



Towards inclusive and sustainable transformation in Shenzhen: Urban redevelopment, displacement patterns of migrants and policy implications



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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.

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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,

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villages in the city [ViCs, or urban villages] and dilapidated houses will be complete'.¹ 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, 2016). 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 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 international experiences of inclusive transformation of informal settlements. In Section 3, we briefly introduce our study area, research methods and data. In Section 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 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.

2. Literature review

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).

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

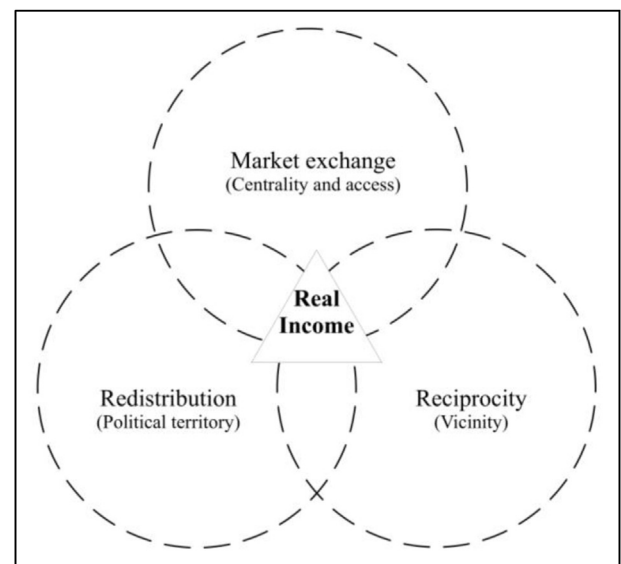


Fig. 1. Generation of real income through three modes of integration. Source: Authors' drawing based on Harvey (1973) and Polanyi (1944).

¹ http://english.gov.cn/news/top_news/2016/02/22/content_281475294306681.htm (last visited 22/07/2016).

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.

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.² 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 Wylie (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

² 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 (last visited 22/07/2016).

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.

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.³ 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 jointly implemented to achieve inclusive urban transformation.

³ <http://www.inclusivecities.org/policy-planning/inclusive-waste-management/> (last visited 22/07/2016).

These experiences are conducive to the establishment of a framework for the inclusive and sustainable transformation of ViCs in Shenzhen.

3. Study area, research methods and data collection

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 (SEZ⁴) 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 km² in 1979 to 890 km² in 2014⁵ (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 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, 2016). Most projects involve the demolition of buildings constructed by indigenous villagers as well as the displacement of rural migrants.

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 (Fig. 2). To estimate the scale of displacement, we used the population density of migrants in these ViCs calculated from the data in Table 1. According to the results, these projects caused or will cause the displacement of approximately 247,091 migrants.⁶ 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 analyse the displacement patterns of evicted migrants and the underlying mechanisms.

These four ViCs were selected for two main reasons. First, they are all in the SEZ. As mentioned above, ViCs in this location have undergone more redevelopment in Shenzhen because of the huge rent gaps. Also, as revealed in Table 1, ViCs in the SEZ have much higher building densities and accommodate larger population of migrants. Therefore, the redevelopment of centrally located ViCs could better reflect the issues of the displacement of migrants in

⁴ 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.

⁵ Government website: http://www.szjt.gov.cn/xxgk/tjsj/tjgb/201504/t20150424_2862885.htm (last visited 22/07/2016).

⁶ 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.

Table 1
Statistics of ViCs in Shenzhen (2004).

District	Number of ViCs	Land area (10 ⁴ m ²)	Number of buildings	Building density	Floor area ratio	Population of migrants (10 ⁴)
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)'.

