

Special Section / Spezialthema

MIGRATION, TOURISM, AND HEALTH – INSIGHTS FROM ASIA

MIGRATION, TOURISMUS UND GESUNDHEIT – FALLSTUDIEN AUS ASIEN

**THE ROLE OF HIGH-SKILLED RETURN MIGRANTS IN CHINA’S
URBAN DEVELOPMENT. POLICIES AND RESETTLEMENT FACTORS
IN THE CITIES OF GUANGZHOU AND DONGGUAN,
PEARL RIVER DELTA / CHINA**

*Initial submission / erste Einreichung: 10/2023; revised submission / revidierte Fassung: 03/2024;
final acceptance / endgültige Annahme: 04/2024*

Marie PETERS (Berlin), Pamela KILIAN, and Frauke KRAAS (both Cologne [Köln])*

with 1 figure in the text

CONTENTS

<i>Summary</i>	138
<i>Zusammenfassung</i>	138
1 The Role of High-Skilled Return Migrants in China’s Economic Development.....	139
2 Government Attitude towards High-Skilled Return Migrants in China.....	142
3 Material, Methods, and Research Sites	143
4 Government Strategies towards High-Skilled Return Migrants in Guangzhou and Dongguan	144
5 Case Study: Songshan Lake Science and Technology Industry Park	148
6 Returning Home: Challenging Return and Settlement Factors of High-Skilled ReturnMigrants, Factors and Reasons for Locational Choice.....	150
7 Discussion	155
8 References	158

* Dr. Marie PETERS (formerly PAHL), Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Potsdamer Platz 10, D-10785 Berlin, Germany; Dr. Pamela KILIAN (formerly HARTMANN), Head of the Sustainability Office, University of Cologne, Albertus-Magnus-Platz, D-50923 Cologne [Köln], Germany; Univ.-Prof. Dr. Frauke KRAAS, Chair, Institute of Geography, University of Cologne, Albertus-Magnus-Platz, D-50923 Cologne [Köln], Germany. – Emails: mariepahl@gmx.de, pkilian@uni-koeln.de, f.kraas@uni-koeln.de.

Summary

China's city governments compete to achieve or maintain importance in today's globalised economy. Corresponding governmental strategies seek to attract and retain high-skilled Chinese return migrants, a group that is expected to stimulate and carry forward economic upgrading. The cities' competition for those high-skilled return migrants is closely related to the development of high-tech development zones. In addition to industrial activities in the development zones, local governments create urban amenities by constructing specially designed living spaces as well as facilities in the development zones. Considering the tense housing situation in China, efforts to provide appealing and affordable housing solutions are considered a promising strategy for attracting high-skilled return migrants.

Against this background, the article analyses, using the example of the two cities of Guangzhou and Dongguan (Pearl River Delta, China), two research questions: (1) What strategies do the municipal governments use to attract high-skilled return migrants – with what spatial consequences? (2) What are the most important factors and reasons for high-skilled return migrants when choosing their place of residence for resettlement? The empirical study uses a mixed methods analysis of government and media reports, secondary data as well as qualitative interviews with experts and high-skilled return migrants.

Results show that despite the fact that both cities apply similar strategies to attract high-skilled return migrants, Guangzhou as a first-tier city remains more attractive to settle down permanently. The case of Dongguan's Songshan Lake Science and Technology Industry Park provides relevant insights into a prevalent municipal strategy for attracting high-skilled return migrants by providing indemnificatory housing solutions. The strategy of providing dedicated housing estates can lead to a tendency towards spatial segregation. Further, the authors raise awareness to the importance of underlying demands and preferences in resettlement behaviour when trying to attract high-skilled return migrants permanently.

Keywords: High-skilled return migration, returnees, high-tech development zones, city competition, urban development, choice of residential location, affordable housing, Pearl River Delta, Guangzhou, Dongguan, China

Zusammenfassung

DIE ROLLE HOCHQUALIFIZIERTER RÜCKWANDERER IN DER STADTENTWICKLUNG CHINAS. POLITIKEN UND ANSIEDLUNGSFAKTOREN IN GUANGZHOU UND DONGGUAN, PERLFLUSSDELTA / CHINA

Chinas Stadtverwaltungen konkurrieren darum, in der heutigen globalisierten Wirtschaft Bedeutung zu erlangen bzw. zu erhalten. Entsprechende Regierungsstrategien zielen darauf ab, hochqualifizierte chinesische Rückkehrer anzuziehen und zu halten – eine Gruppe, von der erwartet wird, dass sie wirtschaftliches Wachstum und Aufschwung stimuliert und vorantreibt. Der Wettbewerb der Städte um diese hochqualifizierten Rückkehrer ist eng mit der Entwicklung von High-Tech-Entwicklungszonen verbunden. Zusätzlich zu den industriellen Aktivitäten in diesen Entwicklungszonen schaffen die lokalen Regierungen

städtische Infrastrukturen und Serviceangebote, indem sie speziell konzipierte Wohnräume, Infrastrukturen und Serviceeinrichtungen in den Entwicklungszonen errichten.

Vor diesem Hintergrund werden in diesem Artikel am Beispiel der beiden Städte Guangzhou und Dongguan (Perlflossdelta, China) zwei Forschungsfragen analysiert: (1) Welche Strategien setzen die Stadtverwaltungen ein, um hochqualifizierte Rückkehrer anzuziehen – mit welchen räumlichen Folgen? (2) Welche sind die wichtigsten Faktoren und Gründe für hochqualifizierte Rückkehrer bei der Wahl ihrer Wohnorte für die Neuan siedlung? Die empirische Studie stützt sich auf eine gemischte Methodenanalyse von Regierungs- und Medienberichten, Sekundärdaten und qualitativen Interviews mit Experten und hochqualifizierten Rückkehrern.

Die Ergebnisse zeigen, dass trotz der Tatsache, dass beide Städte ähnliche Strategien anwenden, um hochqualifizierte Rückkehrer anzuziehen, Guangzhou als Stadt der ersten Ebene für diese attraktiver ist, um sich dauerhaft niederzulassen. Der Fall des „Songshan Lake Science and Technology Industry Parks“ in Dongguan ermöglicht Einblicke in kommunale Strategien zur Anwerbung hochqualifizierter Rückkehrer durch die Bereitstellung entschädigungsfähigen Wohnraums. Die Strategie der Bereitstellung spezieller Wohnsiedlungen fördert jedoch Trends zur räumlichen Segregation. Darüber hinaus wird die Bedeutung spezifischer Anforderungen und Präferenzen im Umsiedlungsverhalten herausgearbeitet, die relevant sind, wenn es darum geht, hochqualifizierte Rückkehrer dauerhaft anzuziehen.

Schlagwörter: Remigration, hochqualifizierte Rückkehrmigranten, Hochtechnologie-Entwicklungszonen, Städtewettbewerb, Stadtentwicklung, Wohnstandortwahl, bezahlbarer Wohnraum, Pearl River Delta, Guangzhou, Dongguan, China

1 The Role of High-skilled Return Migrants in China's Economic Development

In the course of integration into the world economy, local governments in Asia's industrialising economies strive to attract and retain Foreign Direct Investment (FDI) and human capital (DICKEN 2007; SU and LIU 2016; LIU and GUAN 2005; NING et al. 2016). This endeavour implies an increasing trend “towards (urban) entrepreneurship, more intense interurban competition and the conscious promotion of place-specific development strategies” (PARKINSON and HARDING 1995, p. 67). In Asia-Pacific countries, intercity competition for a world city status as well as global investment intensified since the 1997 economic crisis (DOUGLASS 2000). Thus, new and promising approaches need to be found in cities in order to remain competitive and enhance local economic development.

Much research has been carried out on the mechanisms contributing to China's economic rise in general (e.g. ENRIGHT et al. 2005; LU and WEI 2007; CHOW 2015), on China's rapid urbanisation (overviews recently: KÜCHLER and STEIN 2023; HERRLE et al. 2023), on migration-related employment opportunities and challenges (HAO et al. 2016), unequal migration and urbanisation gains (COMBES et al. 2020; ZHU et al. 2021),

migration-related transient urban spaces (BORK-HÜFFER et al. 2016), regional disbalances (ZHOU et al. 2018; LI et al. 2022) and also on the entailed processes of increased inter- and intraregional competition for investment, human capital and global acknowledgement (e.g. JESSOP and SUM 2000; WU et al. 2005; WU and ZHANG 2007; ZHENG et al. 2017), including entrepreneurial resilience and effects of migrants in rural areas (BAO et al. 2022; WU et al. 2023; ZHU et al. 2023).

In respect to the matter of how regions achieve competitive advantages, JACOBS (1969) found that they primarily arise from clusters of high-skilled people rather than clusters of firms. Hence, one of the main drivers of creating economic growth is, also according to FLORIDA (2008), the clustering of human capital, productivity and creative skills in cities and mega-urban regions (LUCAS 1988). Meaning, high-skilled people – i.e., population with tertiary education, including those currently in higher education (SKELDON 2018, p. 49) – or “creative talents”¹⁾ live in the vicinity of their peers. This environment strengthens the exchange of ideas, deepens business connections and, thus, forms a vibrant business environment (FLORIDA 2008) in the global race for talent. Further, it offers unique economic opportunities for, e.g., later-generation migrants (considered “global elites moving from a first-world into an ancestral homeland”, WANG 2016, p. 1954).

Highly skilled migrants are perceived as needed, wanted and vital to a country’s development and “deemed essential in the competitive environment that is part of globalization under neo-liberalism, and a global competition for talent has emerged as countries and cities strive to create cutting-edge technologies in order to secure comparative advantage in specific areas” (SKELDON 2018, p. 48). Scholars studying urban competitiveness have found that a larger pool of human capital leads to a higher technological capability, promotes innovation, fosters economic upgrading and encourages the development of technology clusters. Furthermore, the presence of high-skilled people has been found to create capital markets and enhance economic efficiency (LI et al. 2019), which boosts economic development and adoption of international norms (PORTER 1990; ZWEIG 2005; WELCH and HAO 2015; HAO et al. 2016; ZWEIG and YANG 2014).

However, in contrast to urban development, so far, less attention has been devoted to the study of the spatial consequences of a government’s competition for high-skilled people – specifically those with experiences of studying or working abroad. The same applies to the impact of the “talent war” on the needs of more selective immigration and social housing policies (MACLACHLAN and GONG 2022). While several studies point to the fact that especially high-skilled talents prefer to choose large cities rather than smaller

¹⁾ The term *talents* is often used in the literature, i.e., academic and media articles, as equivalent to high-skilled people. Also the governmental policies and programmes in Guangzhou and Dongguan use the term “talents” referring to high-skilled people. The provincial government of Guangzhou targets different types of professionals: “The terms used to describe the targeted population, however, are diverse and not clearly defined. Primarily, the aim is to attract professionals with an outstanding, innovative business idea, which includes, for instance, innovative technology, or patents. This type is called *leading, high-level, or high-calibre professionals* [...]. *Leading talents (lingjun rencai)* or *high-level talents (gaocengci rencai)* selected as profiteers of one of the governmental attraction programmes often have a high or special educational attainment, such as a Ph.D. or study experience in a foreign country [...]. Professionals who had studied in a foreign country or gained work experience abroad (*haigui*) get specific attention in governmental policies” (PAHL 2016, p. 140).

cities (SONG et al. 2022), their preferences for specific institutional settings, housing costs, resource allocation and health- and well-being-related infrastructure – thus effects of agglomeration, crowding and supply of public urban services – have rarely yet been investigated (LI et al. 2019; SONG et al. 2022).

