion of residents of ViCs. For instance, in Gangxia village, there were only 1000 local villagers, in contrast to 100,000 migrant renters. It is estimated that in many ViCs, the ratio of original villagers to migrants could be less than 1:100 (Li, 2010). Second, unlike migrants, local villagers have a very strong position during redevelopment: they are the main stakeholders and are entitled to considerable compensation for displacement. After the redevelopment, local villagers may even choose to move back to their original neighbourhood. In the case of Gangxia village, 59,200 m<sup>2</sup> of land was used for the construction of new properties to compensate villagers.<sup>19</sup> Therefore, for many local villagers, redevelopment is a once in a lifetime opportunity to acquire a large fortune. Moreover, as for indirect displacement, rising housing prices/rents are the main source for both exclusionary displacement and displacement pressure, in which situation local villagers are actually the beneficiaries rather than the victims. Based on these considerations, in section 4.5.2 we limit the discussion to the situation of migrants in ViCs. In the following section, we present the general background to property-led urban redevelopment in Shenzhen.

#### **4.4 Property-led urban redevelopment in Shenzhen**

Shenzhen is a leading city in the implementation of urban redevelopment strategies. As early as 2004, the municipal government started exploring urban renewal policies. The issuing of Shenzhen's *Urban Renewal Measures* in 2009 marked the more systematic operation of urban renewal projects. By August 2013, more than 300 urban renewal projects had been approved by the government, whose main concern is the redevelopment of ViCs. As noted by He and Wu (2007), property-led redevelopment is characterized by removing supply-side constraints to attract private investment during urban redevelopment. Therefore, local governments usually provide private investors with substantial policy support. In the case of Shenzhen, in order to encourage the participation of private capital in redevelopment projects, the municipal government enacted a number of preferential policies. For instance, the *Provisional Regulations for Redevelopment of Villages in the City in Shenzhen* (Shenzhen UPLRC, 2005) allow local authorities to transfer land in ViCs that is targeted for redevelopment to developers at reduced prices or even free of charge. In addition, substantial

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<sup>19</sup> Information provided by Retumu, a local NGO in Shenzhen.

special support funds have been established for urban redevelopment initiatives (Shenzhen UPLRC, 2007). To simplify approval procedures, in June 2016 a new department within the municipal government – the Urban Redevelopment Bureau – was established and tasked with managing and administering urban redevelopment projects. These preferential policies have boosted the number of urban redevelopment projects, which have become an important source of commercial housing supply in Shenzhen. For instance, whereas land supply from urban redevelopment for commercial housing construction comprised around 20% of the total land supply in 2011, the figure increased to nearly 50% in 2015.

These projects are primarily profit-oriented and create prominent property hot spots. Many of them are flagship projects that play a catalytic role in attracting new financial capital. Table 4.2 gives an overview of flagship redevelopment projects in Shenzhen. As can be seen, the housing prices of these projects are substantially higher than the average housing prices during the same period in Shenzhen, representing typical characteristics of property hot spots.

**Table 4.2 Flagship redevelopment projects in Shenzhen**

Redevelopment project	Housing price after redevelopment (yuan/m <sup>2</sup> )	Average housing price in Shenzhen <sup>20</sup> (yuan/m <sup>2</sup> )	Completed <sup>21</sup>
Huawei science park	20,653	18,175	December 2012
Xiasha village	43,712	22,141	August 2013
Saigerili old industrial area	72,000	21,821	September 2013
<b>Dachong village</b>	<b>43,255</b>	<b>22,198</b>	<b>October 2014</b>
Xingheyabao science park	43,527	26,536	November 2014
Shuiwan village	55,728	25,758	December 2014
Xinlaoxi village	36,704	26,370	April 2015
<b>Gangxia village</b>	<b>89,000<sup>22</sup></b>	<b>34,832</b>	<b>July 2015</b>
Ludan village	89,763	42,476	December 2015
<b>Huangbeiling village</b>	<b>61,212</b>	<b>49,876</b>	<b>April 2016</b>

Source: Shenzhen UPLRC

Note: Statistics of the three case villages in the qualitative section (section 4.5.2) were marked as bold in this table.

The mechanisms underlying the creation of these property hot spots are multifaceted. First, the nature of these projects is primarily profit-oriented, since many of these sites occupy central locations in the city and the rent gaps are enormous. Private developers, the main actors in property-led redevelopment, are eager to capture the huge rent gaps by developing real estate. After redevelopment, housing prices/rents can double or even triple. For instance, in the case of Caiwuwei village, annual rental yields increased from 18 million yuan before the redevelopment to 60 million yuan following it (Wang, 2011). Second, unlike real estate development on agricultural land, the redevelopment of old residential areas requires developers to pay high levels of compensation to relocated owner-occupiers. In extreme cases

<sup>20</sup> This is the average housing price in Shenzhen at the time of completion of each project.

<sup>21</sup> For most projects, by the time shown in the table, only part of the project had been completed and put into the market.

<sup>22</sup> This is the list rather than the transaction price.

like Gangxia village, the only ViC within Shenzhen's CBD, the redevelopment created more than 20 billionaire families and 10 billionaire individuals (Qian et al., 2015). No doubt these high compensation costs contributed to the high housing prices after redevelopment.

By creating contrasting and distinct urban landscapes, property hot spots represent a strong image of urban revitalization and thus raise the expectations of investors. Many landmarks in Shenzhen are a result of urban redevelopment. For instance, in the Caiwuwei redevelopment project (figure 4.3), a 442-metre high skyscraper was erected. The ongoing redevelopment projects of Dachong, Gangxia and Huangbeiling villages are also aimed at changing the areas into high-end urban complexes with commercial and residential functions.



**Figure 4.3** Contrasting landscape between the redeveloped part and the remaining part of Caiwuwei village (Photo by Zhiwen Zou)

Besides the creation of property hot spots, the redevelopment of residential areas (especially ViCs) often leads to a change in the housing market because large-scale direct displacement is initially generated. For instance, as mentioned, the demolition of Dachong, Gangxia and Huangbeiling villages caused the displacement of large populations of migrants. Thousands of displaced residents need to find new accommodation, and they prioritize nearby places (Liu et al., 2016).

Overall, a shock in the lower-end housing and rental market, together with the effect of property hot spots, is likely to induce price-shadowing effects on surrounding neighbourhoods, leading to indirect displacement. As noted by Davidson (2008, p. 2390):

Indirect displacement therefore associates 'price shadowing' (Atkinson, 2002; Hall and Ogden, 1992; Vicario and Monje, 2003) not only with housing market change, but also with the related influx of economic and cultural capital. This includes the gentrification of surrounding housing and the development of new high-status commercial and residential buildings which generate a property 'hot spot'.

In the following section, we describe the chain effects of property-led redevelopment in the case of Shenzhen, namely the price-shadowing effect and the induced indirect displacement.

## 4.5 Chain effects of property-led redevelopment in Shenzhen

### 4.5.1 Price-shadowing of urban redevelopment projects: results from a multilevel hedonic model

In this section, we present the results from the MLM. We first ran a null model to calculate the ICC. As shown in table 4.3, in terms of random effects, the chi-square test is statistically significant, indicating that there is variance in housing prices by neighbourhood groupings. The ICC is very high (0.760), indicating that 76.0% of the variance in housing prices is caused by neighbourhood differences. This result is consistent with the situation in Chinese cities because apartments within the same gated community have very similar prices. The estimation of the full MLM is presented in table 4.4. For coefficients that are statistically significant, floor level and floor area, school district quality, proximity to the beach and access to bus stops are positively related to housing prices. The results are consistent with the hedonic literature (Chen and Jim, 2010; Haurin and Brasington, 1996; Hu et al., 2014). Apartments on higher floor levels generally enjoy better views and thus have higher prices. Apartments situated in a good school district are worth more since better educational resources are capitalized in higher property values. Proximity to the beach not only translates into proximity to water bodies but also indicates better views and therefore leads to higher housing prices. Finally, apartments within 500 metres of a bus stop have higher market values because accessibility is a positive factor of housing prices.

**Table 4.3 Estimation results for the null model**

Fixed effects	Coeff.	Se	t-ratio
$\gamma_{00}$	5.020***	0.057	87.610
Random effects	Variance components	df	Chi-square
$\tau_{00}$	0.179***	53	17,286.790
Level 1 $\sigma^2$	0.056		
Deviance	26.088		

\*\*\* p<0.001.

**Table 4.4 Estimation results of MLM specification**

Fixed effects	Coefficient	Std. error	t-ratio
Intercept	4.513***	0.272	16.565
FLOOR	0.001***	0.000	3.293
AREA	0.009***	0.000	19.309
FURNISHMENT	0.168	0.093	1.795
SCHOOL	0.232**	0.083	2.777
BEACH	0.387**	0.134	2.882
VILLAGE	-0.123	0.065	-1.900
BUS	0.287**	0.083	3.472
METRO	0.119	0.076	1.562
LN_JOB	-0.081	0.041	-1.958
LN_URU	-0.041*	0.018	-2.244
Random effects	Variance components	df	Chi-square
$\tau_{00}$	0.064***	46	69,070.025
Level 1 $\sigma^2$	0.006		
Deviance	-16,598.879		

Note: the dependent variable is natural logarithm of gross price, N = 7287.

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001.

In terms of our focus variable, the MLM results show that after the announcement of a redevelopment plan or the commencement of redevelopment activities, there is a statistically significant negative relationship between distance from URUs and housing prices: a 10% decrease in the distance to the nearest URU leads to a 0.41% increase in housing prices. That is, for apartments within 2 km of a redevelopment project, as the proximity of the apartment to the project increases, the price increases, when controlling for all other independent variables in the model. This is a clear price-shadowing effect of urban redevelopment projects, which is viewed as the main driving force behind indirect displacement. As discussed in the previous section, the price-shadowing effect is closely related to the nature of property-led redevelopment projects, which are often aimed at stimulating an influx of capital by creating property hot spots of high-end commercial/residential spaces for the upper middle class (Davidson, 2008). Moreover, for the redevelopment of residential areas, in particular ViCs, the rising housing prices/rents in adjacent areas are a result not only of the property hot spots but also of the sudden change in the housing market due to the induced large-scale direct displacement.

In brief, we quantitatively identified the main cause of indirect displacement, namely the price-shadowing effect of urban redevelopment. It then became important to establish whether this effect is subjectively experienced at the individual level, and what impacts are felt. In the following section, we zoom in on the three redevelopment projects and discuss the consequences of redevelopment-induced indirect displacement. The main focus is on the experiences of rising housing prices/rents and the impacts on residents' daily lives.

#### **4.5.2 Redevelopment-induced exclusionary displacement and displacement pressure**

Indirect displacement (in the form of both displacement pressure and exclusionary displacement) occurs when the price-shadowing effect of urban redevelopment increases the rents and prices in adjacent areas (Davidson, 2008). Housing that was once affordable for certain groups becomes unaffordable (Shaw and Hagemans, 2015) and therefore these groups are excluded from that housing (exclusionary displacement) or are under the threat of being priced out (displacement pressure) (Marcuse, 1985). Indirect displacement is most likely to have a serious impact on low-income residents, as affordable housing is particularly limited and they have relatively fewer resources with which to deal with displacement. In light of this, the qualitative section mainly focuses on the price-shadowing effect of urban redevelopment projects on the lower-end of the housing market, i.e. the impacts of the lower-income groups. In Shenzhen, the majority of low-income residents (mostly migrants) live in ViCs (Hao et al., 2011). It is therefore thought that, compared to the redevelopment of brownfield sites, the effect of indirect displacement is more prominent and severe in the redevelopment of ViCs.

We conducted interviews, field observations and photo documentations in Baishizhou village, Gangxia East, the remaining part of Huangbeiling village, and Luofang village to

investigate the impact of indirect displacement caused by the redevelopment of nearby Dachong, Gangxia West and Huangbeiling villages. All the interviewees are migrant workers renting rooms in ViCs. They have diversified occupations, ranging from self-employment and white-collar work, to salesman and construction workers. 25 out of 28 interviewees said that these areas had undergone a significant increase in housing rents after redevelopment, which has verified the price-shadowing effect of urban redevelopment, as captured in the quantitative model.

As aforementioned, exclusionary displacement is closely related with the dynamics in housing markets. Specifically, many of the low-income migrants are excluded from once-affordable areas since they can no longer afford the rents. This type of indirect displacement is well illustrated in the Huangbeiling case. Upon the demolition, 30,000 migrants needed to find new accommodation, and they prioritized the remaining part of the village. As recalled by a migrant:

*We wanted to stay in the remaining part of Huangbeiling village when they demolished the central part. However, that area was packed at that time since everyone wanted to stay there. After searching for about ten days, eventually, we managed to find a place in Luofang village. (Interview, May 2015)*

A sudden change in the demand side of the housing market has in a sense directly driven the rise of rent in this area. A migrant who moved out of the remaining part of Huangbeiling village reported the following:

*Before the demolition, the rent for a one-bedroom apartment in the remaining part of Huangbeiling village was only several hundred yuan, whereas right after the demolition, the rent immediately rocketed. I heard that last December, the rent had risen to 1300 or 1400 yuan per month. We really cannot afford the rent anymore. (Interview, January 2014)*

Although the price-shadowing effect in this case is most prominent in the remaining part of Huangbeiling village, it also trickles down to other adjacent villages:

*The housing rent in Luofang village was equally cheap before the demolition of Huangbeiling village, but has substantially risen since then. (Interview, January 2014)*

Six out of seven interviewees in Luofang village described similar experiences.

These cases clearly show that after the demolition, many low-income migrants were deprived of the opportunity of living in the remaining part of Huangbeiling village because of the increasing rent levels, engendering an indirect effect of exclusionary displacement. As expressed by an interviewee:

*It costs more than one thousand yuan for a one-bedroom apartment in Huangbeiling village now. How can we afford the rent with such a low income level? Not to mention that I also have young children and elderly parents to support... (Interview, February 2014)*

Furthermore, it shows that adjacent villages (e.g. Luofang village) experienced a rent rise too, due to the demolition of the central part of Huangbeiling village.

In addition to causing exclusion from certain areas, exclusionary displacement can also lead to a situation of entrapment, whereby the most disadvantaged social groups are 'trapped' in certain deprived neighbourhoods since better alternatives are not available to them (Slater, 2006; Van Criekingen, 2006). In fact, when we visited the remaining part of Huangbeiling village in 2015, there were plenty of complaints about rents increasing after the demolition. However, when asked why they had stayed in the village, most said that they had no other options. This evidence has confirmed Slater's (2009) argument that absence of direct displacement cannot simply be translated into the absence of displacement. In the case of Huangbeiling village, the qualitative materials show that low residential mobility among low-income migrants in the rapidly gentrifying neighbourhood is due to their experienced exclusionary displacement, i.e. a direct consequence of the shrinking pool of affordable housing.

Aside from exclusionary displacement, for those migrants who manage to stay in the neighbourhood by resorting to various strategies, they also suffer from great displacement pressure, fearing that they will eventually be priced out of the area if the rent keeps rising. According to a migrant in Luofang village who had been displaced from Huangbeiling village:

*The houses in ViCs, especially those within the SEZ, are becoming more and more unaffordable to us. Among ViCs within SEZ, the village I am living in now is already relatively less accessible, while the rent for a one-bedroom apartment has also increased to more than one thousand yuan. It feels like we will eventually be forced back to our hometown. (Interview, April 2015)*

Street interviews in Baishizhou village also revealed that since the demolition of Dachong village, rents in Baishizhou village had increased significantly. Concerns about affordability prevailed among migrants living in this neighbourhood. The same situation applies to Gangxia village:

*Ever since they started demolishing Gangxia West, rents in Gangxia East have soared. Before that, landlords normally increased rents once a year, but now, they increase rents two or three times every year. If you cannot bear the high rent, then you just move out, since the landlord can easily let it out.<sup>23</sup>*

In addition to concerns about affordability, pressures can also result from the departure of friends and neighbours or the unaffordability of once-affordable public and commercial facilities as a result of rising rents. According to a migrant in Luofang village:

*Many migrants I know chose to leave, since they can no longer afford to live here. Before the demolition, a one-bedroom apartment normally accommodated two families. However, under current soaring rents, it is no longer possible. So they left Shenzhen and went to cities such as Chongqing and Chengdu, where they get higher chances of survival. ... If it was not for my children's education, I might have left as well. (Interview, January 2014)*

Owing to the redevelopment, incumbent residents witness dramatic changes that are taking place in their neighbourhoods. For instance, the informal market in Huangbeiling village that

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<sup>23</sup> This interview material is from a report on Nanfang Metropolis Daily (28/10/2009).

sold cheap meat and vegetables was replaced by a formal supermarket with higher rents and prices; and a popular gourmet street in Gangxia West no longer existed. Changes like this contributed to a sense of loss of place and made the neighbourhood less and less livable for these residents. Nevertheless, even under such a disadvantaged position, we see that these low-income residents utilize various strategies to mitigate the impacts of indirect displacement. Economically, to cope with increasing rents, they resort to group renting (*qunzu*), which is currently prevalent in ViCs within the SEZ. It is very common for ten or more people to share a two-bedroom apartment, and migrants have extremely poor living conditions in such arrangements (Figure 4.4). A migrant reported the following:

*In Huangbeiling, normally three or four families, sometimes even five families, live in a three-bedroom apartment. It is so common to house two families in the living room. Since every family has their own gas cooker, there are often five or six gas cookers in one apartment. (Interview, April 2015)*



**Figure 4.4** Group renting in ViCs (Photo taken by the first author)

Socially, migrants are actively engaged in place-making for social encounters despite the radically changing situation. For instance, when an old meeting place is no longer there due to the redevelopment, a new one might emerge somewhere else. According to a migrant in Huangbeiling village:

*There was a place in the demolished area where people went there to have a chat or exchange information about job opportunities every morning and evening. After the demolition, we now have a new place to meet, right in front of the Jialeong supermarket (figure 4.5). (Interview, April 2015)*



**Figure 4.5** A new meeting place for migrants after the demolition (photo taken by the first author)

These examples indicate that although vulnerable and disadvantaged in the face of displacement, low-income migrants actively resort to various tactics to minimize the negative impacts. However, the resources (no matter economic, social, or political) this social group possesses to deal with indirect displacement are particularly limited. Therefore, when resources are exhausted, they might eventually leave the city. In fact, this is already happening against large-scale property-led redevelopment in Shenzhen, as revealed in our interviews. This explains the migrants' general pessimism in terms of their future in the city. It is also interesting to notice that, for low-income migrants, although they suffer a lot from rising expenses and declining living conditions, cases of resistance are very rare. Of the 28 interviewees, only one migrant expressed the intention of resisting the landlord's unreasonable demands for higher rent. While others mainly think they had no choice but to grin and bear this situation, by paying what the landlord asked without any negotiations.

Overall, interviews in low-income neighbourhoods adjacent to the three redevelopment projects revealed residents' experiences of both exclusionary displacement and displacement pressure. They were either excluded from once-affordable areas or experiencing a constant threat from rising rents, the departure of friends and neighbours, and drastic changes in the neighbourhood. Qualitative evidence presented in this section has also verified the price-shadowing effect of urban redevelopment, as captured in the MLM.

## **4.6 Conclusion**

Many countries have implemented urban redevelopment. From a government's point of view, redevelopment projects are expected to induce an inflow of capital to the target area, generating various benefits. However, these benefits are often accompanied by profound social costs, in particular, the subtler forms of indirect displacement. In the literature, indirect displacement has long been under-researched because the processes are less radical and less

visible than direct forms of displacement. Moreover, the handful of studies that have been carried out on indirect displacement primarily focused on qualitative descriptions of the consequences of this process on the affected residents. The present research has provided in-depth insights into the underlying mechanisms and the chain effects of property-led redevelopment in Shenzhen, China.

The contributions of this article are as follows: empirically, this research has presented rare evidence of the consequences of indirect displacement after gentrification in urban China; theoretically, the study has elaborated on the driving forces behind the significant spill-over effects of property-led redevelopment, and has quantitatively confirmed the price-shadowing of urban redevelopment; more importantly, new evidence of indirect displacement has contributed to the ongoing gentrification/displacement debate over whether pro-gentrification policies, which are in many cases implemented through large-scale redevelopment activities, really substantially harm the poor. It is without any doubt that Marcuse's (1985) conceptualization of indirect displacement has provided an important yet often neglected perspective on gentrification processes. This perspective can help urban researchers to uncover the full consequences of gentrification processes.