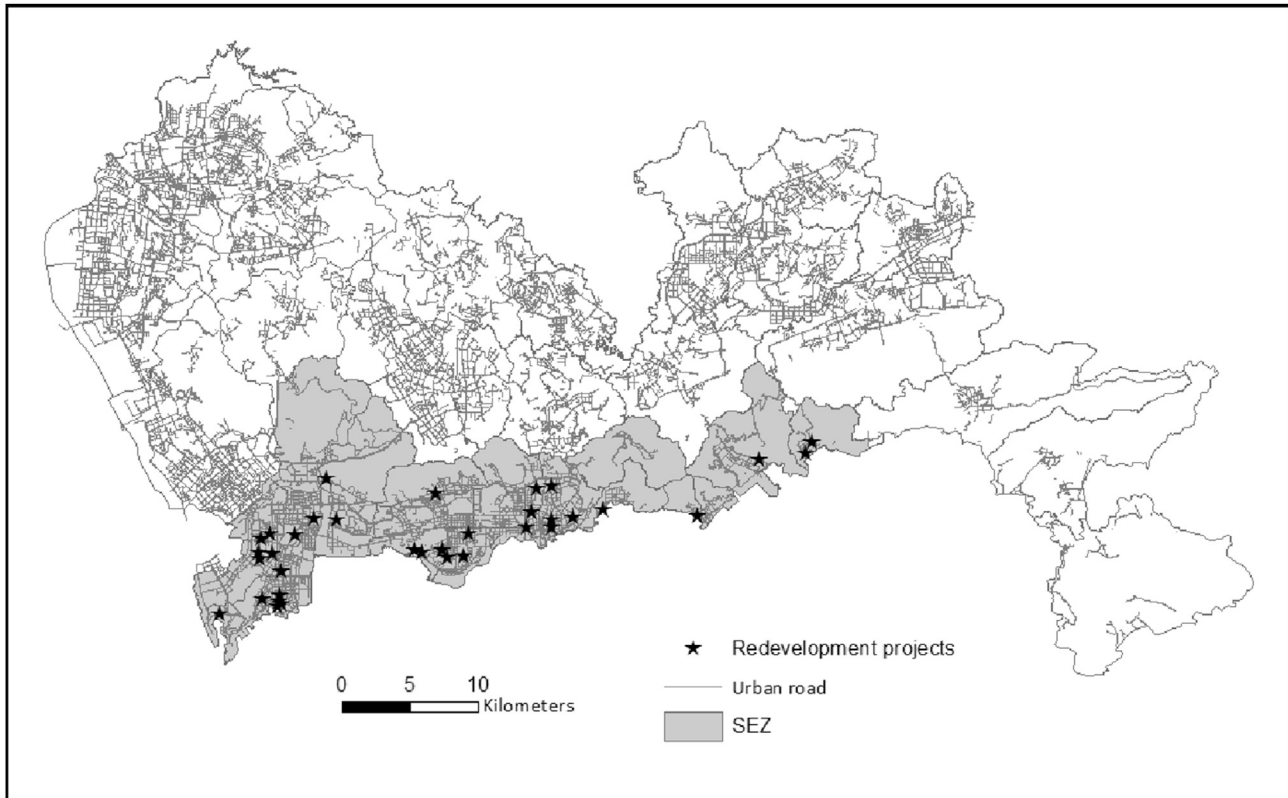


Fig. 2. Redevelopment projects of ViCs in Shenzhen (2008–15).

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, we found that these four ViCs were subject to ongoing redevelopment. Hence, it was feasible to track a sample of displaced migrants in these ViCs. The four ViCs are the following (Fig. 3):

– Dachong village, in Nanshan district. Its redevelopment will be the largest such project in Shenzhen: 1500 old buildings have been demolished and more than 70,000 migrants are displaced. In this area, a 300-m high office building, a 5-star hotel, two 4-star hotels, a shopping mall and apartment blocks will be built.⁷

- Daweifang village, a small ViC in Futian district. The demolition covers a total area of approximately 11,180 m². 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).
- Huangbeiling village, the largest ViC in Luohu district. The first phase of redevelopment involved an area of 0.4 km² 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

⁷ http://sztqb.sznews.com/html/2011-12/21/content_1873764.htm (last visited 22/07/2016).