In regard to attracting highly skilled individuals, the Chinese government's strategies have mainly targeted two groups: Foreign high-skilled people as well as Chinese individuals who have returned to the country after undertaking work experience or an education abroad in various developed countries (MIAO and WANG 2017). Both are considered as valuable assets to China's economic development (QIN 2011; HAO et al. 2016).

High-skilled Chinese return migrants can be defined as Chinese people who returned to China after gaining a full degree or parts of their degree abroad and who lived abroad for at least one year. Some of these high-skilled return migrants have additionally gained work experience upon completion of their studies. High-skilled return migrants targeted by the government policies can be either high-skilled Chinese that still live abroad or those who already moved back to China but live in other Chinese cities.

In the competition to attract high-skilled return migrants, the cities of Guangzhou and Dongguan in the Pearl River Delta, both Guangdong Province, China, make interesting cases because both have experienced an extensive economic transformation since the launch of China's milestone 1978 opening-up reforms and the following deep structural transformation of the (mega-)urban regions (CARTIER 2001; KRAAS et al. 2019) – also referred to as foreign-investment-induced exo-urbanisation (SIT and YANG 1997). The structure of the PRD's economy changed rapidly from a model which is dominated by the agriculture-economy to one driven by the manufacturing industry (XUE et al. 2001; SCHILLER 2011; ROLF 2021; BÖHN and KRAAS 2023).

In the recent years, Guangzhou, as capital of the province, and Dongguan, as the region's manufacturing hub, have both demonstrated great eagerness to actively upgrade their economic structure. The cities both benefit from the inner-regional cluster effects and compete with each other for investment, mobile capital and worldwide economic relevance. In the upgrading process, high-skilled people, especially high-skilled return migrants, drew increasing attention from the governments of both cities.

Against this background, the paper focuses on the following research questions:

- (1) What strategies do the municipal governments use to attract high-skilled return migrants – with what spatial consequences?
- (2) What are the most important factors and reasons for high-skilled return migrants when choosing their place of residence for resettlement?

Empirical fieldwork was conducted in the years 2011 and 2012. The spatial focus lies on the case studies of Guangzhou and Dongguan, with special attention to the high-tech development zone of Songshan Lake Science and Technology Industry Park²⁾ as it was founded in the time before the empirical fieldwork and still today is one of the prominent focal points in the local governments' attempt to attract high-skilled return migrants. Two perspectives, that of the government and that of the return migrants, are investigated.

²⁾ Hereafter referred to as Songshan Lake Park.

2 Government Attitude Towards High-Skilled Return Migrants in China

The rising demand to encourage local economic development and upgrading led to increasing inter-city competition for high-skilled people in China since the early 1990s (ZWEIG 2006b; GAO and WANG 2020). As a result, high-skilled Chinese living abroad have gained a high status in China as they are presumed to bring back critical know-how and advanced foreign technology to render China more competitive within the global economy (MIAO and WANG 2017; WANG 2016; ZWEIG et al. 2008). Hence, the government's attitude towards migration in general and high-skilled Chinese living abroad in particular has changed drastically since the late 1980s, thus counterbalancing previous talent outflow and brain drain (ZWEIG 2006a, pp. 67–68; XIANG 2016; ZHOU et al. 2018; GRANSOW 2023).

Before that time, Chinese with such foreign connections often faced discrimination and many left the country (JOHNSON and YUEN-FONG 1997). The developments in 1989 discouraged many of such people from returning to their homeland and, thus, lowered the percentage of high-skilled people returning to China. Starting in the early 1990s, the national government and local authorities began to launch policies to eliminate many barriers to encourage this group to move back to China. Similarly, the government sought to entice such candidates to flock to China with policies which offered benefits such as easier overseas travel, tax reliefs, subsidies for housing purchases and schooling for children, support for securing employment for spouses, and even residency permits (*hukou*, GUO et al. 2003, p. 107; ZHOU 2004, p. 198). By doing so, the government showed that its attitude towards high-skilled Chinese living abroad had changed and that it welcomed them to return to China to support the country's development (XIANG 2016; ZWEIG et al. 2020).

Despite a few setbacks, the number of high-skilled Chinese living abroad returning home (high-skilled return migrants) increased over the following years (DING and XU 2014). Although the Chinese government eagerly seeks to reverse its brain drain, especially in regard to significant destinations such as the United States, the United Kingdom, Canada or Australia, some scholars argue that policies are only partly successful (e.g., CAO 2008; LI et al. 2022, pp. 170–171). A recent study though points to the fact that between 1978 and 2019 about 4,231,700 students – i.e., over 86 percent of all Chinese international students – returned upon completing their overseas studies; in 2019, about 580,300 Chinese students returned to China, a 12 percent increase from 2018 (MA et al. 2023).

Chinese cities have continued to establish policies to attract the high-skilled Chinese living who have relocated abroad. This has resulted in a fierce competition between the cities who are eager to convince high-skilled Chinese to settle down permanently on their soil. While the big cities of Shanghai and Beijing remain the most popular destinations of high-skilled return migrants, the economically important and growing cities of the Pearl River Delta are endeavouring to present themselves as increasingly desirable destinations too. In an attempt to gain an even more competitive edge, much effort has been put into the creation of a favourable business environment for high-skilled return migrants, including

the establishment of science parks and high-tech development zones³⁾ with residential complexes and recreation areas (WANG 2007; TEO 2011; YANG 2020).

The government became convinced that the provision of an attractive living environment is of similar importance for the attraction of high-skilled return migrants as an attractive business environment. Hence, several policies and programmes address the question of how to improve the living conditions and environment after return. As a consequence, the construction of housing areas combining residential, commercial and leisure use, such as gated communities, apartment complexes and spacious living areas, is promoted by the authorities to fulfil the putative residential preferences of foreign expats and high-skilled Chinese return migrants (WANG and LAU 2008; LI et al. 2019).

3 Material, Methods and Research Sites

Pursuing a mixed methods approach (TASHAKKORI et al. 2003; DECUIR-GUNBY 2008), the empirical results are derived from an explorative analysis of government data – namely township-based data on the distribution of return migrants (see Figure 1) – and publications, media reports as well as from qualitative content analysis (following JOHNSON 2001 and SCHREIER 2012) of semi-structured interviews collected in Guangzhou and Dongguan in 2011 and 2012. The interviews were conducted partly in Chinese language (afterwards translated by Chinese interpreters), partly by the authors in English or German language. The primary data comprise transcripts of five expert interviews with scientists and governmental officials in Guangzhou and Dongguan⁴⁾ (following transcription modes of FLICK 2002). The length of the interviews was between 28 and 88 minutes, in total 211 minutes and with an average of 42 minutes. Additionally, twelve in-depth interviews (seven in Guangzhou and five in Dongguan, ranging from 16 to 118 minutes, in total 499 minutes, with an average duration of 42 minutes) with high-skilled return migrants give deeper insights into subjective factors influencing the resettlement decisions of the high-skilled return migrants. Further, memo records of participant observation – of, e.g., the structure of built environment, prevalent functional use and services offered to residents and employees – and explorative excursions – including informal transect walks – with colleagues from Sun Yat-sen University (Guangzhou) and with local staff members in Songshan Lake Park between 2010 and 2013 were included in the analysis (see also PAHL 2016, chapter 5).

The material allows the researchers to, firstly, give a brief overview on the topic of high-skilled return migration within the aim of investigating the situation in Guangzhou and Dongguan and an outline of existing local policies. Secondly, by reference to the results from the qualitative interviews, the government's strategies and the high-skilled

³⁾ In China, the economic reforms in the course of the opening policy and the inflow of international capital, especially in the coastal regions, have evoked the proliferation of "New Special Development Zones" (NSDZ) (CHAN 1999; CARTIER 2001). High-tech development zones, as a special type of NSDZs, mainly concentrate on the promotion of national and regional high-tech industries; they number 53 across the whole country (WANG 2007).

⁴⁾ All interviews were coded; the quotes' references in this article refer to the given code numbers, E stands for expert, R for return migrants, G for Guangzhou and D for Dongguan.

return migrants' demands on their living environment as well as the key factors and reasons for the choice of their residential resettlement sites can be identified. This information facilitates a deeper understanding of the government offers to incentivising potential high-skilled return migrants to permanently settle down in the two cities. Furthermore, the researchers are able to gauge an understanding of the indirect influence of high-skilled return migrants on the production of urban space.

The case studies of Guangzhou and Dongguan were selected as part of a larger research programme on the Pearl River Delta – Guangzhou as a provincial capital and Dongguan as a typical manufacturing city, satellite industrial platform and one of the fastest growing cities in the Delta (in-depth baseline studies: ROLF 2019; XU et al. 2023; in terms of urban transformation and land use changes: WU et al. 2024). The research sites of the high-tech industrial zones Guangzhou Development Park and Songshan Lake Park in Dongguan were selected based on cluster sampling (PAHL 2016, p. 81), to identify urban areas targeting high-skilled return migrants. The parks were selected by the city governments to support the economic upgrading of the cities and attract high-skilled professionals. Songshan Lake Park is one of the most prominent mega projects that has been developed since 2002 with high valorisation intentions (SHEN and TSAI 2016). In 2011, it was already one of the areas with the highest level of development in terms of GDP and the number of R&D companies (TANG et al. 2020; XU et al. 2023).

4 Government Strategies Towards High-Skilled Return Migrants in Guangzhou and Dongguan

Local governments in China often run own recruitment activities, including local offices with information material and services. Further, many are sending representatives to overseas job fairs and are active in connecting with Chinese diaspora institutions abroad (XIANG 2016) – even encouraging short-term stays and visits.⁵ Also, special grants or business start-up loans are provided to returnees.

In 2011, the provincial government of Guangdong Province announced that the whole province aimed to attract 10,000 high-skilled return migrants⁶ within the following years (in detail: PAHL 2016, pp. 140–144). Later, further and specific programmes (e.g., targeting postdoctoral scholars with relevant expertise) were launched, such as the *Pearl River Talent Plan* in 2016 (LI et al. 2022). The goal of all programmes was to boost business in the province and foster innovation to contribute to the economic development. This triggered policy makers in Guangzhou and Dongguan to actively seek ways to attract

⁵ In 2013, the “Law on Border Exit and Entry” and the “Regulations on Foreign Citizen’s Border Exit and Entry” introduced new visa categories (“Q” and “S”) for persons with family ties with Chinese citizens (XIANG 2016, p. 16).