In this study, it is revealed that property-led redevelopment can not only change the social and physical landscapes of rebuilt areas, but also has spill-over effects on surrounding urban areas, which further engenders indirect displacement in these areas. We have shown that the price-shadowing effects of property-led redevelopment can be identified, and that these effects are substantial. This is important, since current research on indirect displacement presents predominantly qualitative interpretations. We addressed this limitation by quantitatively confirming the logical hypothesis that there is a relationship between urban redevelopment activities and rising housing prices in adjacent areas. And our case studies of three urban redevelopment projects have shown that residents living in the vicinity were profoundly affected by indirect displacement. As a result of soaring housing rents, many migrants are excluded from once-affordable areas; for those who manage to stay put, these neighbourhoods become less and less livable, and residents experience a gradual loss of sense of place. This new evidence for China sheds light on the issue of indirect displacement, which remains under-researched in academia.

Regarding redevelopment-induced indirect displacement, the Chinese context differs substantially from the western context. First, although private developers are the main investors in urban redevelopment in China, local governments are usually more actively involved and provide strong policy support to promote property-led redevelopment. Second, in contrast to the strong focus on economic outcomes, the social consequences are largely neglected in public discourses. This has resulted in the absence of public policies for tackling indirect displacement, a situation that is rare in the western context. Third, unlike displacees in western countries, low-income residents affected by indirect displacement in Chinese cities are particularly vulnerable: they are either deprived of affordable housing in central urban areas or are under constant threat of displacement as a result of changes and of losses of the comfort and security of familiar surroundings. Affected residents can only resort to various

individual strategies (such as group renting) to tackle the impacts of indirect displacement, and there is a tendency towards a consolidation of poverty in these areas. In other words, urban redevelopment has led to low-income migrants becoming even more firmly trapped in ViCs.

Overall, this research has revealed that residential displacement in China has gone beyond forced eviction and has taken on more indirect and latent forms, and that nearby urban redevelopment is a key catalyst for this phenomenon. For policymaking on urban redevelopment, it is imperative to start considering these forms of social consequences in order to take measures to counteract the negative impacts they may have. A critical issue raised by this study is that in contrast to the huge demand, the pool of affordable housing actually shrinks as a result of urban redevelopment. This has raised critical questions concerning the extent to which it is legitimate to pursue economic development/revitalization at the expense of the social welfare of the disadvantaged. In light of this, policymakers should be cautious about the acceleration of this ‘accumulation by dispossession’ process and adopt more inclusive and incremental approaches that do not lead to sudden changes in the lower end of the housing market. In addition, social housing in most Chinese cities is currently provided only to local residents. As a result, millions of migrants must resort to informal rental markets such as ViCs. Due to a lack of regulation, these informal markets are usually subject to severe rent speculation. Therefore, to alleviate the impacts of indirect displacement, access to subsidized public housing needs to be provided to those who are in greatest need (e.g. low-income migrants) and regulations on housing markets in informal neighbourhoods need to be strengthened to protect the interests of tenants, who are particularly vulnerable to rising rents.

The present research has two limitations. First, the redevelopment projects we used for our quantitative model were officially approved and announced by the municipal government in 2012 and 2013. Data on the exact implementation stages of these 101 projects in 2014 were not available. Therefore, we were unable to distinguish actual redevelopment from anticipated redevelopment. However, considering that redevelopment projects usually have a long implementation period (a main reason is the negotiating process of relocation and compensation), all the projects up till 2014 will be at the early stage of redevelopment. Therefore, it is safe to assume that the price-shadowing effect captured in our model is likely to be undervalued. Second, due to a lack of available data, we could not model the price-shadowing effect of urban redevelopment projects on rent levels in informal neighbourhoods such as ViCs. Considering that these neighbourhoods accommodate mainly low-income migrants, who are in urgent need of affordable housing and are extremely vulnerable to indirect displacement, greater attention needs to be paid to these informal communities. Moreover, because urban redevelopment activities are the main accelerators of profound urban transformations, many of which are taking place on brownfield sites and thus do not cause direct displacement, more research on indirect displacement is needed. Finally, future studies should shed more light on alternative urban redevelopment approaches that address

various forms of displacement issues, insights into which can provide empirical input for further institutional reforms.

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## 5 Heterogeneity in Displacement Exposure of Migrants in Shenzhen, China

*This chapter is based on the article: Liu, Y., Geertman, S., Lin, Y., & van Oort, F. (2017). Heterogeneity in Displacement Exposure of Migrants in Shenzhen, China. Journal of Ethnic and Migration Studies, DOI: [10.1080/1369183X.2017.1391078](https://doi.org/10.1080/1369183X.2017.1391078)*

### ABSTRACT

Large-scale residential displacement is occurring in many Chinese cities, with migrants living in “Villages in the City” (ViCs) as the main groups affected. This study uniquely captures a situation in Baishizhou village in Shenzhen, where people live under a threat of imminent displacement. We elucidate the (social) heterogeneity of the affected population, their perceptions before and residential choices after displacement. Identifying four migrant groups, the two older generation groups (the first-generation labour migrant class and the new affluent migrant class) tend to anticipate severe consequences more than the two younger generation groups (the second-generation labour migrant class and the intellectual migrant class), mainly because the former groups are more economically and emotionally attached to the village. The residential choices of migrants (of all types) facing displacement increase housing demand in (remaining) ViCs in central urban areas, causing limitations to the absorptive capacity of cities for displaced migrants. Displacement occasionally enables displacees to climb the housing ladder; however, more often, it drives them further away from the city and places of work.

**Keywords:** displacement pressure, migrant workers, villages in the city, heterogeneity

### 5.1 Introduction

The urban built environment in Chinese cities is undergoing profound transformation. In the northeast part of China, the continuous processes of industrialization, urbanization, and deindustrialization have given birth to many underused or polluted brownfields in central urban areas; in many coastal cities, rapid urban expansion has created numerous “Villages in the City” (ViCs, also called *chengzhongcun*) (Liu et al., 2014; Lin et al., 2014). ViCs, home to millions of migrants in Chinese cities, are currently the main target of urban redevelopment plans. In 2016, the Chinese government released the “*Opinions of the Central Committee of the Communist Party of China and the State Council on Further Strengthening the Administration of Urban Planning and Development*”, in which it is stated that ‘by 2020, the transformation and renovation of existing shantytowns, ViCs and dilapidated houses in cities will be complete’. It is foreseeable that the renewal of these areas will impose profound social consequences on urban residents, manifested in various forms of residential displacement. Against this background, it is imperative to gain more insight into this dynamic process in Chinese cities.

In contrast to the burgeoning literature on the effects of large-scale housing redevelopment projects on relocated households in terms of dispersal patterns (Bolt and Van Kempen, 2010),

residential choices (Posthumus and Kleinhans, 2014) and employment barriers (Levy, 2007), individual experiences, situations and perceptions of residents living under *the threat of* displacement remain under-researched. Moreover, as the main victims of redevelopment-induced displacement in China, migrant workers are often viewed as a homogeneous social group in both public and academic discourses, who possess disadvantaged and marginalized positions in the urban society. In this study, we argue that, in Chinese cities, rural migrants have undergone significant class differentiation, resulting in heterogeneous anticipations and coping strategies when confronting displacement. The social consequences of urban redevelopment in China are better understood when considering the heterogeneity of this social group.

ViCs in Chinese cities provide an ideal case for studying this issue. As a special type of urban community that accommodates millions of migrants in Chinese cities, ViCs are socially diverse and vibrant; however, many are currently targeted for demolition and redevelopment. Shenzhen city is well-known for numerous ViCs, accommodating a large and diversified population of migrants; currently, many of these ViCs are under the threat of demolition and redevelopment (Lai and Tang, 2016). Using the case of ViCs in Shenzhen, this research first explores the social heterogeneity of migrants and then considers whether this social heterogeneity is reflected in the perceptions and residential choices of migrants faced with displacement.

The remainder of this article proceeds as follows. In section 5.2, we conduct an extensive literature review on social stratification and residential displacement, with particular emphasis placed on the socio-economic status of rural migrants in China. In section 5.3, we introduce the study area, our research method, and our data collection strategy. We conducted in-depth fieldwork in Baishizhou village in Shenzhen, which was scheduled for demolition by the municipal government in 2014<sup>24</sup>, leaving people to live under a threat of imminent displacement. This unique case enables us to more closely examine people's feelings and future plans given displacement. In section 5.4, we present a social stratification of migrants in Baishizhou village in Shenzhen, which we use to interpret the heterogeneous perceptions of and locational strategies for relocation in section 5.5. Concluding remarks are offered in section 5.6.

## 5.2 Literature review

Since the 1970s, as a debatable outcome of gentrification, residential displacement has been approached from diverse perspectives (see for instance: Atkinson, 2000; Hamnett, 2003; Butler et al., 2008; Slater, 2009). Grier and Grier (1978) define displacement as follows:

Displacement occurs when any household is forced to move from its residence by conditions that affect the dwelling or its immediate surroundings, and that: 1) are beyond the household's reasonable ability to control or prevent; 2) occur despite the household's having met all previously imposed

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<sup>24</sup> The official initiation of demolition depends on the negotiation progress between local villagers and developers.

conditions of occupancy; and 3) make continued occupancy by that household impossible, hazardous, or unaffordable (p. 8).

Displacement can also take more indirect and latent forms, such as the subjective fear of the possibility of displacement (Doucet, 2009). This finding is often referred to in the literature as displacement pressure. Displacement pressure does not involve the direct eviction of residents as described by Grier and Grier; instead, it emphasizes the psychological and emotional dimensions of displacement, for which stress is experienced by residents when they are physically inhabiting the neighbourhood (Mazer and Rankin, 2011). Thus, displacement pressure is closely related to a threat of uncertainty, in terms of the occurrence of actual eviction, the consequences it may incur, and the availability of resources to mitigate the adverse impacts on their daily lives (Lev-Wiesel & Shamai, 1998). Sakizlioğlu (2014) conducted a five-year-long observation of a neighbourhood in Istanbul to investigate incumbent residents' experiences of displacement threat before actual physical displacement. Residents experienced the increasing pressure of displacement owing to rising housing rents and reduced community liveability. Similarly, Shaw and Hagemans's (2015) observations in a gentrifying neighbourhood in Melbourne showed that, for low-income residents who managed to remain, they experience displacement that originates from the sense of loss of place. Although these studies have provided precious insights into the consequences of displacement pressure, they are primarily limited to qualitative descriptions of emotional experiences of exclusion or relocation threat, without taking one step further to elucidate the residential choices of these low-income residents before actual displacement. This analytical perspective is important in that displacees' locational strategies have significant implications for a city's absorptive capacity for them. As there are increasingly fewer ViCs when restructuring progresses rapidly, the city's ability to accommodate displaced migrant residents (particularly low-income residents) after urban redevelopment is under pressure. Maintaining certain levels of absorptive capacity is imperative for the economic prosperity of the city, which is in need of the cheap workforce in expanding industries (Liu et al., 2016). Previous studies on the spatial pattern of displacement have shown that displaced residents prefer to make short-distance moves (Kleit and Galvez, 2011; Bolt and Van Kempen, 2010). This pattern is explained by the presence of social ties (Popkin et al., 2004), place dependence (Kleit and Galvez, 2011) and limited information about other neighbourhoods (Bolt and Van Kempen, 2010). Within the context of China, recent research also identified factors such as centrality and accessibility to urban amenities and public resources (Liu et al., 2016). The extent to which migrants exposed to redevelopment (can) consider relocation opportunities in proximity to their present living location are the main focus of our study, linking individual-level decision making to urban outcomes.

Given displacement, socio-economic characteristics significantly influence individuals' emotional experiences, perceptions of the consequences, and residential choices. A typical example is that older residents tend to experience more severe impacts of displacement due to stronger attachment to the original neighbourhood. Similarly, Lyons (1996) showed differentiated geographies of migration among higher and lower status households, in which

the latter tend to make short distance moves because they are more dependent on locally available resources such as public services and social ties. This relationship between place attachment and emotional reactions of displacement has been well documented in the literature (see for instance Wilcox, 2009). Relating to this social heterogeneity, migrants of the distinctive classes will envision different choices before relocation. If decision makers are aware of these differences in advance, they can consider these in their decision-making processes.

Heterogeneity in socio-economic features that obviously matter in the study of displacement impacts has not been researched extensively in the Chinese population. Social stratification, believed to be universal in every society, is regarded as “the differential ranking of the human individuals who compose a given social system and their treatment as superior and inferior relative to one another in certain socially important respects” (Parsons, 1940: p. 841). There has been substantial research on social stratification in Chinese society since the economic reform. In 2002, the Chinese Academy of Social Sciences issued ‘*The Report on Social Stratification Research in Contemporary China*’, in which ten social stratas were classified based on employment status and access to resources (CASS, 2002). Bian et al. (2005) observed that the introduction of a mixed ‘market-socialist’ economy in China has given birth to a new pattern of social stratification, wherein the processes of class differentiation are simultaneously political and economic. In a time of rapid social and economic transformation in China, Anagnost (2008, p. 498) noted that “the discourse of ‘social stratification’ has become a way of grasping the social totality of the widespread impact of market reform and globalization on Chinese society”.

Against the background of large-scale urban redevelopment in contemporary China, ViCs, as the primary form of migrant enclaves, are currently the main target of urban redevelopment plans in many Chinese cities. In previous research, primarily at the national or city scale, it is common to treat rural migrants as a homogeneous social group who have experienced continuing institutional discrimination under the *hukou* (household registration) system and are excluded from decent jobs and housing in the city (Xie, 2007). The *hukou* system was introduced in the 1950s, under which all the residents were registered according to the birthplace, either as agricultural (rural) or non-agricultural (urban) status. Before the economic reform, rural-urban migration was strictly controlled by the state under the *hukou* system (Wu, 2002). If, at the early stages of reform, the socio-economic characteristics of migrants were relatively homogeneous, after nearly four decades, this social group has undergone profound differentiation, particularly with the emergence of second-generation migrants. However, only several scholars have noticed the stratification process of rural migrants. For instance, based on differing *hukou* status, Li (2004, p.297) conducted comparative studies between two groups of migrants: migrants holding a non-local urban *hukou*, and migrants holding a non-local rural *hukou*. More recently, Xie (2007) identified five groups of rural migrants in China: migrants with the status of quasi-citizenship, self-

employed migrants, migrants living on odd jobs, unemployed migrants, and landless migrants. More recently, in a research on the housing patterns of second generation migrants in China (Li, 2012), new migrants are classified into three types: labour, intellectual, and investor. There are significant disadvantages in the current studies on the issue of social stratification of migrants in China. For instance, in Li's (2004) research, the classification of different migrant groups is only based on one single indicator, namely, of the *hukou* status, neglecting other important socio-economic indicators. However, in Xie (2007) and Li (2012)'s investigations, the approach applied is relatively subjective and arbitrary, lacking solid quantitative evidence.

Overall, since households' perceptions of displacement as well as residential choices given displacement tend to be influenced by various socio-economic factors, it is likely that heterogeneity exists among migrants possessing differing positions on the social ladder. Thus, in-depth investigations into residential displacement needs to address this heterogeneity for a full understanding of how responsive policy instruments can be developed.

### **5.3 Study area, methodology and data**

The empirical study is based on field research from March to May 2015 in Shenzhen. A questionnaire survey was conducted in one of Shenzhen's ViCs: Baishizhou village. The village is located in Nanshan district, with a total area of 450,000 m<sup>2</sup> and a population of approximately 100,000 (Li et al., 2014). We chose Baishizhou village as the study area based on the following considerations. First, Baishizhou village was scheduled by the municipal government for redevelopment in 2014. The area will be redeveloped into a luxury commercial and residential district. When we visited the village, bulletin boards had been established in different locations in the village, explaining the redevelopment plan to incumbent residents, most of whom are migrants (figure 5.1). Baishizhou village thus provides an ideal case for research on migrants who are living under the threat of imminent displacement. Second, compared with other ViCs in Shenzhen, Baishizhou village has a more diverse social composition. This diversity is mainly due to its locational advantage. The village is situated at the north side of Shennan road, one of the most prosperous streets in Shenzhen, and it is adjacent to the high-tech park and the Overseas Chinese Town (a well-known luxury residential community in Shenzhen). Due to the high level of accessibility, which results from the locational advantages, this village has attracted hundreds of migrants possessing varied socio-demographic characteristics, with both high-skilled migrants working in the high-tech park and low-skilled migrants doing household chores for affluent residents living in adjacent neighbourhoods. Therefore, it is easier to observe the social stratification of migrants in Baishizhou village than in other ViCs in Shenzhen.



Figure 5.1 Bulletin boards of the redevelopment plan in Baishizhou village

We conducted a questionnaire survey in Baishizhou village, in which the target group is tenants living in this village. It is worth noting that, although the majority of tenants who live in ViCs are migrants, there are still some tenants holding a local *hukou* (migrants, often those of higher educational level, who have managed to transfer their *hukou* status from non-Shenzhen *hukou* to Shenzhen *hukou*). Using both the systematic sampling and random sampling methods, a total of 497 questionnaires were collected, including the respondents' socio-demographic information and their perceptions of and residential choices for the imminent displacement. It is worth noting that white-collar workers are underrepresented due to a very low response rate.

Latent class analysis (LCA) is used for the analysis of social stratification in Baishizhou village. LCA was first conceptualized by Lazarsfeld and Henry (1968) to single out a categorical latent class variable ( $c$  in figure 5.2) measured by a number of observed manifest variables ( $u$  in figure 5.2). LCA can be regarded as the counterpart of factor analysis. While factor analysis is a method to investigate continuous variables, LCA is designed for studying categorically scored variables (Guo et al., 2012). The assumption is that observed variables are generally related to each other (for instance, occupation is related to income), while the extracted latent classes can account for these relationships and be statistically independent from each other.

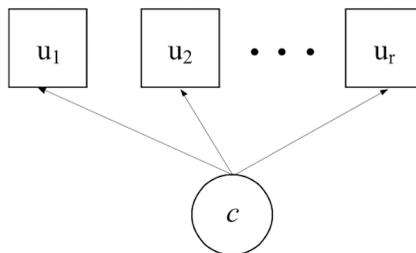


Figure 5.2 The latent class model (source: Nylund et al., 2007)

There are two types of parameters in LCA model, latent class probabilities and conditional probabilities. Latent class probabilities describe the relative size of each class. Conditional probabilities provide a measure of the degree of association between each observed variable and each latent class. Conditional probabilities enable researchers to characterize the nature of typologies by indicating the probability that an individual in a latent class will score a particular way on an observed variable (Guo et al., 2012). If there are three observed categorical variables  $A, B, C$  with  $I, J$  and  $K$  categories, respectively, a latent class model with  $T$  classes can be expressed as follows:

$$\pi_{ijk}^{ABC} = \sum_{t=1}^T \pi_t^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X}$$

where  $\pi_t^X$  is the latent class probability, representing the probability that an individual belongs to latent class  $t$ ;  $\pi_{it}^{A|X}$  is one of the conditional probabilities, representing the probability that this individual is found at level  $i$  of  $A$  given membership in latent class  $t$ , and so on (McCutcheon, 1987; Chan and Goldthorpe, 2007). The Bayesian Informal Criterion (BIC; Raftery, 1986) is used when selecting the best-fitting model among competing models; the smaller the BIC, the better the model fits.

In the literature, the most commonly used indicators for measuring an individual's social position are education, occupation, and income (Bollen et al., 2001). Occupation is a widely used indicator; it is considered to represent not only income but also social standing and intellect. Education is more indicative of a person's knowledge-related assets (Galobardes et al., 2006). Empirically, researchers can also include other relevant indicators according to the purpose of the research. In China, homeownership is generally regarded as one of the most important factors for individuals' socioeconomic status, since it can affect their wellbeing by a variety of means, such as the sense of belonging and the access to public services. The effect of homeownership on socioeconomic status has been well identified within the Chinese context (Xiao et al., 2016). Although all the respondents in our sample are tenants in Baishizhou village, in pilot interviews, we learned that certain migrants who have bought a home in Shenzhen choose to continue to rent an apartment in ViCs. Therefore, in the questionnaire, we asked the question of "have you purchased a home in other neighbourhoods in Shenzhen" to account for this phenomenon in our model. In addition, as noted by Zou (2015), the role of certain institutional factors, such as political power, legal norms, or household registration system, in social stratification is also important. For migrants, the *hukou* system is the key institutional factor that has determined their inferior positions in the city (Wu and Treiman, 2004). Lastly, age is regarded as an important factor to classify different social groups, particularly for rural migrants. In past decades, as a distinct and identifiable group, the second-generation migrants (born in the 1980s or 1990s) have received substantial scholarly interest. Liu (2010), who has conducted extensive research on second-generation migrants in China, noted that, compared with the first-generation migrants,

second-generation migrants represent significantly different characteristics in terms of educational level, employment status, and adaptation to the city life. These characteristics are also identified in other empirical studies (see for instance Liu et al., 2012; Cheng et al., 2014). Overall, in this study, other than educational level, occupation, and income, we also include homeownership, *hukou* status, and age as the indicators.

