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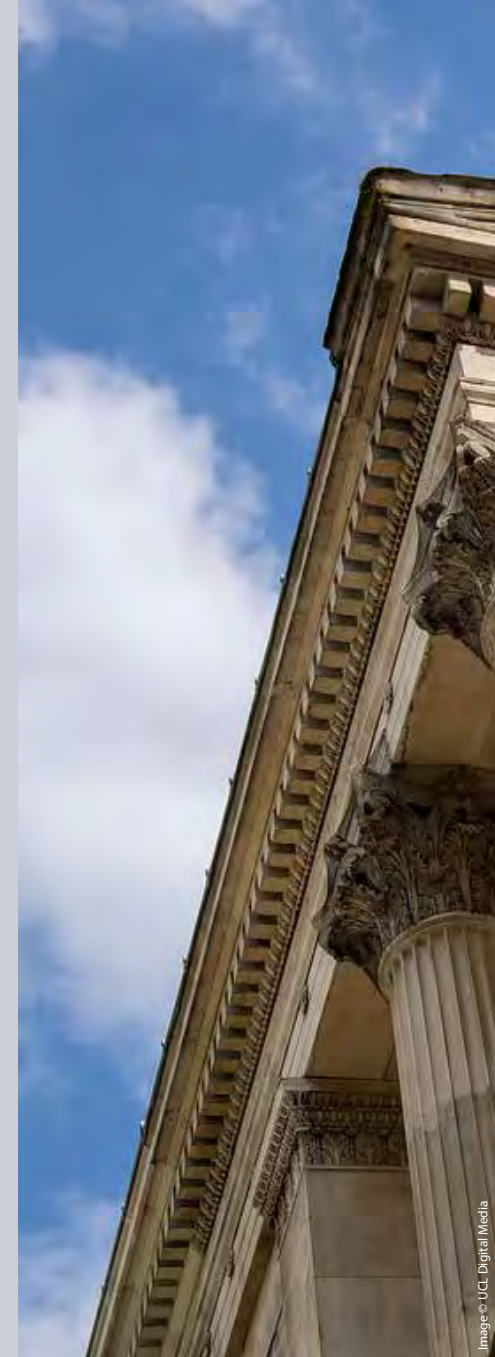## UCL **Migration Research Unit**
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'That is a Beijing problem': the making of rural-urban migrants as translocal environmental subjects in Shenzhen

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Abstract

Recognizing the need to deconstruct rural-urban migrants in China as an homogenized and marginalized group, this dissertation presents a less determinate view of rural-urban migrants within the nexus of migration, urbanization, and environment. It explores how rural-urban migrants in Shenzhen understand and negotiate urban environmental degradation and how their perceptions can be situated within power asymmetries of the city. By addressing the existing disjuncture between the migration-environment linkage and urbanization-environment linkage, this dissertation uses Shenzhen as a case study to establish migrants as translocal environmental subjects. It analyzes how migrants construct and negotiate their environmental subjectivities within 1) the government led-discourse on Shenzhen's environment and 2) their inhabited urban village environment. It also examines the role of environmental attachments in return migration decisions. As this dissertation argues, rural-urban migrants should not be broadbrushed into a marginalized group ignorant of environmental awareness, but recognized as agents of their own negotiated environmental subjectivities based on their multi-scalar translocal connections.

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Acknowledgements

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Introduction

On 20 December 2015, a 100-metre hill of dumped earth and construction waste collapsed as a landslide at an industrial park in outer Shenzhen, China. Debris of over 100,000 square metres killed 73 people—most of whom were rural-urban migrant workers—and buried 33 buildings, including factories, dormitories, and part of the neighbouring urban village. This man-made disaster was particularly unsettling given Shenzhen's status as a first-tier city in China—a privileged ranking bestowed by the central government upon only four cities (others are Beijing, Shanghai, and Guangzhou) considered 'at the forefront of Chinese citizens in its level of modernization' (New York Times 21/20/2015). As a city that yearns to be known as an emblem of Deng Xiaoping's open door reforms and China's most successful Special Economic Zone (SEZ), Shenzhen found itself back under international scrutiny—after recently manoeuvring past its notoriety as the site of numerous migrant worker suicides in 2010. Across international media, reports relayed this disaster as a dangerous but predictable outcome of negligent industrial safety standards that 'have become endemic to a group of developing countries where progress often trumps safety' (The Guardian 23/12/2015). And within state media, municipal officials bowed in contrition after confirming the disaster as an industrial safety accident, claimed they had learned a 'profound lesson' that 'casted a very negative light on Shenzhen's image', and vowed to 'punish whoever should be punished' (Xinhua 25/12/2015 in Chinese).

While there is an easy appeal to frame the man-made disaster as a safety incident rooted in corruption, ascribing this common trope of imbalanced global South development 'risk[s] obscuring specific socio-political causes' pertaining to specific practices that produce 'specific forms of vulnerability' for those affected (Arabindoo 2016: 801-802). In the case of Shenzhen, what has been overlooked by all coverage are its purported 'win-win' urbanization-environment strategies—recognized by the United Nations Environment Programme as 'a model for successful sustainable development for developing and newly developed countries'[1] (UNEP 2002) and most recently in 2014 with an environmental leadership award by C40, an international network of megacities aimed to address climate change and sustainable development. Moreover, there remains a failure to understand the city's urbanization-environment process from the perspective of rural-urban migrants, who are 'inextricably meshed' with the success story of Shenzhen yet remain most vulnerable to its urbanization consequences (Chan 2013: 1). It

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[1] The UNEP recognition is the Global 500 Roll of Honour award. Shenzhen's specific accomplishments include being the first Chinese city to achieve standard industrial discharge, pass 38 local environmental laws, veto 3,619 projects that failed to meet environmental requirements, and achieve 98.4% environmentally good days (UNEP 2002).

is through these two gaps that this dissertation undertakes to address the contradictory outcomes of Chinese cities' urbanization-environment process from an interdisciplinary migration approach.

Against this backdrop, it is of particular relevance and timeliness to qualitatively examine how rural-urban migrants understand and negotiate urban environmental degradation and how their perceptions can be situated within power asymmetries of the city given that migration-environment linkage (Qin & Liao 2015; Rafiq *et al.* 2017) and urbanization-environment linkage (Güneralp & Seto 2008; Gong *et al.* 2012; Wang *et al.* 2012) have both quantitatively framed internal migrants as a main contributor to environmental degradation. With scholars from both linkages calling for 'a quantum improvement in the knowledge base on the interrelationships…as well as more detailed cross-disciplinary research' (Hugo 2008: 49) to challenge the 'highly presumptive and aggregated' links between migration, urbanization, and environment (Qin & Liao 2015: 1376), it is therefore important to explicitly address the three fields together and unpack their subjectivities from the migrant perspective. No research has yet to consider rural-urban migrants' constructions of the urban environment or linked their constructions to migration decisions from a personal scale and development strategy from a city scale.

Aim and research questions

This dissertation aims to present a less determinate view of rural-urban migrants within the nexus of migration, urbanization, and environment. By examining how rural-urban migrants in Chinese cities construct their environmental surroundings and how their perceptions are situated within the government position on sustainable urban development, I challenge not only the deterministic role that has been prescribed on migrants within the binary divide between internal migration and environmental degradation, but also address the existing disjuncture between the migration-environment linkage and urbanization-environment linkage through my case study of Shenzhen. To achieve this, this dissertation will investigate the following interrelated research questions:

1) How do rural-urban migrants construct and negotiate their environmental concerns and perceptions within a broader set of development expectations?

2) In what ways are migrant perceptions driven and influenced by a government-specific discourse about the environment?

3) To what extent do migrant neighbourhoods (urban villages) shape this migration-environment interaction?

Study context

Located at the Hong Kong-mainland China border as the geographical lynchpinch between China and Hong Kong, Shenzhen is a coastal city covering 1952.84km^2 in the Guangdong province (Appendix 1). Before being established as China's first SEZ in 1980, Shenzhen was conceived by scholars as 'just a sleepy border town' with a population of 0.31 million, of which 1500 are migrants (Ng 2003: 429). By 2010, its population has grown to 10.7 million (Ng 2011), marking it as the only city in China—and in the world— where a population of several millions was 'created within an essentially rural environment' in less than thirty years (Zacharias & Tang 2010: 211). Known as the instant city of migrants (Chen & de'Medici 2012), Shenzhen has the largest migrant population in both absolute and relative terms in China (Figure 1) as rural-urban migrant workers has accounted for 70-80% of its labour force since the early 1990s (Chan 2007). Migration to Shenzhen was 'among the earliest and largest rural-urban movements in post-reform China' due to the SEZ appeal as a destination of seemingly unlimited opportunities for large-scale construction and manufacturing jobs (Chen & de'Medici 2010: 1144).