⁶ In the government policy, *high-skilled* is not defined by educational level. The target group of this policy includes all Chinese living abroad regardless of their educational attainment, i.e., it targets more generally Chinese with professional knowledge gained either through studying or working abroad. As the professional qualification is difficult to evaluate if not measured by university degree, in this paper only those return migrants that studied abroad and possibly worked after their studies are considered as high-skilled return migrants.

high-skilled return migrants to their cities. Attracting high-skilled return migrants⁷⁾ is considered as vital for achieving economic upgrading by the local governments of both cities (WIESBROCK 2008; LI et al. 2022; in detail: PAHL 2016, pp. 144–147). The strategies of the two cities have been similar: Both municipal governments have adopted policies supporting innovation and start-ups to encourage more high-skilled people, including high-skilled return migrants to relocate to their cities (WU and KEYTON 2010). But the conditions in both cities distinguish from each other.

Guangzhou – provincial capital, the region's hub for human capital and a prominent hometown of Chinese still living abroad – has long played a leading role in attracting both international investment and professionals (XU and JEH 2005, pp. 42–44). Two main characteristics of talent policies were established after 1999, at first by defining “high-level talent” as “leaders in technology, entrepreneurship, management, academia or public policies, and holders of PhD from overseas universities who have worked in Guangzhou for at least nine months in a single year” (LI et al. 2022, p. 3). Second, since 1999 a policy system aiming at attracting highly skilled talents was established. This includes the programme *100 Leading Talents for Creation and Enterprise*⁸⁾ which is a local policy document referring to the national *One Thousand Talents Scheme*⁹⁾ (MIAO and WANG 2017; Guangzhou Government n. y.; LI et al. 2022). The programme guarantees the selected high-skilled return migrants and their families various benefits, for example, a local registration permit (*hukou*), including public benefits and an apartment provided by the government. In addition, support is offered to spouses in regard to finding employment and schooling for children in nearby education facilities.

In Dongguan, the situation is considerably different. As one of the booming manufacturing cities in China since only the early 2000s, the city's government pursues industrial upgrading schemes (YANG 2020). This entails promoting innovation and structural adjustments, including a parallel strategy of transition of both the economy (in supporting specific branches in the industry) and the society (in attracting high-skilled professionals to move to the city) (Dongguan Ssl Sci. and Tech. Industry Park Administrative Committee, n. y.). Ten “leading” and outstanding candidates, including high-skilled return migrants, have been selected each year under the analogous *Leading Talents Programme*. Besides other benefits, they receive resettlement subsidies (Dongguan Government 2010).¹⁰⁾ To

⁷⁾ Policies of both cities use the terms “talents” (*rencai*) and “leading talents” (*lingjun rencai*, in this paper referred to as leading high-skilled people), also referred to as “high-level talents” (*gaocengci rencai*). All not necessarily are high-skilled return migrants. “Talents” (in this paper be group of high-skilled people) refer to those holding a university degree from China. “Leading talents” either have the status of a Ph.D. graduate or hold a university degree from overseas (the latter is referred to high-skilled return migrants in this paper) (see also: MACLACHLAN and GONG 2022). According to a government official in Guangzhou, the crucial differentiation is that leading high-skilled people bring new technology or know-how to establish a promising business.

⁸⁾ Guangzhou Municipal Human Resource And Social Security Bureau (2017).

⁹⁾ “Recruitment Program of Global Talents” (1000 Plan).

¹⁰⁾ In 2024, subsidy schemes are still practiced, see, e.g., a media report: <https://www.scmp.com/economy/china-economy/article/3234409/chinas-southern-export-hub-steps-talent-hunt-dongguan-dangles-us70000-cash-us14-million-housing> (last access: March 28, 2024).

increase the number of high-skilled return migrants with experience of working in the high-tech sector, the Dongguan municipal government introduced a new funding scheme in 2011 to encourage more people to work and undertake training or study in the high-tech or management-related fields in a foreign country (ED1¹¹). As part of this scheme, participants receive an annual sum of 200,000 Renminbi to cover the expenses of living abroad, “mainly subsidising the people to go abroad to study high-technology and management knowledge, but the requirement is that such people must return to Dongguan” (ED1) upon completion of the programme.

Both cities focus on the establishment of government-led high-tech development zones (GUO 2013). The scheme was modelled on strategies developed by Taiwan and South-east Asian countries (GUO et al. 2003); they were first encouraged by the national policy called *China Torch Program* in the late 1980s (ZWEIG 2009, p. 5). The development zones play an important role in attracting high-skilled return migrants to make investments and launch businesses (ZWEIG 2009). Some of them are even solely created for high-skilled return migrants with entrepreneurial experience (*chuangye yuan*). Examples of such zones – “spaces of exception” – in Guangzhou and Dongguan are the *Overseas Chinese Industrial Park* in Huadong in Guangzhou Municipality, the *Entrepreneur Park for Overseas Chinese Scholars* in the Guangzhou Development District and the *Overseas Students Pioneer Park* in the Songshan Lake Park in Dongguan. Guangdong Province actively promotes the establishment of further high-tech development zones for high-skilled return migrants to accelerate the development of emerging industries, the modern service industry and the advanced manufacturing industry (QIN 2011; see also LI et al. 2022). These development zones act as business incubators for high-skilled return migrants that protect their new businesses from uncertain market conditions and bureaucracy. However, in order to be promoted by preferential policies in the development zones, the business idea needs to involve new technology (ZWEIG 2009). Thus, the authorities in the development zones of Guangzhou and Dongguan only grant benefits to entrepreneurs that fulfil the criteria of one of the preferential policy schemes of the development zones.

In Songshan Lake Park, for example, administration officials estimated that about ten percent of the enterprises receive benefits from the Songshan Lake Park administration authorities because they had previously successfully applied for municipal schemes. However, individual employees may also take advantage of various benefits offered by the scheme. For instance, some employees have been granted a local *hukou* by the Songshan Lake Park administration. Depending on the candidate’s qualification and the length of their contract, high-skilled return migrants can apply for further funding if they have novel ideas for either a business model or technological innovation. Yet, the funding can only be channelled from a company located in the Songshan Lake Park area.¹²⁾

¹¹⁾ ED1 = interviewed expert no. 1 from Dongguan. With regard to the explanation of the abbreviations used by the interviewees, see footnote 4.

¹²⁾ Information in this paragraph was given by experts during field excursions in 2011/2012.

One particular focus of the government strategy in both cities relates to supporting high-skilled return migrants and their families to finding a suitable accommodation and office space. In both cities, including the Guangzhou Development District and Dongguan Songshan Lake Park, two different mechanisms are being applied.

Firstly, the development zone's administration fosters the establishment of housing estates in the zones which give priority to high-skilled return migrants who have successfully applied to one of the development zone's schemes. It considers the housing situation to be a critical factor in the high-skilled return migrants' decision to resettle. Some development zones have specific housing areas – either in completion or in 2012 still in the planning stage – where apartments are offered to the high-skilled return migrants. Depending on the returnee's qualifications, the housing is free or at a discounted price (see case study on Songshan Lake Park below).

Secondly, the allocation of monetary support to facilitate the resettlement of high-skilled return migrants is implemented by local governments in Guangzhou and Dongguan. High-skilled return migrants can benefit from the *Policy for Overseas Student of Guangzhou*¹³ by acquiring resettlement subsidies as a start-up fee as high as 10,000 Renminbi for Ph.D. holders and 7,500 Renminbi for postgraduates (Guangzhou Government n. y.). Other sources underline: "Guangzhou municipality hands out \$12,000 as a 'golden hello' to returnees who decide to work there" (XIANG 2016, p. 15), which was sidebacked from a return migrant who started to work in the university: "They gave something like 80,000 Yuan as a research money to start your research.¹⁴ [...] University provides the temporary house to overseas students which means four years housing. [...] So they provided this funding to me to help me to buy a table, for example, a computer and so on [...] also there are some potential advantages at [...] students from overseas. You can apply for some funding" (RG3). The Dongguanese government has adopted similar support programmes, for housing and work environment. Experts underlined: "Government offers some benefits of the life and work for the returned overseas students, such as to provide them schools for their children, housing subsidies, home qualifications (*hukou*) and the entrepreneur fund" (ED1). This was seconded by statements from a return migrant in the business sector: "When you open a company in Dongguan the government supports your office and financial opening" (RD1).

Both mechanisms emphasise supporting the high-skilled return migrants' search for housing and office space, yet the two schemes have different spatial consequences. The former influences the distribution of high-skilled return migrants directly and can in the long term have consequences on their concentration in certain city areas and the formation of high-skilled return migrants' neighbourhoods, if priority is given to high-skilled return migrants, e.g., by quota. The pull-factors of these housing estates located in the development zones are the proximity to the workplace. Similarly enticing is the development zones' clean and green environment. The zones are often located outside the city centre and pay special attention to built living areas with recreational value. The latter gives the high-skilled return migrants the freedom to choose where in the city they want to settle as

¹³ Guangzhou Municipal Human Resource and Social Security Bureau (2018).

¹⁴ The interview partner did not mention whether obtaining the funds was difficult or not.

they can select the house or apartment they wish to rent or buy. This mechanism supports more the dispersion of high-skilled return migrants all over the city area.

Few return migrants shared different experiences: “[...] Return migrants [are] still struggling with the housing problems” (RD8), particularly in respect to the problem of affordable prices. They also pointed out problems with adequate office space: In the first year I was [...] frustrated, [...] they did offer me an office, as you see it is quite spacious and compared to the UK and it’s quite good, but it was just an empty room and I have to buy all my stuff, everything [...] even the furniture and air condition. They didn’t even offer a table” (RD8).

5 Case Study: Songshan Lake Science and Technology Industry Park

The Songshan Lake Park area in Dongguan is a high-tech development zone that was established in 2001 and covers a planning area of 72 km²; together with the Eastern Industrial Park, altogether 163 km² are planned;¹⁵⁾ the park occupies 3.6 percent of the land area of Dongguan (XU et al. 2023). Songshan Lake Park is located in the Guangdong-Hong Kong Economic Corridor, adjacent to Shenzhen in the south and Guangzhou in the north. It was primarily established to upgrade Dongguan’s economic structure by creating space for research and development (R&D) institutions and high-tech companies. From 2008 to 2020, it grew at an annual growth rate of 24.8 percent; more than 70 percent of the companies were founded after 2010; almost 83 percent of them are domestic companies, about 13 percent belong to investments from Hong Kong and Taiwan (XU et al. 2023). It was from the beginning onwards intended to be a driving force towards the economic and social transition of Dongguan (Dongguan Ssl Sci. And Tech. Industry Park Administrative Committee, n. y.).

The development zone’s administrative authority follows an active strategy of attracting high-skilled people to boost industrial upgrading, supported by the Dongguan city government. In 2003, the authority launched the *Overseas Students Pioneer Park* to primarily concentrate on attracting high-skilled return migrants. The Pioneer Park included about 250 enterprises in 2012, established by high-skilled return migrants and was seen as a key platform for implementing the strategy to make Dongguan a “prosperous city” (Dongguan Ssl Sci. And Tech. Industry Park Administrative Committee, n. y., p. 28; statistical information from 2012).