For educational level, there are six categories: primary school or below, junior middle school, senior middle school or technical secondary school, junior college, undergraduate university, and postgraduate university or above. For occupation, there are eight categories: unemployed or retired, self-employed, construction business, manufacturing industries, service sectors, public servants, white-collar workers, and others. For monthly household income (yuan), there are seven categories: 2000 or below, 2001 to 4000, 4001 to 6000, 6001 to 8000, 8001 to 10000, 10001 to 12000, and more than 12000. Homeownership is a binary categorical variable with 1 denoting ownership and 0 rental status. As regard to *hukou* status, there are two dimensions of division: local/nonlocal and rural/urban. We classify three categories of *hukou* status: Shenzhen *hukou*, non-Shenzhen rural *hukou*, and non-Shenzhen urban *hukou*. Shenzhen *Hukou* refers to migrants who have transferred their *hukou* status to local (Shenzhen) *hukou*; non-Shenzhen rural *hukou* refers to migrants who possess a rural *hukou* in their hometown, and non-Shenzhen urban *hukou* refers to migrants who have an urban *hukou* in their hometown. Lastly, for the indicator of age, there are five categories: 20 or below, 21 to 35, 36 to 50, 51 to 65, and above 65. In the next section, based on the modelling results of LCA, we interpret the stratification of migrants in Baishizhou village.

#### **5.4 Stratification of migrants in Baishizhou village**

Using manifest variables of educational level, occupation, income, housing ownership, *hukou* status, and age, we apply LCA to examine the social stratification of migrants in Baishizhou village. We started by computing a latent class model with only a single latent class (no relation between manifest indicators) and added one class after another. Eventually, we choose the model with four latent classes, with the lowest BIC value (BIC=6821.87). Table 5.1 displays the maximum-likelihood estimates of the latent class probabilities and conditional probabilities of the four-class model<sup>25</sup>. We explain the characteristics of the four classes in the following paragraphs.

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<sup>25</sup> It is worth noting that the relative prevalence of the four classes in our sample cannot fully represent the situation in Shenzhen in general, since the stratification process in every ViC is not identical.

**Table 5.1 Estimated parameters of the four-class model**

	<b>Class 1</b>	<b>Class 2</b>	<b>Class 3</b>	<b>Class 4</b>
<b>Class Size</b>	0.3446	0.256	0.2545	0.1449
<b>Indicators</b>				
<b>Education</b>				
primary school or below	0.0367	0.5332	0.0465	0
junior middle school	0.4494	0.4403	0.4891	0.0022
senior middle school or technical secondary school	0.3950	0.0261	0.3701	0.0586
junior college	0.0811	0.0004	0.0654	0.3719
undergraduate university	0.0376	0.0001	0.0288	0.5403
postgraduate university or above	0.0002	0	0.0001	0.0271
<b>Occupation</b>				
unemployed or retired (0)	0.0210	0.2494	0.0003	0.0088
self-employed (1)	0.0541	0.0925	0.6431	0.0919
construction business (2)	0.0001	0.2025	0.0253	0.0002
manufacturing industries (3)	0.0236	0.0138	0.0173	0.0001
service sectors (4)	0.7917	0.1081	0.1528	0.0460
public servants (5)	0.0036	0.0153	0.0201	0.0124
white-collar workers (6)	0.0343	0.0004	0.0828	0.8001
Others (7)	0.0716	0.3179	0.0583	0.0405
<b>Household income</b>				
2000 or below	0.0369	0.0361	0.0065	0.0037
2001 to 4000	0.3546	0.3501	0.1136	0.0743
4001 to 6000	0.2925	0.2919	0.1701	0.1283
6001 to 8000	0.1542	0.1556	0.1628	0.1416
8001 to 10000	0.0777	0.0793	0.1489	0.1494
10001 to 12000	0.0465	0.0480	0.1617	0.1872
more than 12000	0.0375	0.0390	0.2363	0.3155
<b>Housing ownership</b>				
No (0)	0.9915	0.9641	0.8058	0.8694
Yes (1)	0.0085	0.0359	0.1942	0.1306
<b>Hukou status</b>				
Shenzhen Hukou (1)	0.0001	0.0105	0.1294	0.1428
non-Shenzhen rural hukou (2)	0.8289	0.9135	0.6304	0.3898
non-Shenzhen urban hukou (3)	0.1710	0.0760	0.2403	0.4674
<b>Age</b>				
20 or below	0.2031	0	0	0.0028
21 to 35	0.7964	0.0551	0.4202	0.9503
36 to 50	0.0005	0.5278	0.5329	0.0468
51 to 65	0	0.3399	0.0454	0.0002
above 65	0	0.0772	0.0014	0

*Class 1: the second-generation labour migrants*

As shown in table 5.1, class 1 is characterized by migrants displaying high probabilities of having a non-Shenzhen rural *hukou* (0.8289) and a low educational level (0.8811). They also possess relatively lower economic status, reflected from high propensities of monthly income below 6000 yuan (0.6840) and negligible probabilities of owning a property in Shenzhen (0.0001). These observations fit into the characteristics of labour migrants, who have lower

educational levels, possess low-skilled jobs, and earn a low income in the city (Knight et al., 1999; Li, 2012). The indicator of “age” shows that this group of migrants have high propensities to be the younger generation (below 35 years old). Therefore, we label this class as the “*second-generation labour migrant class*”.

#### *Class 2: the first-generation labour migrants*

There are substantial similarities between class 1 and class 2. For instance, both have very low probabilities of possessing an urban *hukou* (0.0001 for class 1 and 0.0105 for class 2) or homeownership (0.0085 for class 1 and 0.0359 for class 2) in Shenzhen. The classes have very similar patterns in household income (both with the highest probability of earning 2001 to 4000 yuan every month). As with class 1, class 2 also tends to have low educational levels. These identical characteristics justify the classification of class 2 into labour migrant classes.

Regarding the dissimilarities between the two classes, from the observed variable of “age”, we can distinguish an older-generation of labour migrants who exhibits high propensities of being 36 to 65 years old (0.8677). In addition to age, there are other differences between class 1 and class 2, which have also been identified in previous research. For instance, although the labour migrant class is generally of a lower educational level, compared to their predecessors, the younger generation of labour migrants (class 1) possesses higher education attainment (Fan and Chen, 2013; He and Wang, 2015). As shown in table 5.1, class 1 displays high probability of educational levels of junior and senior middle school, while class 2 tends to be of lower educational level (junior middle school or below). In addition, class 1 and class 2 also present differing occupational patterns. The second-generation labour migrant class (class 1) displays high probabilities of occupation in service sectors (0.7917), whereas the first-generation labour migrant class (class 2) tends to possess more diverse occupations. Regarding the occupation of labour migrants, it is worth noting that many ViCs in Shenzhen are specialized in certain occupations (Liu et al., 2016). That is, migrants with similar working skills tend to cluster within the same village. Therefore, the occupation patterns of labour migrants revealed here may only represent the case of Baishizhou village. Surveys at more macro levels may be more informative for the general situation. According to a report at the city scale of Shenzhen, which was released in July 2010, most of the new migrant workers were working in labour-intensive industries (Zhang, 2013).

#### *Class 3: the new affluent migrants*

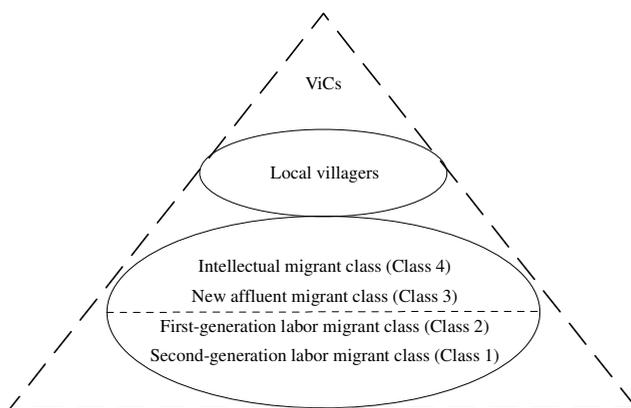
As shown in table 5.1, similar to the two classes above, class 3 tends to have relatively low educational level (senior middle school or below) and is likely to possess a non-Shenzhen rural *hukou*. Nevertheless, there are characteristics that distinguish class 3 from the labour migrant classes: occupation and economic status. In comparison with class 1 and class 2, class 3 possesses significantly higher income levels and higher probabilities of owning a property in Shenzhen (0.19). Migrants in class 3 are also predominantly self-employed (probability of 0.64). Combining these two attributes, we conceptualize this class as the “*new affluent migrant class*”. In the literature, the new affluent migrant class is also called ‘the

investor migrants’ (Li, 2012). This group of migrants, mainly between 36 and 65 years old (probability of more than 0.9), often owns a small business in the ViCs. Originally, this group possesses very similar backgrounds to the labour migrant classes. Taking advantage of the ViCs’ characteristics such as particularly low rents, they have managed to accumulate wealth and have been able to invest in a business.

*Class 4: the intellectual migrants*

Lastly, the migrants of class 4 exhibit substantial differences from the other classes; they tend to be highly educated (junior college or above), mainly work as white-collar workers, and display significantly higher probabilities of possessing a non-Shenzhen urban *hukou* (0.47). With regard to their age level, this class is similar to that of the second-generation labour migrant class (class 1). However, in terms of income level and home ownership, this class represents similar characteristics to that of the new affluent migrant class (class 3). Therefore, we label this class as the “*intellectual migrant class*”. The intellectual migrants, with high educational level, often work in sectors that require higher levels of skills. This group of migrants is also referred to as the ‘skilled migrants’ or ‘white collars’.

Overall, a stratified structure of migrants is conceptualized in figure 5.3. In addition to the privileged local villagers, there are four classes of migrants in Baishizhou village. Compared with first- and second-generation labour migrant classes, the new affluent migrant class and the intellectual migrant class occupy a higher position on the social ladder. In particular, these two classes display higher probabilities of owning a property in Shenzhen (0.19 and 0.13, respectively). As previously mentioned, social stratification reflects different endowments and resources that individuals possess (Bian et al., 2005). This finding is particularly relevant in displacement research since displacement, as a sudden event to affected households, always requires a minimum level of coping capacity to avoid devastating consequences, which is manifested most evidently in the socio-economic status. Based on these four social stratas, in the next section, we further explore the heterogeneity in the perceptions and residential choices of migrants who will soon be displaced from Baishizhou village.



**Figure 5.3 Social stratification in Baishizhou village**

## 5.5 Heterogeneous perceptions of and residential choice for imminent displacement

In 2014, Baishizhou village was scheduled by the government for demolition and redevelopment. We capture this unique situation in which people live under a threat of imminent displacement to more closely examine people’s perceptions about displacement and the locational strategies they intend to utilize. Moreover, the results from the last section enable us to investigate the heterogeneity in the choices of different migrant groups.

### 5.5.1 Perceptions of the consequences of displacement

In the questionnaire survey, respondents were asked to choose the perceived impact levels of displacement from a scale of five responses, ranging from very high to very low. It is found that different migrant groups exhibit considerable heterogeneity in their perceptions of the consequences of displacement. For the younger generation, the second-generation labour migrant class (class 1) and the intellectual migrant class (class 4), the coming displacement will appear to pose very limited impacts on their life; more than 60% of the sample chose an impact level of moderate or lower. In contrast, the perceived impacts of displacement are more severe for the first-generation labour migrant class and the new affluent migrant class; more than half of the sample chose an impact level of high or very high (figure 5.4).

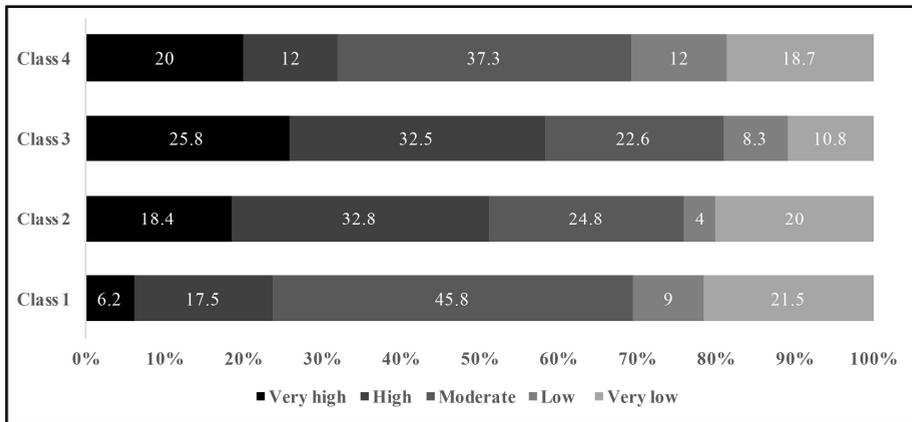


Figure 5.4 The perceived impact level of imminent displacement of the four classes (percentage)

For the first-generation labour migrant class (class 2) and the new affluent migrant class (class 3), who have perceived higher levels of impacts of displacement, they show both economic and emotional attachment to Baishizhou village. In the literature, length of residence is an important factor defining place attachment, in which longer residence in a neighbourhood indicates stronger place attachment (Kasarda and Janowitz, 1974). 64.8% of the first-generation labour migrant class (class 2) and 55.8% of the new affluent migrant class (class 3) in our sample have lived in Baishizhou village for more than 5 years. Regarding the economic attachment, the new affluent migrant class (class 3), who own a business in the

village, will certainly experience serious consequences if the village is going to be demolished. However, for the first-generation labour migrant class (class 2), many do not have a steady job, and they rely heavily on place-based social networks for the search of job opportunities. In addition, the affordable housing provided in ViCs is imperative for their survival in the city. Thus, the first-generation labour migrant class (class 2) is 'trapped' in ViCs.

In comparison, the second-generation labour migrant class (class 1) and the intellectual migrant class (class 4) are more mobile (He and Wang, 2015), and emotionally they are less attached to the village. In fact, 66.7% of the second-generation labour migrant class (class 1) and 53.3% of the intellectual migrant class (class 4) have lived in the village for less than 2 years. Targeting settling in the city eventually (Chen and Wang, 2015), these two groups view ViCs as a step-stone to more decent lives in the city. This finding is particularly true for the intellectual migrant class (class 4), who exhibit higher probabilities of upward housing mobility. To them, ViCs are more a place to sleep than a place to live, and living in ViCs is only a temporal solution rather than a permanent situation.

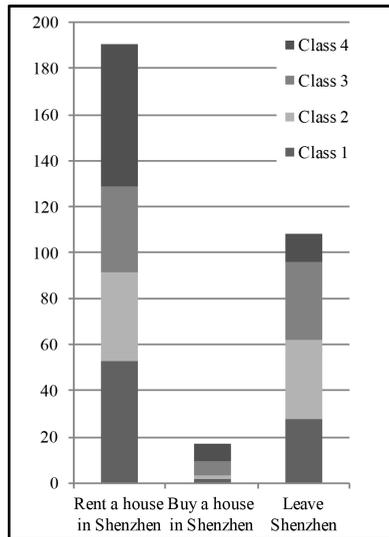
To inform policy-making, it is also important to know what impacts migrants perceive the displacement will pose on their daily lives. In the questionnaire survey, multi-choice questions are designed to address this issue. The results show that in general, migrants' main concerns are the impacts of displacement on job opportunities, commuting distance and costs, living expenses, and social networks. Compared with the first-generation labour migrant class (class 2) and the intellectual migrant class (class 4), the second-generation labour migrant class (class 1) and the new affluent migrant class (class 3) are more worried that displacement will result in the loss of job because a larger proportion of them work within the village. It is also noteworthy that, compared with the older generation (class 2 and 3), the younger generation (class 1 and 4) tends to perceive fewer impacts of displacement on their social networks. This finding can be explained by different lifestyles because, compared to the older generation, who depends heavily on daily encounters to develop and maintain their social network, the younger generation relies more on new communication platforms and social media. Consequently, they anticipate less severe consequences of the imminent displacement on their social network.

These results show that different groups of migrants can perceive the consequences of displacement very differently depending on their socio-economic characteristics. Therefore, meaningful policy instruments addressing the social consequences of urban redevelopment need to account for the heterogeneity of those displaced. For instance, for members of the "first-generation labour migrant class" (class 2), who are more emotionally affected due to the importance of their social ties, the solution may be in maintaining certain levels of proximity to related social groups during relocation to enable the reconstruction of their social networks. However, for those migrant groups such as the "new affluent migrant class" (class 3) who owns a business in the ViC and for whom the demolishment is economically more directly devastating, the most suitable corresponding instrument may be a more financial one.

### 5.5.2 Residential choices after the displacement

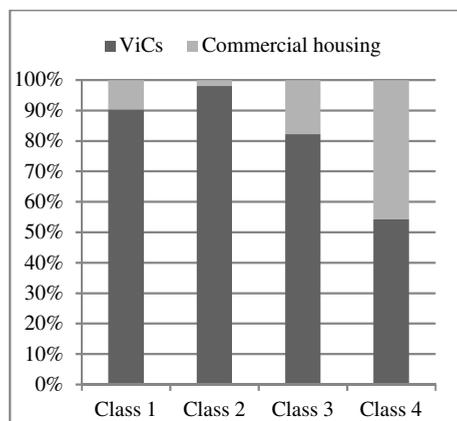
It is undeniable that the most immediate consequence of displacement is the divesting of place (Davidson, 2008). For households who are under the threat of eviction, the first decision they should make is, of course, where to move to. Residential mobility does not simply imply the change of locations but also involves a series of choices. These choices, in turn, reflect the socio-economic situations of those displaced, since higher social and economic status often translates into more resources and options. Therefore, we also elucidate the residential choices of the four migrant groups confronting displacement, by asking questions concerning their locational choices, change of ownership status, and preferences of the characteristics of the destination neighbourhood.

Respondents were asked to choose from five options after displacement: 1) to continue to rent a house in Shenzhen; 2) to buy a house in Shenzhen; 3) to go back to their hometown; 4) to go to other cities; and 5) other. The results show that, in addition to those who chose the option of “other”, 233 migrants chose to continue renting in Shenzhen; 18 expressed their intention of purchasing homeownership in Shenzhen, and 142 intended to leave the city (return to hometown or move to other cities). Figure 5.5 shows the proportions of migrants within each group for choices of “rent a house in Shenzhen”, “buy a house in Shenzhen”, and “leave Shenzhen”. In total, 52.54% of the second-generation labour migrant class (class 1), 39.20% of the first-generation labour migrant class (class 2), 37.50% of the new affluent migrant class (class 3), and 61.33% of the intellectual migrant class (class 4) chose to continue renting in Shenzhen. We can observe that the younger generations (class 1 and 4) are more likely to continue renting. In contrast, the older generations (class 2 and 3) exhibit higher propensity to leave the city (34.40% for class 2, and 34.17% for class 3). This disparity between the younger and older generation resembles similar findings in other studies. For instance, a case study in Jiangsu province revealed the stronger intention of the younger generation of rural migrants to settle in cities (Tang and Feng, 2015). Chen and Wang (2015) also found in Shanghai that the new-generation migrants have a great desire of becoming urban citizens. Although these studies researched the general situation, the facts continue to hold true when situated within the context of imminent displacement, as revealed above. In addition, a very small proportion of migrants intended to buy a house in Shenzhen after displacement. This finding indicates that, for certain better-off migrants (higher percentages among the new affluent migrant class and the intellectual migrant class), displacement may act as a pushing force for them to settle in the host city. However, this trend, as observed in our sample, is very limited.



**Figure 5.5 Residential choices of sampled migrants**

For those who chose to continue renting in Shenzhen, we further investigate their neighbourhood preferences (ViCs or commercial communities). As shown in figure 5.6, for migrant renters, there is disproportionately huge demand for housing in ViCs. An exception is the intellectual migrant class (class 4), wherein nearly half indicated that they would consider renting in commercial communities. Huge housing demand in ViCs among migrants is consistent with the general impression that ViCs serve as an important source of affordable accommodation for rural migrants in Chinese cities, which has been extensively studied and widely recognized in the literature (see for instance: Song et al., 2008; Wang et al., 2009). The results also indicate that ViCs tend to continue to play a role as migrant enclaves, even under profound and radical urban transformations.



**Figure 5.6 Neighbourhood preferences for sampled migrants who intend to continue renting**



**Figure 5.7** Locational preferences for sampled migrants who intend to continue renting in ViCs

For those who chose to continue renting in ViCs, we further inquire about their locational preferences (within or outside the SEZ<sup>26</sup>). The results (figure 5.7) show that the four groups exhibit similar patterns, indicating huge housing demand for ViCs within the SEZ. This finding is closely related to the concepts of centrality and accessibility, as indicated in previous literature (Liu et al., 2016). Centrality is regarded as a precious locational advantage of many of the ViCs within SEZ. Centrality is often translated into the availability of cheap daily necessities and various urban amenities. Accessibility to the workplace is another main concern among migrants. As noted in section 5.3, many low-skilled migrants do household chores for affluent residents living in nearby luxury neighbourhoods. Therefore, living within the SEZ may reduce commuting costs and enable certain levels of proximity to the workplace.