Shenzhen's current environment is summarized by four bottlenecks: limited land availability, energy and water shortage, overpopulation, and environmental pollution (Shi & Yu: 2014). Yet it is also viewed as the 'forefront Chinese city' for environmental protection at both the national and international scale (Liu *et al.* 2007: 559). Hence, the city's seemingly 'win-win' strategy in its urbanization-environment development invites further exploration to understand how rural-urban migrants are situated in this context. By focusing on Shenzhen—both a megacity and a migrant city—it presents a relevant case study that offers comparative implications for developing cities in the global South.
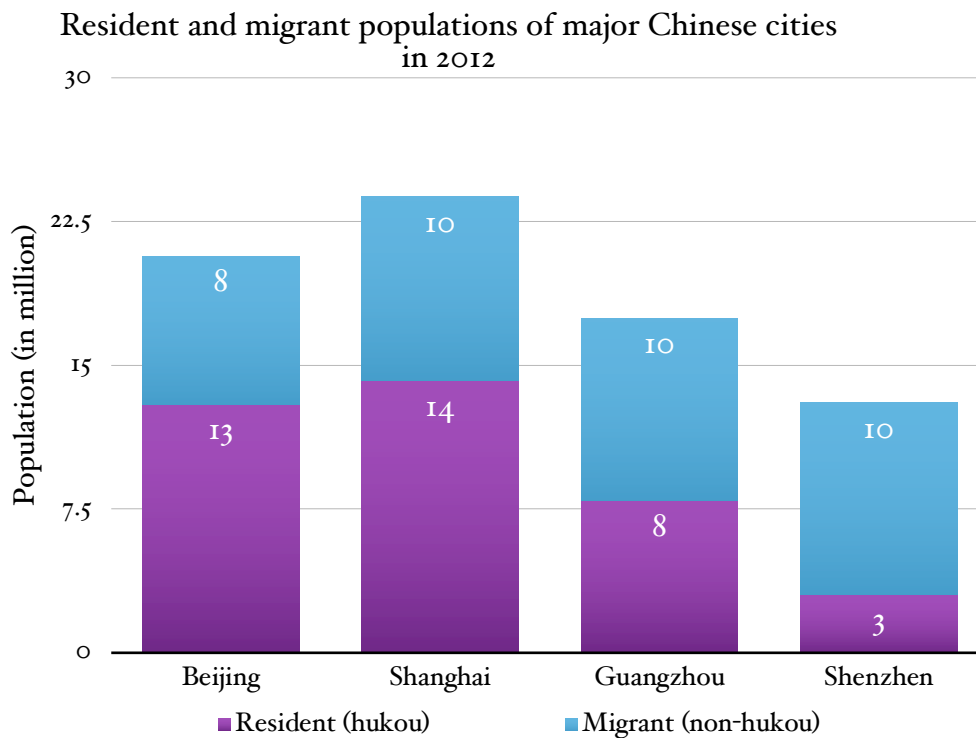
Figure 1: Shenzhen has the largest migrant population in both absolute and relative (76.6%) terms. Graph by author, data from Dec 2012 Sanitation Bureau Statistics retrieved via http://news.sz.fang.com/2014-01-15/11911242_all.html (in Chinese)

The remainder of this dissertation consists of six chapters. Chapter two untangles and reviews four contextual and theoretical strands of literature. Chapter three discusses the methodology. Chapter four and five each present, analyze, and contextualize empirical findings. Chapter six provides concluding remarks.

Literature Review

In this chapter, I review emerged patterns, themes, and gaps of four relevant literature strands that my dissertation will draw from and contribute towards: 1) rural-urban migrants and environmental perceptions in China, 2) urbanization-environment linkage, 3) migration-environment linkage, and 4) urban villages.

Rural-urban migrants and environmental perceptions in China

While environmental degradation remains a pressing challenge for countries that have undergone rapid urbanization at the expense of their environment, the scale of China's degradation 'dwarfs that of most countries' (Economy 2010: 237). In particular, Chinese cities are facing severe environmental issues including water shortage (Jiang 2015), natural habitat loss (He *et al*. 2014), soil deterioration (Teng *et al*. 2014), river and groundwater pollution (Qu & Fan 2010), increased urban heat island effect (Zhou *et al*. 2015), air pollution (Yang *et al*. 2011), and exacerbated warming (Wu *et al*. 2013). Consequently, Chinese cities' search for an 'appropriate equilibrium' between economic growth and environmental protection is especially precarious given its unbalanced development strategy and unprecedented socio-economic transformation (He *et al*. 2013: 767).

One transformation is China's urban population: 55.6% of its population now live in cities compared to just 17.9% in 1978 (United Nations 2017). A large portion of China's new urban dwellers are rural-urban migrants—who despite being 'the largest labour flow in world history' that generated China's economic growth, remain a 'marginalized group in urban China' (Zhao 1999: 281; Wong *et al*. 2006: 33). As is well known, the rigid *hukou* (household registration) system, which regulates and enforces internal migration, acts as an institutional barrier that reduces these migrants to second class citizens.[2] Expectedly, the field of Chinese internal migration has revolved around migrant inequality/marginality, be it employment and working conditions (Knight *et al*. 1999; Wong *et al*. 2006), psychological health (Li *et al*. 2007; Chen 2011; Qiu *et al*. 2011), discrimination by urban residents (Zhang *et al*. 2009; Du *et al*. forthcoming), or children's access to public education (Liang & Chen 2007; Chen & Feng 2013). However by homogenizing rural-urban migrants as a passive and exploited urban underclass, scholars

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[2] See Chan, K. (2013). China: Internal Migration for a definitive discussion on the *hukou* system and internal migration. In 2014, the Chinese government has reformed the *hukou* system to relax requirements for migrants in second and third-tier cities (Griffiths and Schiavone 2016). However, the old *hukou* system remains for first-tier cities: Beijing, Shanghai, Guangzhou, and Shenzhen.

have failed to recognize their agency and everyday practices in relations to their urban surroundings (notable exceptions include Ma & Xiang 1998; Zhang 2002).

In terms of environmental perceptions, rural-urban migrants have become synonymous with ambivalent citizens who lack environmental awareness and pro-environmental behaviours (Harris 2004; 2006; 2008; Chen *et al.* 2011; Yu 2014). While scholars acknowledge that 'people in different parts of China have differences in perceptions' (Harris 2006: 5), they agree that education is a key indicator to predict people's understanding of environmental knowledge and promote their 'realization of their own responsibility for the environment' (Chen *et al.*: 50). Despite never being explicitly categorized in studies as the group least concerned with environmental degradation, rural-urban migrant workers are implicitly pigeonholed as such because of their rural background and low education. For instance, Yu's study found rural participants often provided vague answers or 'I have no idea' replies to environmental questions, which she interpreted as a reflection of their limited education (2014: 47). Additionally, Harris suggests that their belief in a combination of past and present anti-environmental Chinese values can explain their particularly low sense of environmental responsibility: the traditional Confucian 'anthropocentric paradigm' where the environment 'exists for the benefit of people' (2006: 8) and the post-reform economic mantra that 'getting rich is glorious' (致富光荣) (2004: 154). By reducing millions of rural-urban migrants to an uneducated group ignorant of the environment, such a prejudiced assumption against their environmental perceptions need to be effectively challenged and debunked. In this context, I employ Agrawal's (2005) conceptual term 'environmental subjects', which draws from Foucault's ideas on governmentality/environmentality, to identify how rural-urban migrants 'come to hold particular views' about the environment, how their everyday practices are shaped by such subjectivities, and why 'certain forms of knowledge are validated over others' (166; Arabindoo 2015: 807). Moreover, the dual meaning of 'subjects'—agents/subordinates—can reveal how Shenzhen's rural-urban migrants produce, negotiate, or transform their subjectivities of the environment within the municipal government's urbanization discourse (Agrawal 2005).

Environment in the urbanization discourse of Chinese cities

Past literature on the relationship between urbanization and environmental change is complex and inconclusive regarding the effects of urbanization on environment and vice versa (Seto *et al.* 2010). From the 1960s to 1980s, urbanization, cities, and economic development were viewed as environmental ills, though recent research suggests that factors including governance, regulation, and social processes also affect environmental

quality (Marcotullio & McGranahan 2006). Though there remains no conceptual agreement on a clear link between urbanization and environment, scholars do accede that 'urbanization is not a homogenous process' and significant differences exist 'among regions and countries, and even within countries' (Seto *et al.* 2010: 169). In particular, as cities that have transformed the characteristics of contemporary urbanization in terms of scale, rate, and form, Chinese cities—along with other major global South cities—can extend critical implications for sustainable development practices (*Ibid.*).