Songshan Lake Park was established as a provincial-level zone but was upgraded to a national-level high-tech development zone in 2010 (TAN 2014). Being a development zone of national importance, Songshan Lake Park received additional funding by the Dongguan government including 500 million Renminbi to improve the zone’s infrastructure given to high-skilled return migrants in 2011. According to the development zone’s administrative authority, besides facilities like a conference hall and leisure facilities, planning also included the construction of further residential areas that would grant priority to high-

¹⁵⁾ Figures updated in March 2024. https://www.cnbayarea.org.cn/english/Specials/content/post_1021593.html (last access: March 26, 2024).

skilled return migrants. One of them is named Happiness Garden (*Xingfu Xiaoqu*). The construction work began in 2011 and was completed in 2014. At that time, the complex included 300 apartments offered to high-skilled return migrants at a lower rate than the market price, asking them to pay just the proportional construction costs of the apartment. Other apartment complexes, such as Lotus Apartments (*Jilian Gongyu*), also give priority to high-skilled return migrants (ED1).

Whether these housing complex offers are attractive to high-skilled return migrants remains subject of further studies. However, according to two zone administrative officers, the demands and needs of high-skilled return migrants are still not exactly known and have not been considered when building the estates. An officer stated: "Maybe it [the apartment houses] is attractive. There is a chance [that it is attractive to them] but if you do not build there is no chance" (ED1). Another officer said: "You have to plan for the future, not only for three to five years. It is not possible that if it turns out to be more high-skilled return migrants you then build another building complex" (ED2). It seems that in order to achieve the overall goal of industrial upgrading, the risk of over-financing and over-supply is taken. However, the zone's administrative authority points out that "the houses that are going to be built are very cheap and the environment is very good so we do not have any concern about whether it will be sold out. In the case whereby there are fewer high-skilled return migrants than expected who want to live in the development zone, then they can still sell it to other people" (ED1).

Selling the offered apartments to people without overseas background instead seems reasonable when looking at the current housing situation in Songshan Lake Park, also with regard to a social mix of different residents' professional and social backgrounds. Other housing estates in the high-tech development zone are available on the free housing market, e.g., Beauty Landscape (*Jinxiu Shanhe*) or The Great Wall Family (*Changcheng Shijia*), some with priority given to zone administration officials, e.g., Songhu Garden (*Songhu Huayuan*), or to enterprise senior management personnel, e.g., Voice of Lake (*Tinghu Ju*). Apartments in other housing estates are sold to people who work in the high-tech development zone, e.g., New Prosperous Garden (*Xinxing Yuan*) or Green Bamboo Garden (*Qingzhu Yuan*), and some which were built by the government are rented to companies that provide apartments to their employees, e.g., Lvhe Residence (*Lvhe Ju*) or Technology Park Apartments (*Keyuan Gongyu*, ED1).

The demand for apartments in these estates is very high, though the housing prices are much higher than in the city centre of Dongguan¹⁶⁾ due to the good environmental conditions in the development zone's area with its artificial lake which was built as a reservoir in the 1950s and 14 km² of green spaces (Dongguan Ssl Sci. And Tech. Industry Park Administrative Committee, n. y.).

¹⁶⁾ According to administrative officers (ED1, ED2), the price per m² in Songshan Lake Park in 2011 was around 20,000 Renminbi whereas the price for housing of comparable standard in the city centre was only around 10,000 Renminbi per m². Other sources indicate that the prices differed from about 11,000 Renminbi in Songshan Lake Park to 8,000 Renminbi per m² in the city centre (e.g., SouFun.com Limited 2013). On corresponding developments in the property sector in Guangzhou and Dongguan between 2010 and 2019, see, e.g., XU and ZHANG 2023).

As in Dongguan City, the development zone's administrative authority in 2011 gave several incentives to high-skilled return migrants who established companies or were employed in Songshan Lake Park. These incentives included the privilege to buy apartments for a reduced price in the development zone's residential estates or the grant of housing subsidies of 200,000 Renminbi paid once to every high-skilled return migrant who came to the development zone and was chosen for the supportive programme. For many high-skilled return migrants it is important to live and work at a place where they can afford housing. This fact underlines the relevance of the policy to provide subsidised housing to the high-skilled return migrants. Furthermore, they and their family members gain permanent residency as well as support in finding employment. Their children can enrol in the highly popular schools provided in Songshan Lake Park area (ED1, ED2).

The high-skilled return migrants in 2012 could use the lump-sum payment for either buying or renting an apartment or house. As they were free to choose their accommodation, many high-skilled return migrants still opted to buy or rent a place in the city centre. This decision is based on different reasons: On the one hand, despite the development zone at that time still being in an expansion phase, the area appeared not attractive enough yet to some high-skilled return migrants due to the limited amount of available facilities, e.g., in terms of shopping places and leisure options. One expert explained: "The supermarket is very small, I think maybe in a few years we can have a lot of them. [...] Dongguan is an industrial city, not like Shenzhen and Guangzhou. [...] So many facilities in Dongguan is not better than Shenzhen, so it's very difficult for Dongguan to attract quality of life [...] social development, [...] to develop the region to increase the living standard. To increase the economic situation, to increase the transportation, the ecological quality of the region" (ED3).

On the other hand, they could find cheaper housing in the city centre. The concern of the development zone's administration authority was that, as in other development zones in China, as explained by an administrative officer in Songshan Lake Park (ED3), high-skilled return migrants rented out the apartments provided to them to other people without overseas experience as they themselves preferred living outside the development zone. Nonetheless, for instance, the residential area Moonlight Lotus Residence (*Yuehe Ju*) in Songshan Lake Park did have a high concentration of high-skilled return migrants at that time. It can be assumed that one reason for the concentration is that the residential area was built by the government and, thus, was cheaper than those residential areas constructed by private real estate companies.

6 Returning Home: Challenging Return and Resettlement Factors of High-Skilled Return Migrants, Factors and Reasons for Locational Choice

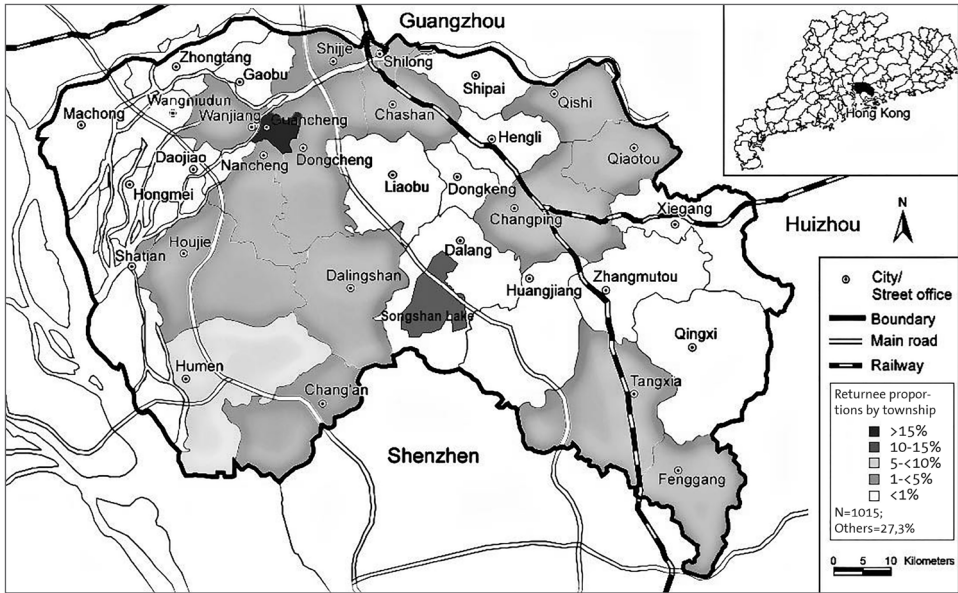
Many return migrants shared their views on the rapidly changing economic, social and spatial urban transformation in the Pearl River Delta in general as well as in the traditional metropolis Guangzhou and the fast growing Dongguan, aggravating the necessity to

readjust to the local circumstances after years abroad. One return migrant explained the complex experiences in respect to the necessity for multiple social, institutional and individual adaptations in daily life: "Basically is a complicated transformation at the moment. [...] There is multiple transformation [...] from students to teacher, from overseas people to back to China to from someone far away from family to go back to the family." "It's very hard to suit to that new life (after return). [...] So basically, you need to go back to the Chinese institutional system. It's difficult to get hold and to get in. There are so many pressures [...] there is policemen, [...] authorities, the hukou" (RG3). Obviously, the time needed for readaptation is underestimated: "I spent almost two years to get use to the new social environment, like get used to the unfriendly staff or ask you to fill forms and then like you all hear something, you owe him or her something. [...] You have to face it and have to endure it" (RG3).

Further, a certain persisting social distance between locals and return migrants seems to be an issue for return migrants, too: "I think you can never return to be a full Chinese, which means somehow they take you as different. So maybe the ten gates for them to integrate you. [...] You can only reach the lines you can never enter the final gate. They [...] behave differently, let's say, because he studied abroad. They will always keep this in mind, so you know what that means. It's always there, even my family, even my mother, she will take this history as something there, so you are never the one who before you go abroad. [...] For Chinese you go abroad, and you have such history then you can never come back to your old Chinese situation, so you become something in between, the third type of thing and it will last forever. Actually, the feeling is not good, because you are not the new type and you are not old type anymore, you can never go back home" (all quotes: RG3).

The governmental attempts to attract high-skilled return migrants and the described policies raise questions on the effects of these strategies. Further, the question is how the resettlement process of the high-skilled return migrants is actually taking place. In other words, where are the high-skilled return migrants resettling and what are the reasons for their decision? According to official statistics (Dongguan Oversea Scholars Association 2012), in Dongguan, the highest proportion of return migrants (including all educational attainments, 89 percent with university degree) can be found in the central district Guangcheng, whereby this makes up 15 percent of all return migrants (Figure 1).

This proportion supports the assumption that living in the city centre that provides more urban facilities seems attractive to high-skilled return migrants. It furthermore seems that providing housing subsidies to the high-skilled return migrants and, thus, the free choice of where to resettle corresponds more to the high-skilled return migrant's preferences than offering apartments in existing housing estates. However, since ten percent of the return migrants live in Songshan Lake Park, the provision of apartments in the development zone also seems to be a promising strategy. Minor concentrations can also be found in Humen where seven percent of the return migrants live as well as in Shilong with a return migrants' population of around five percent. This data confirms the initial impression that there are no major concentrations of high-skilled return migrants on the city-level.



Source: Own draft based on Dongguan Oversea Scholars Association (2012).

Figure 1: Township distribution of return migrants (all educational attainments, 89 per cent with university degree) in Dongguan (N=1015).