The uncovered huge housing demand for ViCs within SEZ is particularly relevant in predicting the absorptive urban capacity of displaced migrants, particularly those with lower socio-economic status, since the housing market of ViCs is shrinking rapidly. Against the increasingly rapid pace of urban redevelopment, ViCs, particularly those situated in central urban areas, are disappearing one by one. In other words, this finding has caused the absorptive capacity of the urban system for displaced migrants to be broadly questioned, since the remaining ViCs can barely absorb the huge population of displaced migrants. Thus, it is safe to assume that when the utility costs incurred by displacement reach a certain point and low-income migrants cannot possibly survive in the city anymore, they may leave the city forever (as shown in figure 5.5). In this situation, the city is under the risk of losing cheap labour forces, which is imperative for the overall prosperity of the urban economy. This case particularly applies for Shenzhen. ViCs in Shenzhen have played an important role in economic development, in which the collective industrial land represents more than half of the total industrial land in the city (Lai et al., 2014). For migrants, ViCs not only provide

<sup>26</sup> Special economic zone. The SEZ was originally made up of four central administrative districts, Nanshan, Futian, Luohu and Yantian; however, in 2010, it was extended to cover the whole area of Shenzhen. The ‘SEZ’ used in this paper retains its original meaning.

them with cheap accommodation but are also important sources of employment opportunities (Lai et al., 2017).

## 5.6 Conclusion and discussion

Large-scale redevelopment-induced displacement is occurring in many Chinese cities, with migrants living in ViCs as the main affected group. This study captures a unique situation in Baishizhou village in Shenzhen, where people live under a threat of imminent displacement. In Baishizhou village, substantial heterogeneity is identified in the affected population, as well as in their perceptions and locational choices after displacement. The current research is innovative in three ways. First, we utilize latent class analysis to identify the heterogeneity of social classes of migrants (social stratification) in China. Second, we provide insights into people's feelings and perceptions of living consequences before actual displacement, which presents a meaningful perspective of the impacts of large-scale urban redevelopment imposed upon (members of) different social groups. Third, we elucidate the locational choices of varying social groups confronting displacement, which have important implications for urban absorptive capacities for displaced migrants, which is informative for policy-making in Chinese cities.

We find that migrants living in ViCs can no longer fit into the simplified conventional sociological conceptualization of homogeneity; instead, they stratify into four distinctive migrant classes: first- and second-generation labour, new affluent, and intellectual. Compared with the latter two groups, labour migrant classes occupy relatively lower socio-economic positions and are more vulnerable to redevelopment-induced displacement. This social heterogeneity is reflected in migrants' perceptions of the consequences of displacement and the locational choices. Although the situation differs from village to village, it is safe to assume that the exemplary class diversification in Baishizhou will continue, arguably deepening transformation of social structures in Chinese cities.

In terms of migrants' perceptions of displacement, the results reveal that the first-generation labour migrant class and the new affluent migrant class tend to anticipate more severe consequences of the physical displacement than the second-generation labour migrant class and the intellectual migrant class, mainly because the former are more economically and emotionally attached to the village. In general, migrants are concerned with the impacts of displacement on job opportunities, commuting, living expenses, and social networks. In particular, migrant classes with a higher proportion working within the village (second-generation labour migrant class and the new affluent migrant class) anticipate more serious impacts on their job opportunities. In addition, the older generations (first-generation labour migrant class and the new affluent migrant class) are more worried about the impacts on their social networks because they rely more on daily encounters to maintain the social networks. This finding reveals that the consequences of displacement also differentiate, which to a greater extent depend on the role that the original neighbourhood plays in migrants' livelihoods. For instance, for the intellectual migrant class, ViCs mainly provide them with

affordable accommodation and accessibility, while for other groups, ViCs may be an imperative source for job opportunities or the sense of social belonging. Therefore, more nuanced research needs to account for this heterogeneity and understand the multifaceted impacts of displacement. It is also suggested that meaningful policy instruments addressing the consequences of displacement need to explicitly consider the heterogeneity of the displaced population, since differing social needs (of younger and older groups and more or less affluent groups) entail different approaches.

With regard to the residential choices, it is shown that displacement may act as a pushing force for displacees to climb the housing ladder; however, more often it drives them further away from the city and places of work or even forces them to leave the city forever. Specifically, migrant classes with lower socio-economic status are more “trapped” in (remaining) ViCs, and rising living costs and utility losses incurred by displacement are more likely to force them to leave the city when nearby ViC’s become scarce. In contrast, migrant classes with higher socio-economic status have higher probabilities of settling in the city eventually, particularly for the intellectual migrant class. For these classes, ViCs are more a temporal rather than a permanent situation.

Migrants’ locational choices given displacement have also revealed the huge housing demand for ViCs within the SEZ, which has raised serious questions concerning the absorptive urban capacity for displaced migrants. Under large-scale urban redevelopment, ViCs occupying better locations in Shenzhen are erased one by one, and ViCs cannot be used to absorb displaced migrants forever. This finding highlights the importance of learning migrants’ locational choices prior to displacement, which can contribute to the development of responsive policy-making concerning urban redevelopment. Currently in Shenzhen, the absorptive capacity of ViCs has not reached its limits; thus, the serious consequences have not yet manifested. Nevertheless, if due focus is not garnered, there is a substantial risk of losing cheap labour forces. Thus, urban redevelopment may jeopardize the city’s economy in the long run. Therein, a possible solution is to combine the provision of affordable housing to migrant workers with the redevelopment of ViCs, an integrated policy that has also been suggested in previous literature (see for instance: Lin et al., 2014; Lai and Tang, 2016).

In sum, this article reveals that the population of ViCs is becoming increasingly more heterogeneous, and this heterogeneity will result in distinctive behaviours and associated consequences of redevelopment. Currently, as with Shenzhen, many Chinese cities are undergoing profound transformations—physically, socially, and economically. Although Shenzhen is selected in this study as a case study area, we believe the uncovered empirical findings can provide important insights for other Chinese cities. The diversification of migrant workers is also occurring in other cities, although possibly at differing phases. Property-led urban redevelopment in other cities will generate similar social consequences and pose pressure on the absorptive capacity of the urban system. Therefore, we encourage conducting more empirical studies within other urban contexts to enrich current understandings on this issue.

The primary analysis delivered in this article is based on migrants' perceptions in prior to actual residential displacement. Although it is believed that migrants' perceptions under displacement pressure can substantially reflect the actual moving decisions they will make, it is essential for future researchers to conduct in-depth studies on the actual spatial dispersal patterns of migrants. Particular focus is needed for those migrants at a lower position in the social ladder, since many are literally 'trapped' in ViCs, and they tend to experience the most severe consequences in the process of displacement.

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## 6 Towards Inclusive and Sustainable Transformation in Shenzhen: Urban Redevelopment, Displacement Patterns of Migrants and Policy Implications

*This chapter is based on the article: Liu, Y., Lin, Y., Fu, N., Geertman, S., & van Oort, F. (2016). Towards inclusive and sustainable transformation in Shenzhen: Urban redevelopment, displacement patterns of migrants and policy implications. Journal of Cleaner Production, DOI: [10.1016/j.jclepro.2016.09.224](https://doi.org/10.1016/j.jclepro.2016.09.224)*

### ABSTRACT

Sustainable urban transformation is a socially inclusive process in which urban residents, including the most marginalized groups, have a representative voice in planning and redevelopment. Nevertheless, the redevelopment of ‘villages in the city’ (ViCs) in China is often an exclusive process in which rural migrants are absent from decision-making, resulting in inequality and a redistribution of migrants’ real income, defined as command over society’s scarce resources. Migrants’ displacement pattern of spatial attachment is explained by their attempts to maintain real income through three modes of integration (redistribution, market exchange and reciprocity). In particular, there is a spatial logic behind each mode of integration: centrality and access are essential for command over resources in market exchange; the limited redistributive resources available to migrants are strictly defined by political territory, which is to a certain extent supplemented by the ‘externality effect’ of public goods; and proximity to social groups gives rise to a variety of reciprocal activities that help migrants to integrate in the urban system. The research outcomes show that displaced migrants exhibit a strong desire to remain nearby and maintain their real incomes. The impacts of displacement on migrants must be taken into account in urban redevelopment projects, since this social group can become more marginalized in the city due to the redistribution of real incomes resulting from displacement. Considering that ViCs are very lively and accommodate diverse commercial and industrial activities, they could be gradually transformed into sustainable neighbourhoods with small interventions and incremental upgrading. In light of this, this research suggests economically, spatially and socially inclusive planning strategies to replace the demolition–redevelopment model and provide pathways towards the sustainable transformation of ViCs in Shenzhen.

**Keywords:** displacement pattern, rural migrants, three modes of integration, inclusive and sustainable transformation, informal settlements

### 6.1 Introduction

Since the 1970s, the new wave of globalization and trade liberalization has both fostered economic prosperity and led to increasing social polarization and inequality. In particular, urban development under the neoliberalism regime has given rise to urban exclusion in terms of economic, spatial and social dimensions, which is manifested in housing by the proliferation of informal settlements in developing countries. A broad consensus has been reached in the international community that economy-oriented urbanization is not sustainable and tends to consolidate urban exclusion (World Bank, 2015). Against this background, inclusive urban development and redevelopment has gained increasing attention and is

promoted by leading international organizations such as UN–Habitat (2015b) and the World Bank (2015). Flagship initiatives with innovative approaches to the implementation of inclusive urban transformation have been launched in many developing countries.

Like that of many other countries, China’s urban built environment is undergoing a profound transformation. In February 2016, a series of guidelines for urban planning were announced by the Chinese central government. One of the guidelines is that ‘by 2020, the transformation and renovation of existing shantytowns, villages in the city [ViCs, or urban villages] and dilapidated houses will be complete’.<sup>27</sup> These transformative processes will no doubt have enormous social consequences for urban areas, manifested as various forms of residential displacement. However, insights into the patterns and dynamics of this urban phenomenon are extremely scarce in China. This study sheds light on this pressing issue, by focusing on the redevelopment of ViCs and the consequent displacement in Shenzhen.

Compared to other urban residents, the inhabitants of informal settlements suffer more economic, spatial and social exclusion from the benefits and opportunities of the broader urban environment (UN–Habitat, 2015b). Local governments often stigmatize ViCs as an urban pathology and many ambitious plans to redevelop these migrant enclaves have been announced (Lai and Zhang, 2015). However, ViCs have played an essential role in providing affordable housing for the majority of China’s rural migrants (Lin et al., 2011). ViCs also accommodate a diversity of commercial and cultural enterprises and make a significant contribution to the urban economy. These ‘unslumming slums’ (Jacobs, 1961) are lively and have great potential to be gradually transformed into sustainable neighbourhoods. Nevertheless, migrants who are displaced from these informal settlements to make room for large-scale redevelopment are seldom put under the spotlight. A main obstacle might be that it is extremely difficult to trace them. In order to understand the impact of redevelopment on migrants, we conducted in-depth fieldwork and mapped the spatial displacement patterns of a sample of migrants displaced from four redevelopment projects in Shenzhen. The research outcome reveals migrants’ strong desire to stay close to their original neighbourhood. In light of this, we argue that the dominant demolition–redevelopment approach adopted by local governments is unsustainable and tends to intensify socio-spatial exclusion and inequality. Therefore, more inclusive approaches to urban transformation in China are urgently needed. Drawing upon international experiences, we propose a framework for the inclusive and sustainable transformation of ViCs in Shenzhen, by taking into consideration the economic, spatial and social dimensions of urban inclusion.

The remainder of this article is structured as follows. In section 6.2, we first elaborate on the theoretical basis for this study, wherein following the conceptual thinking of David Harvey (1973) and Karl Polanyi (1944), residential displacement is viewed as a redistributive process of residents’ real income, defined as command over society’s scarce resources through three modes of integration (market exchange, redistribution and reciprocity). We then review literature on the issue of the displacement of migrants in China, and share

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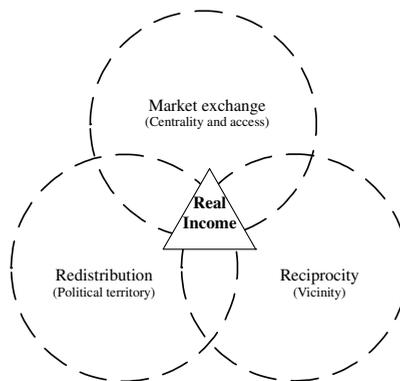
<sup>27</sup> [http://english.gov.cn/news/top\\_news/2016/02/22/content\\_281475294306681.htm](http://english.gov.cn/news/top_news/2016/02/22/content_281475294306681.htm) (last visited 22/07/2016).

international experiences of inclusive transformation of informal settlements. In section 6.3, we briefly introduce our study area, research methods and data. In section 6.4, we show how the empirical study in Shenzhen led to an understanding of the spatial logic behind migrants' displacement patterns, evidencing migrants' strong desire to remain nearby and maintain their real incomes. In section 6.5, we reflect upon the empirical findings and propose an inclusive and sustainable planning framework that consists of economic, spatial and social dimensions of urban inclusion. We give some concluding remarks in section 6.6.

## 6.2 Literature review

### 6.2.1 Three modes of integration

To organize our argument, we return to Harvey's (1973) conceptualization of the 'real income' of residents within the urban system and Polanyi's (1944) notion of three modes of integration. The urban system is regarded by Harvey (1973) as a gigantic resource system. Resources can be either natural or man-made, but within an urban system most of them are man-made, such as parks, health and educational services, and recreational and transport facilities. The real income of an individual is defined as his or her command over society's scarce resources, whether or not those resources are purchased with monetary incomes (Titmuss, 1962). Unlike conventional economic interpretations, this broadened definition of income takes into account not only direct access to resources, but also various public goods and services that have impacts on urban residents' real income because of their externality effect (Harvey, 1973). This externality effect, which is also called the 'spill-over' or 'third-party' effect, is defined by Harvey (*ibid.*) as an unpriced or non-monetary effect generated by certain activities in an urban system. Typical examples are state-financed or collective-financed infrastructure (e.g. public transport) and amenities (e.g. parks and plazas).



**Figure 6.1 Generation of real income through three modes of integration (source: authors' drawing based on Harvey (1973) and Polanyi (1944))**

According to Polanyi (1944), there are three main ways for households to gain access to resources, namely through market exchange, redistribution and reciprocity (figure 6.1).

- Market exchange is the dominant mode in contemporary society. In order to engage in market exchange, households must develop a social utility. Most households exchange their labour power in the market; others are self-employed and sell goods and services. These activities generate an income that allows them to buy the goods and services in the market that they need and cannot produce themselves. However, the ‘free’ market is inherently unequal, and this is partially compensated for by state redistribution (Kesteloot and Meert, 2000).
- Redistribution means the centralization, by a powerful social institution, of resources (goods, money, services) that are then redistributed according to a set of rules. The condition for participating in the redistribution system is usually citizenship or ‘villagership’ (in the case of ViCs in China) (Kesteloot and Meert, 2000; Lin et al., 2012).
- Finally, reciprocity enables households to access resources through mutual support networks (Murie and Musterd, 2004). Affiliation to a social network is the condition for participation in reciprocity.

As noted by Harvey (1973, p. 69), most urban resources intrinsically represent a spatial dimension:

Natural and man-made resources are usually localized in their distribution. Location decisions, in turn, lead to the further evolution of the spatial availability of man-made resources. Command over resources, which is our general definition of real income, is thus a function of locational accessibility and proximity. Therefore, the changing spatial form of the city and the continuous process of run-down, renewal and creation of resources within it, will affect the distribution of incomes and may form a major mechanism for the redistribution of real income.

Urban redevelopment and the consequent residential displacement are part of this continuous process mentioned by Harvey, a main result of which is the redistribution of residents’ real income. The change in a household’s real income can be understood by applying three modes of integration. In particular, intrinsic spatial logic exists in each mode of integration (Kesteloot and Meert, 2000).

The spatial dimension of market exchange is determined by the range of goods and services available across space. This geography of socioeconomic integration through the market is related to the classic location theories in which centrality and access are key factors determining the degree of integration. Here, centrality and access refer to the concentration and availability of market resources such as employment opportunities and consumers (in the case of production), and necessary goods and services (in the case of consumption). For instance, loss of centrality and access often translates into longer commuting distances to the workplace and higher commuting costs, which is a strong force to redistribute the real income of residents.

The spatial dimension of redistribution refers to the political territory where both the centralization and the redistribution of resources take place. Since in many cases redistribution implies social welfare and benefits, access to the redistribution system reflects

the possession of certain political rights of participants within a pre-determined territory. The political territories defined can be multi-scalar, affiliated by redistribution systems at different geographical levels (country, region, city, district and even neighbourhood).

Finally, the spatial dimension of reciprocity is vicinity, namely of the spatial proximity of social groups, because reciprocity implies the existence of territorial social networks as well as the material exchange of goods and services within these networks. This vicinity is an asset, facilitating the dialectical relationship between exchange and network maintenance, thus allowing trust to develop (Kesteloot and Meert, 2000).

It is well proven in the literature that the theory of three modes of integration is a powerful tool for analysing modes of production and forms of economies in a macro sense, or for gaining insights into various factors affecting individuals' integration in the economic system at a finer scale (see e.g. Wu, 2010; Zhang, 2013; Lim, 2014; Kesteloot and Meert, 1999, 2000; Lin et al., 2011). However, very few studies have applied this framework to understand the process of residential displacement. Since the most important factor that affects displacees' location choices is access to the various resources required for household reproduction, the theory of three modes of integration can act as an effective analytical tool to reveal in a rather systematic fashion the mechanisms underlying the displacement process. Through the lens of real income as conceptualized by Harvey (1973), residential displacement can be seen as a process that redistributes displacees' real income through three modes of integration. Therefore, this article contributes to theoretical debates by applying the three modes of integration to understand the changes in household real income generated by redevelopment and displacement.

### **6.2.2 Redevelopment-induced displacement of migrants in China**

There has been growing interest in urban redevelopment and the resultant residential displacement in China since the economic reform. For instance, He and Wu (2007) examined property-led redevelopment in China. A process of displacement of low-income residents was identified in two redevelopment projects. He (2010) also researched new-build gentrification in the city of Shanghai. She interviewed displacees relocated to the peripheries and pointed out that 'displacement not only deprives low-income groups of convenience and the joys of urban life in the central area, but also jeopardizes their socioeconomic prospects and household livelihood' (p. 359). We notice that these studies often focus only on households that are entitled to receive compensation for their relocation. However, there is another social group that enjoys few tenancy rights upon displacement and is largely excluded from the decision-making process of urban redevelopment: migrants living in ViCs. Until now, migrants who are displaced as a result of urban redevelopment have received scant scholarly attention in the English-language literature, although debates do occasionally emerge in

newspapers or other media.<sup>28</sup> A main reason might be that it is extremely difficult to trace displaced migrants. The obstacles to tracing them are widely recognized in the literature. As Newman and Wyly (2006, p. 27) pointed out:

Estimating the scope and scale of displacement and exploring what happens to people who are displaced have proved somewhat elusive. In short, it is difficult to find people who have been displaced, particularly if those people are poor. By definition, displaced residents have disappeared from the very places where researchers or census-takers go to look for them.

Wu (2004, p. 12) also noted that it was ‘impossible to trace residents of demolished houses’.

However, the sparse Chinese-language literature on this issue provides some informative findings. Deng (2015) investigated 29 urban renewal projects in Shenzhen and compared the socioeconomic characteristics of residents before and after the redevelopment. He found that low-income migrants were replaced by middle-class citizens. Gan and Wang (2008) researched the residential segregation of migrants in China. Based on a case study in Fuzhou, they found that when ViCs in central urban areas were demolished, migrants, who can only afford housing in ViCs, were gradually displaced to the periphery of the city, resulting in their further spatial marginalization. Sun (2015) discussed the long-lasting neglect of migrants’ housing rights in China. Under the current regime of the large-scale redevelopment of ViCs, migrants choose group renting (*qunzu*) in central urban areas, move to ViCs in the suburbs or leave the city for good. On the basis of a case study in Shanghai, Zhao (2008) explained how and why migrants have joined local governments, developers and urban residents as the fourth, albeit silent group in the process of urban redevelopment. Not only are migrants institutionally excluded from basic housing rights, they do not even realize that they should claim a certain level of housing rights in cities.

These case studies in different Chinese cities all showed that urban redevelopment has serious consequences for the livelihoods of migrants. It is therefore imperative to gain more insights into the displacement pattern of this specific social group, which is largely excluded from the decision-making processes. Considering that social sustainability is an important dimension of sustainability, inclusive planning strategies need to be developed for the sustainable transformation of ViCs in Chinese cities. The unique case of ViCs in China can contribute to the international knowledge of urban informal settlements, and international practices of the inclusive transformation of informal settlements can provide invaluable experiences for the sustainable transformation of ViCs.