Among city responses to environmental degradation, Chinese megacities face 'perhaps the bitterest dilemma of development': the juxtaposition of planning for over ten million inhabitants while mitigating heightened concerns over ecological deterioration (Xu & Chung 2014: 396). Since the 1980s, the central government has implemented 'a host of laws and regulations' for environmental improvement (Jahiel 1997: 101), yet most municipal governments continue to favour pro-growth strategy over environmental protection (Economy 2005). Because local development strategies are expected to reflect the central government's Five-Year Plans (中国五年计划), some scholars consider them as tokenistic responses to central government demands (Schreurs 2011). In spite of their inability to enforce environmental regulations, other scholars argue that local environmental discourses should not be viewed as 'passive responses of environmental agenda of higher administration or quick-fix local policy solutions' (Xu & Chung 2014: 395 Bulkeley & Betsill 2005; Andonova & Mitchell 2010). Rather, they should be viewed as 'argumentative struggles occurring in multiple' spaces and scales bounded by temporality, where older discursive strands are likely to persist/coexist with newer conceptualizations of the environment in an urban planning system (Bulkeley & Betsill 2005: 52; Healey and Shaw 1994). This is reflected in Shenzhen's past master plans—'the official mandate used to accommodate spatial needs' (Xu & Chung 2014: 398)—where three conceptualizations of the 'environment'—separation, integration, and unification—have remained in its planning discourse (Figure 2).
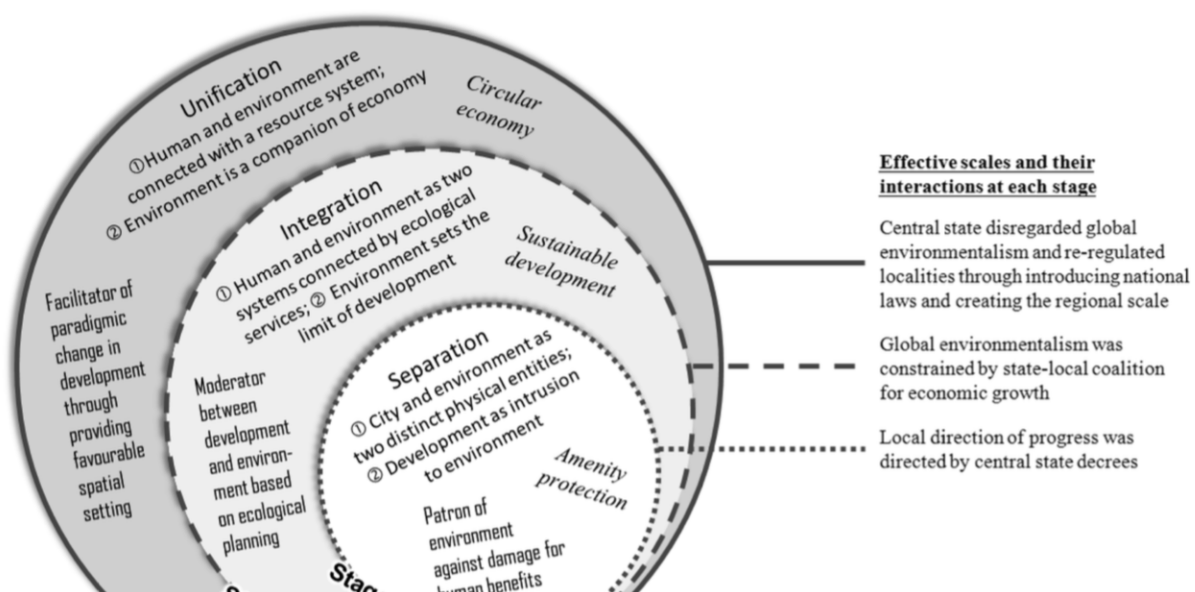
As illustrated by Figure 2, Xu and Chung suggest framing the articulation of Shenzhen's planned environment discourses as a form of 'proliferation, rather than succession, of its substance' (2014: 409). An advantage to the coexistence of multiple discourses, they emphasize, is that each discourse enables the government to 'win the support of a particular socioeconomic stratum' (*Ibid.*). Hence, I follow Xu and Chung's approach to critically untangle the 'contextual peculiarities' that govern how Shenzhen's current master plan interacts with its environmental agenda (*Ibid.*).

The role of environment in migration decisions

Research linkage between human migration and environmental degradation roots its theoretical development from the notion that internal migration causes and exacerbates environmental degradation. Led by the intersecting strand between neoclassical economics and migration theory, literature from the late twentieth century constructed increasing internal migration as a hyper-urbanisation problem that deteriorates the urban environment (Findley 1977), affects people's living environment and their quality of life (Frey & Speare 1988; Geyer & Kontuly 1993), and enhances diseconomies of scale by 'destroying conditions for a [Third World city's] 'natural' transition to a modern economy' (Brown & Stetzer 1984: 1595). For these scholars, population growth induced by internal migration creates urban environmental problems that negatively impact the spatial concentration of people, industry, consumption, and other environmental stresses with the hypothesis that the larger the city, the greater the per capita environmental costs and damages (Leitmann *et al.* 1992). Emblematic of its heightened visibility in the academic debate, population growth has been analogized to 'the elephant in the room' (Bailey 2010: 691). Yet views from population scholars reveal caution against drawing these reductionist causations since the relationships between urban population/city size distribution and environmental degradation remain 'numerous, complex, and very poorly known' (Brennan 1999: 9; Prud'homme 1994).

From the broader migration and environment linkage, recent literature has moved away from the 'simplistic conceptual linkages fuelling the environmental refugee debate'[3] to 'documenting environmental influences on migration but also revealing difference across settings and complexity in influence' (Hunter *et al.* 2015: 386) after multiple publications have signalled to rethink existing literature's approach to the migrant and to migration (see Lonergan 1998; Silvey & Lawson 1999; Carr 2005). Currently, this academic field is dominated by two facets of a reciprocal relationship: the effects of environmental factors

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[3] See Morrissey, J. (2012). Rethinking the 'debate on environmental refugees': from 'maximilists and minimalists' to 'proponents and critics' for an overview and insightful critique of the environmental refugee-migration linkage.

on migration (Henry *et al.* 2003; Gray 2009; Massey *et al.* 2010) and the environmental impacts of migration on rural areas (Cassels *et al.* 2005; Carr 2008; Schmook & Radel 2008; Qin 2010). Specific to the Chinese context, migration-environment literature is segmented into two quantitative strands: 1) rural-urban migrants as a marginalized group are disproportionally exposed to environmental risks (Ma 2010; Schoolman & Ma 2012; Chen *et al.* 2013), and (2) inter-provincial migration contributes to urban air and water pollution (Qin & Liao 2015; Rafiq *et al.* 2017). Yet despite these advances, the linkage remains an emergent area of scholarship with several qualitative, empirical gaps (McLeman 2014). In a meta-analysis study on urban vulnerability to environmental degradation, Romero-Lankao *et al.* (2012) were unable to find any specific research from the past two decades that examined relevant in-migration effects in cities. Another gap is understanding perceptions of environmental degradation as Hunter *et al.* posit 'how do people perceive and interpret their environments and how do these perceptions relate to migration decisions?' (2015: 389). To answer these gaps, I adopt Greiner and Sakdapolrak's (2013; 2015) call to apply the concept of translocality to better discern the multi-scalar dimensions of migration and environment.

Building on earlier insights from established geographical works on transnationalism, translocality (or translocalism) seeks to resolve its antecedent's conceptual limitations: privileging of the nation state, neglect of internal circular migration, and inability to negotiate local-local connections from a multi-scalar perspective (Brickell & Datta 2011). The concept of translocality engages with the range of spaces and places in migrants' lives, which are negotiated through 'different material and affective processes' in 'different geographical orbits and under different structural conditions' (*Ibid.*: 17). Translocality conceives migrants as 'actors who do not fit neatly into mono-spatial categories of belonging' (Greiner & Sakapolrak 2012: 538) and captures their complex social-spatial interactions in 'a holistic, actor-oriented, and multi-dimensional understanding' (*Ibid.* 2015: 376). By establishing explicit attention to local conditions, translocality also draws attention to the transformation of the physical and/or natural environment and combines issues of environmental degradation with situated actors of mobilities, e.g. rural-urban migrants, in their everyday lives (*Ibid.*: 2013).

Urban villages: a new spatialization of migration, urbanization, and environment

While the increasing influx of rural-urban migrants to cities of the global South have traditionally been characterized and generalized by high levels of urban poverty and

widespread proliferation of segregated slums,[4] Chinese cities have relied on an alternative model of housing—urban villages (城中村 *chengzhongcun*, or villages-in-the-city)[5]—to accommodate its migrant labour (Song *et al.* 2008; Wang *et al.* 2009; Bach 2010). Since the government is intolerant of informal settlements yet reluctant to provide public low-income housing (Hao *et al.* 2011), rural villages that have been spatially encompassed by cities during urbanisation evolved into urban villages—'densely built-up migrant enclaves'—to provide low-cost housing for the cities' new workers (Breitung 2013:279). Yet despite their high levels of multifunctionality, the municipal government perceives urban villages as the 'cancers of modern cities' (Wang *et al.* 2010: 98) with 'unplanned land uses, decayed housing conditions, reduced public safety and deteriorating social order' and has since enacted numerous policies to demolish these villages for commercial and residential redevelopment (Song *et al.* 2008: 314). Urban villages function as transitional neighbourhoods with competing rural and urban characteristics reflective of the rural-urban dichotomy in Chinese society (Hao *et al.* 2011). Hence as posited by Bach (2010), they are 'both a key locus for China's urban civilizing mission and the lump in its urban throat' (447).