The empirical findings from interviews with high-skilled return migrants in Guangzhou and Dongguan show that they settle in locations which are well distributed throughout the city. There is no evidence for a clustering of high-skilled return migrants in any specific city district or estate. This impression is confirmed by an officer of the Returned Overseas Association in Dongguan who says: “Returnees live scattered in Dongguan, and their children are at the same schools as the children of the workers” (ED3). Obviously, social distinction does not play a decisive role for the resettlement decision of high-skilled return migrants. As a high-skilled return migrant in Dongguan said, even though there are some places where they meet friends with overseas background for leisure activities, they do not live in the same areas only because they have an overseas background: “We live in the same place, not quite different from [others]. It’s not because [...]: ‘Oh, you have overseas background we hang out in some special place.’ No we don’t do that. Maybe though [there is] some shopping mall, [...] some cafe, relaxing [...] also there are bars [where overseas like to meet]” (RD3).

Moreover, according to high-skilled return migrants’ statements, there does not seem to be demand for segregated areas or estates: “I do not find it necessary. We are not that different to the others” (RD2). Therefore, their status as high-skilled return migrants does not seem to influence, at least not much, the choice of residential location directly.

Academic literature indicates that the determinants influencing the choice of residential location are rather complex and are difficult to grasp entirely (MALAITHAM et al. 2013).

However, the in-depth interviews suggest that there are several key influencing factors and reasons for the choice of residential location for Chinese high-skilled return migrants. The most salient factors are proximity to family, affordability of housing, proximity to workplace and quality of urban life as well as urban and business surroundings – as shall be explained in more detail in the following.

Firstly, the locational choice is related to the reasons of return. Many respondents mentioned that they returned because of their responsibility towards their parents: “My mother is on her own, she lives alone. That is why I wanted to go back. Because she is not young anymore. And my father died. Because of that and due to the one-child policy, I am responsible” (RG5) and “I am an only child. In China and in our culture, caring for parents is a task for all children” (RG6).

As the traditional family ties are strong in China, these ties play a key role in the choice of place of residence (see, e.g., HE 2022). Thus, family ties are of great importance and the parents are involved a lot in their children's matters. Due to the one-child policy practiced in China until 2016, most of the children are solely responsible to support their parents (see, e.g., HU and SHI 2020). As long as they were not married, they stayed either with their parents or family or close to them. Even after marriage, some mentioned they wanted to stay close to their parents to offer support (RG3, RG9).

In addition, most of the interviewed high-skilled return migrants either returned to a city where they had previously lived before going abroad or they returned to the city where their parents lived. Thus, they already knew the place they returned to and have stronger social ties than newcomers. This bond seems to have an influence on the choice of residential location as they might want to stay in a familiar environment. Other return migrants point to gained freedom after their return: “When you come back from abroad, you don't have these relatives, [...] then you are free from the complicated behaviour [...] partly because people don't know you that well and you don't have these networks and obligations” (RG10).

Secondly, the findings suggest that many high-skilled return migrants do not get high salaries after their return to China. An expert explained: „The biggest problem returnees faced is employment. They have high self-expectations, but the domestic market does not provide entirely satisfactory and suitable jobs for them; other issues include cultural conflicts and urban environments“ (ED1). Some of the respondents just entered the labour market and still have a comparatively low income. Housing prices, especially within the big cities such as Guangzhou, are on the rise. Thus, many high-skilled return migrants are struggling to buy their own place: “In 2009, the price [for housing] already went up. Quite a lot compared to my first return and at that time we had to borrow money from my parents. [It] was embarrassing, but we had to, because we couldn't afford” (RD1).

The challenge is even higher for families: “Return migrant still struggling with the housing problems. Especially after having a kid. Having a child, if you don't have your own house would be difficult in China” (RG8). Problematic are the high interest rates: “I don't really have many saving to spend on housing, especially need to pay like 30 percent

on payment is very difficult” (RG8). This influences the choice of location to return to: “If I went to Beijing or Shanghai I [...] probably couldn’t buy a house by now. That is also one of the main reasons why we chose Guangzhou over Beijing and Shanghai. So many people face these problems [...] in some places about sixty percent of the local revenue coming from the land sale so you can imagine how much the local government relies on the real estate industry” (RG8).

Consequently, the provision of housing remains an important issue for the high-skilled return migrants. Many struggle to buy an apartment after return. Housing offers or subsidies, e.g., by employers or the government, are, thus, attractive and influence the choice of residential location. Thus, many of the high-skilled return migrants choose their residential location in proximity to their workplace to avoid long commuting distances. These distances are increasing in Chinese cities since the restructuring of the traditional work-units (*danwei*) during the economic transformation beginning in the early 1980s and also due to increasing urban expansion (LIU and GUAN 2005, pp. 59–60). Accommodation provided by the employer is either on the work compound or in adjacent estates.

Finally, the offered quality of urban life as well as the urban and business surroundings count. This becomes apparent when asking experts and return migrants for urban and residential preferences of return migrants and when comparing the urban surroundings in Guangzhou and Dongguan.

In Guangzhou, the traditional urban and international atmosphere and the higher urban qualities are appreciated, as explained in the interviews: “In Guangzhou [are] so many international companies [...] the city is very beautiful compared to other cities” (RD2). “Guangzhou has also some opportunity. [...] In Beijing the competition is more serious, but in Guangzhou you have more career growth. And your life will be more comfortable. Guangzhou has high reputation corporation for all the world” (RG4). Other return migrants also point to urban disadvantages: Guangzhou “is actually no really good place to live. The weather, the pollution, the people [...]” (RG9).¹⁷⁾ “The air is very, very dirty here and the surroundings are not at all nice. [...] But the situation has changed so rapidly [...] so the difference in quality of life between China and Europe, I think, is getting smaller and smaller” (RG10).

As to Dongguan, an expert explained: “Because the society in China changes very fast. [...] I have to know the [...] business culture, because you know in the UK you can do anything [...], but in China it’s totally different. You have to follow this culture. For me the most difficulties [...]: How to settle my company, how to earn the money, how to find the people, find the employee.” (RD1). Several return migrants judged: “They don’t want to work here, a small town, they don’t like it. They like big city, more fun” (RD2). “In Dongguan is a [...] lack of culture” (RD7), “very small society” (RD1) and “the security is very bad” (RD7). Similarly, the business surroundings are judged upon critically: “It’s very difficult to find high qualified people here in Dongguan but easier in Guangzhou” (RD2).

Comparisons between the experiences abroad and the new locations back in China are an essential part of a return readaptation for many return migrants. An expert expressed his per-

¹⁷⁾ For details on pollution problems, see, e.g., a recent study by CHEN et al. 2022.

spective: "Main problems they encountered are the maladjustment of the lifestyle. The living environment abroad is more secure, more coherent. But after a long time, they can be able to adapt to the local environment. The local staff appreciates and admires the returnees. The local staff has adapted to the habits of the returnees, but the returnees have not adapted well to the habits of Dongguan after studying abroad for 1–4 years" (ED1).

In order to ease the readaptation, unusual arrangements are offered: "For cultural conflict, we are creating a free environment with Western characteristics and cultural activities for returnees, such as the Christmas party, so that they can find a sense of belonging. The aim of the government is to retain the returned talents by the means of these cultural efforts" (ED1).

Many return migrants also appreciate the results of the urban transformation of the last decades in acknowledging. One interview partner explained: "I heard before the city was very, very dirty. Since these Asian competitions the city has become much better" (RG10). The returnee also reflects: "Now there's also the underground [i.e., the metro], for example, which didn't exist before and in some areas it's even more pleasant, for example with the prices: still relatively cheap. And there are still services that you can no longer enjoy in Europe" (RG10). Such assessments emphasise the willingness of the return migrants to readjust to the return situation as well as to the many changes brought about by the urban transformation.

7 Discussion

The paper, firstly, investigates the local governments' strategies of Guangzhou and Dongguan for attracting high-skilled people so that they may contribute to the cities' economic, especially industrial upgrading endeavours. The study shows that both schemes pay attention to the group of high-skilled return migrants who are expected to bring professional expertise and know-how to the high-tech sector. Entrepreneurs with overseas experience are targeted in particular. Although both cities pursue similar policies in their efforts to attract high-skilled return migrants, they have different framework conditions, and the resulting situation appears to be different. Guangzhou, as a first-tier city and provincial capital, seems to be a comparatively more attractive location to settle down permanently, due to the wider range of facilities, services and urban attractions, especially for high-skilled return migrants not originating in the city. Thus, the benefits offered are appealing to these migrants. Dongguan, as a second-tier city, seems more attractive to high-skilled return migrants born in the city, mostly due to existing family and social ties. Hence, this factor renders the benefits offered less appealing to high-skilled return migrants who do not have such roots in the city compared to Guangzhou.

In their attempts to attract high-skilled return migrants, both cities apply comprehensive schemes that offer benefits in various realms of life, such as access to public services that, due to the housing registration system in China, are difficult to access for internal migrants. Benefits also include assistance with job searches or benefits to family members. The strategies aim to boost attraction by focusing particularly on access to housing. This is a pressing issue as housing ownership is not only socially valued in China but also

a challenge due to high housing prices, especially for career entrants (see, e.g., KNIGHT and WAN 2023).

First, the cities provide housing estates in which they primarily offer apartments to high-skilled return migrants who invest or work in the cities, a strategy applied mainly in the cities' high-tech development zones in the urban fringes. Second, the local governments give monetary lump-sum payments that high-skilled return migrants can use to rent or buy an apartment in a location of their choice. The provision of apartments in housing estates – partially built specifically for high-skilled people, including high-skilled return migrants, as in the case of Songshan Lake Park in Dongguan – presents two issues that deserve more attention in governmental strategies if this approach is to succeed:

1. Dedicated housing estates can – beyond usual income-based segregation (see, e.g., ZHANG et al. 2021) – lead to a tendency towards spatial segregation according to educational level because such a policy is aimed at a specific clientele and certain quotas may have been reserved. So far, in both cities, high-skilled return migrants still live scattered all over the cities. However, in Dongguan, beside in the central district, there seems to be a slight tendency towards grouping in the development zone, which seems to be related to the fact that specialised skills and qualifications acquired abroad are required for the jobs offered in and around the development zone. But spatial segregation does not seem to be the intention of the interviewed high-skilled return migrants, as they do not perceive themselves as being different from other Chinese colleagues who did not study or work overseas.
2. The findings suggest that governmental attraction attempts pay too little attention to potential underlying demands and preferences – such as specific factors and reasons for locational choice – of the high-skilled return migrants, as can be seen in the case of built housing estates. Therefore, it remains to be seen whether the housing areas can be attractive to high-skilled return migrants in the long run.

Secondly, the results of the findings on factors and reasons for the choice of location during the study period indicate that it is important to take greater account of the specific requirements of high-skilled returnees – such as family and social ties, the income situation or the quality of the residential environment (see, e.g., XU et al. 2023). The high-skilled return migrants in particular consider the availability of housing in the low-price segment as important when they choose somewhere to resettle. This relevance of housing prices partly has labour market-related reasons: many high-skilled return migrants have relatively low wages after they return (GUO et al. 2003), because the labour market conditions for high-skilled return migrants have tightened.