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<sup>28</sup> See e.g. a recent story about Baishizhou village in Shenzhen covered by *The New York Times*: [http://www.nytimes.com/2016/07/20/world/asia/skyscrapers-rise-in-china-mark-the-fall-of-immigrant-enclaves.html?\\_r=0](http://www.nytimes.com/2016/07/20/world/asia/skyscrapers-rise-in-china-mark-the-fall-of-immigrant-enclaves.html?_r=0) (last visited 22/07/2016).

### 6.2.3 Inclusive transformation of informal settlements

Informal settlements in developing countries are manifestations of multidimensional and intertwined exclusions within the urban area. Economically, a lack of integration in the formal labour market results in poverty and income inequality; spatially, there is a severe shortage of basic services, infrastructure and public amenities in these neighbourhoods; socially, people living in informal settlements are often discriminated against and marginalized by the mainstream society (World Bank, 2015). Thus, inclusive approaches to the transformation of these neighbourhoods need to address exclusions in various dimensions. As mentioned, compared to the demolition–redevelopment approaches, incremental upgrading is generally preferred, as it promotes inclusive urban transformation and can help to protect social networks/capital that have already developed in these areas.

Various inclusive planning programmes for informal settlement upgrading have been implemented by international organizations worldwide:

- Measures for economic inclusion range from skill-building and improving access to credit and finance, to pro-poor economic development strategies (World Bank, 2015). For instance in New Delhi, with the help of local NGOs, inclusive waste management is being developed by awarding waste management contracts to informal waste pickers.<sup>29</sup> In other cases, low-income entrepreneurs are provided with small grants to expand their businesses.
- Spatial inclusion can be translated into infrastructure provision and access to affordable housing and basic services, such as transport, clean water and sanitation. In a project in Medellín, for example, the spatial segregation of people living in the surrounding hills has been reduced by providing three Metrocable lines (a gondola lift system) as a form of public transport (World Bank, 2014).
- Social inclusion is promoted by the participation and empowerment of local residents and communities in informal settlement upgrading. The role of the local community in implementing inclusive urban redevelopment is widely recognized (Steinberg and Lindfield, 2011). Among various pathways to inclusive cities provided by UN–Habitat, an important component is a multi-stakeholder platform, which engages all interest groups, especially the inhabitants of informal settlements (UN–Habitat, 2015a, 2015b).

Overall, international experiences indicate that economic integration, physical improvement and social development must be conjointly implemented to achieve inclusive urban transformation. These experiences are conducive to the establishment of a framework for the inclusive and sustainable transformation of ViCs in Shenzhen.

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<sup>29</sup> <http://www.inclusivecities.org/policy-planning/inclusive-waste-management/> (last visited 22/07/2016).

## 6.3 Study area, research methods and data collection

### 6.3.1 Study area

Shenzhen City is in the southeast of China, adjacent to the border with Hong Kong. In the pre-reform era, Shenzhen was only a small town. However, since the central government designated Shenzhen a Special Economic Zone (SEZ<sup>30</sup>) in 1979, the city has grown at an unprecedentedly rapid pace. The population increased from 0.31 million in 1979 to 10.78 million in 2014, and the area of urban built-up land increased from less than 3 km<sup>2</sup> in 1979 to 890 km<sup>2</sup> in 2014<sup>31</sup> (Ding, 2007; Hao et al., 2011). The dramatic expansion of the urban built-up area was at the expense of rural land. To ensure rapid and effective capital accumulation, the local government only requisitioned cropland, leaving the built-up land (mostly villagers' settlements) to the villagers (Hao et al., 2012). The built-up land of the villages was gradually surrounded by formal urban built-up areas, and the villages became ViCs. Shenzhen is well-known for having numerous ViCs.

After three decades of rapid development, Shenzhen has nearly exhausted its land resources. The municipal government has therefore shifted its attention to built-up urban areas. In 2004, it started implementing urban renewal policies. Five years later, the launch of Shenzhen's Urban Renewal Measures marked the more systematic operation of urban renewal projects, and the redevelopment of ViCs became a main concern. In 2004, there were 320 ViCs scattered around the city, accommodating more than 4 million migrants (Table 6.1). Since most of the ViCs in Shenzhen provide low-rent housing for migrants, the disparity between the potential ground rent and the actual ground rent is enormous. Therefore, ViCs in the SEZ have undergone more redevelopment (Hao et al., 2012; Lai and Zhang, 2015). Most projects involve the demolition of buildings constructed by indigenous villagers as well as the displacement of rural migrants.

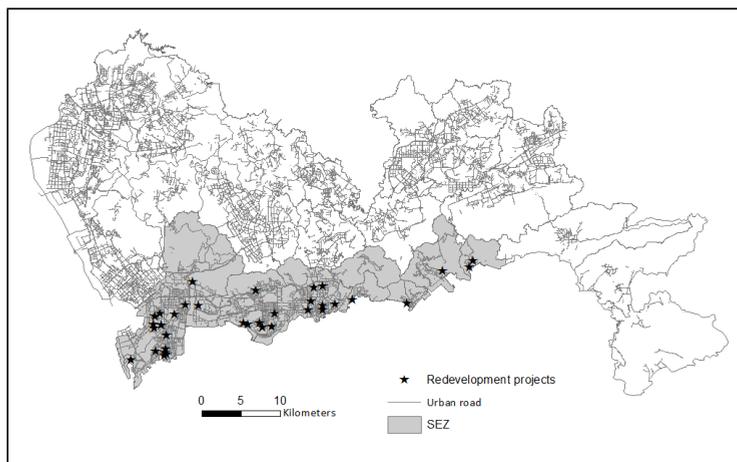
**Table 6.1 Statistics of ViCs in Shenzhen (2004)**

District	Number of ViCs	Land area (10 <sup>4</sup> m <sup>2</sup> )	Number of buildings	Building density	Floor ratio	area	Population of migrants (10 <sup>4</sup> )
Futian	15	195.62	9000	0.55	3.42		57.2
Luohu	35	235.68	12,400	0.53	2.75		74.8
Nanshan	29	291.21	16,800	0.54	2.47		50.9
Yantian	12	77.60	4100	0.45	1.30		14.8
Total SEZ	91	800.11	42,300	0.53	2.67		197.7
Baoan	138	4428.01	165,400	0.33	0.97		166.9
Longgang	91	4120.88	141,200	0.33	1.00		110.8
Total non-SEZ	229	8548.89	306,600	0.33	0.99		277.7
Total	320	9349.00	348,900	0.35	1.13		475.4

Source: 'Annual report of redevelopment of ViCs in Shenzhen (2005)'

<sup>30</sup> The SEZ was originally made up of four administrative districts: Nanshan, Futian, Luohu, and Yantian. In 2010, the SEZ was extended to cover the whole area of Shenzhen. 'SEZ' used in this article retains its original meaning.

<sup>31</sup> Government website: [http://www.szjt.gov.cn/xxgk/tjsj/tjgb/201504/t20150424\\_2862885.htm](http://www.szjt.gov.cn/xxgk/tjsj/tjgb/201504/t20150424_2862885.htm) (last visited 22/07/2016).



**Figure 6.2 Redevelopment projects of ViCs in Shenzhen (2008–15)**

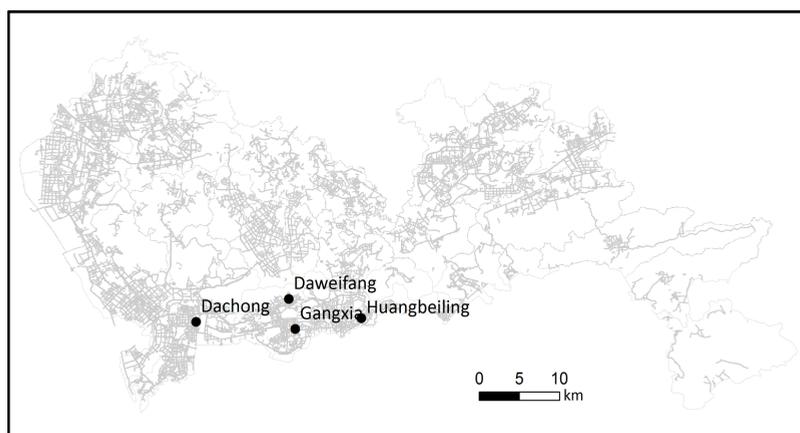
Based on information collected from the Urban Planning Land and Resources Commission of Shenzhen Municipality, we mapped the redevelopment of ViCs in the SEZ from 2008 to 2015 (Figure 6.2). To estimate the scale of displacement, we used the population density of migrants in these ViCs calculated from the data in Table 6.1. According to the results, these projects caused or will cause the displacement of approximately 247,091 migrants.<sup>32</sup> To our surprise, such large-scale displacement has received very little academic attention. To shed light on this process, we used the redevelopment of four ViCs in Shenzhen to analyze the displacement patterns of evicted migrants and the underlying mechanisms (Figure 6.3). The four ViCs are the following:

- Dachong village, in Nanshan district. Its redevelopment will be the largest such project in Shenzhen: 1,500 old buildings have been demolished and more than 70,000 migrants are displaced. In this area, a 300-metre high office building, a 5-star hotel, two 4-star hotels, a shopping mall and apartment blocks will be built.<sup>33</sup>
- Daweifang village, a small ViC in Futian district. The demolition covers a total area of approximately 11,180 m<sup>2</sup>. The area will be redeveloped into a residential and commercial district, with high-end shopping malls, apartments and office buildings.
- Gangxia village, the only ViC within Shenzhen’s CBD in Futian district. It consists of two parts, Gangxia west (Heyuan area) and Gangxia east (Louyuan area). Gangxia west has already been demolished and a new multifunctional district, with shopping malls, apartments and office spaces, will be constructed. It is estimated that the demolition of Gangxia west resulted in the displacement of nearly 100,000 migrants (Li, 2010).

<sup>32</sup> The results should be read with caution. The continuing influx of migrants during the past decade means that calculations based on the population density in 2004 could underestimate the scale of displacement.

<sup>33</sup> [http://sztqb.sznews.com/html/2011-12/21/content\\_1873764.htm](http://sztqb.sznews.com/html/2011-12/21/content_1873764.htm) (last visited 22/07/2016).

- Huangbeiling village, the largest ViC in Luohu district. The first phase of redevelopment involved an area of 0.4 km<sup>2</sup> and an investment of 3.5 billion yuan (approx. 0.5 billion US dollars). The project consists of two stages. During the first stage, the central part of the village was demolished. This area will be transformed into an urban complex with commercial and residential functions. More than 1,400 buildings were demolished and approximately 30,000 migrants were uprooted from their neighbourhood.<sup>34</sup>



**Figure 6.3 Location of the case study ViCs in Shenzhen**

In contrast to the fate of migrants, local villagers are entitled to considerable compensation for redevelopment. Compensation is usually in the form of money or a new property of a value equivalent to that of the demolished housing. In the case of Gangxia village, the area of villagers' informal housing (above the ground floor) was compensated under the 1:1 policy. In total, 59,200 m<sup>2</sup> of land was used for the construction of new properties to compensate villagers. After the redevelopment, many villagers will choose to move back to the original neighbourhood. As one villager from Gangxia village said:

*I chose compensation in the form of new property, under the 1:1 policy. After the redevelopment, I will move back to Guangxia village, since the environment of the neighbourhood is better and all my friends are in Futian district.<sup>35</sup>*

Moreover, after redevelopment, rent levels can be doubled or even tripled (Lin et al., 2015a). For instance, in the well-known case of Caiwuwei village in Shenzhen, rental yields per year increased from 18 million yuan (approx. 2.7 million US dollars) before the redevelopment to 60 million yuan (approx. 9 million US dollars) following it (Wang, 2011).

These four ViCs were selected for two reasons. First, they are all in the SEZ. As mentioned, ViCs with better locations have undergone more redevelopment in Shenzhen because of the huge rent gaps. Also, as revealed in Table 6.1, ViCs in the SEZ have much higher building

<sup>34</sup> Information obtained from Huangbeiling sub-district office.

<sup>35</sup> Quotation provided by Retumu, a local NGO in Shenzhen.

densities and accommodate larger populations of migrants. Therefore, as regards the displacement of migrants, the redevelopment of centrally located ViCs better represents the overall situation in the city. Second, because of the aforementioned difficulty in tracing displacees, timing plays an essential role in data collection in the study of displacement. When we conducted our fieldwork in Shenzhen, the redevelopment of these four ViCs was ongoing. This improved the chances of tracking a sample of displaced migrants, which demanded great efforts and many resources.

### **6.3.2 Research methods and data**

In the empirical part of our study, we used various data sources, including government documents, interviews, photographs and maps. The data were mainly collected during two periods of in-depth fieldwork (December 2013–February 2014 and March–May 2015). Government documents and maps, for instance the ‘Annual report of redevelopment of ViCs in Shenzhen (2005)’, were obtained from government bureaus. The government’s website was used to harvest information on Shenzhen’s urban renewal projects. We used mapping, field observations and semi-structured interviews to investigate the displacement pattern of migrants and the underlying driving forces. Eventually, a total of 110 semi-structured interviews were conducted with displacees from four redevelopment projects, namely Dachong village (17 interviews), Daweifang village (13), Gangxia village (41) and Huangbeiling village (39).

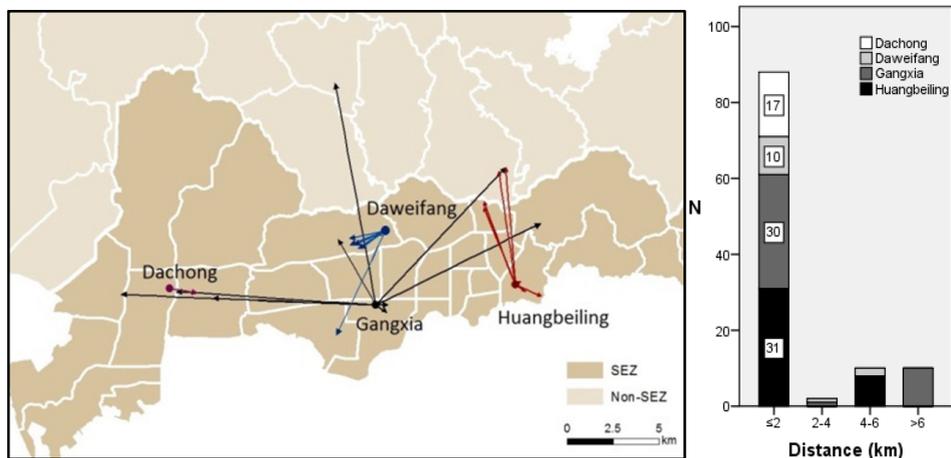
The majority of the interviewees had lived in Shenzhen for more than five years (eight had lived there for more than 20 years). Most interviewees from Daweifang village were self-employed, those from Gangxia village were mainly white-collar workers or small business owners, and those from Huangbeiling village were mainly construction workers. In contrast, interviewees from Dachong village had more diversified jobs, ranging from self-employment and white-collar work, to salesman and construction workers. Migrants were recruited through snowball sampling. Although this sampling technique might generate unrepresentative sample groups, it is widely used for populations that are difficult to access. Since displaced migrants from ViCs are extremely difficult to trace, this sampling method was the most suitable for our research purpose. The interviews concentrated on the main issues concerning displacement, ranging from change of locations (in order to map the displacement pattern) to the reasons for location choices (in order to interpret the mechanism behind the displacement process). The empirical findings are presented in the following section.

## **6.4 Empirical study in Shenzhen**

### **6.4.1 Displacement patterns of migrants caused by the redevelopment of ViCs**

Here, we first present the geographical displacement patterns of the sampled migrants and then explain the spatial logics behind these patterns. As regards the spatial pattern of

displacement, previous studies have shown that displaced households tend to move only short distances (see e.g. Kleit and Galvez, 2011; Popkin et al., 2004; Varady and Walker, 2000). This geographical pattern was also found in our empirical study.



**Figure 6.4** The locational choices (left) and displacement patterns (right) of sampled migrants

Figure 6.4<sup>36</sup> (left) shows the locational choices of the displaced migrants in our sample. The majority moved within the SEZ. For displacees who moved to non-SEZ areas, popular choices were those neighbourhoods adjacent to the SEZ border with relatively better accessibility to the city centre than other areas in non-SEZ. Compared with interviewees from other villages, interviewees displaced from Gangxia village exhibited more diversified locational choices, moving to neighbourhoods in other districts in the SEZ or even to non-SEZ areas. However, when we look at the percentages, they were still disproportionately clustered near the demolished area. As shown in Figure 6.4 (right), 30 of the 41 interviewees remained within a 2 km radius. This geographical pattern is similar for other villages. All 13 interviewees displaced from Daweifang moved within the SEZ, and 10 of them remained within a 2 km radius. Of the 39 displacees from Huangbeiling village, 31 stayed within a 2 km radius. This pattern is more extreme in Dachong village, where all 17 interviewees had moved to a ViC only 1 km away (Baishizhou village). The main reason might be that Baishizhou village is a very large ViC that can provide substantial amount of low-rent housing for displaced migrants.

Since our sample was relatively small and we wanted to gain a more general and concrete picture of the displacement pattern, we also asked interviewees to indicate the most popular locations among displaced migrants. Figure 6.5 shows the locations indicated by interviewees from Dachong, Gangxia and Huangbeiling villages. Grey areas have been redeveloped, and white areas are the most popular locations mentioned by the interviewees. Baishizhou village is just 1 km from Dachong village; Gangxia East is next to Gangxia West, and together they

<sup>36</sup> Since most of the interviewees were unwilling to provide their exact address, we can only map the locations of the neighbourhoods pre- and post-displacement.

formed the old Gangxia village; for Huangbeiling village, the most popular location was the part that had not yet been demolished, followed by Luofang village, which is 1.5 km southeast of Huangbeiling village. From the evidence provided, a clear effect of spatial attachment can be identified. That is to say, displaced migrants tend to feel an attachment to their original village and to move to nearby locations. In the following subsection, we use the framework of maintaining real income through three modes of integration to unravel the spatial logic behind this displacement pattern.

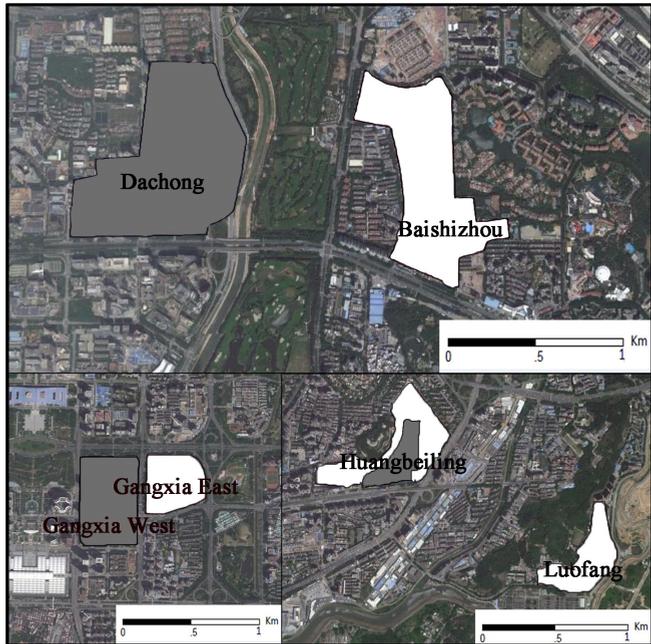


Figure 6.5 The most popular locations among displaced migrants

### 6.4.2 Spatial logic behind migrants’ displacement pattern: centrality and access, political territory and vicinity

To explain migrants’ displacement pattern of spatial attachment, we applied the previously introduced analytical framework: the maintaining of real income through three modes of integration. In this conceptual framework, displacees’ real income (command over resources) is likely to be redistributed by urban redevelopment and the consequent displacement; and vice versa, displaced migrants resort to all means to resist this redistribution process. In particular, there is a spatial logic behind each mode of integration.

#### 1) Centrality and access for market exchange

First, market exchange, as the dominant way for households to gain access to resources in contemporary society (Lin et al., 2011; Wu, 2010), relies on centrality and access.

On the production side, access to employment is essential for those who sell their labour in the market, and access to customers is essential for those who are self-employed. Like

many other big cities in China, Shenzhen has undergone the process of deindustrialization (Liu et al., 2014). More and more job opportunities in the manufacturing sectors are distributed outside the SEZ, and those within it are largely in tertiary sectors. Wang and Meng (2014) mapped the spatial distribution of employment in Shenzhen, and they verified that job opportunities in tertiary sectors mainly cluster in the SEZ. Proximity to employment has shaped the spatial distribution of the labour force. Wang and Meng's (ibid.) research also revealed that the population working in tertiary sectors concentrate in the SEZ. Looking at a finer scale, the high accessibility to workplaces of ViCs in the SEZ is also evidenced by our research. For instance, the workplace of the majority of interviewees from Daweifang village was less than a 10-minute walk away.

