



# NEW GLOBAL CITIES IN LATIN AMERICA AND ASIA

Welcome to the Twenty-First Century

Edited by Pablo Baisotti

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Many terms are commonly paired with the word *global*, including *culture*, politics, economy, society, and city, among others. According to the Merriam-Webster dictionary, globalization means "the development of an increasingly integrated global economy marked especially by free trade, free flow of capital, and the tapping of cheaper foreign labor markets." The current period of human history can plausibly be identified not only as a global era, but as an urban era. It is a period in which populations, productive activity, and wealth are largely and increasingly concentrated in cities. New Global Cities in Latin America and Asia aims to enrich the growing field of global city studies by presenting research on cities in Asia (especially China) and Latin America produced by both leading scholars and young researchers. This book studies cities transforming, in part as a result of the dynamics of globalization that have fostered greater multiculturalism, new social dynamics and mechanisms of social aggregation, as well as increased inequality, marginality, and growing organized crime (Abu-Lughod 1994; Bartlett 2007; Bridges and Watson 2010; Bryson and Daniels 2005; Dawson 1999; Drainville 2004; Thrift and Amin 2002; Valle and Torres 2000; Sampson and Raudenbush 2001, quoted by Sassen 2006, 2010; Scott and Storper 2014, 7, 2016, 6; Farah 2011, 12).

In recent decades dozens of cities have become global, with the benefits and detriments that this brings hanging in a delicate balance. Despite originally being classified as "Third World," the new global cities of Latin America and Asia (Buenos Aires, Lima, Santiago de Chile, Querétaro, Suzhou, Chongqing, Singapore) present an assortment of global features. New Global Cities in Latin America and Asia delves into the concept of the global city, but also questions global issues that produce effects on the micro scale and that ultimately have a social background, repeatedly creating and multiplying mechanisms of exclusion. It critically examines some specific characteristics through which these cities could share a "global identity" via a process of cultural redistribution adapted to the new characteristics of (post)modernity. Through an analysis of official narratives, data and statistics, historical evolution, and even individual perceptions, this study of some Latin American and Asian cities highlights their "global" features.

Retrospectively, during the 1970s and 1980s, the nature of cities was considered a debatable construction where various processes intersected (Castells 1972; Harvey 1973; Lefebvre 1974; Timberlake 1985, quoted by Sassen 2010, 4), and also during the 2000s (Brenner 2004; Global Networks 2010; Lloyd 2005; Paddison 2001, quoted by Sassen 2010, 4). During the 1970s, new analyses of the city, often informed by Marxist critical theory (Castells, Lefebvre, and Harvey, among others), insisted on a concept of the city as a theater of class, redistribution of wealth upward, and political demands associated with the rights of citizenship, urban spaces, and resources (Scott and Storper 2014, 2). Decades later, in the 2000s, research on cities focused on the dimensions of gender (McDowell 1983; Massey 1991), ethnicity, race and class in urban contexts (Jackson 1989; Waldinger and Bozorgmehr 1996), the global urban system and globalization in the internal structure of cities (Friedmann and Wolff 1982; Sassen 1991), urban policy and governance (Brenner 1999; Cochrane 2006; Harvey 2007, 2012; Jessop 1997, quoted by Scott and Storper 2014, 2).

With the dawn of the twenty-first century, the city emerged as a strategic site for understanding new trends in the reconfiguration of the social order, where globalization, new information, transnational technologies and translocal dynamics, and sociocultural diversity were materializing (Sassen 2010, 3). Brenner and Schmid (2014) noted that there were usually no simple or clearly identifiable boundaries between the city and the rest of the world; instead, for Sampson (2012), many diverse "neighborhood effects" encouraged global, internal, and external dynamics. Another phenomenon that occurs in the city sphere is cultural representation, which until a few years ago strongly differentiated the global cities of the First World from those of the Third World. At present, cities such as Beijing, Mexico City, and Buenos Aires have undergone cultural developments that outshine many First World cities. Research on global cities is constantly growing and being debated, with increasing interest in Third World cities.

Amendola (2000) stated that the current urban scene was produced by the different demographic relationship between the traditional city and the expanded urban fabric and by the new centrality of postmodern cities.

However, the overwhelming majority of cities in Latin America and Asia have global characteristics, although they were not initially established as economic and financial nodes, unlike those of the First World already mentioned. New Global Cities in Latin America and Asia explores these kinds of limits and aims to develop lines of research based on "classical" studies to broaden the spectrum of global "being." Starting from the consideration that a city is a social, political, cultural, and economic phenomenon, New Global Cities in Latin America and Asia analyzes the city as something greater than the sum of its parts, where joint dynamics produce a constantly evolving identity. A large agglomeration, density, and economic and financial gravitation are some of the main features of cities (Cheshire and Hay 1989; Kerr and Kominers 2015). Although the geographical space of the city is continuous and indivisible, it is imperative that we distinguish the specific units and levels of interaction, the different scales and articulations of phenomena that the city possesses, as well as the political processes and interests at work (Hummels 2007, quoted by Storper and Scott 2016, 26–29).

## **New Relationships**

To explore the various internal and external relationships of cities, it is important to understand the theory of "assembly." This concept provides frameworks for exploring the complexity of city problems and sociospatial networks at multiple scales. It is related to notions of network, multiplicity, emergence, and indetermination, although there is no single, monolithic interpretation; "pluralities in transformation" are analyzed by holding together heterogeneous elements (Anderson and McFarlane 2011; Allen 2011). McFarlane (2011) saw assembly as an orientation to a process that contributed to the work and social materiality of the city and offered guidelines for "critical urbanism"; Tonkiss (2011) saw assembly as a means to promote a "model urbanism" by rejecting the existence of a single "assembly urbanism." Brenner, Madden, and Wachsmuth (2011) related this theory to political economy by rejecting its relationship to a critical urban theory, and Wise (2005) saw in this theory the organization of identity, character and territory claims. Finally, De Landa (2006) and Ballantyne (2007) concluded that the theory externalized connections and the formation of new identities (quoted by Kamalipour and Peimani 2015, 403-4, 406).