The locations and conditions of urban villages can vary drastically across cities (Song *et al.* 2008). Beijing's urban villages are located on the fringes of the city with inadequate facilities, overcrowded rental unties, and rampant social problems (Zheng *et al.* 2009) whereas Shenzhen's urban villages are distributed across 'both the outskirts and in the downtown segments' (Hao *et al.* 2011: 218). While its 318 urban villages remain at the low end of the city's housing market[6], they function as a 'diverse housing market' where the status of residents within an urban village reflect the spectrum of jobs and activities available in the village's surroundings (*Ibid.*: 219). As sites of multifunctional land use, Shenzhen's urban villages display an urban aesthetic as they incorporate apartment buildings, shopping complexes, recreational facilities, medical clinics, community centres, and schools (Hao *et al.* 2012). Despite the urban villages' effective role in housing migrant workers, their physical environment has been critiqued by various scholars as

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4 See Arabindoo, P. (2011). Rhetoric of the 'slum'. for a discussion of the epistemological inadequacies in using 'slum as theory' to conceptualize urban poverty for policy decisions in the global South.
5 Using the term 'urban village', borrowed from the United Kingdom context to describe its urban village projects as a new form of urban development in the 1990s, to encapsulate China's phenomenon is somewhat problematic due to the differences in their social composition, development histories, and relationship with the surrounding environment (Chung 2010). To overcome such differences, Chung suggests replacing this terminology with villages-in-the-city or *chengzhongcun*. However, as noted by Kochan (2015), both terms are nevertheless insufficient in describing the multifunctionality of the phenomenon as they emphasize only the spatial dimension of the village relative to its surrounding environment. Hence for consistency and clarity, I adopt Kochan's approach in labelling this phenomenon as 'urban villages' while recognizing the inherent limitations in all three terms.
6 This figure is from Hao *et al.* 2012, which draws from the government's Municipal Building Survey 2009. The exact number of the total villages remains unknown and will vary depending on the source (Bach 2010).

sites of environmental degradation. When contrasted with formal housing, urban villages are associated with informal settlement characteristics including 'relatively unsuitable land use, low-quality housing construction, severe infrastructural deficiencies, and a deteriorated urban environment (Hao *et al.* 2011: 220). Song *et al.* describe their physical environment as:

> buildings are overcrowded; public stairways and pathways inside buildings are extremely narrow; public facilities are inadequate and poorly maintained; public roadways cannot meet the basic requirements of transport and fire control standards; distances between buildings are well below standard and cannot meet fire control standards; and garbage is scattered and unhygienic (2008: 317).

However, one study argues that in comparison to other megacities, the environmental conditions of Shenzhen's urban village are in fact better due to the 'shared cultural and professional background' of local landlords and migrant workers, 'relatively safe and secure' rental tenure, and access to affordable and modern amenities (Wang *et al.* 2010: 97). Yet in terms of Shenzhen rural-urban migrants' satisfaction with their inhabited urban villages, Hui *et al.*'s (2014) survey findings identify common dissatisfaction with rental cost, quality of living conditions, and public order. Indeed, urban villages should not be taken as places that have a definitive and stable meaning for migrants, but rather as places that have different meanings to different people who are also embedded in a state of continual change.

Taking the above-mentioned multiple positions into consideration, urban villages offer a new—albeit, unexplored—form of spatialization of the nexus between migration, urbanization, and environment for rural-urban migrants in Shenzhen. As established by Massey (1999), places 'may be imagined as particular articulations of these social relations, including local relations 'within' the place and those many connections which stretch way beyond it' (41). Echoing Datta's (2011) analysis of London neighbourhoods as translocal sites of situated mobility and movement by Polish migrants within 'particular localized contexts without ignoring their connections to other spaces, places, and scales' (90), I adopt a translocal view of place to analyze urban villages as sites of 'local-local attachments' and 'trajectories of migration and mobility' (Smith 2011: 193). In doing so, I excavate the everyday experiences of rural-urban migrants through which their individualized constructions of the environment/environmental degradation can provide a 'fractured and differentiated socio-spatial meaning' to how they make migration decisions (*Ibid.*: 194).

Methodology

In this chapter, I explain my chosen methods, participant sample, and data analysis. Then, I reflect upon on my positionality and ethics.

Methods, sample, and analysis

This dissertation is primarily based on 22 semi-structured interviews with 24 rural-urban migrants who have lived in Shenzhen for at least five years and currently reside in urban villages. These requirements are to ensure that participants possessed the 'perceived ability to answer specific questions of substantial or theoretical importance to the research' (Johnson & Rowlands 2012: 105). Relevant to this dissertation, Baxter and Eyles emphasize the interview's strength in expanding knowledge on how individuals respond to environmental issues 'within the contexts in which they are experienced' (1999: 307). Interviews are supplemented by discourse analysis of Shenzhen's current master plan (2010-2020), which was later incorporated to contextualize specific patterns that emerged from participant responses. By investigating the 'different facets of a concrete phenomenon', triangulation of the appropriate methods is 'not about replication *per se*, but about making connections within particular cases' (Yeung 1997: 64-5).

To recruit the participants, I first contacted a local labour rights activist who connected me to community-based NGO organizers. Using organizers as gatekeepers, I recruited 8 participants from an urban village in three districts: Longhua district—an outer Shenzhen district synonymous with Foxconn and electronic manufacturing migrant workers, Longgang district—an outer district where Huawei, the world's largest telecommunications manufacturer, is headquartered, and Futian district—an inner district where the municipal government and central business district is located. These districts were chosen to reflect a diverse and accurate representation of Shenzhen's rural-urban migrants. Participants were suggested by NGO organizers as migrants who are comfortable or have previous experience in speaking with researchers. Table 1 below summarizes the participants' attributes.

Table 1: Summary of interview participants

Name** (Gender)	Date of Interview	Residential district	Length in SZ	Home Province	Occupation
Ajiang (F)	25/05/2017	Longhua district	10 years	Hubei	Beauty services
Baishu (M)	25/05/2017	Longhua district	22 years	Jiangxi	Construction
Chengdao (M)	25/05/2017	Longhua district	10 years	Hunan	Sales

Table 1: Summary of interview participants

Name** (Gender)	Date of Interview	Residential district	Length in SZ	Home Province	Occupation
Dengyun (M)	25/05/2017	Longhua district	11 years	Hunan	Landlord of UV
Fumi (F)	25/05/2017	Longhua district	8 years	Hubei	Full-time mom
Enxin (F)	26/05/2017	Longhua district	7 years	Hubei	Full-time mom
Guoping (M)	26/05/2017	Longhua district	12 years	Guangxi	Construction
Hongsheng (M)	26/05/2017	Longhua district	10 years	Hunan	Beauty services
Jiani* (F)	28/05/2017	Longgang district	5 years	Jiangxi	Full-time mom
Kaimu* (F)	28/05/2017	Longgang district	9 years	Hunan	Full-time mom
Lu (F)	28/05/2017	Longgang district	6 years	Jiangxi	Full-time mom
Mengxin (F)	04/06/2017	Longgang district	5 years	Guangdong	NGO staff
Nana (F)	04/06/2017	Longgang district	10 years	Fujian	Full-time mom
Omei (F)	04/06/2017	Longgang district	8 years	Fujian	Full-time mom
Pingli (F)	04/06/2017	Longgang district	7 years	Hunan	Full-time mom
Qiuyue (F)	04/06/2017	Longgang district	14 years	Shandong	Full-time mom
Rui* (F)	06/06/2017	Futian district	20 years	Guangdong	Full-time mom
Shimei* (F)	06/06/2017	Futian district	6 years	Hubei	Full-time mom
Tao (M)	06/06/2017	Futian district	14 years	Hubei	Self-employed
Wuhui (F)	06/06/2017	Futian district	12 years	Jiangxi	Sales
Xiexia (F)	21/06/2017	Futian district	14 years	Hunan	Beauty services
Yanjun (F)	21/06/2017	Futian district	26 years	Sichuan	Sales
Zhenhuan (F)	21/06/2017	Futian district	17 years	Guangxi	Self-employed
Beibei (F)	21/06/2017	Futian district	10 years	Guangxi	Self-employed
** Names have been changed					
* Multiple-person interviews, as requested by the participants					

All participants have rural *hukou* status with education attainment at a high school level or less, which essentially limits any *hukou* conversion prospects since Shenzhen prioritizes university-educated migrants as permanent residents (Fu & Ren 2010). Since China eliminated its one-child policy in 2016, half of the participants recently had a second child, which explains the significant representation of full-time moms in my

sample. Previously, these participants worked in either the electronic manufacturing industry or service industry. Although I tried to recruit a balanced number of both men and women, the gender representation—8 men and 16 women—was due to some male participants' lack of availability during the daytime.