Therefore, for migrants who still live in the SEZ, where rents are significantly higher even in the ViCs, a main consideration is proximity to employment. This is especially important for low-skilled migrants, whose jobs are usually not steady, and many of them hold several jobs at the same time. A typical example is hourly workers – mostly female migrants who are hired by affluent residents to do household chores such as cleaning, cooking or childcare. In such a situation, easy access to these workplaces is of central importance. For instance, in Huangbeiling village, some migrants who first moved to non-SEZ areas chose to move back to the remaining part of Huangbeiling village:

*My wife has three jobs. She gets up at three every morning and comes home at eight in the evening. There is no bus at three in the morning. Luckily her workplace is within walking distance from Huangbeiling village. If we still lived in Buji [a sub-district outside the SEZ], it would be impossible for her to do the job. (Interview, January 2014)*

Besides those who sell their labour in the market, a substantial number of migrants own small businesses within the village, where they can make use of the high living densities and flows of people to better integrate in market exchange.

The same logic applies to consumption. Centrality entails the availability of cheap daily necessities, which are critical for household reproduction. Loss of centrality often causes increased living expenses:

*There are many supermarkets in Huangbeiling village, everything is cheaper. But in the place where I moved to, there is only one supermarket and pork is very expensive. (Interview, January 2014)*

*There is no vegetable market here [Luofang village]. Since there is only one main street with very few shops, food is more expensive than in Huangbeiling village. (Interview, January 2014)*

By staying close to the original neighbourhood, migrants can still make use of the cheap services to which they are accustomed. For instance, a displaced migrant who had moved to Luofang village said that she still went to Huangbeiling village (where she had lived for a long time, and that used to provide her with affordable services) to buy meat, since meat there is much cheaper. Therefore, when the demolition of ViCs uproots migrants from their original neighbourhood, they attempt to maintain the locational advantage they once enjoyed by staying close by, so as to keep the original level of integration in market exchange.

## 2) Political territory for redistribution

In the sphere of redistribution, access to redistributive resources is primarily determined by political territories. The most important institution that has defined China's political territory is the *hukou* (household registration) system, which was introduced in the 1950s. Under this system, all residents are registered according to their birthplace as having either an agricultural (rural) or a non-agricultural (urban) *hukou* status. This system has generated urban/rural and local/nonlocal divisions, which exclude migrants from various services in the host cities. Under the precondition of citizenship, various resources are allocated to local urban residents through the state redistribution system, for instance municipal housing, public schools and social welfare (Wu, 2002). Lin et al. (2011) identified various barriers in housing, employment and education for migrants resulting from the *hukou* system. Similarly, the so-called villagers'hip has defined another redistribution system within ViCs, one that is organized by the collective (Lin et al., 2012). Under this collective redistribution system, local villagers are provided with a variety of resources, such as upgraded infrastructure, education and entertainment facilities. In contrast, migrants who possess neither citizenship nor villagers'hip are largely excluded from the main redistribution systems in the city. In other words, migrants are denied access to a variety of redistributive incomes provided by the government or collectives.

In recent years, some new policies have been introduced in an attempt to deal with the mentioned discriminative institutions. Since 2008, migrants' children in Shenzhen have been entitled to free education at public schools.<sup>37</sup> However, this redistributive educational resource is localized: the city is divided into school districts, and each public primary or secondary school can only enrol students who live within their district (Figure 6.6). Providing all the documents required is a great challenge for many migrants, and even if they manage to, there is no guarantee that their child can attend public school, since places are extremely limited. Therefore, displaced migrants who have managed to get their children into a public school tend to move within the same school district, otherwise they would have to go through the whole application procedure again and risk losing the precious opportunity. According to one migrant in Daweifang village:

*I know some migrants whose children study in two public schools within this area. They stay in this place just for the sake of their children, since all the certificates required by the public schools are so hard to obtain, once they get their children into a public school, they prefer not to change school until their children graduate. This means that they can only stay within this area. That is why many people moved to Meilin village [a nearby village]. (Interview, April 2015)*

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<sup>37</sup> 'The Management Method of Compulsory Education of the Children of the Temporary Population in Shenzhen (2005)'.

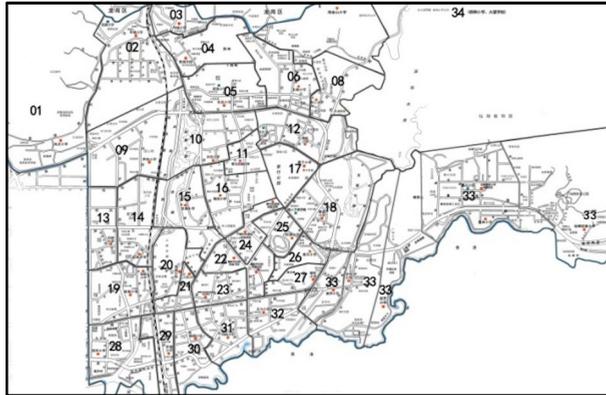


Figure 6.6 Primary school districts in Luohu district in 2015 (source: Shenzhen municipal website)

It is worth noting that, in the sphere of redistribution, although new political territories are taking shape owing to gradual reforms, migrants holding a non-local *hukou* are still largely excluded from the mainstream redistributive resources provided in the city, such as social housing and welfare. The case of educational resources presented above is rather an exception, but it does have a strong influence on migrants' locational choices. It is foreseeable that when more and more redistributive resources are accessible to migrants, emerging political territories will play a more important role in migrants' moving decisions.

This brings us to the aforementioned 'externality effect' of many public goods. Although these public goods are usually subsidized by the government, and thus represent the characteristics of redistributive resources, those outside the pre-determined political territories are entitled to a certain amount of access owing to the externality of these resources (Harvey, 1973). As noted by Lin et al. (2011), thanks to the externality effect of public goods, migrants obtain a redistributive income that is crucial for their survival in the city, and the greater the locational advantage, the more redistributive income it can generate. This spatial logic overlaps to a certain extent with the sphere of market exchange, where centrality and access play the key roles. Since the majority of migrants rely heavily on public transport, a loss of accessibility results in long-distance commuting and increased transport costs; in other words, a redistribution of real income. As mentioned, ViCs with better (i.e. central) locations are given priority in Shenzhen's redevelopment plan (Lai and Zhang, 2015). Therefore, migrants displaced from these ViCs tend to move to nearby neighbourhoods so that they can continue to enjoy the locational advantage, as well as the redistributive income generated by the externality of public goods (Figure 6.7). In other words, owing to externality effects, locational advantage has acted as a 'supplement' to political territories for excluded migrants.



**Figure 6.7 Public goods in ViCs accessible to migrants (left: a bus station within Huangbeiling village; right: a park in Huangbeiling village) (photos taken by the first author)**

### 3) Vicinity for reciprocity

Lastly, in the sphere of reciprocity, the migrants' displacement pattern is driven by the desire to stay close to social groups, since many reciprocal activities rely on the existence of a social network. Non-monetary resources are exchanged within the social network and these resources constitute an important part of migrants' real income. Interviewees listed a variety of reciprocal activities in their daily lives, for instance childcare, housekeeping and lending money:

*In this village, neighbours help each other all the time, such as moving, parcel collection and childcare. (Interview, March 2015)*

Also worth noting is that many reciprocal activities were made use of to facilitate migrants' integration in the sphere of market exchange. For instance, the social network of migrants who do not have steady jobs is one of the most important sources of job opportunities:

*We don't have a steady job. If we know more people in the neighbourhood, we have more contact with each other. Because of that we come to hear about more job opportunities. (Interview, January 2014)*

*We don't have a steady job, so we rely heavily on our social network for job opportunities. For instance, if I hear about a job today, first I will ask my family, relatives or friends. After that I just go out and ask some townies if they need a job. If you know very few people, you will get very few job opportunities, and you earn less. (Interview, December 2013)*



**Figure 6.8 The informal 'employment office' in Baishizhou village (left) and Huangbeiling village (right) (Photo taken by the first author)**

Moreover, the proximity of social groups also enables the cumulative effect of labour. The clustering of townies in ViCs has resulted in high degrees of occupational specialization. For instance, Huangbeiling village is often known in Shenzhen as ‘Sichuan village’, because the majority of migrants are from Sichuan province and work in the construction sector. Similarly, Gangxia village has a big group of informal workers who are mainly from Chongqing city. Occupational specialization is manifested in space by the emergence of informal ‘employment offices’ in ViCs (Figure 6.8), where migrants gather and wait for potential employers. These informal ‘employment offices’ give migrants a better chance of finding work.

Overall, the empirical evidence presented in this section suggests that after demolition, migrants remain attached to the original village in resistance to the redistribution of their real income. This displacement pattern of spatial attachment evidences migrants’ strong desire to stay put. Nevertheless, since migrants are largely excluded from the decision-making processes during the redevelopment of ViCs, they cannot get their voices heard by the authorities and their needs are thus ‘hidden’ in the displacement patterns, as revealed in this research.



**Figure 6.9** Group renting in ViCs (Photo taken by the first author)

Viewing the urban system as a whole, the violation of the spatial logic behind migrants’ displacement patterns has already had serious consequences for the just and efficient management of urban resources. For instance, the waves of redevelopment projects have led to the prevalence of group renting (*qunzu*) in the SEZ: it is very common for ten or more people to share a two-bedroom apartment (Figure 6.9). Migrants have extremely poor living conditions in such arrangements. In this sense, the geographic concentration of the urban poor has been intensified by radical urban redevelopment. Moreover, the demolition of ViCs also contributes to the job–housing spatial mismatch in Shenzhen, owing to the shrinking pool of affordable housing in the SEZ. This increasing job–housing mismatch has put great pressure on the city’s public transport system. It is therefore important to recognize that the demolition–redevelopment model is unsustainable and that more inclusive and sustainable

approaches to the redevelopment of ViCs are needed. Building upon empirical findings in Shenzhen and successful international initiatives of upgrading informal settlements, we propose a conceptual framework for the inclusive and sustainable transformation of ViCs, by addressing the dimensions of economic, spatial and social inclusion.

## **6.5 Towards inclusive and sustainable transformation of ViCs**

Informal settlements such as ViCs are spatial manifestations of urban exclusion and inequality. The empirical findings presented in the previous section indicate that the reckless demolition of these low-income neighbourhoods poses a substantial risk of increasing existing inequalities and social injustices, since the real income of the disadvantaged tends to be redistributed in a variety of ways, implying a process of accumulation by dispossession (Harvey, 2003). This raises the question of what constitutes sustainable urban transformation.

For the city of Shenzhen, it is believed that the key to sustainable urban transformation is to position ViCs within the system of the whole city and to view ViCs as an organic part of the urban system. Rather than ‘islands’, ViCs have developed complex relationships with the surrounding urban areas. They not only provide affordable housing and cheap services for the majority of rural migrants, but also make a significant contribution to the urban economy. The collective land of ViCs accommodates a large percentage of the city’s industrial and economic activities. Although ViCs suffer from overcrowding and poor facilities, they have mixed functions, small housing blocks and are walkable. They are close to job opportunities and public transport, promote mixed land uses in the city, and are crucial to the effectiveness and sustainability of the urban system. Most ViCs are lively and have a self-diversification of population, which is reflected in the wide range of commercial and cultural enterprises.

The demolition–redevelopment model is mainly driven by the strong desire of local governments and developers to capture the huge rent gap, and only local villagers receive many compensation. The reckless demolition of these informal migrant enclaves, solely in pursuit of short-term economic benefit, might be detrimental to the city’s development in the long run. The displacement patterns revealed in the previous section indicate displacees’ strong desire to stay put, so as to maintain their real income through three modes of integration. In light of this, incremental upgrading rather than demolition followed by redevelopment might be the way to capture the opportunities associated with the self-diversification of ViCs. Drawing upon international experiences, we propose a framework for the inclusive and sustainable transformation of these informal settlements in Shenzhen. This framework includes economic, spatial and social dimensions of inclusion, which are related to market exchange, redistribution and reciprocity, respectively. Economic inclusion refers to engaging migrants in the market sphere by providing them with formal and informal job opportunities. Spatial inclusion is related to the provision of public facilities and services as well as affordable housing for migrants in the redistributive domain. Social inclusion can be promoted by fostering the thriving reciprocal activities in ViCs and empowering migrants in the upgrading process.

### 6.5.1 Economic inclusion: integration of informal and formal economy

To implement economic inclusion it is crucial to cultivate economic opportunities for all. In particular, measures need to be developed to channel and strengthen migrants' integration in market exchange. As mentioned, ViCs accommodate thriving informal economic activities, providing migrants with numerous job opportunities (figure 6.10). Although informal workers usually suffer from unstable incomes and insecure rights, the informal economy is still the best option for many unskilled migrants who wish to remain in the city. In the demolition–redevelopment model, many informal workers are simply deprived of their fundamental means of living through market exchange. Therefore, the recognition of the informal economy is important to the economic integration of ViCs. The entry point might be the creation of an enabling environment (i.e. appropriate institutional and policy frameworks) to support these informal economic activities, instead of simply labelling them as illegal and suppressing them. Innovative and supportive finance initiatives could be developed. For instance, small loans could be offered to promote micro-enterprise development within ViCs. Moreover, migrants' integration in the formal labour market could be strengthened by measures such as skills training, which would promote their upward mobility in the labour market.



Figure 6.10 Informal economic activities in ViCs (photo taken by the first author and Honghong Fu)

Moreover, ViCs have played an important role in Shenzhen's economic development (Lai et al., 2014). For instance, their collective industrial land represents more than half of the total industrial land in the city, and it accommodates a wide range of manufacturing industries, such as textile, electronics and pharmaceuticals (Liu et al., 2014; Lai et al., 2016). The upgrading of these industries in ViCs could become an important part of the industrial

restructuring of the city. ViCs are also a cradle of innovative activities, since many new university graduates, local artists and creative workers rely upon the ViCs for affordable housing or to start their careers. Many successful cases in Shenzhen show that creativity and innovation originating in ViCs can be translated into strong competitiveness in the formal economy, as exemplified by, for instance, the leading drone manufacturers DJI, the Dafen art village and the clusters of ‘maker entrepreneurs’ (*chuang ke*) in many ViCs. These newly emerging economic sectors have made great contributions to the industrial upgrading of Shenzhen. It is therefore important for local governments to recognize and treasure these intangible assets and take measures to foster grassroots innovation in these informal settlements.

### **6.5.2 Spatial inclusion: access to redistributive resources**

Spatial inclusion involves the gradual improvement of streets and housing, the creation of public spaces, and the incremental provision of public infrastructure and facilities, such as education, sanitation and healthcare. As discussed in section 6.4, migrants living in ViCs are largely excluded from political territories defined by the *hukou* system, and only limited redistributive resources are accessible to them. In light of this, during the upgrading process of ViCs, spatial inclusion could be implemented by channelling and strengthening access to these redistributive resources.

Public infrastructure and facilities are redistributive resources that are usually subsidized by the government and can also be enjoyed by migrants as a result of the ‘externality effects’. It is noteworthy that in ViCs in Shenzhen, the collective has played the redistributive role in providing public infrastructure and facilities for villagers. However, due to a lack of incentives and high expectations for redevelopment, the infrastructure and facilities are often poorly maintained. To upgrade the infrastructure in ViCs and integrate it with formal urban areas requires close collaboration between the city government and the collectives, a phenomenon that is gradually emerging in many ViCs in the SEZ. As for transport services, ViCs in the SEZ generally have accessible public transport. What needs to be improved is the road network within ViCs, since many streets are too narrow for fire engines should a fire break out. It might be necessary to demolish some of the ‘handshake and kissing’ buildings, broaden some main streets, and create new public spaces and facilities particularly for rural migrants.

Educational facilities are also redistributive resources, and they are an important component for both spatial and social inclusion. The huge educational demand from migrant children has led to the proliferation of numerous informal schools within ViCs. Many of these schools have poor educational facilities and face the risk of being shut down owing to redevelopment plans (Lin et al., 2011). Given the large number of these schools, the government might consider supporting these informal educational resources and incorporating them in the city’s formal education system during the upgrading of ViCs. In addition, when migrants who have children enrolled in public schools are displaced to another

school district, the government could prioritize those children when they apply to a new school, as this would give migrants more options when making relocation decisions. Such redistributive arrangements are common practices in western countries. For instance, in the Netherlands, displaced tenants are given priority when seeking new housing (Kleinhans and Van der Laan Bouma-Doff, 2008).

Multi levels of governments should cooperate in introducing gradual institutional reforms to enable migrants' access to more redistributive resources, alleviating the social costs generated by large-scale redevelopment. For instance, reforms in the political territory could be made by expanding social housing eligibility to migrants, especially low-income migrants. In fact, Shenzhen's municipal government has already laid down that for demolition–redevelopment projects, at least 8 per cent of the building area must be set aside for social housing units.<sup>38</sup> However, low-income migrants are excluded from this redistributive resource. Since in the short run it is unlikely that the government will provide social housing for the majority of rural migrants, an alternative approach is to combine the upgrading of ViCs with the provision of public rental housing; that is, to upgrade some clusters of existing housing and construct new public rental housing on the collective industrial land (Lin et al., 2014). In order to ensure that the upgraded houses remain available for the majority of low-income migrants, a cap on the annual rent increase would probably be required (ibid.). The Dutch experience also shows that the regulation of public and private rental housing and the provision of differentiated housing subsidies are also necessary in the long run.

### **6.5.3 Social inclusion: participation and empowerment of migrants**

Lin and De Meulder (2012) noted that the key to the sustainable transformation of ViCs is cooperation between stakeholders and the involvement and empowerment of the informal sector as well as migrants in the planning processes. To successfully upgrade informal neighbourhoods, it is of great importance to recognize the needs of the local community. Since migrants constitute the majority of ViC residents, and many of them have lived in ViCs for many years, they possess 'important knowledge, skills and capacity' to contribute the upgrading process (UN–Habitat, 2015b). Moreover, the clusters of social groups and the thriving reciprocal activities in ViCs are valuable social assets that can promote and foster social inclusion during the upgrading of ViCs. However, under current redevelopment regime, migrants, who possess few or no tenancy rights, are largely treated as 'invisible' and are excluded from the decision-making process by both local governments and developers. The demolition of ViCs simply uproots migrants from their neighbourhoods and destroys the valuable social assets linked to these villages (Liu et al., 2014). It is therefore important to empower this 'invisible' social group throughout the upgrading process and make their voices and needs heard.

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<sup>38</sup> 'Regulations on the construction of affordable housing in urban redevelopment in Shenzhen (2016)', available from the government website: [http://www.szft.gov.cn/bmxx/qcsgxb/tzgg/201601/t20160113\\_483046.html](http://www.szft.gov.cn/bmxx/qcsgxb/tzgg/201601/t20160113_483046.html) (last visited 22/07/2016).

To achieve this, local governments need to play the leading role in creating enabling environments for empowering migrants. Nowadays, public narratives concerning rural migrants are gradually changing, mainly due to reforms of the *hukou* system. In 2014, the World Bank, together with the central government of China, issued a report on the efficient, inclusive and sustainable urbanization of China (World Bank, 2014). One main concern voiced in this report is the reform of the *hukou* system, and it goes on to present detailed and feasible guidelines for both the national and local governments. As a result, many cities will implement a new residence system that no longer has a rural/urban division in *hukou* status. These reforms have signalled a gradual empowerment of migrants in a variety of areas. Therefore, it is foreseeable that as a major stakeholder in ViCs, migrants might also be gradually empowered during the redevelopment process. Local NGOs, researchers and planners can also help to create channels for communication with and the participation of migrants. By making use of the unique reciprocal characteristics of ViCs, the development of community-based organizations of migrants can be encouraged and migrant representatives can be elected to negotiate with other stakeholders. In addition, various communication platforms can be established: traditional opinion gathering approaches, such as seminars, workshops, interviews and surveys, can be complemented with the use of new information technologies such as online websites, social media and web-based planning support systems (Lin et al., 2015b).

## **6.6 Discussion and conclusion**

Massive urban redevelopment and the related residential displacement in contemporary Chinese cities have raised serious questions concerning the sustainable transformation of urban systems. Combining the conceptual thinking of Polanyi (1944) and Harvey (1973), residential displacement is viewed as an exclusive urban activity that attempts to redistribute migrants' real income, defined as command over society's scarce resources through three modes of integration (market exchange, redistribution and reciprocity). This theoretical framework was applied in a case study in Shenzhen investigating the residential displacement of migrants after the demolition of ViCs.