Due to the increasing amount of high-skilled Chinese people returning home after having lived abroad in the early 2010s, those high-skilled return migrants who have only studied abroad but not gained work experience may appear as less desirable to the high-tech industry (HAO et al. 2016; ZHOU 2004; Global Times 2010). Furthermore, it is argued that most of the high-skilled return migrants are not (yet) top-level professionals which makes it even more difficult to find a well-paid employment (HAO et al. 2016; ZHANG and HOU 2011). Hence, the high-skilled return migrants are sharing the experience of many

Chinese in the younger generation that they are struggling to accumulate enough capital to buy their own place. Additionally, over the past three decades, the market situation in the commodity housing sector¹⁸⁾ has tightened in China (HUANG 2004; CHEN et al. 2011; MA 2018). Due to real estate speculation and limited urban space in China's large cities, the housing prices, especially in coastal cities, have gone up so that most households cannot afford housing in the private housing sector and must rely on subsidised housing offers (HUANG 2004; WU et al. 2012).

The governments in Guangzhou and Dongguan address this scarcity of housing and the struggle of many high-skilled return migrants to find affordable housing after return by providing access to subsidised accommodation for renting or buying. At present, the economic situation of many high-skilled return migrants obstructs them from making high demands in terms of their housing situation and living environment. With rising salaries, further demands and preferences are likely to gain importance as determinants of the resettlement decisions of high-skilled return migrants. In addition, demands and preferences change in the course of the life span; many of the high-skilled return migrants in Guangzhou and Dongguan are still young and unmarried.

In addition to solving the housing issue, local authorities should try to address other relevant concerns, factors and reasons of high-skilled return migrants to convince them to resettle in their place of residence. These include proximity to the family, their children's education, commuting distances, environmental quality and living environments, including a range of urban municipal facilities and services. Facilities in the newly developed urban areas, housing estates and high-tech development zones are still scarce, such as local shopping, leisure facilities, education and health facilities, or transport connections; urban policies to attract high-skilled return migrants may focus more firmly on such aspects in future. With rising demands and more attention paid to such preferences, the living environment offered in the high-tech development zones which are apparently at the centre of present attraction strategies may not be so appealing in the future as it seems now (also see XU et al. 2023).

Therefore, it seems reasonable to suggest that the local governments diversify their attraction strategies by paying more attention to offering comprehensive, integrated living environments with ample amenities based on profound knowledge of specific factors and reasons for the choice of location gained from detailed surveys among the target group. Whereas the environmental quality of the high-tech development zones is valued in the interviews, the integration into existing city structures and provision of comprehensive urban amenities could remain an issue. Other places within the cities might already provide the conditions which the high-skilled return migrants seek. In a new place, such as the high-tech development zones, these amenities might take long to develop, such as social cohesion and bonds or diversified leisure facilities.

¹⁸⁾ In the period between about 2004 and 2012, there have been major changes in the housing sector in China towards a more market-oriented housing provision. This shift has led to the privatisation of subsidised housing and to the excessive construction of commodity housing (*shang ping fang*), a new private housing type constructed by developers (HUANG 2004; on the division of housing class since the market-oriented housing reform in 1998, see CHEN et al. 2018).

The above presents what a hard task it is to build liveable cities from scratch to attract a specific group. This paper presents that in the case of attracting high-skilled return migrants, this task grows ever more challenging as these high-skilled people can place high demands upon their city of residence since they are targeted by many cities worldwide and in China. Considering the recent trend of an increasing number of higher-educated residents in the Pearl River Delta, such as Dongguan (XU et al. 2023), the above specific requirements may become more important for urban management policies and urban planning and development in the Pearl River Delta. In terms of both quantity and quality, it will be necessary for the authorities and companies to have a better understanding of the specific housing needs of different population groups. Further developments in the Pearl River Delta will also depend on the dramatic oversupply of housing and the debt crisis facing local authorities. The severe problems of large property companies, such as Evergrande, underline the need for an in-depth examination of the post-pandemic economic depression and the specific social needs in China.

Funding and Acknowledgements

This research was funded by the German Research Foundation (DFG), grant number KR 1764/11-2.

This paper is based on the research project “Regional Agility in the Wake of Crisis: Towards a New Growth Model in the Greater Pearl River Delta?” within the frame of the Priority Programme 1233 “Megacities – Megachallenge: Informal Dynamics of Global Change” funded by the German Research Foundation (DFG) at the University of Cologne, Germany (KR 1764/11-2). It was carried out in cooperation with Prof. Dr. Desheng XUE and his students at the Department of Geography, School of Geography and Planning, Sun Yat-sen University (SYSU), Guangzhou, China.

The authors are grateful to the collaborating colleagues at SYSU and our interview partners at government institutions, in the private sector and among return migrants for their valuable support.

8 References

- 1000 Plan (n. y.): Recruitment Program of Global Talents. – <https://rsbold.whu.edu.cn/EN/1000talents2.html> (access: Oct. 26, 2023).
- BAO A., PANG G., ZENG G. (2022): Entrepreneurial Effect of Rural Return Migrants: Evidence from China. In: *Frontiers in Psychology*, 13, article no. 1078199. – <https://doi.org/10.3389/fpsyg.2022.1078199>.
- BÖHN D., KRAAS F. (2023): Das Perlflossdelta: Urbane Transformation des Deltaraums zwischen Guangzhou, Hongkong und Macau. In: HARDAKER S., DANNENBERG P. (eds.): *China. Geographien einer Weltmacht*. Berlin: Springer, pp. 389–396. – https://doi.org/10.1007/978-3-662-66560-2_40.
- BORK-HÜFFER T., ETZOLD B., GRANSOW B., TOMBA L., STERLY H., SUDA K., KRAAS F., FLOCK R. (2016): Agency and the Making of Transient Urban Spaces: Examples of Migrants in the

- City in the Pearl River Delta, China, and Dhaka, Bangladesh. In: *Population, Space and Place*, 22 (2), pp. 128–145. – <https://doi.org/10.1002/psp.1890>.
- CARTIER C. L. (2001): *Globalizing South China*. Malden: Blackwell Publishers. – <https://doi.org/10.1002/9780470712764>.
- CAO C. (2008): China's Brain Drain at the High End. In: *Asian Population Studies*, 4 (3), pp. 331–345. – <https://doi.org/10.1080/17441730802496532>.
- CHAI Y. (2014): From Socialist *danwei* to New *danwei*: A Daily-life-based Framework for Sustainable Development in Urban China. In: *Asian Geographer*, 31 (2), pp. 183–190. – <https://doi.org/10.1080/10225706.2014.942948>.
- CHAN R. C. (1999): Regional Development in the Yangtze and the Pearl River Delta Regions. In: CHAPMAN G., DUTT A. K., BRADNOCK R. W. (eds.): *Urban Growth and Development in Asia*. Aldershot: Ashgate, pp. 62–81.
- CHEN J., GUO F., WU Y. (2011): One Decade of Urban Housing Reform in China: Urban Housing Price Dynamics and the Role of Migration and Urbanization, 1995–2005. In: *Habitat International*, 35 (1), pp. 1–8. – <https://doi.org/10.1016/j.habitatint.2010.02.003>.
- CHEN Y., LAI B., WEI Y., MA Q., LIANG H., YANG H., YE R., ZENG M., WANG H., WU Y., LIU X., GUO L., TANG H. (2022): Polluting Characteristics, Sources, Cancer Risk, and Cellular Toxicity of PAHs Bound in Atmospheric Particulates Sampled from an Economic Transformation Demonstration Area of Dongguan in the Pearl River Delta, China. In: *Environmental Research*, 215 (2), article no. 114383. – <https://doi.org/10.1016/j.envres.2022.114383>.
- CHEN J., WU Y., GUO F., WANG H. (2018): Domestic Property and Housing Class in Contemporary Urban China. In: *Journal of Housing and the Built Environment*, 33 (1), pp. 91–109. – <https://doi.org/10.1007/s10901-017-9545-6>.
- CHOW G. C. (2015): *China's Economic Transformation*. 3rd edition, Malden: Wiley Blackwell.
- COMBES P.-P., DÉMURGER S., LI S., WANG J. (2020): Unequal Migration and Urbanisation Gains in China. In: *Journal of Development Economics*, 142, article no. 102328. – <https://doi.org/10.1016/j.jdeveco.2019.01.009>.
- DECUR-GUNBY J. T. (2008): Mixed Methods Research in the Social Sciences. In: OSBORNE J. W. (ed.): *Best Practices in Quantitative Methods*. Thousand Oaks: Sage Publications, pp. 125–136. – <https://doi.org/10.1007/s11186-019-09345-5>.
- DICKEN P. (2007): *Global Shift. Mapping the Changing Contours of the World Economy*. 5th edition, London: Sage Publications.
- DING M., XU J. (2014): *The Chinese Way*. New York: Routledge.
- Dongguan Sci. And Tech. Industry Park Administrative Committee (n. y., about 2012): *Investment Guide. The High-Tech Industry Park with the Greatest Development Potential in China*. Dongguan: Park Administrative Committee.
- Dongguan Government (2010): *Dongguan Leading Talent Policy*. In: *China News*. – <http://www.chinanews.com/lxsh/news/2010/03-04/2151700.shtml> (access: Sept 6, 2017).
- Dongguan Overseas Scholars Association (DGOSA) (2012): *Statistics on Dongguan Overseas Scholars*. Dongguan: DGOSA. – www.dgosa.com (access: Jan 25, 2020).
- DOUGLASS M. (2000): Mega-urban Regions and World City Formation: Globalisation, the Economic Crisis and Urban Policy Issues in Pacific Asia. In: *Urban Studies*, 37 (12), pp. 2315–2335. – <https://doi.org/10.1080/00420980020002823>.
- ENRIGHT M. J., SCOTT E. E., CHANG K.-M. (2005): *Regional Powerhouse. The Greater Pearl River Delta and the Rise of China*. Singapore: Wiley.
- FLICK U. (2002): *Qualitative Sozialforschung. Eine Einführung*. 3rd edition, Reinbek bei Hamburg: Rowohlt Taschenbuch Verlag.