All interviews were conducted and recorded in person during a one-month stay in Shenzhen. Interview questions (Appendix 4) were conducted in Mandarin and participants replied in Mandarin or their regional dialects. Since the interview location is not simply 'a technical matter of convenience and comfort' but also a constructed space of (re)produced power relations, participants' homes were not used since Herzog (2014) noted that marginalized groups may be reluctant to host their private spaces. Most interviews were conducted at the community centre of the urban villages with the exception of self-employed participants where the interviews were conducted at their shops. This was an intentional choice because the participants and their children were frequent visitors to the community centre, viewed the space as familiar and safe, and NGO staff were available to look after the children during the interviews.

To analyze the interview and document data, first I (re)listened to the recordings to note the 'nuances of emphasis, hesitation and inflection' that may have been missed by line-by-line transcription (Jackson 2001: 203). Next, I transcribed the interviews in Chinese and followed a thematic analysis approach for coding, which entailed identifying repeated patterns such as key words, phrases, or specific experiences (Aronson 1995). Then, I grouped patterns of codes and specific passages into three broad themes with additional sub-themes and analyzed them as representations of knowledge that 'shape and produce social meanings' (Tonkiss 2012: 405). This process was repeated for the document data, which were interpreted as particular representation of facts rather than objective facts. Since one strength of qualitative research is 'its ability to refine the research questions during and after data collection and analysis', I ended up incorporating emerged patterns and sub-themes that were not originally part of my research design to ensure that my findings remain contextualized within broader literature (Oxford 2012: 417).

Positionality and ethics

As a Chinese-Canadian who has previously lived in Shenzhen for five years, my position as the researcher is neither objective nor neutral since claiming such 'serves only to make invisible the biases and subjective of the information that is collected and coded as knowledge' (Mohammad 2001:103). As an ethnic Chinese who blends into the local community but no longer holds Chinese citizenship, I was aware that my background

may influence the participants' approach to my questions and their given answers. For example, some participants explicitly questioned my interest in researching a group I had no familial relations with or shared critical opinions to specific questions—both of which may have been withheld with a different (non-Han Chinese) researcher. To engage with my different positions, I employed a 'self-conscious, self critical gaze' to identify the uneven power relations between myself and the participants (*Ibid.*: 104). Without subscribing to the insider/outsider binary, my positionality was fluid—'flexible, overlapping, and at times conflicting' (Razon & Ross 2012: 495). As such, I chose to highlight or downplay certain parts of my positionality, when appropriate during interviews, as a conscious decision for alliance building (*Ibid.*).

Detailing the experiences of a institutionally marginalized group opens up ethical considerations that should be engaged with throughout the research process. All participants were verbally instructed about the dissertation background, signed the consent form (Appendix 5), and their identities have been anonymized. They were informed about their right to withdraw at anytime during the interview and the research process. While I recognize qualitative research has its own 'ethical dilemmas' and interviews carry both 'risks and benefits' for the participants (Tisdell & Meriam 2015:262), the aim of my interviews was not to reinforce rural-urban migrants as a disempowered underclass. Rather, I treated interviews as 'inter-views' (Kvale 1996)—a conversational reciprocal exchange between equal partners—with attention to my fluid positionality.

Empirical chapter 1

Since post-reform China, municipal governments occupy a 'dualistic role' in sustainable development practices as both 'the manager of the local economy' and 'the protector of local environmental quality' (Xu & Chung 2014: 408). This chapter examines how rural-urban migrants perceive Shenzhen's environment and their environmental responsibilities in the government-specific discourse. The first section extracts the governmental rhetoric on environment from the municipal government's current master plan, the second section explores how participants contextualize Shenzhen's environment and environmental degradation among Chinese cities, and the third section analyzes how participants designate environmental responsibilities within the urban context.

Governmental rhetoric on environment

Shenzhen's current master plan consists of six sections, 28 chapters, and 235 articles, in which only three chapters explicitly discuss its environmental agenda. The plan is based on seven development discourses and related regulations at the national, provincial, regional, and local level (PGSM 2010: 2). Reflective of 'the legacy of the centrally planned economy rhetoric' (Ng 2011: 639), the master plan envisions Shenzhen's first function to be 'China's experimental site for integrated reforms to develop a creative circular economy model' (PGSM 2010: 3). As explained by Xu and Chung (2014), circular economy in the Chinese context is a governmental rhetoric introduced by Hu Jintao in 2003 to institutionalize 'green logic' and 'high-level green commitment' within its planning discourse (405).

Unsurprisingly, Shenzhen's master plan frames this rhetoric as sustainable development in its *lühua (绿化 greening)* goals: build 140 new parks that include 25 large-scale forest and country parks, increase tree canopy cover to 50%, establish 8 district green areas, and construct 16 city-scale ecological corridors to mitigate air pollution, the urban heat island effect, and rising temperature (PGSM 2010: 55-57). This is highly problematic because *lühua* is an inadequate indicator for environmental protection/sustainable development (Bowler *et al.* 2010). Nevertheless, the municipal government is pursuing *lühua* as a visual strategy to accomplish its development goal: 'to become an international model city with Chinese characteristics in building an...environmentally friendly, culturally vibrant and ecologically liveable city' (*Ibid.*: 3). From a physical geography lens, constructing green spaces can exacerbate the urban heat island effect and remain an inappropriate response to environmental degradation, particularly for a water-scarce city

like Shenzhen (Chen *et al.* 2006; Maimaitiyiming *et al.* 2014). Hence, it becomes evident that *lühua* as an environmental discourse is utilized for 'visual amenity and recreational potential' (Xu & Chung 2014: 407)—aimed to satisfy citizens inhabiting this resource-constraint city who 'clamour for access to the natural environment' (Zacharias & Tang 2010: 240).

Aside from using *lühua* as a problematic quick-fix for environmental degradation, the master plan includes a plethora of other approaches to frame its environmental discourse. One is an ambiguous definition of 'urban ecological system' (城市生态绿地系统) (PGSM 2010: 11) within which golf courses and resorts are included, despite being 'notoriously destructive of biological systems' (Zacharias & Tang 2010: 240). Another is increasing environmental cooperation with Hong Kong through improving the water quality of Shenzhen Bay, the bay that divides the two cities, though it also calls for the construction of multiple transport infrastructure linkages directly over the Bay to facilitate business and recreational cooperation (PGSM 2010: 8). What this reflects is that the master plan's guiding principle to 'prioritize environment' (环境优先) and 'preserve ecological city' (生态立市) is often overridden by economically-driven principles such as to 'serve Hong Kong' (服务香港) and 'elevate its strategic development position within China' (提升在国家发展中的战略地位) (*Ibid.*: 1). To sum up the government's environmental rhetoric, while it claims it has responded to environmental issues since Shenzhen's inception as a SEZ, its current master plan reflects 'an ecologically grounded endeavour' that remains 'practiced for the neoliberal appropriation of environment' (Xu & Chung 2014: 406, 409). Hence, the proliferation of environmental discourses has coexisted in Shenzhen's planning only because it has continuously seceded its purported priority to the dominant economic development discourse.

'That is a Beijing problem.'[7]

When asked to assess the city's overall environment, all participants perceived Shenzhen's environment as not only satisfactory for a developing city, but also a positive exception among Chinese cities. Many commented on the abundance and accessibility

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[7] Interview with Hongsheng

of green spaces and some equated *lühua* to be the defining quality of Shenzhen's environment:

> Look at Shenzhen's environment in terms of parks and green roads. We have Lychee Park (forest park) within walking distance here, and our surroundings are covered by *lühua*. That is environmental improvement, that's the biggest change. The municipal government has invested a lot of money. If you compare it to Chengdu…let me tell you, it has less than five or six parks that are comparable to Shenzhen's beautiful parks. And Shenzhen's urban area is significantly smaller (Yanjun).

> Well obviously our Shenzhen is better. Guangzhou is an older city, so a lot of areas can't be developed. Look at our Shenzhen, *lühua* development is done so much better than Guangzhou, and so much better than other cities. The government has put in a lot of effort in *lühua* (Rui).

The unanimous acknowledgements/appreciations by participants suggest that the master plan's visual emphasis on *lühua* has enabled the government to win their support as 'a particular socioeconomic stratum' (Wu & Chung 2014: 409). By likening *lühua* to high environmental quality, participants appear in this instance to be persuaded by the government-led rhetoric that Shenzhen has a superior environment within China.