The unifying theme that the book proposes is to offer new visions about global cities and regions historically considered secondary in the international context. Hence, the arguments are based not only on material progress, but on the growing social difficulties experienced by these metropolises (organized crime, drug trafficking, slums, economic inequalities, etc.). New Global Cities in Latin America and Asia seeks to establish a new dialogue, avoiding established cultural, economic, and academic stereotypes. For this reason, the book brings together researchers from various fields who provide new interpretative keys to certain cities in Latin America and Asia. This novel discursive method and analytical approach results in a manuscript that is both homogeneous and heterogeneous, due to the similar identities and shared problems of the cities we have focused on. It seeks to find new ways to evaluate the "global" dynamics of cities that until recently were considered marginal in the international context. Another strength of New Global Cities in Latin America and Asia is that it confronts the traditional narrative and, without breaking with it completely, attempts to expand on it to identify new alternatives, considering more than the economic and financial factors that define belonging to a global city. The book also proposes to investigate issues that are currently relevant to citizenship. Some of the authors focus on the economic development of certain cities as a whole; others seek to individualize certain social groups while avoiding the rest of the groups (often minorities, immigrants, or the lower classes). The book intends to analyze the complex relationships within cities through a multiple and interdisciplinary approach that complements other research and sometimes even takes positions challenging orthodox views on global cities.

# Global City

For decades the term *global city* has been applied mainly to cities such as New York, London, and Tokyo, among others. For a city to enter this category, it needs to have a highly developed network economy focused on activities related to finance, specialized services, telecommunications, and transnational connections (Sassen 1991). Such cities were at the forefront of the global urban networks that emerged as leading examples of the new relationships between the world economy and urban life. The network economy allowed industries to develop cross-border relationships and to propose specialized divisions of function within cities to serve the needs of global businesses and markets. These transactions and contacts, which were initially located in these global cities, also influenced the national

sphere, and created new demands from both the powerful and the disadvantaged (Sassen 2005, 40).

The general intellectual perception of these megalopolises has often been rather negative, focused on problems related to urban living conditions, a critique that went beyond appraisals of architecture, high technology, or virtual spaces (Sassen 2005, 77; Kraas 2007, 82). Harvey (1996, 2002, 2005, 2009, 2010, 2012) defended the rights of the inhabitants to equality and to the healthy and profitable use of urban spaces, so often swallowed by a capitalism without borders. Harvey (2014) also repeatedly stressed that the different urban crises he identified should be considered, not so much in relation to the transformation of physical spaces, but to changes in the modes of thought and understanding of the dominant institutions and ideologies; in alliances, political processes, and subjectivities; in technologies and forms of organization; and in social relations, among other areas. The processes of gentrification, for example, triggered on a global scale an economy based on both accumulation through dispossession and the creation of wealth through new urban investments. Harvey asserted that this economy of circulation and accumulation of capital "spat out" new urban forms.

New Global Cities in Latin America and Asia takes a broad, multidisciplinary perspective, but at the same time considers points of rupture or inflection that can change, at various rhythms, the features of cities. It investigates "secondary" regions and cities of the "Global South" that share certain characteristics, such as urban growth and environmental care, that are of growing international interest. Much contemporary postcolonial research has criticized the traditions of theoretical analysis of the "developed North." Said (1978), Spivak (2008), and Comaroff and Comaroff (2012) highlighted the various intellectual legacies of colonialism (ethnocentric biases and prejudices in particular), which often proved to be false (quoted by Storper and Scott 2016, 1). Roy (2009, 2011) considered that the study of metropolises was based exclusively on European and American cities: Paris, London, Vienna, New York, Chicago, and Los Angeles, urban centers that were considered to represent the definitive standards that highlighted the modern and postmodern condition. The cities of the Global South were perceived as heirs to a backward modernity, or as aspiring to imitate and copy the modernisms of the European and American metropolises. This vision was modified when "native" modernities, produced in conditions of "otherness" and difference that question the origins of Western modernity, began to be widely considered. These criticisms of the theory of the "developed North" became a strong influence in urban studies that denounced the application of urban theories built in Europe and North America to the cities of the Global South (Robinson 2006, 2011; Edensor and Jayne 2012; Myers 2014; Ong and Roy 2011; Sheppard, Leitner, and Maringanti 2013; Patel 2014, quoted by Storper and Scott, 2016, 1). Indeed, any researcher of "globalism" (such as urban planners, geographers, sociologists, or similar practitioners) will not be able to deny the First World characteristics of cities such as Buenos Aires, Mexico City, Lima, Brasilia, Sao Paulo, Singapore, Shanghai, Chongqing, Shenzhen, or Beijing. Even a traveler will notice various characteristics of modernity (native or inherited from the First World) in the above-mentioned cities and in many other urban areas that until recently were considered, generically, to be part of the Third World.

New Global Cities in Latin America and Asia presents chapters that have specific areas of focus, but on the whole the book delivers a cohesive message; it reveals a break with the traditional narrative concerning urban studies and develops a distinct approach focused on sociospatial issues. For example, one pressing issue is the growing convergence in the conditions of many workers in informal economies around the world, which led to inferences regarding similarities between the large metropolises of the First and Third World (Sassen 2012, 93; Harvey 1998, 176, 326). Another is the acceleration of migratory movements, which has affected urban lifestyles by increasing decentralization, increased the autonomy of urban management, led to reformulation of citizenship, and produced new forms of violence and insecurity. The negative effects of globalization and their rapid manifestation have caused spatial segregation and deepened exclusive socioeconomic and cultural structures (Scott and Storper 2014, 7). Exclusion affected the cultural structure and the integrative functions of cities and social networks. This era is also, in some ways, a dark age, marked by gutted-out old industrial cities, concentrated poverty, slums, ethnic conflict, ecological challenges, unequal access to housing, gentrification, homelessness, social isolation, violence and crime, and many other problems (McKinsey 2012, quoted by Storper and Scott 2016, 3). These situations provoke social grievances that have implications for transnational policy and at the same time alienate diverse social sectors based on their socioeconomic positions. A challenge for Sassen would be how to capture the cross-border dynamics with existing or new social categories without losing the city as a site (2010, 8). Brenner and Schmid (2016) argued that urbanization represented a process of continuous sociospatial transformation, a relentless "upheaval" in the types of settlements and morphologies that spanned entire territories, including the nonurban domain, as they are impacted by the agglomeration process and evolve through a complex net-

work of economic, social, and ecological connections that span all domains of the global economy. Therefore, the planetary urban system represents a wide variety of differentiated and polarized situations, conditions, and responses that require contextually specific research to fully understand the unstable and constantly changing geographies of the twenty-first century.