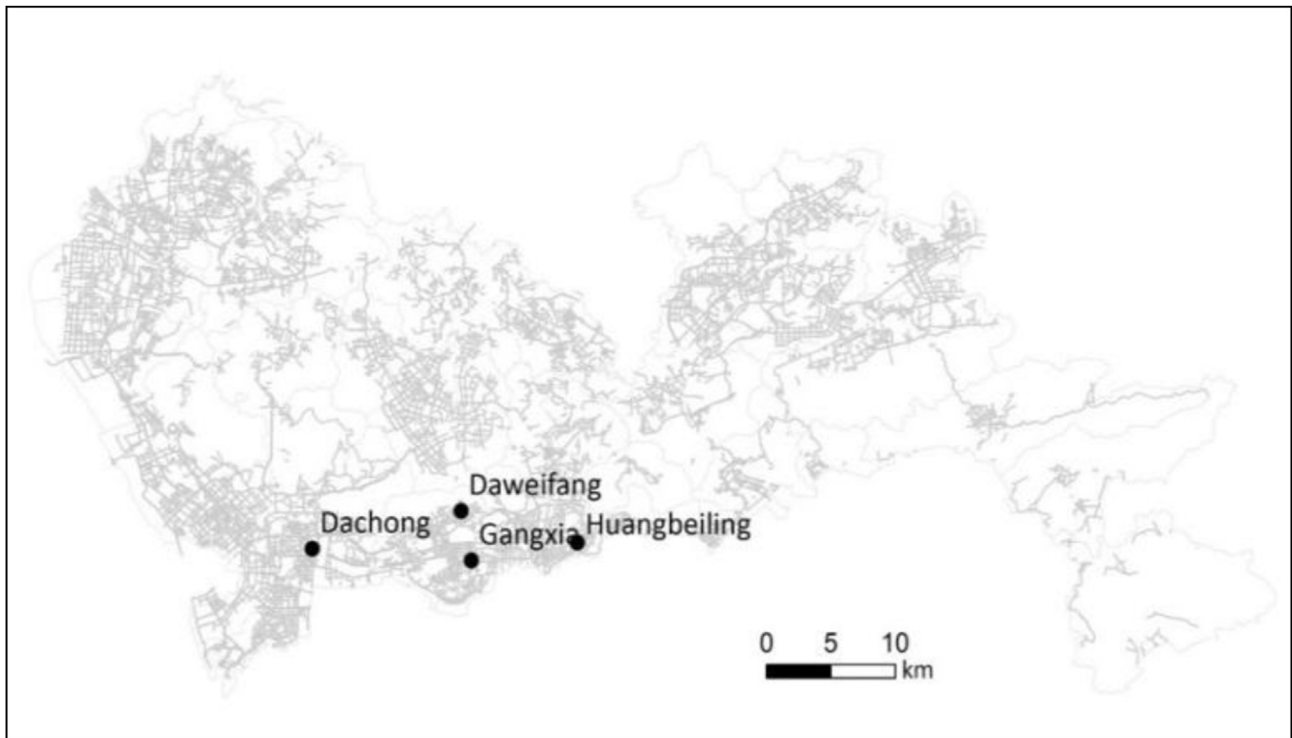


Fig. 3. Location of the case study ViCs in Shenzhen.

residential functions. More than 1400 buildings were demolished and approximately 30,000 migrants were uprooted from their neighbourhood.⁸

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 m² 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.⁹

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).

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).

Migrants were recruited through snowball sampling. Although this sampling technique might generate unrepresentative sample groups, it is widely used for populations that are not easy to track. This method was suitable for our research, since it is extremely difficult to trace displaced migrants due to the redevelopment of ViCs. 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. 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.

⁸ Information obtained from Huangbeiling sub-district office.

⁹ Quotation provided by Retumu, a local NGO in Shenzhen.

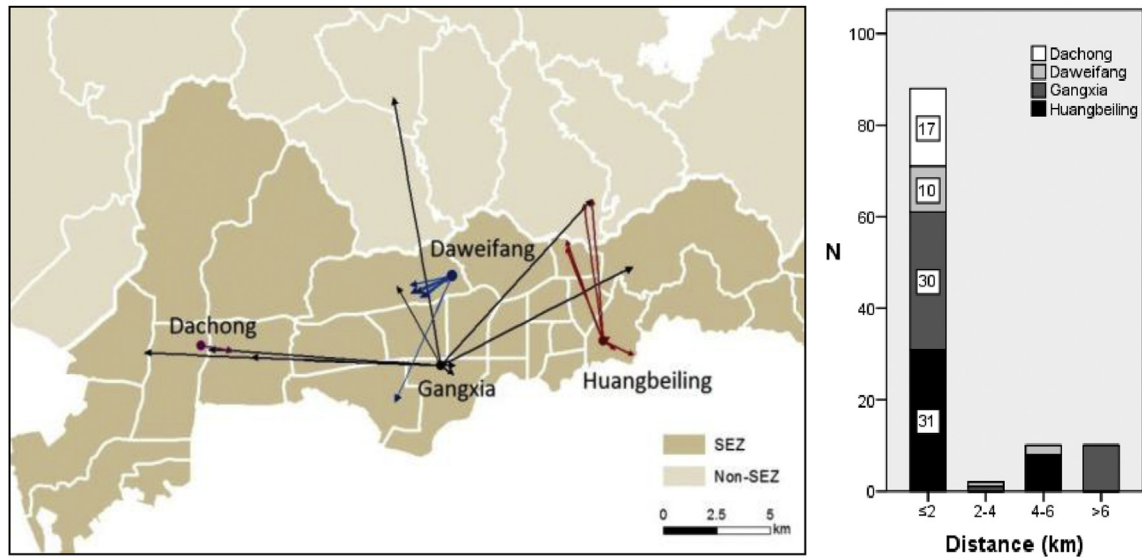


Fig. 4. The locational choices (left) and displacement patterns (right) of sampled migrants.

4. Empirical study in Shenzhen

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.

Fig. 4¹⁰ (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 Fig. 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. Fig. 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 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.

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.

4.2.1. 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.)

¹⁰ 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.