When asked about Shenzhen's air pollution, most participants were quick to contrast Shenzhen's air with other megacities's smog, and some even claimed that they have never seen smog in Shenzhen. In particular, Beijing's smog was frequently mentioned to highlight Shenzhen's better air quality. For example, Nana referred to her classmate's experience as comparative knowledge:

> When I think about air pollution I immediately think of Beijing and the Northern part of China. There is basically no smog in Shenzhen, but we do have clear and blue sky, and sometimes we can see the stars at night. My classmate who lives in Beijing says she rarely sees blue sky and needs to wear a mask when she goes out. Here, I rarely see people wearing masks. I've stayed in Shenzhen for ten years and I've never seen smog.

Others, such as Ajiang, brought up her last visit to Beijing:

> Here is not like Beijing, or the Northern part, where it is filled with smog. Last time when I went up there, their air was dry, and as soon as you wake up all you

see is smog, and I was there in May! When we compare air quality in the South with the North, the difference is *tiandi* (天地 heaven and earth).[8]

For the few participants who have never been to Beijing yet still used the city for environmental comparison, one joked about how he 'felt lucky to not live in that city or else he might lose a couple years of life' (Dengyun) while another stated 'what reasons do I have to go there?' (Qiuyue). The participants' quick reference to Beijing demonstrated how their perceptions are not simply situated in their localized context, but also transcend the locale to include intangible translocal constructions of other cities' environments. Although they did not explicitly state that Shenzhen has no environmental degradation issues, they used Beijing—a city they have never lived in—as a degradation example to justify Shenzhen's better environment. In turn, this environmental comparison serves as a window to understand why particular cities are chosen over others, which is still 'largely absent' in migration literature (Datta 2011: 76).

When I asked participants to assess how Shenzhen's environment has changed during their migration process, many constructed it as a transitioning evolution. For participants who have lived in Shenzhen for more than fifteen years, they shared similar anecdotes derived from their initial factory experiences:

> But now when I reflect on it, Shenzhen's environment in 1995 was not as good as now. I saw the biggest change within the last few years, the government has phased out factories that used to emit the most industrial pollution. The rivers from before were so dirty and mixed with sewage drainage and had a horrible smell. But now this is not the case anymore, when you look at the river water it is relatively clear (Baishu).

> Look at the presence of *lühua* here, we used to have factories instead, but now they are all gone (Yanjun).

For participants who have lived in Shenzhen for less than ten years, their notions of improvement tended to reference a specific year:

> The real improvements began in 2015, I felt the environment has been taken very seriously since then. Prior to that the focus on the environment was never this intense (Hongsheng).

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[8] *Tiandi* is traditionally used as a Confucian term to invoke interdependence and unity. However, Ajiang's usage of *tiandi* is to emphasize the difference between Shenzhen and Beijing as though Shenzhen's air and Beijing's smog should not be measured in the same category like heaven and earth.

To be frank, the environment has improved drastically since 2014. I don't go out much these days since I'm home with the kids, but when I look at the environment, I think overall it looks pretty good—it is significantly cleaner now (Lu).

The *lühua* in Longgang district was non-existent before. It is a lot better now after the 2011 Summer Universiade, which really improved the overall environment. Hence we have clean and modern infrastructure now (Enxin).

What emerged from participant responses are two patterns of constructed environmental improvements based on different space/time connections. For participants who migrated to Shenzhen during the late 1990s/early 2000s when environmental degradation was arguably at its worst (Liu *et al.* 2007), their improvements are attached to work experiences at factories that did not follow environmental regulations: when they are no longer situated in these factories and their surrounding environments, they perceive Shenzhen's environment as an undisputed and tangible improvement. For participants who migrated during the late 2000s/early 2010s when Shenzhen has begun to enforce policies on ecological protection (Shi and Yu 2014), their constructions of environmental improvements are not necessarily in agreement with each other, since improvements are less defined by specific lived experiences but more relational to their individual social and cultural connections.

'This is about *suzhi*.'[9]

Suggested by some responses from the previous section, the municipal government occupies a productive contributor/enforcer role in Shenzhen's improved environment. Yet while most participants recognized 'that the government has made a substantial effort' (Lu) in reducing industrial pollution and investing in *lühua*, not all were convinced that its actions can be divorced from political intentions:

The government has imposed strict mandates on each factory. I think the amount of wastewater coming out of each factory and how it degrades the environment are all being monitored. I remember around the 2011 Universiade it was quite tense—the government was very intense about monitoring. But that was for an important event and Shenzhen's image needed to be presentable, so the government's efforts were not innocent. But now it's different, I really

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[9] Interview with Beibei

believe the environment is becoming a big problem, so it's up to me take the initiative to reflect on my own actions and plan accordingly (Enxin).

In particular, Enxin's last sentence offered a shared subjectivity among some participants regarding their individual responsibilities toward environmental protection:

> Well the government can't do it all, it simply doesn't have the capacity to do so much. Real changes happen when everyone is aware, so that includes everyone who lives in Shenzhen need to feel that they care about our environment. It is only when we are conscious of our environmental awareness can things actually improve. The government can only plan things like how much do these bushes and flowers cost, and how many trees should be planted on roadside. (Dengyun).

> And improvements need to come from the personal scale. If we all improve our awareness and *suzhi* (素质 human quality)[10] and learn to love the environment, I think some environmental degradation issues can be avoided (Beibei).

By assuming environmental protection as their responsibilities, participants did not view themselves simply as subjects under the government rhetoric, but also as agents for environmental improvements that extended beyond governmental efforts. Concurring with Beibei's call for improved *suzhi*, other participants also mentioned *suzhi* or *gao suzhi* (高素质 high human quality) as a solution for themselves—and all Shenzhen residents— to protect the environment. Rooted from the government-led population quality (*renkou suzhi* 人口素质) discourse and birth-control policies in post-Mao China, *suzhi* has become a popular discourse that locates an individual's social worth in contemporary China—'the ephemeral qualities of civility, self-discipline, and modernity' (Yan 2003: 494) with *gao suzhi* connoting a 'kind of ideal personhood associated with urban modernity (Fong 2007: 86). Often, rural-urban migrants are associated with inferior *suzhi* and urban citizens have typically invoked this discourse to justify *hukou* marginality (Zheng 2003; Kipnis 2006). While participants did not use *suzhi* to measure themselves against urban *hukou* residents, they nevertheless perceived a lack of *suzhi*—a behavioural standard—as a direct cause of environmental degradation (Hubbert 2015). And though participants never explicitly declared they have *gao suzhi*, they provided examples of environmentally conscious practices, such as using the fan instead of the air conditioner

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[10] Though often translated as human quality, no single English term has been able to capture the nuances embedded in *suzhi*. See Kipnis, A. (2006). Suzhi: A Keyword Approach for an insightful analysis of the rise of *suzhi* discourse during post-Mao reform and its underlying dynamics in contemporary Chinese society.

(Xiexia), not letting water run when washing vegetables (Beibei), or teaching her children not to litter (Shimei), which implied as agents of environmental protection: they embodied *suzhi*.

Through their *suzhi* discussions, the participants revealed how they are redefining their interests as environmental subjects (Agrawal 2005). As a response to living in a 'better' city that already has abundant *lühua* and little industrial pollution, participants made the contextualized decision and chose to define their environmental responsibilities with *suzhi*—underscoring that having *suzhi* is associated with social advantages in the Chinese urban setting. Yet this does not indicate their responses should be 'morphed into larger ideological beliefs' on rejecting governmental responsibility to protect the environment (Arabindoo 2016: 809; Agrawal 2005). As exemplified by Rui's proposal below, their *suzhi* discourse can include governmental intervention, suggesting that though governmental efforts may be viewed as political calculations, participants still identify the government as the most effective actor in Shenzhen's—and China's—environmental/development context.

> Because you still need everyone's effort in the end. This is why I like going to Hong Kong—its sanitation is much better. When I first visited I thought it was quite claustrophobic, but their environment is controlled much better. I still remember the tour guide telling us that we were not allowed to litter, because if you litter you will be fined 500 HKD. And yes the Chinese government tells you not to litter too, but there is no effective penalty. That's why we have fake products, waste oil as cooking oil, and poisonous rice scandals, because the government's anti-counterfeiting efforts have not been enough. If you impose harsher punishment, then people dare not to commit such harmful crimes. I know that when some Hong Kong people come to Shenzhen, their behaviours change and they litter—even though they are law-abiding citizens in Hong Kong! That's why there's still litter on the ground here, it's because our efforts are not enough. It's the same for us, when we go to Hong Kong, we don't dare to litter.

This chapter has highlighted how participants as environmental subjects are situated within the government-specific discourse of Shenzhen's environment. With superficial emphasis on *lühua*, the governmental rhetoric has conditioned the participants to approve of Shenzhen's 'better' environmental quality and the government's effective role in reducing environmental degradation. Yet by choosing to assume environmental responsibilities as individuals, the participants have also positioned themselves as agents

of environmental protection—albeit being associated with *suzhi* is within their interests as rural-urban migrants in the Shenzhen context.