- FLORIDA R. (2008): *Who's Your City? How the Creative Economy Is Making Where to Live the Most Important Decision of Your Life*. New York: Basic Books.
- GAO X., WANG X. (2020): The Trends of Migration in China, 1949–2019. In: *China Population and Development Studies*, 3 (2), pp. 154–159. – <https://doi.org/10.1007/s42379-019-00035-4>.
- GAUBATZ P. (1999): China's Urban Transformation: Patterns and Processes of Morphological Change in Beijing, Shanghai and Guangzhou. In: *Urban Studies*, 36 (9), pp. 1495–1521. – <https://doi.org/10.1080/0042098992890>.
- Global Times (2010): Reverse Culture Shock Strikes. Newspaper, English Edition, Beijing. – <http://www.globaltimes.cn/content/572383.shtml> (access: Jan 1, 2019).
- GRANSOW B. (2023): Bevölkerungswanderung/Binnenmigration. In: HARDAKER S., DANNENBERG P. (eds.): *China. Geographien einer Weltmacht*. Berlin: Springer, pp. 127–134. – https://doi.org/10.1007/978-3-662-66560-2_14.
- Guangzhou Government (n. y.): *Preferential Policies of Guangzhou City*, Government Brochure. Guangzhou: Guangzhou Government.
- Guangzhou Municipal Human Resource and Social Security Bureau. Guangzhou: The People's Government of Guangzhou Municipality. – https://www.gz.gov.cn/guangzhouinternational/businessenvironmentoptimization/policies/PayingTaxes/content/post_7299386.html (access: June 15, 2017 and Jan. 23, 2018).
- GUO F., KEREN L., PING H. (2003): China: Government Policies and Emerging Trends of Reversal of the Brain Drain. In: IREDALE R., GUO F., ROZARIO S. (eds.): *Return Migration in the Asia Pacific*. Bodmin: MPG Books Ltd, pp. 88–111.
- GUO R. (2013): *The Palgrave Macmillan Regional China. A Business and Economic Handbook*. Houndmills / New York: Palgrave Macmillan.
- HAO J., WEN W., WELCH A. (2016): When Sojourners Return: Employment Opportunities and Challenges Facing High-skilled Chinese Returnees. In: *Asian and Pacific Migration Journal*, 25 (1), pp. 22–40. – <https://doi.org/10.1177/0117196815621806>.
- HE Q. (2022): Family, Geographical Distance and Residential (Im)Mobility Behaviour in China. In: *Journal of Housing and the Built Environment* 38 (3), pp. 1457–1489. – <https://doi.org/10.1007/s10901-022-09979-5>.
- HERRLE P., FOKDAL J., YANG S. (2023): Wenn Städte Dörfer verschlingen – Urbanisierung in China. In: HARDAKER S., DANNENBERG P. (eds.): *China. Geographien einer Weltmacht*. Berlin: Springer, pp. 253–261. – https://doi.org/10.1007/978-3-662-66560-2_26.
- HU Y., SHI X. (2020): The Impact of China's One-Child Policy on Intergenerational and Gender Relations. In: *Contemporary Social Science*, 15 (3), pp. 360–377. – <https://doi.org/10.1080/21582041.2018.1448941>.
- HUANG Y. (2004): Housing Markets, Government Behaviors, and Housing Choice: A Case Study of Three Cities in China. In: *Environment and Planning A: Economy and Space*, 36 (1), pp. 45–68. – <https://doi.org/10.1068/a35158>.
- JACOBS J. (1969): *The Economy of Cities*. New York: Random House.
- JESSOP B., SUM N.-L. (2000): An Entrepreneurial City in Action: Hong Kong's Emerging Strategies in and for (Inter)Urban Competition. In: *Urban Studies*, 37 (12), pp. 2287–2313. – <https://doi.org/10.1080/00420980020002814>.
- JOHNSON G., YUEN-FONG W. (1997): The Response to Rural Reform in an Overseas Chinese Area: Examples from Two Localities in the Western Pearl River Delta Region, South China. In: *Modern Asian Studies*, 31 (1), pp. 31–59. – <https://doi.org/10.1017/S0026749X00016929>.
- JOHNSON J. M. (2001): In-Depth Interviewing. In: GUBRIUM J. F., HOLSTEIN J. A. (eds.): *Handbook of Interview Research. Context & Method*. Thousand Oaks: Sage Publications, pp. 103–120. – <https://doi.org/10.4135/9781412973588>.

- KNIGHT J., WAN H. (2023): The Receding Housing Ladder: House Price Inflation, Parental Support, and the Intergenerational Distribution of Housing Wealth in China. In: *Journal of Chinese Economic and Business Studies*. – <https://doi.org/10.1080/14765284.2023.2210016>.
- KRAAS F., HACKENBROCH K., STERLY H., HEINTZENBERG J., HERRLE P., KREIBICH V. (eds.) (2019): *Megacities – Megachallenge: Informal Dynamics of Global Change. Insights from Dhaka, Bangladesh, and Pearl River Delta, China*. Stuttgart: Borntraeger Science Publishers.
- KÜCHLER J., STEIN S. (2023): Stadtgeschichte Chinas im 19. und 20. Jahrhundert. In: HARDACKER S., DANNENBERG P. (eds.): *China. Geographien einer Weltmacht*. Berlin: Springer, pp. 245–252. – https://doi.org/10.1007/978-3-662-66560-2_25.
- LI S.-M. (2010): Evolving Residential and Employment Locations and Patterns of Commuting under Hyper Growth: The Case of Guangzhou, China. In: *Urban Studies*, 47 (8), pp. 1643–1661. – <https://doi.org/10.1177/0042098009356118>.
- LI T., LIU R., QI W. (2019): Regional Heterogeneity of Migrant Rent Affordability Stress in Urban China: A Comparison between Skilled and Unskilled Migrants at Prefecture Level and Above. In: *Sustainability* 11 (21), article no. 5920. – <https://doi.org/10.3390/su11215920>.
- LI W., MA L., TAN Y., LIU M. (2022): Attracting Highly Skilled Migrants to Guangzhou, China: A Policy Commentary. In: DEGILA D. E., VALLE V. M. (eds.): *Governing Migration for Development from the Global Souths. Challenges and Opportunities* (= International Development Policy Series, 14). Leiden / Boston: Brill – Nijhoff, pp. 159–174. – https://doi.org/10.1163/9789004522770_008.
- LIU R., GUAN C.-Q. (2005): Mode Biases of Urban Transportation Policies in China and Their Implications. In: *Journal of Urban Planning Development*, 131 (2), pp. 58–70. – [https://doi.org/10.1061/\(ASCE\)0733-9488\(2005\)131:2\(58\)](https://doi.org/10.1061/(ASCE)0733-9488(2005)131:2(58)).
- LU L., WEI Y. D. (2007): Domesticating Globalisation, New Economic Spaces and Regional Polarisation in Guangdong Province, China. In: *Tijdschrift voor Economic and Human Geography*, 98 (2), pp. 225–244. – <https://doi.org/10.1111/j.1467-9663.2007.00393.x>.
- LUCAS R. E. (1988): On the Mechanics of Economic Development. In: *Journal of Monetary Economics*, 22 (1), pp. 3–42. – [https://doi.org/10.1016/0304-3932\(88\)90168-7](https://doi.org/10.1016/0304-3932(88)90168-7).
- MA X. (2018): Housing Challenges in Chinese Cities Under Urbanization. In: YE, L. (ed.): *Urbanization and Urban Governance in China. Issues, Challenges, and Development*. Singapore: Springer, pp. 161–181. – https://doi.org/10.1057/978-1-137-57824-2_8.
- MA L., TAN Y., LI W. (2023): Identity (Re)construction, Return Destination Selection and Place Attachment among Chinese Academic Returnees: A Case Study of Guangzhou, China. In: *Cities*, 143, article no. 104563. – <https://doi.org/10.1016/j.cities.2023.104563>.
- MACLACHLAN I., GONG Y. (2022): China's New Age Floating Population: Talent Workers and Drifting Elders. In: *Cities*, 131, article no. 103960. – <https://doi.org/10.1016/j.cities.2022.103960>.
- MALAITHAM S., NAKAGAWA D., MATSUNAKA R., YOON J., OBA T. (2013): An Analysis of Residential Location Choice Behavior in Bangkok Metropolitan Region: An Application of Discrete Choice Models for the Ranking of Alternatives. In: *Journal of the Eastern Asia Society for Transportation Studies*, 10 (2), pp. 989–1008. – <https://doi.org/10.11175/easts.10.989>.
- MIAO L., WANG H. (2017): *International Migration of China. Status, Policy and Social Responses to the Globalization of Migration*. Singapore: Springer.
- NING L., WANG F., LI J. (2016): Urban Innovation, Regional Externalities of Foreign Direct Investment and Industrial Agglomeration: Evidence from Chinese Cities. In: *Research Policy*, 45 (4), pp. 830–843. – <https://doi.org/10.1016/j.respol.2016.01.014>.
- PAHL M. (2016): *Moving Professionals. Structure and Agency in the Migration and Place Decision-making of High-skilled Chinese in Guangzhou and Dongguan, China*. Cologne. Doc-

- toral Thesis, University of Cologne. – https://kups.ub.uni-koeln.de/6585/1/Pahl_2016_Moving_Professionals.pdf.
- PARKINSON M., HARDING A. (1995): European Cities toward 2000: Entrepreneurialism Competition and Social Exclusion. In: RHODES M. (ed.): *The Regions and the New Europe. Patterns in Core and Periphery Development*. 5th edition. Manchester: Manchester University Press, pp. 53–77.
- PORTER M. E. (1990): *The Competitive Advantage of Nations*. Basingstoke: Macmillan Business.
- QIN L. (2011): Remarks at the Press Conference of Guangdong’s Cultivation and Introduction of Talents. Guangzhou: Department of Human Resources and Social Security of Guangdong Province. – http://www.sz.gov.cn/cn/xxgk/xwfyw/wqhg/2011dy_gds/20110822_1/ (access: Jan. 4, 2019).
- REDDING G. (1995): Overseas Chinese Networks: Understanding the Enigma. In: LASSERRE P., REDDING G. (eds.): *Corporate Strategies for Asia Pacific (= Long Range Planning, 28 (1))*, pp. 61–69. – [doi.org/10.1016/0024-6301\(94\)00071-C](https://doi.org/10.1016/0024-6301(94)00071-C).
- ROLF S. (2019): National Development through Global Production Networks? The Case of Dongguan, China. In: *Political Geography*, 73, pp. 48–59.
- ROLF R. (2021): *China’s Uneven and Combined Development*. Cham: Palgrave Macmillan.
- SCHILLER D. (2011): Upgrading Strategies of Firms from Emerging Economies in Global Value Chains: Three Cases from the Electronics Industry in Hong Kong. In: *Geographische Zeitschrift*, 99 (4), pp. 185–201. – <https://www.jstor.org/stable/23337283>.
- SCHREIER M. (2012): *Qualitative Content Analysis in Practice*. London: Sage Publications.
- SHEN X., TSAI K. S. (2016): Institutional Adaptability in China: Local Developmental Models Under Changing Economic Conditions. In: *World Development*, 87, pp. 107–127. – <https://doi.org/10.1016/j.worlddev.2016.06.010>.
- SKELDON R. (1995): Reluctant Exiles? Migration from Hong Kong and the New Overseas Chinese. *Hong Kong becoming China: The Transition to 1997*. Hong Kong: Hong Kong University Press.
- SKELDON R. (2018): High-Skilled Migration and the Limits of Migration Policies. In: CZAİKA M. (ed.): *High-Skilled Migration: Drivers and Policies*. Oxford: Oxford University Press, pp. 48–64. – <https://doi.org/10.1093/oso/9780198815273.003.0003>.
- SIT V. F. S., YANG C. (1997): Foreign-investment-induced Exo-urbanisation in the Pearl River Delta, China. In: *Urban Studies*, 34 (4), pp. 647–677. – <https://doi.org/10.1080/0042098975961>.
- SONG Y., ZHU N., LUO F. (2022): City Size and Permanent Settlement Intention: Evidence from Rural-Urban Migrants in China. In: *International Journal of Environmental Research and Public Health*, 19 (2), article no. 676. – <https://doi.org/10.3390/ijerph19020676>.
- SouFun.com Limited (2013): National Real Estate Network. Live Broadcast of House Inspections to Grab Discounts [in Chinese]. Beijing: SouFun Science and Technology Development Co. Ltd. – <http://newhouse.dg.soufun.com/fangjia/> (access: Jan. 4, 2019).
- SU Y., LIU Z. (2016): The Impact of Foreign Direct Investment and Human Capital on Economic Growth: Evidence from Chinese Cities. In: *China Economic Review*, 37, pp. 97–109. – <https://doi.org/10.1016/j.chieco.2015.12.007>.
- TAN J. (2014): Dongguan Songshan Lake Hi-tech Industrial Development Zone. Dongguan – Today. – http://www.dongguantoday.com/special/enmedia2014/008/201410/t20141027_4588182.shtml (access: Jan 4, 2019).
- TANG S., LU B., HE D. (2020): Evolution of Industrial Competitiveness Based on Evaluation of Urban Competitiveness of Dongguan City: A Case Study of Songshan Lake High-tech Zone. In: *Journal of Landscape Research*, 12 (3), pp. 57–64.
- TASHAKKORI A., TEDDLIE C., TEDDLIE C. B. (2003): *Handbook of Mixed Methods in Social & Behavioral Research*. Thousand Oaks: Sage Publications.