Spatially, migrants displaced from ViCs tend to remain attached to their original neighbourhoods and mainly move only short distances. This displacement pattern is explained by migrants' attempts to maintain their real income through three modes of integration. In particular, there is a spatial logic behind each dimension of integration. In the sphere of market exchange, centrality and access translate into accessibility to employment and consumers, as well as the availability of cheaper daily necessities, which are essential for command over resources in both production and consumption. In the sphere of redistribution, access to public educational resources, determined by school districts (a form of political territory), is one of the most important factors influencing migrants' locational choices. In addition, owing to generally limited access to mainstream redistributive resources, the externality effects have enabled migrants' access to many public goods and facilities; in this

case, locational advantages translate into redistributive income and have acted as an important 'supplement' to political territories for excluded migrants. Finally, the proximity of social groups gives rise to a variety of reciprocal activities that also help migrants to find jobs and integrate themselves in the sphere of market exchange. The displacement patterns revealed in the case of Shenzhen evidence the strong desire of the displaced to remain close to their previous living places, whereas under the exclusive decision-making regime, displaced migrants cannot get their needs heard. It is suggested that serious consequences for migrants should be taken into consideration in urban redevelopment projects, since this social group can become even more marginal in the city due to the loss of real income resulting from displacement.

It has been shown in the western context that the self-diversification of slums and the breaking down of residential discrimination outside slums are crucial for the gradual, sustainable transformation of slums, and could make them 'unslumming slums' that are lively enough for people to enjoy city public life and pavement safety (Jacobs, 1961). In light of this, this research suggests that an inclusive approach that incrementally upgrades ViCs is more conducive to the sustainable transformation of Shenzhen than the demolition-redevelopment approach. Sustainable urban transformation should be a socially inclusive process in which urban residents, including the most marginalized groups, have a representative voice in planning and redevelopment, and have access to sustainable livelihoods and affordable housing and basic services.

This study proposes a framework for the inclusive and sustainable transformation of ViCs in Shenzhen. It addresses inclusion in multiple dimensions and also reflects back upon the three modes of integration. Economic inclusion can be achieved by supporting the informal economy within ViCs and restructuring industrial and economic activities on collective land, so as to channel migrants' integration in market exchange. Spatial inclusion can be promoted by the gradual improvement of streets and the incremental provision of public infrastructure and facilities as well as social housing for migrants, which will strengthen migrants' access to redistributive resources. Social inclusion can be facilitated by the participation and empowerment of rural migrants in the upgrading process of ViCs, which makes use of the unique reciprocal characteristics and valuable social assets associated with ViCs.

Although this planning framework is tailored to the case of Shenzhen, the key principles of economic, spatial and social inclusion can be adapted to other contexts. Of the three facets of inclusion, the implementation of social inclusion might encounter greater challenges compared to economic and spatial inclusion, since in Chinese cities migrants as a social group have long been institutionally discriminated against and excluded as a result of the *hukou* system. Nevertheless, emerging reforms at the national level might signal the gradual empowerment of migrants during the redevelopment of ViCs.

It is also worth noting that although the in-situ upgrading of ViCs can obviate the large-scale direct displacement of migrants and sudden changes in the lower end of the housing market, other forms of displacement can still occur in the absence of effective pro-poor regulations. For instance, low-income migrants might be gradually priced out as a result of

the improvement in the living environment, engendering indirect displacement. In western countries, various institutional arrangements mitigate the impacts of indirect displacement, for instance the rent stabilization legislation in the USA, or the provision of subsidized housing to displacees in the Netherlands. These arrangements can provide valuable insights for policymakers in Chinese cities to develop more encompassing policy mixes for sustainable urban transformation. This study calls for more research on the displacement process of low-income migrants in China, in order to provide empirical evidence and find new solutions for dealing with various forms of displacement issues in the city.

## Acknowledgements

This research was supported by the State Key Laboratory of Subtropical Building Science, South China University of Technology (Refs: 2015ZB06, 2015ZC08).

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# 7 Conclusion

## 7.1 Introduction

Chinese cities face profound urban transformations, manifested in the urban built environment by booming urban redevelopment projects. These projects are mainly driven by property development, engendering large-scale displacement of low-income residents and a process of “dispossession by accumulation” (He and Wu, 2005, 2007; Harvey, 1973). The urban transformative processes in China embody the broader debates on the outcomes of area-based policies worldwide. Specifically, as regard to policies for revitalizing distressed neighbourhoods, there are debates on whether urban communities are better defined by locational/geographical characteristics, or by social/relational attributes (Khare, 2015). These two different perspectives of urban communities may lead to two different approaches of area-based policies, namely of place-based approaches and people-based approaches. Although place-based approaches have been implemented in many developed countries (Gobillon et al., 2012), recent years have seen a resurgence of interest in people-based approaches. For instance, in the World Development Report “*Reshaping Economic Geography*”, the World Bank (2009) proposed a spatially-blind development model, wherein people-based outcomes such as the equal opportunities of individuals are emphasized. Barca et al. (2012) and Neumark and Simpson (2015) also argue that in area-based policies, special attention should be paid to the incurred people-based consequences. Following this line of argument, this dissertation investigates the unintended place- and people-based consequences of urban redevelopment policies in China.

Differing significantly from western circumstances, China’s urban redevelopment is in many cases property-led and profit-oriented. A strategic alliance is often formed between local governments and developers to revitalize derelict urban areas in pursuit of short-term economic outcomes, which emerged from intertwining processes of industrialization, suburbanization, and deindustrialization (chapter 2). These place-based strategies often aim to radically transform the targeted area, wherein the locational advantages of urban neighbourhoods are transferred into huge exchange values. Although urban redevelopment might generate intended positive place- and people-based outcomes, unintended consequences can come up as a major issue if due attention is not paid, manifested as both direct and indirect forms of residential displacement. Despite the urgency of this issue, very few studies have shed light on the full economic and social scale and scope of redevelopment-induced displacement in Chinese cities. We show in this dissertation that on the one hand, demolition of old residential buildings directly displaces large populations of low-income residents, leading to serious impacts on these social groups (chapter 3); on the other hand, short-term economic prosperities generated through urban revitalization and the creation of property “hot spots” pose significant economic and social spill-over effects on adjacent urban areas, with indirect displacement as a main consequence (chapter 4). These two processes together have posed great challenges to the city’s absorptive capacity for the displaced: once

affordable neighbourhoods are either bulldozed or becoming more and more costly to live. Although displacees exhibit heterogeneities in their response to residential displacement (chapter 5), in general displacement has led to substantial utility loss and the disintegration of the displaced, which are likely to jeopardize the city's development in the long run. Therefore, an inclusive and sustainable approach for urban transformation in China is finally developed, which integrates people-based and place-based views of urban communities (chapter 6).

## **7.2 Answers to the research questions**

The main aim of this research is to identify the mechanisms and selective socio-economic consequences of redevelopment-induced displacement. Situated within the specific Chinese policy context, the place- and people-based consequences of redevelopment policies in terms of income, housing, travel to work distances, job security, and social networks are discussed. Besides providing a critical view on displacement processes and place-based redevelopment, the research suggests pathways for socially inclusive and sustainable transformations of urban China. To accomplish this research objective, five research questions have been raised in chapter 1. The answers to each research question are as follows.

*1. What are the institutional determinants that have shaped the formation of brownfields in Chinese urban villages and other urban areas?*

Chapter 2 depicts the institutional determinants that have shaped the formation of derelict land in Chinese cities. In particular, two types of brownfields are distinguished: brownfields in urban areas and brownfields in urban villages. They represent differing characteristics in terms of land ownership, size of the site, spatial distribution, the mechanisms by which the sites are created, and the stakeholders involved. Based on this distinction we develop a three-stage conceptual model (industrialization, suburbanization, and deindustrialization) that explains the formation process of these derelict sites. In pre-reform era (from 1949 to 1978), the central government initiated large-scale national industrialization which resulted in the formation of numerous industrial districts in cities. Besides, in the rural villages a process of bottom-up rural industrialization (industrial development on collective land) occurred since the economic reform and a substantial amount of collective land in the villages was used for industrial purposes. From early 1980s, under the regimes of fiscal decentralization (a shift of fiscal power and responsibility from central government to lower levels of government) and reforms in the land system (separation of land ownership from land use rights of urban land and the approval of the circulation of the latter in the market), leasing land use rights of urban land became a main approach for local governments to generate revenues (Wu, 2001). This has driven prominent suburbanization, and the industrial areas once located in the urban periphery were gradually integrated into the city centre. Meanwhile, traditional rural villages were incorporated into the urban built-up areas and became urban villages. As China's economic reform progressed, a process of deindustrialization has been driven by industry

restructuring (upgrading and transformation of the industry). Many industrial enterprises in old industrial areas or in urban villages located in the urban core either went bankrupt or moved to development zones built by the government in suburban areas. As a result, numerous derelict areas in central urban areas or urban villages emerged, which are now targeted for redevelopment. The classification of different brownfields in Chinese cities is conducive to more successful practices of brownfield redevelopment, as the different attributes they possess can lead to differing redeveloping strategies. For instance, brownfield sites in urban villages are on a small scale and scattered. They have complex relationships with their adjacent plots in terms of land ownership and social and economic activities. The redevelopment of these sites is usually organized comprehensively along with other lands (e.g. residential areas) in urban villages. In contrast, the redevelopment of large-scale brownfields in urban areas usually does not involve their adjacent areas, because they have clear boundaries and can be easily separated from the surrounding urban areas.

## *2. What are the individual experiences of and socio-economic consequences for migrants who are displaced from urban villages?*

Owing to an absence of tenancy security that is deeply rooted in the informality of urban villages, migrant renters are treated by local governments and developers as an invisible social group during the redevelopment of urban villages. In an attempt to make the invisible visible, we trace a substantial group of displaced migrants in Huangbeiling village in Shenzhen, so as to disentangle the displacement processes and the induced consequences. We find that even before the initiation of the demolition, a constant threat of physical displacement was imposed on migrant renters. Displacement pressure came from the occurrence of actual eviction, the consequences it might incur, and the availability of resources to mitigate the adverse impacts on their daily lives. In addition, due to the intentional neglect by main stakeholders, migrant renters also consider themselves as outsiders and they exhibit strong senses of subordination, obedience, and even fatalism. When part of the village was finally bulldozed, migrants' inferior situation is reflected in limited options of relocation available to them. The long-standing institutional neglect of migrants' housing needs and housing rights has resulted in their disproportionate concentration in urban villages. In general, displacement in the form of short-distance relocation occurred most frequently, but still with substantial utility loss, in terms of decreasing accessibility to workplace and various urban services, rising living costs and the destruction of social and economic networks. An interesting finding is that, after a while, some migrants decided to return to the remaining part of the gentrifying village. These migrants suffer greatly from displacement *in situ* (displacement experienced by residents when they are still inhabiting the neighbourhood) engendered by rocketing rents, drastic physical changes and declining liveability, but in exchange for the restoration of social and economic networks, which play an imperative role in their income generation.

### *3. Do property-led redevelopment processes lead to price-shadowing and indirect displacement in adjacent urban areas?*

Chapter 4 investigates the chain effects of property-led redevelopment in Shenzhen, namely of the price-shadowing and the induced indirect displacement in adjacent urban areas. Results from the multilevel hedonic model quantitatively confirm the price-shadowing effect of urban redevelopment. In particular, it shows that for apartments within 2 km of a redeveloping project, a 10% decrease in the distance to the nearest project leads to a 0.41% increase in housing prices. Interviews with residents living in adjacent neighbourhoods of three typical redevelopment projects show that redevelopment-induced indirect displacement is closely related to inflating property values, and residents suffer from both displacement pressure and exclusionary displacement. Regarding redevelopment-induced indirect displacement, the Chinese context differs substantially from the western context. First, although private developers are the main investors in urban redevelopment in China, local governments are usually more actively involved and provide strong policy support to promote property-led redevelopment. Second, in contrast to the strong focus on economic outcomes, the social consequences are largely neglected in public discourses. This has resulted in the absence of public policies for tackling indirect displacement, a situation that is rare in the western context. Third, unlike displacees in western countries such as the Netherlands, low-income residents affected by indirect displacement in Chinese cities are particularly vulnerable: they are either deprived of affordable housing in central urban areas or are under constant threat of displacement as a result of changes and of losses of the comfort and security of familiar surroundings. Affected residents can only resort to various individual strategies (such as group renting) to tackle the impacts of indirect displacement, and there is a tendency towards a consolidation and concentration of poverty in these areas. In other words, urban redevelopment has led to low-income migrants becoming even more firmly trapped in urban villages.

### *4. What are the perceptions of consequences and locational strategies of different social groups of migrants under the threat of imminent displacement?*

In chapter 5, we capture a unique situation in Baishizhou village in Shenzhen, where migrants live under a threat of imminent displacement, to present their heterogeneous perceptions of and residential choices for relocation. Firstly, based on latent class analysis, four different migrant groups are identified: first-generation labor migrant class, second-generation labor migrant class, new affluent migrant class, and intellectual migrant class. The labor migrant classes (both first-generation and second-generation) mainly work in sectors which do not require high levels of skills and usually generate limited income; the new affluent migrant class often owns a small business in urban villages; and the intellectual migrants, with high educational level, often work in sectors that require higher levels of skills. Compared with the latter two groups, labor migrant classes occupy relatively lower positions in the social ladder. This social heterogeneity is then reflected in migrants' anticipations of the

consequences of and the residential choices after displacement. In general, the older generation (the first-generation labor migrant class and the new affluent migrant class) tend to anticipate severe consequences more than the younger generation (the second-generation labor migrant class and the intellectual migrant class), mainly because the former is more economically and emotionally attached to the village. Migrants are generally concerned with the impacts of displacement on job opportunities, commuting, living expenses, and social networks. In particular, migrant classes with a higher proportion of them working within the village (second-generation labor migrant class and the new affluent migrant class) anticipate more serious impacts on their job opportunities. In addition, the older generations (first-generation labor migrant class and the new affluent migrant class) are more worried about the impacts on their social networks because they rely more on daily encounters to maintain the social networks. This finding reveals the fact that the consequences of displacement differentiate among migrants, which to a greater extent depend on the role that the original neighbourhood plays in their livelihoods. Lastly, with regard to the residential choices, it is showed that displacement might sometimes act as a pushing force for displacees to climb up the housing ladder, yet more often it may drive them further away from the city and places of work, or even leaving the city forever. Specifically, migrant classes with lower socio-economic status are more “trapped” in urban villages, and rising living costs and utility losses incurred by displacement are more likely to force them leaving the city. In contrast, migrant classes with higher socio-economic status have higher probabilities of settling down in the city eventually, especially for the intellectual migrant class. Migrants’ residential choices also reveal increasing housing demand for urban villages in central urban areas, which places a big question mark on the absorptive capacity of cities for displaced migrants.

*5. What are pathways to inclusive and sustainable urban transformation that help strengthen migrants’ socio-economic integration after urban redevelopment?*

The urban system is regarded by Harvey (1973) as a gigantic resource system, and the real income of an individual is defined as his or her command over society’s scarce resources. According to Polanyi (1944), this real income can be generated through either exchanges in the market, redistribution by the state, or supports from social networks. These three means, namely of market exchange, redistribution and reciprocity, are conceptualized by Polanyi (1944) as the three modes of integration. Following Harvey (1973), in chapter 6, we view place-based redevelopment policies and the induced residential displacement as urban processes that affect displaced migrants’ real income through these three modes of integration. By mapping the displacement patterns of 110 migrants displaced from four redeveloping project in Shenzhen, a displacement pattern is revealed, in which migrants tend to move short distances after displacement. This has verified the pattern unraveled in chapter 3 from migrants’ locational choices. Underlying this spatial pattern are migrants’ strong desires to stay put, because imperative economic, spatial, and social resources are all affiliated to the original neighbourhood. For instance, the four villages possess the locational centrality and

accessibility that can facilitate migrants' integration through market exchange; they are within certain political territory (for instance public school districts) that ensures migrants' access to redistributive resources; and within the village, proximity to social groups fosters reciprocal activities. However, current place-centred demolition-redevelopment approach simply evicts migrants from their neighbourhoods, jeopardizes migrants' access to various resources, and redistributes their real income. Based on these findings, this chapter recommends the approach of incremental upgrading instead of demolition-redevelopment and proposes critical elements of planning approaches that take into consideration the unintended consequences of place-based redevelopment strategies, and that need to be considered as much as possible by planners. These elements address economic, spatial and social dimensions of inclusion, which are related to market exchange, redistribution and reciprocity, respectively. The economic dimension of inclusion refers to engaging migrants in the market sphere by providing them with formal and informal job opportunities. The spatial dimension of inclusion is related to the provision of public facilities and services as well as affordable housing for migrants in the redistributive domain. The social dimension of inclusion can be promoted by fostering the thriving reciprocal activities (for instance childcare and job-searching) in urban villages and empowering migrants in the upgrading process. Overall, the spatial, economic and social inclusions incorporate both place-based and people-based approaches, indicating that locally driven place-based initiatives need to be complemented by locally responsive people-based initiatives.

### **7.3 Theoretical implications**

#### **7.3.1 Identify the heterogeneity of the displaced population**

In both public and academic discourses, conventional understandings tend to view displaced residents as a homogeneous social group, which is particularly vulnerable and possesses a disadvantaged position during the process. Although, roughly speaking, this is true in most cases, this dissertation shows that considerable heterogeneity exists in the displaced population in Chinese cities. This heterogeneity is not only the result of differing socio-demographic and economic characteristics such as occupation, education, and income level (chapter 5), but is also deeply rooted in institutional arrangements such as the *hukou* system (chapter 3). It is therefore suggested that research on displacement needs to take into account explicitly the heterogeneity of the displaced population, since different social groups might experience varied consequences of displacement and might react differently on urban redevelopment processes. For instance, it is revealed in chapter 5 that for some groups of migrants like the intellectual migrant class, displacement might act as a pushing force to climb up the housing ladder or even to settle down in the city, whereas for others displacement might incur consequences they cannot afford and might result in leaving the city forever. Also in chapter 6, we showed that displaced migrants with children enrolled in public schools exhibit geographically differing displacement patterns compared to those without children,

in which the former tend to move within the same school district to maintain their children's seats in the public school. Overall, we showed that the displaced population is becoming more and more heterogeneous, and this heterogeneity can result in diverse behaviors and associated consequences of redevelopment. Therefore, these social, economic, as well as institutional characteristics that are individually embedded need to be considered so as to develop a more robust theory of residential displacement.

### **7.3.2 Recognize the redistributive nature of the process of residential displacement**

In this dissertation we view residential displacement foremost as people-based consequences of place-based urban redevelopment policies. These place-based policies usually target specific derelict industrial or residential sites in the city, emerging from the continuous and intertwining processes of industrialization, urbanization, and deindustrialization (De Sousa, 2008; Liu et al., 2014) (chapter 2). However, these sites are not simply urban places in a physical sense, but, from the perspective of urban residents, are rather embedded within very complex social, economic, and institutional structures. Access to urban resources therein can be reviewed as a function of locational accessibility (market exchange), social proximity (reciprocity), and politically predefined territories (redistribution) (Polanyi, 1944) (chapter 6). For instance, due to a change in residential location, job accessibility might be affected structurally, long-lasting social networks might be destroyed, and access to public resources might be seriously hindered (chapter 3). Therefore, urban redevelopment and the resultant displacement will affect the spatial availability of these urban resources to the affected social groups (Harvey, 1973). This people-based perspective on residential displacement and the recognition of the heterogeneity of the displaced population are decisive for addressing the consequences of residential displacement processes (chapter 5). By combining the conceptual thinking of Polanyi (1944) and Harvey (1973), we have developed a theoretical view on displacement as a redistributive process of urban resources. On the one hand, this analytical framework can act as an effective tool to reveal in a rather systematic way the mechanisms underlying the displacement process, namely the redistribution of urban resources in economic (market exchange), social (reciprocity), and institutional (redistribution) spheres. On the other hand, through this critical theoretical lens, the inherent redistributive nature of the displacement process is more evidently and fully revealed, and can also be applied in other contexts.