Empirical chapter 2

As elucidated by McKay (2005), 'as migration and mobility produce new subject positions, they transform and extend locality and create both new subjective experiences of place and new subjectivities' (265). Consequently, Shenzhen's urban villages are 'neither the city's other, nor solely its history, but its accomplice in the creation of the urban' (Bach 2010: 448). This chapter examines how the everyday experiences of rural-urban migrants in urban villages construct their subjectivities of Shenzhen's environment. The first section explores the evolution of their translocal environmental perceptions, the second section discusses urban villages as translocal neighbourhoods, and the third section considers how this 'spatialization of habitus' shapes participants' migration decisions (Datta 2011: 90).

'I was too young to have an awareness about the environment.'[11]

By examining participant responses along existing findings on environmental perceptions, I found them to construct nuanced viewpoints that contextualized the environment with their migration process in Shenzhen, which rejects previous notions that rural-urban migrants are unaware of and unconcerned by environmental degradation (Harris 2004; 2006; 2008; Chen et al. 2011; Yu 2014). For example, the participants' knowledge of environmental degradation diverged from Harris (2006) and Chen *et al.* (2011) survey findings that the less educated are unaware of how their own actions cause environmental harm (Harris 2006; Chen *et al.* 2011). Reflecting on her factory experiences prior to her current job at a local NGO, Mengxin said:

> Now if I look for jobs, I have certain demands. I was seventeen when I first started working at a factory, so I did not understand its negative impacts on the environment. After reading about labour standards and hearing shared experiences regarding harmful factories, I gradually learned what it meant to look for a job with a relatively good environment. I intentionally eliminated factories that emitted heavy pollution or caused environmental risks as potential workplaces and looked for factories with better standards instead.

Although most participants were not as environmentally proactive as Mengxin, they shared a consensus that they have spent time reflecting on how the urban environment impacts their everyday decisions. This suggests that not only did their environmental concerns extend beyond the 'domestic home environment' as prescribed by Harris

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[11] Interview with Kaimu

(2006: 8), but that they also act as a form of translocality in which heightened environment awareness influences decisions related to their surrounding environment. Two participants who are heavy smokers noted how their smoking habits have recently changed: both are now more careful of where they smoke in public spaces in order to affect fewer people with second-hand smoke, whereas in the early 2000s they smoked 'without care' and 'everywhere' in restaurants, train stations, and buses (Baishu; Tao). Since most participants migrated to Shenzhen at age eighteen or earlier for labour work, they self-consciously reflected that young age and economic pressure delayed the development of their environmental perceptions:

> I was only fifteen when I moved to Shenzhen, so I didn't have the awareness to think about the environment (Baishu).

> I was too young back then…I came here to make money to help out my family back home and I never had the time or energy to think about anything else (Jiani).

While some participants acknowledged that their environmental perceptions remain limited due to 'a lack of time' (Wuhui), 'not the top priority' (Guoping), or 'generally do not worry about environmental issues' (Chengdao), other participants, and in particular those who are full-time moms, stated that childrearing was the catalyst for developing and heightening their environmental perceptions; or as summarized by Shimei: 'After I became a mom, I found myself worrying and reflecting on how to ensure a healthy environment for my kids.' These participants' perceptions pertained to one environmental problem that directly impacts their children: food safety. Most participants recalled the 2008 milk powder contamination scandal as an event that prompted their environmental awareness, which led them to develop the regular habit of checking the Internet or social media discussion groups for food safety related news and/or guidance. Since the full-time mom participants all had a second child within the last year, they recognized Shenzhen's geographical advantage that allowed them or friends from their networks to take the train to Hong Kong and purchase its local milk powder, which they labelled as 'better quality' (Qiuyue), 'safe' (Omei; Rui), or 'gives my mind peace' (Lu; Nana; Pingli; Shimei). Most participants also grew up in small villages where part of their arable land was used to grow vegetables. Recalling her childhood memories, Pingli commented that 'we grew up poor, but at least we had vegetables with no pesticides. Though my economic situation is better now, I end up spending more money to buy safe food and that becomes a financial pressure.' Others stressed how food shopping for their children can be a 'headache' (Nana) since they are not always sure whether supermarket vegetables were of safe quality. Comparing the vegetables in Shenzhen and her hometown and her grocery strategy, Qiuyue said:

> The cucumbers sold at supermarkets here are too green, probably injected with growth hormones! But even if you worry about food safety, you have to find ways to solve the problem right? I just don't buy potatoes that look too big or cucumbers that are too green. There are always older women who sell their home-grown vegetables in our urban village, so I usually buy from them. And I can definitely taste a difference between the cucumbers, theirs taste quite refreshing and crisp, whereas the supermarket cucumbers taste older and softer, so not as good.

One particular phrase that many participants mentioned was 'this is a process', and how they expect their environmental perceptions will continue to evolve as they teach their children values that are related to the environment. As an example of how she teaches her children environmental awareness as a way to promote their *suzhi*, Jiani said :

> Yesterday my older child dropped a biscuit on the ground, and even though we were walking away from it, I told him to go back and pick it up until we find a garbage can. I always tell him that we cannot hurt nature. This awareness needs to be instilled at a young age because I didn't have that growing up.

While the female participants' stronger environmental perceptions may be explained vis-à-vis socialized gender roles that expect women to take on the greater share of childrearing responsibilities (Xiao & Hong 2010), ending the explanation on 'an externally observable difference' disregards the effects their actions have on their different constructions of selves (Agrawal 2005: 166). Instead, what their responses illuminate is that the participants—and rural-urban migrants as an assumed homogenized group—have been labeled to lack environmental perceptions based on previous literature, yet they exhibit an ongoing reflection of environmental awareness and knowledge. The evolution of their environmental perceptions can be understood as a form of translocal learning: 'an ongoing labour' in establishing 'relationally produced' connections between 'different sources, routes and actors' that is 'place-focused but not restricted to that place' (McFarlane 2011: 2). As agents of environmental knowledge, these participants use practices, such as smoking habits or job search requirements, and past experiences, such as a public food safety scandal or memories of their home villages, to produce their form of environment perceptions—revealing that environmental subjectivity is a process rather than a product (Greiner & Sakdapolrak 2013). Supporting Brickell's call to recognize rural-urban migrants as 'interpretive subjects of their own mobility' even though they are influenced by economic imperatives, the participants in this context have demonstrated that their environmental perceptions are 'intimately interwoven with social, family and cultural considerations that influence the nature of their translocal identifications' (2011: 25).

Urban villages

All participants, with the exception of some who had briefly lived in factory dormitories for their first job, have only lived in urban villages during their entire length of stay in Shenzhen. This is consistent with findings that migrants who hold rural *hukou* will more likely choose to live in urban villages (Song *et al.* 2008; Wang *et al.* 2010). Most participants have lived in their current urban villages for at least five years and intend to stay until their next (if any) migration decision. Unlike Hui *et al.*'s (2014) findings of high dissatisfaction with urban villages' rental cost, all participants noted that affordable rent is their 'number one reason' to live in an urban village. Although rent ranges significantly from 350 RMB (~40 GBP) to 1800 RMB (~210 GBP) depending on the size of their apartment and the location of their urban village, most participants agreed that what they pay is '*huasuan*' (cost-effective 划算). Instead, their financial dissatisfaction stems from the private school tuition fees for their children because rural *hukou* renders them ineligible for urban public schools—an economic strain that has been overlooked by previous studies.

Similar to their perceptions on Shenzhen's environment, most participants viewed urban villages' environment as places of gradual improvement. For those living in inner Shenzhen, their environmental subjectivities are framed in terms of safety and sanitation:

> When I first started living in urban villages, it was quite unsafe and dirty. But after ten years, there are significant improvements! Now all the villages in Futian have their own cleaning staff. I remember before there was only one communal area to dispose garbage, but now under every building there is a garbage bin that is emptied every day. We also have cleaning staff who come to the village twice a day (Yanjun).

> The improvements have been drastic. When I started living here in 2004, it was dirty, messy, and bad. Now it is clean and safe. The interactions between people here are good because most residents don't move around, so the environment is a lot better...and I don't worry about the safety of urban villages. We have security guards and there are cameras around (Xiexia).

While participants living in outer Shenzhen also mentioned safety and garbage/sanitation improvements, their subjectivities of urban village environment entailed a more multifaceted construction. For some participants, this included the

addition of a park as accessible green space, supermarkets as convenient facilities, or street signs as an urban aesthetic:

> Before this village does not have a park, and there was only one overpriced supermarket. Now life is more convenient and feels enhanced overall (Pingli).

> There was no park before, the one we have now is newly built. Now our surrounding environment is a lot better. Previously I had to take a bus to go grocery shopping! Now I just need to go downstairs to buy vegetables (Qiuyue).

> Oh the changes have been significant. When I first came here, the village was still being built so it was quite ugly and dirty. Now it looks a lot more presentable with street signs (Ajiang).