For this reason, the book offers the reader a new dimension of analysis as the concept of the global city expands to regions such as Latin America and Asia, assessing the positive and negative points of these cities and highlighting the process of "globalization" sector by sector. At the same time, it proposes new methods for the study of cities with global features in "peripheral" regions, contradicting the dominant discourse in order to frame it in a broader vision. Moreover, *New Global Cities in Latin America and Asia* seeks to determine new variables to discuss how traits of "globalism" are shared—or not; in addition to the traditional economic and financial variables, authors discuss social and environmental dimensions, crime, and inequality. These proposed new parameters can also be used for future research in various regions. An opening to the study of global cities should not be limited to a handful of cities but should expand the tools of analysis to encourage a broader study of hundreds of cities that share some "global" characteristics.

# Organization of the Book

New Global Cities in Latin America and Asia is organized in two parts with a total of 11 chapters. Part I, Asia: Centre of Growth and Globality, analyzes the articulation between globalization and economic, urban, and social development in several Asian cities that have grown significantly in geographically different areas—Suzhou, Dongzhou Island, Singapore, and Chongqing (together with Querétaro, Mexico). It also provides an overview of the historical and geographical emergence of city-regions. The new architectures are confronted with traditional urban geography, social crises resulting from new immigration, and the relationships established within "global" cities in the search for equal rights. Part I offers a methodological and practical approach to the challenges posed by the advance of "globalization" and the accelerated changes in society and how they can eventually be overcome. It also shows the tensions that modernization has brought to urban space, generating new social challenges. The progress and development of some regional cities at a global level is also evaluated.

In the first chapter Raffaele Pernice (UNSW-Sydney) highlights the

frenetic urbanization of China and the consequent restructuring of the preexisting urban fabric, accompanied by the rapid modernization of obsolete industrial factories. In the city of Suzhou, for example, this global-local dichotomy influenced local cultural history and urban and architectural traditions. In chapter 2, Hong Gang (Sun Yat-sen University) investigates the island of Dongzhou with its particular complexities, nuances, and tensions generated as the result of a traumatized urban spatiality. He addresses three specific spatial dimensions of the island (absolute, relative, and relational urban space), emphasizing their dialectical interactions (a phenomenon pointed out by Sassen 1999), ultimately finding that these strategic spaces are embedded in a plethora of global and national processes. In chapter 3 Miguel Ángel Hidalgo Martínez (University of Xi'an Jiaotong-Liverpool) compares the Chinese city of Chongqing and the Mexican city of Querétaro, highlighting the enormous growth rates of both and the different state policies and strategies that have sustained their accelerated economic changes. In chapter 4, Liangni Sally Liu (Massey University) moves the axis of analysis with respect to the previous chapters and focuses on the city of Singapore (fifth place worldwide in the Global Cities Outlook Report 2018, behind San Francisco, New York, London, and Paris). Its central analysis deals with the intersection between heterosexuality and transnational migration, that is, how migrants' lives are sexualized and how heterosexuality is influenced by migratory mobility. As mentioned, citizens' situations are also part of this book, which discusses claims for such basic rights as being part of the city, participating in politics, and finding decent work. In chapter 5, Allen Scott (University of California, Los Angeles) offers an overview of the historical and geographical emergence of city-regions. He describes their growth and expansion since the mid-1950s, highlighting the fact that contemporary capitalism and globalization fostered urban development with the following characteristics: (1) aesthetic land use, (2) gentrification, (3) social polarization and informality, and (4) posturban areas.

Part II: Latin America: Opening, Globalization and Crisis, analyzes and historicizes how Latin America has opened up to globalizing processes and the consequences—positive and negative—that have resulted. As in several Asian cities, the "global" process in Latin American cities provoked tensions and demands from those considered excluded. Part II explores the multiple factors that explain the persistent relationship among economy, development, and urban governance, as well as the search for a more inclusive, livable, and sustainable city. Part II also highlights the political challenges that this implies for Latin American political authorities and the

new threats facing these cities. Some of these threats are tangible, such as organized crime, drug trafficking, and other forms of violence, while others are more hidden but no less harmful, such as hunger, marginalization, and structural poverty.

In chapter 6, Ulises Girolimo and Patricio Feldman (University of Buenos Aires) take a critical approach to the concept of the global city from the point of view of Latin America and the Caribbean. They identify the different ways this city is linked to the new economy. The main analysis focuses on the Argentine case, specifically the city of Buenos Aires, which is considered a global city by different analysts, one in which informality and strong development were established as a model of urban governance. In chapter 7, Brian Roberts (University of Canberra), José Tomás Videla (Instituto de la Construcción, Chile), and Marcela Allué Nualart (COPSA, Chile) describe the current challenges and problems that have accompanied the development of secondary cities with global characteristics (with between 100,000 and 500,000 people), taking the central region of Chile as a case study. They examine and identify ways to improve connectivity between secondary cities in support of more equitable, inclusive, livable, resilient, and sustainable development. In chapter 8, Nadia Urriola Canchari (Beijing Forestry University) presents changes in consumption in Peru during the globalization process (1990–2017) from a descriptive and econometric point of view to explain the increase in consumption of capital and durable goods by Peruvian citizens. She focuses on the city of Lima as a global city, explaining how economic growth has modified citizens' consumption since 1990. In chapter 9, John Sullivan (University of Southern California) studies the relationship between crime and organized crime ("global gangs") in some Latin American cities, relating the interactions between illicit and licit activities, that is, between the economic flows of organized crime and the political economy, highlighting the particular cases of Mexico, Venezuela, and Colombia. In chapter 10, Adrián Moreno Mata (Universidad Autónoma de San Luis de Potosí) delves into the development of an intermediate global urban region, the Mexican region of Centro-Bajío, based on a new paradigm of regional and urban planning, emphasizing factors such as the strategy of territorial and urban competitiveness, the potential of the large cities in that region, the capacity of local urban and metropolitan planning systems, and the social responsibility of local actors (government, business, and society in general). In chapter 11, Pablo Baisotti (University of Costa Rica) demonstrates the influence of globalization with Chinese characteristics in Latin America, highlighting its economic influence and social impact on the American continent. He asks whether this new globalization will differ from previous ones, whether it will have a mutually beneficial relationship for all the nations of the American continent, and what role many Latin American cities will play on the international stage.

In short, New Global Cities in Latin America and Asia aims to make a new and innovative contribution to the study of global features in selected cities and city-regions from an Asian and Latin American perspective. At the same time, it provides new theoretical and methodological tools to understand the progress of Third World cities and "globalism" in the 21st century by confronting the traditional perspectives from which global cities have been assessed since the 1980s.