- TEO S. Y. (2011): "The Moon Back Home is Brighter"? Return Migration and the Cultural Politics of Belonging. In: *Journal of Ethnic and Migration Studies*, 37 (5), pp. 805–820. – <https://doi.org/10.1080/1369183X.2011.559720>.
- WANG H. (2007): *The Forefront of Urban China. New Special Development Zones and their Impact on the Spatial Transformation of Chinese Cities – A Case Study of Xi'an*. Cologne [Köln]: Geographisches Institut der Universität zu Köln [Department of Geography of the University of Cologne] (= Kölner Geographische Arbeiten, 88).
- WANG L. K. (2016): The Benefits of In-Betweenness: Return Migration of Second-Generation Chinese American Professionals to China. In: *Journal of Ethnic and Migration Studies*, 42 (12), pp. 1941–1958. – <https://doi.org/10.1080/1369183X.2016.1139447>.
- WANG J., LAU S. S. Y. (2008): Forming Foreign Enclaves in Shanghai: State Action in Globalization. In: *Journal of Housing and Built Environment*, 23 (2), pp. 103–118. – <https://www.jstor.org/stable/41107417>.
- WELCH A., HAO J. (2015): Global Argonauts: Returnees and Diaspora as Sources of Innovation in China and Israel. In: *Globalisation, Societies and Education*, 14 (2), pp. 272–297. – <https://doi.org/10.1080/14767724.2015.1026249>.
- WIESBROCK A. (2008): Return Migration as a Tool for Economic Development in China and India. In: *IMDS Working Paper Series*, 3, pp. 31–50. New Delhi: International Migration and Diaspora Studies Project (IMDS). – http://lib.jnu.ac.in/sites/default/files/pdf/imds_p/IMDS_Dec_2008_WP_3.pdf (access: May 25, 2023).
- WU F., XU Y., YEH A. G. O. (2006): *Urban Development in Post-reform China. State, Market, and Space*. London: Routledge.
- WU K., ZHAO X., WANG X., CHEN X., HUNG T.-K., WANG Z., LEE S.-C. (2023): The Impact of Entrepreneurial Resilience on the Entrepreneurial Intention of Return Migrants: An Empirical Study Based on Survey Data from Multiple Provinces in China. In: *Sage Open*, 13 (2). – <https://doi.org/10.1177/21582440231182654>.
- WU F., ZHANG J. (2007): Planning the Competitive City-Region: The Emergence of Strategic Development Plan in China. In: *Urban Affairs Review*, 42 (5), pp. 714–740. – <https://doi.org/10.1177/1078087406298119>.
- WU J., KEYTON, D. (2010): GZ Aims to Solicit More High-qualified Professionals on OCS. Life in Guangzhou. Guangzhou: Foreign Affairs Office. – https://www.lifeofguangzhou.com/node_981/node_989/node_997/node_1007/2010/12/21/129290953183215.shtml (access: March 25, 2018).
- WU J., GYURKO J., DENG Y. (2012): Evaluating Conditions in Major Chinese Housing Markets. In: *Regional Science and Urban Economics*, 42 (3), pp. 531–543. – <https://doi.org/10.1016/j.regsciurbeco.2011.03.003>.
- WU L., LANG W., CHEN T. (2024): Deciphering Urban Land Use Patterns in the Shenzhen–Dongguan Cross-Boundary Region Based on Multisource Data. In: *Land* 13 (2), article no. 161. – <https://doi.org/10.3390/land13020161>.
- XIANG B. (2016): *Emigration Trends and Policies in China: Movement of the Wealthy and Highly Skilled*. Washington D.C.: Migration Policy Institute. – https://www.migrationpolicy.org/sites/default/files/publications/TCM_Emigration-China-FINAL.pdf.
- XUE D.-S., YAN X.-P., JOHNSON G. (2001): Local Government, Enterprises and Individuals: Economic Transformation in the Pearl River Delta. A Case Study in Beijiao Township, Shunde City. In: *Chinese Geographical Science*, 11, pp. 211–222. – <https://doi.org/10.1007/s11769-001-0017-1>.
- XU J., YEH A. G. O. (2005): City Repositioning and Competitiveness Building in Regional Development: New Development Strategies in Guangzhou, China. In: *International Journal*

- of Urban and Regional Research, 29 (2), pp. 283–308. – <https://doi.org/10.1111/j.1468-2427.2005.00585.x>.
- XU J., DU Z., YEH A. G. O. (2023): Localization, Regionalization, and Domesticization of Satellite Industrial Platform and Urban Transformation: A Case Study of Dongguan in the Pearl River Delta, China. In: *Cities*, 139, article no. 104368. – <https://doi.org/10.1016/j.cities.2023.104368>.
- XU X., ZHANG Y. (2023): Cointegration between Housing Prices: Evidence from One Hundred Chinese Cities. In: *Journal of Property Research*, 40 (1), pp. 53–75.
- YANG C. (2020): The Transformation of Foreign Investment-induced ‘Exo(genous)-Urbanisation’ amidst Industrial Restructuring in the Pearl River Delta, China. In: *Urban Studies*, 57 (3), pp. 618–635. – <https://doi.org/10.1177/0042098019859266>.
- ZHANG T., DUAN X., WONG D. W. S., LU Y. (2021): Discovering Income-Economic Segregation Patterns: A Residential-Mobility Embedding Approach. In: *Computers, Environment and Urban Systems*, 90, article no. 101709. – <https://doi.org/10.1016/j.compenvurbsys.2021.101709>.
- ZHANG H., HOU R. (2011): China kämpft um seine klugen Köpfe. In: *China Heute*, German edition of *China Today*, Daily Newspaper. Beijing. – http://www.chinatoday.com.cn/ctgerman/schwerpunkt/txt/2011-10/24/content_400393.htm (access: July 3, 2023).
- ZHENG S., SUN W., WU J., KAHN M. E. (2017): The Birth of Edge Cities in China: Measuring the Effects of Industrial Parks Policy. In: *Journal of Urban Economics*, 100, pp. 80–103. – <https://doi.org/10.1016/j.jue.2017.05.002>.
- ZHOU R. (2004): How ‘Sea Turtles’ Turned Out to be ‘Seaweeds’? In: *China Daily*. Newspaper. – http://www.chinadaily.com.cn/english/doc/2004-02/10/content_304574.htm (access: July, 2023).
- ZHOU Y., GUO Y., LIU Y. (2018): High-level Talent Flow and its Influence on Regional Unbalanced Development in China. In: *Applied Geography*, 91, pp. 89–98. – <https://doi.org/10.1016/j.apgeog.2017.12.023>.
- ZHU H., CHEN Y., ZHANG H., LIU Z. (2023): What Drives Migrants Back to Set up Firms? Return-home Entrepreneurial Intention of Rural Migrant Workers in China. In: *Chinese Geographical Science*, 33, pp. 205–220. – <https://doi.org/10.1007/s11769-023-1336-2>.
- ZHU Y., WANG W. W., LIN L., SHEN J., REN Q. (2021): Return Migration and In Situ Urbanization of Migrant Sending Areas: Insights from a Survey of Seven Provinces in China. In: *Cities*, 115, article no. 103242. – <https://doi.org/10.1016/j.cities.2021.103242>.
- ZWEIG D. (2005): *Parking on the Door Step (= Center on China’s Transnational Relations. Working Paper, 3)*. Hong Kong: Hong Kong University of Science and Technology (HKUST). – http://www.cctr.ust.hk/materials/working_papers/WorkingPaper3.pdf (access: Jan 4, 2019).
- ZWEIG D. (2006a): *Competing for Talent: China’s Strategies to Reverse the Brain Drain*. In: *International Labour Review*, 145 (1–2), pp. 65–90. – <https://doi.org/10.1111/j.1564-913X.2006.tb00010.x>.
- ZWEIG D. (2006b): *Learning to Compete: China’s Efforts to Encourage a “Reverse Brain Drain”*. In: KUPTSCH C., PANG E. F. (eds.): *Competing for Global Talent*. Geneva: International Labour Office, ILO, pp. 187–213. – https://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_PUBL_9290147768_EN/lang--en/index.htm (access: Jan 4, 2019).
- ZWEIG D. (2009): *Returns, Technology Transfer, and China’s Economic Development (= Center on China’s Transnational Relations. Working Paper, 28)*. Hong Kong: Hong Kong University of Science and Technology (HKUST). – http://www.cctr.ust.hk/materials/working_papers/WorkingPaper28-DZ-Returnees_and_Tech_Transfer.pdf (access: Sept 20, 2017).
- ZWEIG D., FUNG C. S., HAN D. (2008): *Redefining the Brain Drain: China’s ‘Diaspora Option’*. In: *Science, Technology and Society*, 13 (1), pp. 1–33. – <https://doi.org/10.1177/097172180701300101>.

- ZWEIG D., YANG F. (2014): Overseas Students, Returnees, and the Diffusion of International Norms into Post-Mao China. In: *International Studies Review*, 16 (2), pp. 252–263. – <https://doi.org/10.1111/misr.12136>.
- ZWEIG D., SIQIN K., HUIYAO W. (2020): 'The Best are yet to Come:' State Programs, Domestic Resistance and Reverse Migration of High-level Talent to China. In: *Journal of Contemporary China*, 29 (125), pp. 776–791. – <https://doi.org/10.1080/10670564.2019.1705003>.