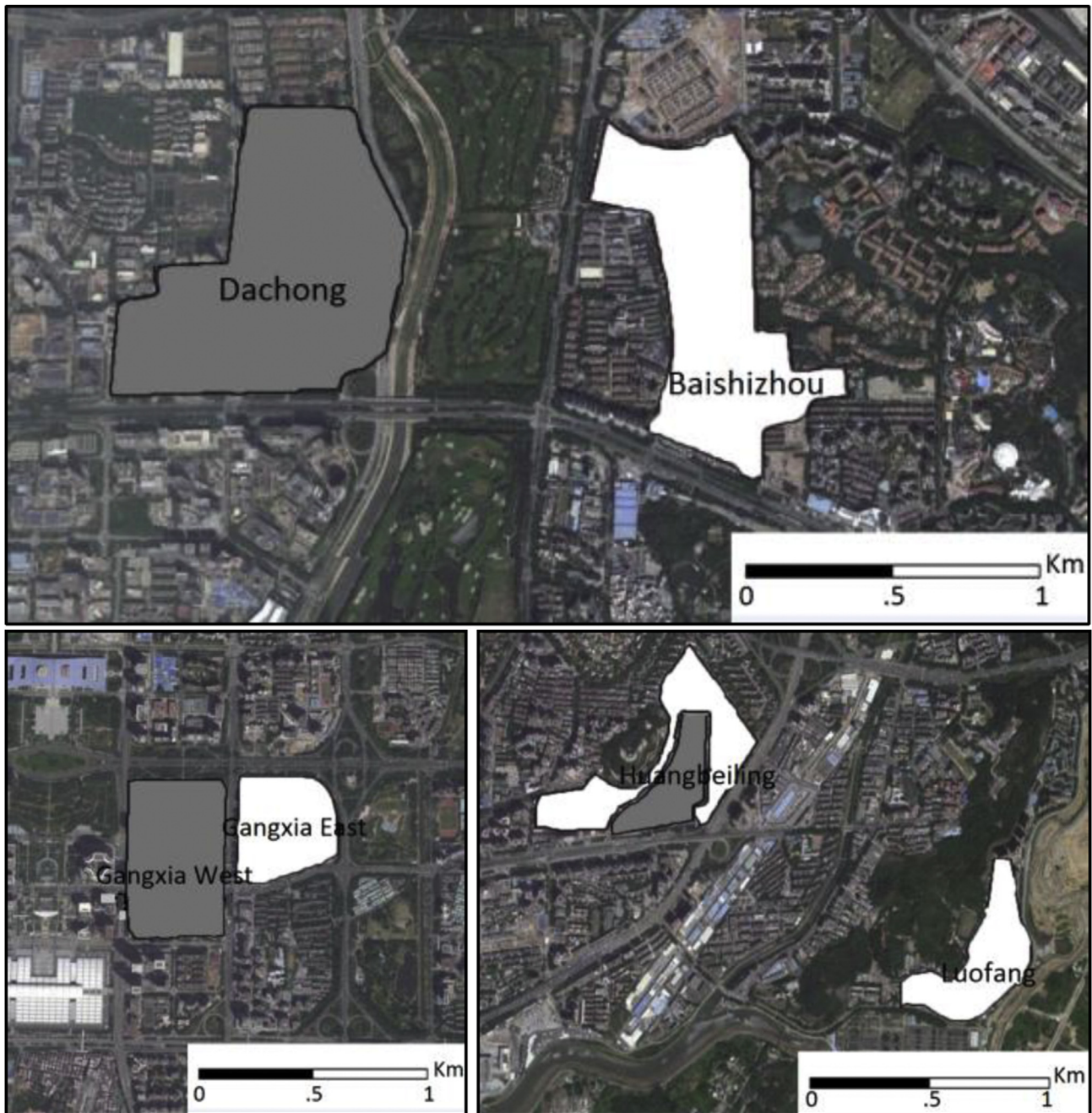


Fig. 5. The most popular locations among displaced migrants.

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-min 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 child-care. 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.

4.2.2. 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' system 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' status 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.¹¹ 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 (Fig. 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)

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, 2016). 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 (Fig. 7). In other words, owing to externality effects, locational advantage has acted as a 'supplement' to political territories for excluded migrants.

4.2.3. 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

¹¹ 'The Management Method of Compulsory Education of the Children of the Temporary Population in Shenzhen (2005)'.



Fig. 6. Primary school districts in Luohu district in 2015.
Source: Shenzhen municipal website.



Fig. 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).

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)

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 (Fig. 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.

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 (Fig. 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.

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,



Fig. 9. Group renting in ViCs (Photo taken by the first author).

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.

5.1. Economic inclusion: integration of informal and formal economy

To implement economic inclusion it is crucial to cultivate



Fig. 8. The informal 'employment office' in Baishizhou village (left) and Huangbeiling village (right) (Photo taken by the first author).

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 (Fig. 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.

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.

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 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.



Fig. 10. Informal economic activities in ViCs (photo taken by the first author and Honghong Fu).

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.¹² 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.

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.

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. 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

¹² '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 (last visited 22/07/2016).

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.

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