#### NOTE

### 1. See https://www.merriam-webster.com/dictionary/globalization

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# PART I

Asia

Center of Growth and Globalism

# Chinese Cities from the Ground to the Sky

Building Suzhou as a Global City beyond Tradition

Raffaele Pernice

The frantic urbanization and modernization process of China in the last 30 years has been an extraordinary process in the recent history of humanity. It has led to a huge restructuring of China's pre-existing urban fabric and the progressive reshaping of its city forms, inner structure, and urban landscapes. One striking aspect of this process has been the impetuous growth of vast zones of new high-rise residential superblocks and busy commercial, industrial, and business districts extensively interconnected by massive mobility arteries in the suburban areas around the major cities. This enormous infrastructure development has been paired with rapid modernization of obsolete industrial factories. Both of these processes have led to urbanization in this part of the world that is unprecedented in both scale and rapidity, resulting in ballooning cities whose growth is fueled by a new class of urbanites and increasing arrival of rural immigrants. This has caused what seems to be an irreversible alteration of traditional historical districts and buildings and subsequent progressive loss of memory and precious cultural and historical heritage. The city of Suzhou, a United Nations Educational, Scientific and Cultural Organization-protected heritage site located in Jiangsu Province with over 2,500 years of history, well represents this trend of radical transformation. Suzhou is a by-product of the globalization rush common to many other Chinese cities, in which the coexistence of complex and contradictory socioeconomic phenomena has shaped and directed the genesis of a new built environment. Suzhou's development is driven by fascination with a consumerist lifestyle, as expressed by the contemporary promethean verticality of the skyline of towers; the new built environment aims to protect a more effective equilibrium between the preservation of traditional landscapes and urban cultures.

The chapter provides an overview and comments on the global-local dichotomy in contemporary Suzhou, how international urban and architectonic models have affected the local cultural history and urban and architectonic traditions, and how the theme of verticality—the dichotomy of modernity and tradition—in this city somewhat mirrors a larger trend in Chinese and other East Asian cities.<sup>1</sup>

# Rapid and Extensive Urbanization in China

China's spectacular urban growth in the twentieth century, one of the largest urbanization processes in history, was heralded by the "Open Doors" policy of 1978 and was driven by economic reforms triggered by the unprecedented scale of internal migration (Campanella 2008; Harvey 1991, 2012). Millions of people moved from rural regions to old urbanized and new urbanizing areas, compressing an experience that was achieved over much longer periods in Western countries and other Asian developed nations, especially Japan and South Korea. The rapid, massive urbanization of China and the transition toward a more urban model of society in the twenty-first century has been mostly characterized by a peculiar process of rural industrialization. In the view of the planner John Friedmann (2005), this process has been constructed around the designation of a number of key government-sponsored coastal regions such as the Pearl River Delta and the lower Yangzi Delta, as well as the capital region of Beijing. These regions have become the main economic engines of this process and subsequently created a vast number of peripheral new settlements and scattered industrial zones, which have a synergic relationship with other proximal dense urban areas (Friedmann 2005). By 2017, China had become the second-largest economy in the world, after the United States and before Japan. Reversing a process of ideological deurbanization prevalent during the 1950s under Chairman Mao, in which cities were considered corrupt and decadent, this process of progressive reurbanization in China has been directly linked to the radical shift in the economic structure of the country (Rowe 2005; Wu 2007). It has also been associated with the massive migration from China's internal rural areas, a movement carefully orchestrated by China's central government to ensure the controlled and progressive process of its technological modernization to secure a more relevant geopolitical role in the world economy (Rowe 2005; Wu 2007).

In 2013, the Chinese urbanization rate reached 53.7 percent; in 2011, urban residents surpassed rural residents for the first time in China's history (China Population and Development Research Center 2012; UN-Habitat/China Press 2014; World Bank 2018). This push toward fastgrowing urbanization has progressed since the 1980s and accelerated in the first decade of the twenty-first century. Despite China's decline due to the global financial crisis and subsequent economic shocks, the Chinese urbanization rate was predicted to increase to nearly 60% by 2020. Frantic development in major cities has completely transformed China's urban landscape, often resulting in forms of diffuse sprawl characterized by high-rise and high-density housing types and a lack of efficient and well-connected transportation infrastructure, which has directly promoted wider car use (Burdett and Sudjic 2010; National Geographic 2019). Since 1990, 190 million cars have poured into the cities, producing traffic congestion and environmental pollution, creating a chaotic process of urban growth and the expansion of an unfriendly and unlivable built environment (Burdett and Sudjic 2010; National Geographic 2019).

The strong vertical dimension of most new constructions and other urban developments in the cities is closely related to the economic model inspired by so-called "Communism with Chinese Characteristics." This model can be considered a form of state sponsorship of neoliberal capitalism, which has strongly influenced the urbanization agenda. The process of city expansion is the direct consequence of the development of urban infrastructure, public facilities and amenities, and above all, large-scale, highrise urban residential complexes directly promoted by big developers, supported by central (or local) government policies to foster economic growth through urban infrastructure spending. This macroeconomic planning system follows the logic of the developmental state that has been implemented, mainly successfully, by many advanced economies in East Asian countries; it is evident, for example, in the clusters of collective apartment buildings of A-Pa-Tu Tanji and the large-scale, high-rise residential blocks at the heart of South Korea's urbanization and city densification since the 1970s (Gelezeau 1997, 2003; Jung 2013). This planning pattern has also been implemented in postwar Japan, the city-state of Singapore, and Hong Kong and Taiwan. The construction of modern, comfortable, collective

vertical mass housing projects was without question instrumental in their governments' ambitious political and economic agenda. Therefore, the development and construction of large residential complexes received particular attention, because this process related directly to larger redevelopment project requirements in the cities that could be planned, organized, and integrated with new urban infrastructure. They also related to the broad process of industrialization, economic growth, and eventual modernization of China.

China's national urbanization policy is structured on the system of Hukou (household registration). The policy aims to control population growth to prevent people from free movement into large cities and other crowded urban centers by diverting them toward small- and medium-sized cities that generally provide minor urban public services and governmentsupported social security. New comprehensive plans for large regional networks of cities have fostered the formation of several subcenters, to decentralize and move people and activities from central cities, creating a new habitat of multicentric urban structures in large regions that interconnect urban and rural landscapes. In response to the government's economic and political agenda of increasing urban development as a foundation for economic growth, Chinese planners and architects have proposed radical new projects for planning and constructing many new towns at some distance from the main urban centers. A good example of this comprehensive regional planning approach, which seeks to combine and foster economic growth, social progress, planning control, and political will, is the constellation of new towns around Shanghai named "One City-Nine Towns," which was promoted and developed beginning in the early 1990s to decentralize excessive congestion of the major conurbation (den Hartog 2010).