Unlike inner Shenzhen participants who have only lived in inner Shenzhen urban villages, some outer Shenzhen participants have lived in both areas, which added a comparative lens to their perceptions:

> It's quiet here in this village, it makes your inner self more calm. The speed in inner Shenzhen is too fast, and it gives you the feeling that you need to walk faster or else you're blocking someone's way. Here the environment is more idle (Dengyun).

> Well the environmental conditions between inner and outer Shenzhen are similar, but I would say villages in inner Shenzhen have developed faster. I used to live close to a subway station and bus station, so transportation was more convenient. Here we're close to a bus station, but getting to the subway is inconvenient (Mengxin).

Migrants' everyday lives are negotiable and not primordial (Datta 2011). As shown by the participants' different constructions of urban village environment, the relationship they have with residential space are dependent on different factors. When asked to respond to the existing academic and political rhetoric that urban villages are sites of environmental degradation, many participants challenged that notion:

> Urban villages' existence is a good thing. Although it is valid to say that urban villages have lowered the cityscape development and environmental protection, but for us working people it is a really good place. Not only rent is relatively lower, but also the living environment is accessible and convenient (Rui).

> Yes the environment of urban villages is like a 'black spot' to urban development, but you can't demolish them simply based on environmental degradation reasons.

> If inner Shenzhen removes all of its urban villages, hundred of thousands of people will have to move to outer Shenzhen—how can the government respond to this housing shortage? (Shimei)

While their assessments concurred with Bach's portrayal of urban villages as places 'that interrupt the monotone cityscape of the high-rise city' (423), their responses reflected a multi-scalar understanding of urban villages. From a personal scale, participants have experienced the benefits of urban villages through affordable rent, proximity to workplace, and access to a livable environment. From a neighbourhood scale, they noted how they are 'basically immersed in the village's lifestyle' (Zhenhuan) since its surrounding environment forms their social networks and cultural capital. And from a city scale, they acknowledged that urban villages may occupy a 'black spot' position in city-scale planning, yet they are also aware that any planning action to eliminate these places will come at the expense of rural-urban migrants (Song *et al.* 2008).

'I'm willing to live here for a lifetime.'[12]

As residents of an improving neighbourhood environment within an improved city environment, how participants connect their environmental perceptions to return migration decisions offer unexplored insights to the migration-environment linkage (Hunter *et al.* 2015). With the exception of those who are from Guangdong or Shandong, all participants stated their *laojia*'s (老家 ancestral home/hometown) environment was superior to Shenzhen's:

> There is noise pollution here day and night, and *laojia* doesn't have that. Back home there is only the sound of birds, and in our village you can appreciate all the natural scenery. My village is at the bottom of a mountain, so our water comes straight from there. No matter how expensive bottled water is here, it'll never taste as good as *laojia*'s (Dengyun).

Similar to Dengyun's praise of his *laojia* environment, other participants either recalled fond memories of their childhood environment being untainted by degradation or discussed their last visit to *laojia* and their appreciation of its natural scenery. However as noted by migration scholars on the indeterminate role of environment in migration decisions (Lonergan 1998; Carr 2005), most participants did not believe *laojia*'s better environment is a sufficient reason for return migration:

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[12] Interview with Omei

Of course when we talk about Shenzhen's environment, it is not as good as *laojia*'s. But this is where China's development is happening, you have to come here. Why would I go back to *laojia*? If I went back I will have no opportunities (Wuhui).

Well I haven't lived in *laojia* for so long so I'm not familiar with that area. If I go back I don't have much contacts or find the friends I had before, it would feel like an unfamiliar place (Fumi).

Shenzhen is better, it's convenient, faster, and the interactions are better. People here are from all over China, so I quite like the diverse environment here. If I go back home it's all about personal connections, I can't handle that (Xiexia).

While participants maintain a relationship with *laojia* sustained by yearly visits, *laojia* does not evoke the myth of return because it remains saturated by sociospatial power dynamics and limited opportunities (Wu 2012 ; Zhang 2013). Instead, *laojia* is used as 'a point of reference with which urban existence experiences and practices can be compared' (Kochan 2016: 24). As such, participants highlighted the environmental attachments they felt with their urban village as reasons to stay:

When you have lived here for long, you are used to its surroundings and you share familiarity with its environment. The interactions between people here are good because most residents don't move around. Nowadays, the landlord lives in the building, so the environment is a lot better. Once you've lived here for a long time you don't need or want to change much anymore—that is the feeling this urban village gives me (Zhenhuan).

This urban village was built up around 2007 or 2008. A lot of people have already stayed here for 10 to 15 years. When they first came here, it was basically empty except for the Foxconn factory. So we've literally witnessed the birth and growth of this village (Nana).

I feel like I can experience all the positive aspects here in this urban village, which makes me feel like I am experiencing the positive aspects of Shenzhen (Lu).

Reflected by participant responses, the urban villages that they live in produce 'a particular feature of situatedness' within Shenzhen's environment (Datta 2011: 90). As Datta elucidates, this type of situatedness functions as a 'spatialization of habitus, where access to different kinds of social and cultural capital in localized contexts produces particular constructions of places (*Ibid.*). For most participants, they constructed their

urban village not only as a site of improving environment, but also as a site of familiar environment where they have developed strong translocal attachments. In turn, while *laojia*'s better environment is not an adequate reason for return migration, their urban village's improving environment—and Shenzhen's improved environment—is an adequate reason for participants to continue their migration process in this city. As explained by Mengxin:

> Especially for migrants who are born in the 80s or 90s, we don't make decisions based only on money. I see more of them taking their environment and their living conditions into consideration as well. But if you tell this to the older generation of migrants, they'll think you're being extravagant.

This chapter has analyzed how participants' translocal environmental subjectivities are shaped by their urban village environment. Their multi-scalar environmental perceptions construct urban village—their spatialization of habitus—as an improving neighbourhood environment situated in an improved city environment. Due to their environmental attachments to their urban village, most participants do not consider return migration as a future option even though *laojia*'s environment is objectively better. Instead, they consider their inhabited environment with its embedded social networks and cultural capital as satisfactory factors for them to remain in Shenzhen.

Conclusion

This dissertation began as an inquiry to investigate Shenzhen's purported 'win-win' environment-urbanization strategies from the perspective of rural-urban migrants—who have been the labour catalyst for Shenzhen's transformation yet remain vulnerable to its development pitfalls (Chan 2013). While rural-urban migrants are marginalized at the institutional level with their rural *hukou* status, previous scholarly attempts to broadbrush them into a homogenized group ignorant of environmental perceptions only contribute to the 'highly presumptive and aggregated' links between migration, urbanization, and environment (Qin & Liao 2015: 1376). To challenge this problematic and deterministic role prescribed on rural-urban migrants, my participant responses presented the different ways migrants construct their environmental subjectivities through their different translocal connections.

Within the government-led rhetoric on environment, participants perceived Shenzhen's environment as a positive exception among Chinese cities. Recognizing the municipal government's (superficial) visual emphasis on *lühua*, most participants viewed *lühua* as a measure for environmental quality, which conditioned them to assert that environmental degradation issues common to other developing cities, such as air quality or industrial pollution, were no longer applicable to Shenzhen. To demonstrate their environmental subjectivities independent from the government discourse, participants called for increasing *suzhi* as their responsibility to environmental protection, which is contextualized with their interest to reposition themselves in the *suzhi* hierarchy pertinent to urban China. Since Shenzhen was the first migration destination for most participants, their environmental practices, experiences, and perceptions have developed and evolved with Shenzhen's improving environment, indicating their constructed subjectivities as a process rather than a product. Similarly regarding urban village environment, participants also perceived it as a site of improving environment. Though some participants recognized that their neighbourhoods are the 'black spot' to Shenzhen's development, they challenged this rhetoric through examples of multi-scalar understanding of urban villages. Since urban villages have produced their local-local connections, many participants point to their constructed environmental attachments as reasons not to consider return migration, even though *laojia*'s environment is better. Participants' recognition of both the urban village environment and Shenzhen's environment provide new insights to the migration-environment linkage that has not yet considered the role of the destination environment on migration decisions.

Overall, this dissertation contributes to the existing gap between the migration-environment linkage and urbanization-environment linkage that has either reduced or

ignored the migrant perspective. By explicitly addressing the nexus of migration, urbanization, and environment together from the migrant perspective, my research identified rural-urban migrants as environmental subjects who construct and negotiate different environmental awareness, responsibilities, and decisions based on their multi-scalar translocal connections. This dissertation chooses not to offer any policy recommendations because calling for institutional changes related to *hukou* reform is synonymous with a go-to solution proposed by academics since the 1980s, and it has shown no measurable results. Instead, I hope my research has presented the case to invite future research to deconstruct rural-urban migrants as a homogenized group and understand them as individuals who are agents of their own negotiated subjectivities within their situated context.

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