## **7.4 Policy implications: tailoring to the Chinese context**

### **7.4.1 Improve the absorptive capacity of the urban system for displaced migrants**

Urban redevelopment has become a main driving force for the restructuring of urban space of many Chinese cities, during which process profound unintended consequences are generated. The urban absorptive capacity can be viewed as a city's ability to (properly) accommodate displaced residents (especially low-income residents) after urban

redevelopment. Maintaining certain levels of absorptive capacity for lower-income social groups, especially within central urban areas where residents enjoy centrality, accessibility to urban services, and proximity to workplace, is imperative for the economic prosperity of the city, while otherwise the city runs the risk of losing cheap labor force. In many western countries, an important aim of area-based urban redevelopment is to deconcentrate the spatial clustering of poverty (Tach, 2009). For instance, in many of these area-based projects, social mixing is intentionally implemented by the government. Derelict neighbourhoods are redeveloped into mixed-income communities; former low-income residents can either choose to move back after redevelopment (staying put) or take a housing voucher and relocate to other places in the city (displacement with compensated moving costs and controlled utility loss). In contrast, findings from Shenzhen show that property-led urban redevelopment has caused both unintentional place-based and people-based consequences. On the one hand, in central areas of the city we see significantly intensified spatial segregation and poverty concentration in low-income neighbourhoods such as urban villages, which play the role as the primary base for absorbing displaced migrants; on the other hand, many migrants are displaced to suburban areas with substantial moving costs and utility losses (for instance longer commuting distances and higher commuting costs). This has raised critical questions concerning the city's absorptive capacity. Currently in Shenzhen, we see the absorptive capacity of the urban system is hindered in a variety of ways. Physically, under the prevalent 'demolition-redevelopment regime', urban villages, the main affordable housing market for migrants in the city, are teared down one by one, and in a rapid tempo (chapter 3); economically, the price-shadowing of urban redevelopment has acted as a main force pushing up the housing rents in many once-affordable neighbourhoods (chapter 4); institutionally, migrants are denied access to social housing built by local governments, as a result of the *hukou* system (chapter 5). Therefore, to improve the urban absorptive capacity for displaced migrants, corresponding policies need to be designed to tackle these barriers. First, in the long run, migrant tenants need to be considered for compensation for their relocation. Compensation can be either monetary compensation or in-kind compensation. Monetary compensation would offer migrants more options in the housing market, and as such acts as a way for channeling the absorptive capacity for them. Considering that private developers and local governments make considerable profits out of redeveloping low-income neighbourhoods such as urban villages, redistributive measures (such as taxing) need to be designed to mobilize financial resources for monetary compensation. Besides, in-kind compensation is another solution, which might require the construction of more affordable housing. Currently in Shenzhen, the municipal government starts to combine the redevelopment of urban villages with the provision of social housing by requiring that for demolition-redevelopment projects, at least 8 percent of the construction area must be set aside for social housing units. However, migrants, without a local urban *hukou*, are not entitled to access to these social housing. This is related to the institutional barriers hindering the absorptive capacity (chapter 6), which need to be removed. Currently in some big cities, incremental reforms in the *hukou* system are being experimented. However, these reforms

mostly benefit those migrants who have higher incomes or educational levels, and low-income migrants with low educational levels are largely excluded by the system in a variety of ways. There is still a long way to go before fundamental reforms can be enforced in the institutions that eventually benefit the most marginalized and vulnerable social groups. An easier and more straightforward way might be to entitle displaced low-income migrants access to public low-rent housing. By doing so, the urban's absorptive capacity can be greatly improved.

#### **7.4.2 Integrate both place- and people-based approaches into urban redevelopment strategies**

The predominant approach for urban redevelopment in Chinese cities is the demolition-redevelopment model. This place-based approach involves large-scale direct displacement, posing serious social consequences on the livelihoods of the evicted. This situation differs substantially from the western contexts in that large populations of displaced migrants in China are never considered as an interest group and are rather “invisible” to main stakeholders in the process (Sun, 2015; Zhao, 2008) (chapter 3). This “invisibility” is deeply rooted in sophisticated historical and institutional circumstances, for instance the *hukou* system. Nevertheless, their strong desires to stay put have been revealed from their displacement patterns (chapter 6), since the original neighbourhood usually accommodates vibrant social capital. Moreover, although the demolition-redevelopment approach is to a great extent driven by the incentives of capturing huge rent gaps, developers also have to take great financial risks because of a large amount of compensation to local villagers and the usually long periods of construction. Therein, research findings from this dissertation strongly challenge the predominant place-based regime in China, and rather seek solutions in the combination with people-based approaches. That is to say, beside the aims of upgrading the physical environment of the neighbourhood, important social issues also need to be taken into account, for instance to ensure the livelihoods of those displaced and to avoid further marginalization of those already in an inferior position. In line with advocates by international organizations such as UN-Habitat (2015) and the World Bank (2015), among many solutions, the approach of incremental upgrading (*weigengxin*) is increasingly gaining attention in urban redevelopment in China. For instance, in Guangzhou city, in the newly released “*Urban Renewal Measure*” in 2016, the approach of incremental upgrading was firstly recommended by the government. Incremental upgrading not only improves the physical environments of the neighbourhoods (place-based outcomes), but more importantly also maintains the invaluable social and economic capital embedded in the original communities (people-based outcomes). For the approach of incremental upgrading, active involvement of local communities is crucial. Turning back to the case of urban villages in China, to develop integrated redevelopment strategies that combine both place- and people-based approaches, the recognition and empowerment of migrants are of great importance. Many migrants have lived in the urban village for many years, and they possess important

local knowledge, skills and capacities to contribute to the upgrading process (UN-Habitat, 2015). From the perspective of local governments, incremental upgrading can also avoid large-scale eviction in the short run and the loss of cheap labor in the long run and also to maintain social stability. Also worth noting is that, incremental upgrading can only narrow down the originally huge rent gap, and informal settlements after upgrading might be subject to rent speculation (another way of cashing in the rent gap). As a result, the benefits of upgrading might not be enjoyed by low-income groups. So the ultimate question might be: do the poor have the right to live in central areas? If the function of these informal settlements as a form of affordable housing can be recognized, the government might consider providing suitable financial mechanisms to subsidize the targeted social group. Then the issue at stake is, again, the entitlements to public welfare, which approach of redistribution is closely related to the *hukou* system. As discussed above, although reforms of this system are underway, it entails substantial time and efforts before fundamental changes can take place.

## 7.5 Final remarks

In this dissertation, the case study area - Shenzhen city - represents unique characteristics. It has undergone unprecedentedly rapid urbanization and massive influx of rural migrants, giving birth to hundreds of urban villages; it is located in the coastal mountain area, which landscape has restricted unlimited urban expansion and has forced the implementation of alternative approaches for urban land utilization, namely of urban redevelopment. Although Shenzhen is selected as an ideal case for the study of redevelopment-induced displacement of migrants, the conclusions generated from this dissertation can provide important insights for sustainable transformation of other Chinese cities. Despite the facts that low-income residential clusters might exhibit different geographical patterns and affected groups might possess diverse socio-economic status, the sharing characteristics of property-led - so place-based - urban redevelopment tend to generate similar people-based consequences, and pose the same pressure on the absorptive capacity of the urban system. The theoretical framework of viewing residential displacement as a redistributive process of urban resources is worth testing empirically in other Chinese cities, and similar planning frameworks for inclusive and sustainable urban transformation that integrate both place-based and people-based approaches can readily be adapted to different contexts.

On the cover of this dissertation are two Chinese ancient characters: “失” and “所”. The former denotes the meaning of “losing” or “dispossessing”, and the latter is a traditional way of describing a “place”, “home”, “shelter”, or “dwelling” of human beings in the Chinese language. As noted by Davidson (2008: p.2389), displacement is the “divesting of place”, a *place* not only in a physical/spatial/geographical sense (the place-based view), but to a certain extent also (or more) in a social and emotional sense (the people-based view). Poetically and philosophically, Martin Heidegger (1971) pushed the social readings of place to an extreme, and believed that the dwelling is the essential existential core of human being. We hope this dissertation can serve as both a starting point and a critical step for further theoretical and

empirical development of spatial and social justice within the urban contexts of China. We hope by this the use-value of urban space that is manifested in residents' *everydayness* will become appreciated as much as the exchange-value, and in that every dweller's right to the city will be recognized and respected (Lefebvre, 1991, 2003).

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## Summary

Chinese cities nowadays face profound restructuring and transformations, manifested in the urban built environment by booming redevelopment projects. Differing significantly from western circumstances, China's urban redevelopment is in many cases property-led and profit-oriented. A strategic alliance is formed between local governments and developers to revitalize derelict urban areas in pursuit of short-term economic outcomes, which emerged from intertwining processes of industrialization, suburbanization, and deindustrialization. Property-led urban redevelopment might cause large-scale displacement of low-income residents, generating unintended place- and people-based consequences. Despite the magnitude of these displacement processes, there is a general lack of insight into the patterns, dynamics, and mechanisms of this urban phenomenon in China. The main aim of this research is therefore to identify the mechanisms and selective socio-economic consequences of redevelopment-induced displacement. A particular interest lies in the redevelopment of urban villages, a type of informal settlements in urban China that mainly accommodates low-income rural migrants. During the redevelopment of urban villages, migrant renters occupy a very disadvantaged position and they are simply uprooted from their dwelling without any room for bargaining. It is this 'invisibility' of this social group that motivated us to have a closer look at displacement in the course of the redevelopment of urban villages.

Through in-depth empirical studies in Shenzhen, this research finds that varied forms of displacement have manifested themselves as a result of urban redevelopment. First, demolition of old residential buildings directly displaces large populations of low-income residents, leading to serious impacts on these social groups, ranging from decreasing accessibility to workplace and various urban services, to rising living costs and the destruction of social and economic networks. Second, urban redevelopment creates the so-called property "hot spots", which pose spill-over effects on the housing prices in adjacent urban areas, with indirect displacement as a main consequence. As a result of soaring housing rents, low-income residents are excluded from once-affordable areas; for those who manage to stay put, these neighbourhoods become less and less liveable, and residents experience a gradual loss of sense of place.

The spatial pattern of displacement and the logic behind this pattern are also revealed. By mapping the location of relocation after displacement, we find that displaced migrants tend to attach to their original neighbourhoods and move only short distances. Using the theory of three modes of integration, we argue that migrants make short-distance moves in an attempt to maintain their real income, since imperative economic, spatial, and social resources are all affiliated to the original neighbourhoods. Specifically, the original neighbourhoods not only possess the locational centrality and accessibility that can facilitate migrants' integration through market exchange, but are also within certain political territory (for instance public school districts) that ensures migrants' access to redistributive resources. More importantly, the established social network is imperative for obtaining resources through reciprocal activities. The importance of social networks is also reflected in the case of Huangbeiling

village, where some migrants return to the gentrifying neighbourhood, suffering from displacement *in situ*, imposed on them through rocketing rents, drastic physical changes, and declining liveability, merely in exchange for the restoration of the original social and economic networks.

This research unravels considerable heterogeneity that exists in the displaced population in Chinese cities, which can result in diverse behaviors and associated consequences of redevelopment. Based on this finding, this research calls for further theoretical delineation of the heterogeneity of the displaced population, in which socio-economic and institutional characteristics that are individually embedded need to be considered so as to develop a more robust and nuanced theory of residential displacement. In addition, this research develops a theoretical view on displacement as a redistributive process of urban resources. Specifically, it shows that residential displacement tends to redistribute the real income of those displaced, defined as access to urban resources in economic (market exchange), social (reciprocity), and institutional (redistribution) spheres. Through this critical theoretical lens, the inherent redistributive nature of the displacement process is more evidently and fully revealed, which can also be applied in other contexts.

Situating within the Chinese context, this research outlines two policy implications. On the one hand, the absorptive capacity of the urban system for displaced migrants needs to be improved. Both processes of direct and indirect displacement have together posed great challenges to the city's absorptive capacity for the displaced: once affordable neighbourhoods are either bulldozed or becoming more and more costly to live. To improve the urban absorptive capacity for displaced migrants, corresponding policies need to be designed to tackle existing barriers. Granting displaced low-income migrants access to public low-rent housing is a possible solution. As a main victim of redevelopment-induced displacement, rural migrants are generally excluded from the decision-making process of urban redevelopment and are largely treated as "invisible" by key stakeholders. Displaced migrants' vulnerable position is deeply rooted in the informality of urban villages, leading to the absence of secure tenancy of them in the face of demolition and eviction. In the long run, migrants' tenancy rights need to be recognized, so that they can be considered for compensation for their relocation. On the other hand, this research calls for the integration of people-based elements into currently predominant place-centred policies. These elements address economic, spatial and social dimensions of inclusion, of which the recognition and empowerment of migrants are of great importance. The economic dimension of inclusion engages migrants in the market sphere by recognizing their economic value for the city's labor market and supporting their formal and informal economic activities. The spatial dimension of inclusion safeguards accessibility to public facilities and services as well as to affordable housing for migrants in the redistributive domain. The social dimension of inclusion fosters the thriving reciprocal activities in urban villages and empowering migrants in the upgrading process. Overall, this research calls for an integrated planning strategy, in which place-based initiatives need to be complemented by locally responsive people-based approaches.

## Samenvatting

Chinese steden worden vandaag de dag geconfronteerd met grondige herstructurering en transformaties, die zich manifesteert in de stedelijk gebouwde omgeving door bloeiende herontwikkelingsprojecten. De stedelijke herontwikkeling van China is in veel gevallen gericht op vastgoed en winst, wat een significant verschil is vergeleken met westerse omstandigheden. Een strategische alliantie wordt gevormd tussen lokale overheden en ontwikkelaars om verlaten stedelijke gebieden te vernieuwen in het nastreven van economische resultaten op korte termijn, wat voortvloeide uit de verstrengelde processen van industrialisatie, suburbanisatie en de-industrialisatie. Herontwikkeling op basis van vastgoed kan een verplaatsing op grote schaal veroorzaken van bewoners met lage inkomens, waardoor onbedoelde plaats- en mensen-gebonden consequenties ontstaan. Ondanks de omvang van deze verplaatsingsprocessen is er een algemeen gebrek aan inzicht in de patronen, dynamieken en mechanismen van dit stedelijke fenomeen in China. Het hoofddoel van dit onderzoek is daarom om de mechanismen en selectieve sociaaleconomische consequenties van door herontwikkeling veroorzaakte verplaatsing vast te stellen. Een bijzondere interesse ligt in de herontwikkeling van stedelijke dorpen, een soort van informele nederzettingen in stedelijk China dat voornamelijk plaats biedt aan landelijke migranten met lage inkomens. Tijdens de herontwikkeling van stedelijke dorpen nemen migrerende huurders een zeer benadeelde positie in en worden ze simpelweg onttrokken van hun woning zonder enige ruimte om te onderhandelen. Het is deze 'onzichtbaarheid' van deze sociale groep die ons gemotiveerd heeft om de verplaatsing in het verloop van de herontwikkeling van stedelijke dorpen nader te bekijken.

Door middel van diepgaande empirische onderzoeken in Shenzhen, blijkt uit bevindingen van dit onderzoek dat gevarieerde vormen van verplaatsing zich manifesteren als gevolg van stedelijke herontwikkeling. Ten eerste verliezen door de sloop van oude residentiële gebouwen een grote hoeveelheid bewoners met lage inkomens hun woning, waardoor er ernstige gevolgen voor deze maatschappelijke groepen ontstaan, variërend van afnemende toegankelijkheid tot de werkplek en verschillende stedelijke diensten, tot stijgende kosten voor levensonderhoud en de vernietiging van sociale en economische netwerken. Ten tweede creëert stedelijke herontwikkeling de zogenaamde vastgoed "hot spots", die spillover effecten op de huizenprijzen in aangrenzende stedelijke gebieden veroorzaken, met indirecte verplaatsing als een belangrijk gevolg. Als gevolg van sterk stijgende huisvestingskosten, worden bewoners met een laag inkomen uitgesloten van wat eens betaalbare gebieden waren; voor degenen die erin slagen te blijven worden deze wijken minder en minder leefbaar en bewoners ervaren een geleidelijk verlies van een persoonlijk gevoel bij de plaats.

Het ruimtelijke patroon van verplaatsing en de logica achter dit patroon worden ook onthuld. Door de locatie van de verhuizing na verplaatsing in kaart te brengen, ontdekken we dat ontheemde migranten de neiging hebben om zich te hechten aan hun oorspronkelijke wijken en alleen over korte afstanden verplaatsen. Door de theorie van drie vormen van integratie te gebruiken, stellen we vast dat migranten korte afstandsbevingen maken in een

poging om hun reële inkomen te behouden, aangezien de noodzakelijke economische, ruimtelijke en sociale middelen allemaal verbonden zijn met de oorspronkelijke wijken. In het bijzonder bezitten de oorspronkelijke wijken niet alleen de centrale ligging en toegankelijkheid die de integratie van migranten door middel van marktwisseling kunnen bevorderen, maar ook binnen bepaalde politieke gebieden (bijvoorbeeld districten met openbare scholen) die migranten toegang bieden tot herverdelingsmiddelen. Maar nog belangrijker is het gevestigde sociale netwerk dat essentieel is voor het verkrijgen van hulpmiddelen via wederzijdse activiteiten. Het belang van sociale netwerken wordt ook weerspiegeld in het geval van het dorp Huangbeiling, waar sommige migranten terugkeren naar de verbeterde wijk, lijdend onder de verplaatsing *in situ*, wat opgelegd wordt aan hen door huurprijzen die de pan uit vliegen, drastische fysieke veranderingen en afnemende leefbaarheid, alleen in ruil voor het herstellen van de oorspronkelijke sociale en economische netwerken.

Dit onderzoek ontketent aanzienlijke heterogeniteit die bestaat bij de ontheemde populatie in Chinese steden, wat kan leiden tot diverse gedragingen en bijbehorende consequenties van herontwikkeling. Op grond van deze bevinding vraagt dit onderzoek naar een verdere theoretische afbakening van de heterogeniteit van de ontheemde populatie, waarbij sociaaleconomische en institutionele karakteristieken die individueel ingebed zijn in overweging moeten worden genomen om een robuuste en genuanceerde theorie te ontwikkelen over residentiële verplaatsing. Daarnaast ontwikkelt dit onderzoek een theoretische visie op verplaatsing als een herverdelingsproces van stedelijke hulpmiddelen. In het bijzonder blijkt dat residentiële verplaatsing het reële inkomen van de ontheemden vaak verdeelt, gedefinieerd als toegang tot stedelijke hulpmiddelen in economische (marktwisseling), sociale (wederkerigheid) en institutionele (herverdeling) gebieden. Door deze kritische theoretische lens wordt de inherent herverdeelde aard van het verplaatsingsproces duidelijker en volledig onthuld, wat ook in ander contexten kan worden toegepast.

Gesitueerd binnen de Chinese context, schetst dit onderzoek twee beleidsimplicaties. Enerzijds moet de absorptiecapaciteit van het stedelijke systeem voor ontheemde migranten worden verbeterd. Beide processen van directe en indirecte verplaatsing hebben samen grote uitdagingen opgelegd voor de absorptiecapaciteit van de stad voor de ontheemden: eens betaalbare wijken worden ofwel platgewalst of worden steeds duurder om te leven. Om de stedelijke absorptiecapaciteit voor ontheemde migranten te verbeteren, moeten bijbehorende beleidsmaatregelen worden ontworpen om bestaande barrières aan te pakken. Zorgen voor toegang tot sociale woningen met een lage huur is een mogelijke oplossing voor migranten met lage inkomens. Als belangrijkste slachtoffer van door herontwikkeling veroorzaakte verplaatsing, zijn landelijke migranten in het algemeen uitgesloten van het besluitvormingsproces van stedelijke herontwikkeling en worden door de belangrijkste belanghebbenden grotendeels als “onzichtbaar” beschouwd. De kwetsbare positie van ontheemde migranten is diep geworteld in de informaliteit van stedelijke dorpen, wat leidt tot de afwezigheid van betrouwbare huur van hen met sloop en uitzetting in het vooruitzicht.

Op de lange termijn moeten de huurdersrechten van migranten erkend worden, zodat er rekening met hen wordt gehouden voor compensatie voor hun verhuizing. Anderzijds pleit dit onderzoek voor de integratie van op mensen gebaseerde elementen in een momenteel overheersend plaats-gericht beleid. Deze elementen richten zich op economische, ruimtelijke en sociale dimensies van integratie, waarvan de erkenning en zelfbeschikking van migranten van groot belang zijn. De economische dimensie van integratie komt aan migranten tegemoet in de marktsfeer door hun economische waarde voor de arbeidsmarkt van de stad te erkennen en hun formele en informele economische activiteiten te ondersteunen. De ruimtelijke dimensie van integratie waarborgt de toegankelijkheid van openbare voorzieningen en diensten, evenals voor betaalbare woningen voor migranten in het herverdeelde domein. De sociale dimensie van integratie bevordert de bloeiende wederzijdse activiteiten in stedelijke dorpen en bevordert migranten in het bijwerkingsproces. Over het algemeen vraagt dit onderzoek om een geïntegreerde planningsstrategie, waarbij plaatselijke initiatieven moeten worden aangevuld met lokale responsieve, op mensen gebaseerde benaderingen.



## **Curriculum Vitae**

Ying Liu was born in Wufeng county, Hubei, China, on 28 July 1987. She received her BSc in Geographic Information System (GIS) from Wuhan University in 2009. She continued her Master's studies in Human Geography in Graduate University of Chinese Academy of Sciences (2009-2012). From 2012 through 2017, she conducted her Ph.D. research on urban redevelopment and residential displacement at the Department of Human Geography and Planning, Faculty of Geosciences, Utrecht University. She intends to become an independent scholar after the promotion.