Two other characteristics have contributed to reshaping the model of urban development in China and have directly fostered the construction frenzy of residential buildings in the last two decades. These are the peculiar Chinese system of land ownership and the mid-1990s tax reform and abolishing of rent subsidies. With no exceptions, land in China belongs to local governments, which have the right to lease and sell it as a major source of funding for their activities and new urban plans. Typically, the local governments lease or sell land to developers, who can invest large amounts of money in lucrative new redevelopment projects that bring high returns. Indeed, many Chinese cities rely on "land revenue" to finance new urban development and operation. Since the cost of land is cheapest for rural land at the urban fringe and the urbanization process presents much potential for future development, it is common for local governments to

be strongly motivated to develop these areas in the hope that some form of economic development will follow. The decision by the central government in 1998 to abolish subsidized rent also boosted house ownership and fostered the pouring of citizens' savings and big companies' money into investments in the real estate market. This directly triggered the unprecedented construction boom of new housing complexes and related urban infrastructure, driving enormous urban development in the many suburban areas of all cities. By the end of the first decade of the twenty-first century, the massive construction boom had supported the growth of a huge housing market while exponentially growing personal and national debt. This created what many experts believe to be an enormous real estate bubble, profoundly affecting the basic urban structure of pre-existing districts and altering the traditional framework of social communities and the lifestyles of people dwelling in the large cities.

The concomitant action of multiple factors related to the profound changes driven by sustained economic growth and the progressive urbanization process has substantially transformed typical urban structures in the modern Chinese city. In the second half of the twentieth century, the basic Chinese urban unit was the working unit (danwei), which defined large neighborhood communities surrounded by walls with gates. The danwei were both specific spatial enclaves and self-contained social communities where people worked, lived, shopped, went to school, and entertained. These well-defined urban areas covered entire urban blocks and were the key unit of spatial and social organization in Chinese cities. The danwei were inspired by other earlier community models developed since the 1930s in Europe (Siedlungen), the US (neighborhood unit), and Russia (microrayon, or microdistrict), which were all conceived at different scales, sizes, and densities. Major roads formed the boundaries to a core of intensive residential dwelling blocks linked to pedestrian-oriented spaces filled with green areas and other collective urban facilities within a walkable distance, conducive to the social and material needs of their citizens. The lessons from Russia in particular (due to the common political bonds) became the favorite among Chinese architects and planners. They embraced the idea and blueprint of the microrayon as a supercommunity of dense apartment blocks and collective services as the most suitable model for defining the physical form and social organization of the new urban unit in the socialist order empowered in China since 1949. Therefore, danwei precincts became the key block in the larger urban structure of Chinese cities planned and built as mosaics of small enclosed citadels of residential and factory blocks with few commercial and entertainment activities. These citadels were integrated into the larger urban frameworks of streets, with limited provision of other services except in major urban centers. Since the late 1990s, the *danwei* enclaves have evolved and been redefined as *xiaqui* (superblocks)—extensive, superdense residential gated communities mostly designed as high-rise apartment blocks (Bray 2005; Lu 2006; Wu 2006).

The development of such large-scale gated communities is strongly supported by government policies and mainly driven by market demand. These drivers build on the desire for the new wealthy and middle-income citizens to move into new, large, modern apartments set in green, wellmaintained, nicely landscaped gardens as status symbols. However, the rigid management system, omnipresent fenced boundaries, China Central Television (CCTV) at wall corners, and constant surveillance by uniformed guards at clear checkpoints and the main car entrance and gate of the communities explicitly indicate that these residential superblocks have another function aside from security: to control citizens' lives and activities (Kan, Forsyth, and Rowe 2017; Tomba 2010). To the residents, the sense of security generated by living in tightly controlled, well-maintained gated communities contributes to enhanced feelings of stability and reassurance regarding their status in their daily life. Developers and real estate companies work to promote this sense of security and higher standards of living. These communities contribute directly to the fragmentation of the urban tissue in countless macro units. In other parts of East Asia, the use of Western names, lifestyles, images, and icons has triggered a rush to brand-new, exclusive residential projects and developments that stress such concepts as exclusivity, comfort, and elegance. Similarly, in China, gated communities have become the most popular form of residential community in which people choose to live and invest. Between 1991 and 2000, about 83% of Shanghai's residential neighborhoods were gated (Miao 2003), and in 2002, the Ministry of Construction reported that more than 80% of housing stock was privately owned (den Hartog 2010).

While large-scale urban renewal projects have become the typical form for new gated communities created by developers, to enhance the sense of security and control, Chinese local governments often require and subsidize the gating of residential communities that are not already enclosed, including older urban neighborhoods.

The new superblock and gated residential projects all share the same formal architectural aspects and planning methodology. They are structured as standardized high-rise apartment towers with generous dimensions, and large green spaces, commonly with a few playgrounds and minimal communal services. While most new residential projects are intended to be sustainable, livable, and relatively affordable, as advertised in marketing campaigns, the reality is often different and directly linked with local conditions. Apartment costs are rising out of reach for many, especially in the major cities. Further, the poor-quality construction and passive acceptance of design techniques and forms unsuitable for different climate and social systems often produce defective final architectural products, resulting in underused or wrongly used spaces. The Chinese residential superblock shares the same characteristics more generally, resulting in similar problems. All the towers are strictly standardized types and accord with strict building codes. They are oriented to the same direction because of the required direct sun access for the apartments. This explains the image of endless, monotonous rows of parallel slabs and towers, which allow little flexibility in urban layout and master planning of the cities. The enclosure of space around the towers and slabs generates extensive superblocks, which contain minimal collective services, such as small shops and service centers, and are surrounded by wide traffic arteries. Unused setbacks among these enclosures commonly transform large chunks of public space into unfriendly, wasted urban areas. These residential developments are not usually mixed-use urban projects in which it is possible to enjoy a variety of the activities that are so important to urban vitality; essentially, they are residential enclaves. The Chinese city, which was once a predominantly walkable space for pedestrians who used bicycles as transportation, has now largely been redesigned according to car-oriented planning principles. These principles entailed the construction of many new street networks on a gigantic scale, fully immersing the gated communities and directly contributing to the increased pollution and mobility problems caused by heavy motor traffic.

Thus, there is a direct interaction between the larger structure of the city and the consolidated system of urban gated communities in China. Limited and controlled access to the gated communities causes problems related to accessibility and the isolation of internal streets from the larger city's street networks. Permeability inside gated communities is also a problem, because superblocks commonly use large parts of their open space for gardens and other green landscaped areas surrounding dense, high-rise apartment blocks. Thus, movement inside gated communities requires walking long distances, which creates mobility issues both inside and between neighborhoods.



Fig. 1.1. The townscape of the historical district of Suzhou. A street in Pingjang Road. *Source:* Author's personal collection, 2018.

## Origins and Evolution of Singapore Suzhou Industrial Park

The economic growth and urban development of China's new towns and urban clearance projects during the second half of the twentieth century were largely based on Western city planning theories and construction schemes developed since the 1930s (i.e., in Western Europe, Russia, and the US). These schemes were further developed at the dawn of great economic growth following World War II, when exemplary models of new towns and large-scale urban residential districts were designed and built, mostly in the US and Western Europe. Examples include US urban renewal and vast UK new-towns programs in the 1940s and '60s, France's grands ensembles, and the regional planning and transit new-towns projects in Scandinavia. Large-scale programs to construct new towns have been initiated and fully developed since the 1960s and '70s in East Asia, in Japan and then in South Korea, but especially in Hong Kong and Singapore, where the influence of British city planning and design was strongest. In China, these new urban entities have been designed in response to several problems (social, economic, and political) caused mainly by the excessive concentration of functions and people in the few main conurbations of the country. For example, special consideration is given to the conurbation of the capital regions of Beijing, Tianjin, and other important urban areas

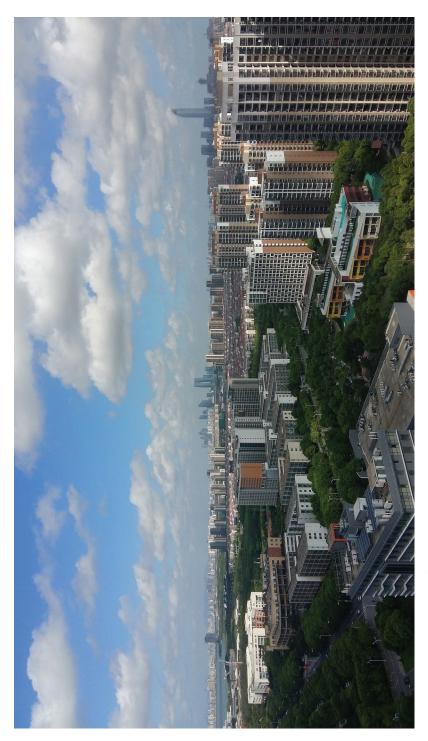


Fig. 1.2. The urban landscape of Suzhou Industrial Park: Dushu Lake Higher Education Town. Source: Author's personal collection, 2018.

(e.g., the Shanghai-Suzhou metropolitan area, Pearl River Delta area, and Hong Kong-Shenzhen region).

In six decades, different types and models of new towns, some designed to be plain bedroom or commuter towns, while other more recent models have been developed as prototypes of "eco-cities." A number have been built (with more or less success) to showcase the newest technologies for building and productive systems. The Suzhou development projects are exemplary models of urban renovation and the expansion of existing cities.

Suzhou is classified as one of the second-tier cities in China. This industrial city of five million people is set in the Yangzi River delta along the axis that connects the Shanghai metropolitan region to Nanjing. Suzhou has experienced radical urban development and extreme economic growth focused on the promotion of industrial innovation and high-quality service production. A combination of foreign direct investments and domestic investments has fueled impressive GDP growth, directly influencing the city's overall transformation into an important commercial hub and highly regarded cultural and technological innovation center in Jiangsu Province. One of the main urban development projects that has driven the recent success of Suzhou as a global city with an illustrious heritage and ecological touch was the development of the Singapore Suzhou Industrial Park, a high-tech industrial park filled with a variety of integrated research institutes, livable green residential areas, attractive new commercial complexes, various national and international academic institutions, and medium to large industrial factories and firms of local and multinational companies.

The gardens and waterways are the best-known urban elements of the historical districts of Suzhou. The Venetian traveler Marco Polo described it as the "Venice of Orient" because of its numberless water canals. In the last few decades, two important development projects have reshaped the general layout of Suzhou. Its master plan and urban structure can essentially be divided into three main areas or zones defined in terms of the vision of "one body—two wings." The city's central core contains the historical city with its rectangular-grid street pattern (Di, Lei, and Xingsheng 2000), a western district known as Suzhou New District (SND), and an eastern area renamed Suzhou Singapore Industrial District (SSIP). This industrial area is a large, comprehensively designed, and fully landscaped green park (according to Suzhou's planning codes, around 40% of all the land is reserved for green space) that hosts many foreign high-tech companies and other educational, industrial, and research facilities integrated in a vast system of public services.

# Suzhou Industrial Park Master Planning: Flagship Architectures in the Central Business District and Dushu Lake Higher Education Town

As a new emergent cultural and industrial metropolis, Suzhou presents a dichotomy. On the one hand, it is represented by the ancient city with its low-rise buildings and dense core full of vitality and a sense of history still expressed by its traditional architecture, public spaces along small streets, and mixed retail and residential areas. These traditional aspects stand opposite to the new, densely developed suburban areas of SND and SSIP; these two major suburban zones are true expressions of the city's global ambitions. The modern, clearly defined sharp lines of high-rise towers exist in an urban context where functions are not mixed; retail and commercial activities are largely separated, organized and concentrated locally in specific neighborhood centers serving their communities, which tend to be relatively separate and not fully integrated with each other. Here, the city is truly a patchwork of mini villages separated by walls, streets, green buffers, and fences. Conversely, in large untouched parts of the historic city, the residential areas are more comprehensive, and there is a feeling of being part of a larger whole.

The large urban area of SSIP (now commonly referred to as SIP after its partnership with Singapore ended due to unsettled conflicts during the process of developing the area) was originally set up as a joint venture between the Suzhou metropolitan government (under the sponsorship of the Chinese government) and the Singapore government. The industrial park was intended as a prototype and demonstration project of an exemplary modern industrial district based on the most advanced planning strategies and up-to-date urban design concepts developed in Singapore. The intent was to provide a model of a new town from which other Chinese cities could learn. This large project was deliberately built to create a comprehensive urban entity of districts and development zones within a new town not far from Suzhou. It was intended to be filled with first-class industrial infrastructure, planned island clusters of mostly self-contained residential complexes (essentially gated communities inspired by Clarence Perry's "neighborhood unit") with high-standard services and technology incubators, all while promoting and "branding" a new image of the city at the national and international level (Logan 2002).

Following initial discussions in 1992, SIP was cofounded in February 1994 by the Singaporean and Chinese governments as a joint project, with the intent of introducing China to the urban-planning practices

and urbanization techniques of Singapore. At the time, Chinese leaders were strongly impressed by Singapore's achievements, such as its progress from economic development to infrastructure and design capabilities and its innovation in building technologies. As Deng Xiaoping commented when presenting the plan of the new area in Suzhou, "Singapore's social order is rather good. Its leaders exercise strict management. We should learn from their experience, and we should do a better job than they do" (SIP 2018). Singapore's urban planning system was also imported into this experimental new town, and the local government was determined to make SIP an international, modern, informative, ecological, creative, happy new town. Waves of new immigrants were attracted by the new employment prospects created by the new factories in SIP; the original farmers were displaced and relocated into newly constructed apartment blocks built to control the rapid urbanization process. In 2010, the number of people living in SIP was 762,000, and the plans for developing the new urban area on the west side of Suzhou, SND, further fostered Suzhou's urban growth. Within a few years, SND and SIP had become important poles of attraction for activities and people, prompting higher demand for new housing projects in the last 20 years to house growing resident populations.

The core urban areas of SIP are around both sides of Jinji Lake, while another is located on the east side of Dushu Lake. They showcase modern and international architectural and creative city planning and design practice with a local touch; urban design plays an important role in the vision for the city's future and is used to demonstrate the globalism of Suzhou. The central spine or main axis of services and office towers clustered around the city's central business district and focused on the double glass towers of the Oriental Gate on the west side of the Jinji Lake connects to the financial tower on the east side. This is one of the most relevant urban projects in SIP. Built on a monumental scale, its vistas and long visual long axis are reminiscent of Baroque planning. It seemingly pays symbolic reference to Hausmann's wide, tree-lined streets and boulevards in Paris, but it also shows some curious analogies and references to Kenzo Tange's unbuilt Skopje plan from East Asia and pays homage to Manhattan's skyline through its high-rise architecture.

Thus, the impressive skyline of SIP is dominated by the landmarks of the Oriental Gate and Suzhou Centre (megamall) that extend and visually relate to the new Financial Centre. Several new waterfront areas have recently been developed, connecting in a perfectly straight east-west line along the east bank of the lake several urban functions and internationallevel facilities, such as the Jinji Lake International Exhibition zone, the Cul-



Fig. 1.3. The Oriental Gate and Suzhou Centre mall. *Source:* Author's personal collection, 2019.

ture and Exhibition zone, the Art Centre and Conventional Hall, and the Moon Harbour, Ferris Wheel Park, and Times Square entertainment area. The architecture is modern in style and monumental in scale to impress tourists and enhance the feeling of global tastes along the lakefront. Along the green promenades close to the water, several different types of restaurants, pubs, and fashionable shopping areas are sited in a large, attractive open park carefully designed as a system of public spaces with beautiful sightseeing spots and picturesque, natural landscape views.

Following China's successful hosting of international events such as the 2008 Beijing Olympic Games and 2010 Shanghai Expo, the Meeting, Incentive/Travel, Convention, and Exhibition industry has become a relevant business. The domestic and overseas tourism boom has prompted a steady increase in the number of high-class hotels (i.e., the Sheraton, Kempinski, Pan Pacific, and InterContinental), which provide highly accessible and efficient meeting places and quality recreational facilities in scenic tourist spots on Jinji Lake. Accordingly, tourism is becoming more relevant in the economy of the city. The colorful lights of the bright façades at night transform large sections of the city into an artificial scene as if in perennial



Fig. 1.4. Main axis of the Suzhou central business district. *Source:* Author's personal collection, 2019.

celebration of some special event, producing an effect that is both cute and strange. The kinetic cornices and neon lights of the buildings and towers create amazing views of the architecture, transforming the usual cityscape. Every night is a visually rich show with a blast of vivid colors, changing graphic patterns, and bizarre light effects in the sky, which intermingle with the streetlights, flashing lights, bar signs, and other street signals on the ground. This new visual environment that can be observed at night on the SIP-Suzhou's lakefront is replicated in other major Chinese cities that aspire to be part of the urban elite and to be recognized as legitimate global cities.

Dushu Lake Higher Education Town is set on the east bank of Dushu Lake and comprises an impressive number of university campuses and academic institutes, both Chinese and international. Examples include Soochow University, Xi'an Jiaotong–Liverpool University, the University of Singapore Research Institute, and Renmin University of China. These institutes provide a large variety of facilities and accommodation for students and researchers in a pleasant, green environment. The residential areas have been steadily and progressively developed, and the many apart-

ment complexes have attracted a great number of workers and immigrants who work in local factories and industries, especially in the service sector. Major Chinese developers (e.g., Wanke, China Construction/South Pacific, and Evergrande Real Estate Group) have contributed greatly to the growth and expansion of the area.

Property-led urban development in China was conceived to foster rapid economic growth and promote the far-reaching physical transformation of its cities; selling government land to private developers funded large residential projects and urban infrastructure investments, creating the benefits of a market economy by creating jobs and supplying services. The size of apartments has steadily grown over time despite the one-child policy that began in 1979. Housing area per capita has risen enormously from fewer than 7 m² in 1978 to over 30 m² in 2012. This has prompted urban sprawl at the expense of agricultural land. It has resulted in increasing land shortages, idle land, and the creation of countless ghost towns. This has resulted in a severe, radical alteration of the natural environment that threatens to nullify any efforts to achieve a more sustainable, coordinated, and balanced model of urbanization in the future (Xu 2017).

Property development has consistently gained prominence in terms of national GDP. Since the inauguration of the open market in the early 1980s, housing and apartments have been conceived of as goods to buy and sell, and they have become a primary form of lucrative financial investment. Internal immigration into developing new industrial districts and the effects of aggressive economic reform have accelerated this trend, generally resulting in the production of high quantities of housing stocks taking precedence over overall housing quality in Suzhou, like elsewhere in China.

Hide Park, Lotus Village Community, and Living Bank housing complexes are typical examples of residential projects designed and built as gated communities in SIP. These projects are examples of large-scale, middle-income, hybrid residential developments whose organization of communal services and public and semipublic spaces was inspired by the lessons and layouts of precedents such as Russia's *microrayon* and the US's neighborhood-unit principle. However, the profile of the imposing apartment towers typology has an unmistakably East Asian flavor, recalling the urban environments of Hong Kong and Singapore, although construction standards and level of innovation are lower. The water canals of the old city have been turned into heavily landscaped green promenades along the roads, forming long physical barriers among extensive residential blocks. Hence, the built environment and urban landscape are structured of inte-

grated elements connecting large housing *xiaoqu* (neighborhood district) clustered around community centers inspired by different urban planning theories and predominantly modernist or European-flavored architectural idioms, styles, and languages.

Lotus Village was built in 1998 as a relocation community for eight villages to host new immigrants. Many of its residents are former farmers who lived in rural areas before the development of the SIP project and who were displaced. Living Bank and Hyde Park are newer residential communities built beginning in 2008, but they are much smaller. The residential blocks have common characteristics: they are all gated with walls, fences, and often electric fences as safety precautions. The gates have CCTV and checkpoints and they are regularly patrolled by guards and other security. The internal public spaces that contain the collective services (e.g., small retail outlets, health and medical facilities, libraries, and other sport and cultural areas) are heavily landscaped green areas with spaces for resting and outdoor activities. These compounds form large superblocks filled with south-facing high-density towers that create an imposing skyline. The facades are in various colors, styles, and shapes, but they are monotonous in terms of their dull repetitiveness and inhuman scale. All the blocks are surrounded by wide streets designed for heavy traffic and cars as the main transportation system. While the central government has recently attempted to open the fences and walls surrounding the towers to break up the precincts and diminish the lack of permeability that fragments the city, most people still view them favorably as a protective barrier from outside insecurity and risks. Car streets dominate the urban scene outside the gated communities, even though the long distances between the various parts of the city are increasingly connected by efficient public mass transport services, such as buses and new metro lines that now run north-south and east-west.

The model of the neighborhood unit system has been extensively used to structure the new urban areas; it was among the key planning elements inherited from Singapore and the United Kingdom's planning legacy. Neighborhood community theory has a long history in urban planning, dating back to planner and sociologist Clarence Perry's publication in 1929. After the 1960s, Singapore adopted this model for urban redevelopment to support public housing policy; it proved to be an efficient way to organize local residential communities and successfully provided various commercial and public services integrated with residential elements at the community level. As part of the learning process of Singapore's planning experience, the SIP community plan and management training team vis-

ited Singapore for the first time in 1996. The chain "regional center-town center-neighborhood center-residential precinct center" structure is one of the important elements that supports public housing communities in Singapore. In Suzhou, the "neighborhood center" concept was imported from Singapore and applied to the mass housing projects in SIP to develop a practical spatial unit for organizing a larger urban district. These units can easily be physically and functionally enclosed and are highly responsive to the traditional Chinese urban design approach. This approach tends to emphasize enclosure and separation over connectivity and permeability, conforming to the old Chinese city planning custom that has always prioritized streets over the large spaces, such as squares and plazas, that are the core of social and economic activities in Western cities. The architectural typologies for the design of the residential units are the high-rise tower apartment blocks suitable as high-density complexes, which reserve space on the ground for mostly green areas and motor streets and provide room for additional services and leisure spaces. The first stage of construction mainly used Singaporean design firms and construction companies. This allowed the importation of architectural styles and landscaped areas reminiscent of Singapore, especially the concept of a "green vertical city" model.

This trend toward a vertical model of the city, mostly landscaped with extensive green spaces and curated gardens, an urban structure model integrated and interconnected with wide motor arteries and roads suitable for heavy traffic, seems to derive directly from Singapore's model of expansion. This pattern is in contrast with Suzhou's history of horizontal urban development, as observed in the historical city on the other side of Jinji Lake. That city also experienced an impressive transformation in the development new luxury housing communities and cultural and entertainment facilities.

Long-term urban sustainability practices, including protection of ecology, have influenced waste management, urban mobility, and transit circulation. The separation and recycling of urban waste is increasingly popular among the citizens and is largely supported by administrators and local and regional governments. The development of efficient mass transit infrastructure is viewed as an important future asset, and several new metro line extensions have been completed. Walkable spaces, electric bike usage, and bike-sharing services are widely distributed and contribute to the overall partial success of the SIP-Suzhou model of ecofriently urbanization.

The elements that connects the new expansion of SIP and the old historical district of the ancient city are the new central business district and commercial and financial areas. These are developing along an axis



Fig. 1.5. A model of a gated community in Suzhou Industrial Park. The internal gardens of Hyde Park in Dushu Lake Higher Education Town. Source: Author's personal collection, 2018.

from the fundamental structure of the Oriental Gate (office and residential tower)—the new symbolic landmark of Suzhou—east toward the completed tower of the financial district zone set near the open public space around Times Square. The vertical development of this part of the city reflects the decision to follow the current trend of an urban image inspired by globalization, which affects most Chinese cities, and the need to brand the new Suzhou, characterized by high-rise towers, as opposite to rather than integrated with the old Suzhou, which is characterized by the traditional horizontal gardens and old waterways and canals.

## Suzhou Industrial Park as a Model of a Green Eco-City

Extensive research has portrayed how, from the second half of twentieth century, China has extensively restructured its pre-existing urban fabric and progressively reshaped its city form, urban inner structure, and urban landscapes, especially after the great reform and opening policy that began in 1978. At the time, less than 20% of the population was urban; in 2018, it had reached almost 60% (World Bank 2018). While this unprecedented urbanization process has increased the wealth of many Chinese cities, it has also caused problems, such as enormous energy consumption and waste production, many different forms of pollution (China still extensively uses coal as its main fuel), and rapid and drastic environmental alterations that present severe present and future challenges (Yu, Dijkema, and de Jong 2014). To cope with this situation and solve the less desirable effects of rapid urbanization, the Chinese government has orchestrated numerous campaigns to promote the diffusion of the "ecological city (eco-city)" concept for future urban planning. Many cities, including Beijing, Shanghai, Shenzhen, Suzhou, Tianjin, and Ningbo, have adapted this stance and set goals to achieve a sustainable and ecological urban development. As a consequence, by the end of 2015, 284 out of 287 cities (98.9%) had advanced ecological development as a primary urban planning goal (Liu, Sun, and Hu 2017).

In the modern history of city planning, the idea of a healthy, functional, and well-planned city dates back at least to Ebenezer Howard and his well-known model of a garden city (Howard 1898). According to Howard, a garden city should integrate the beauty and uncontaminated landscapes of the countryside with the comforts and attractions of the city. The importance of designing human settlements in accord with the principles of nature was also emphasized by Ian McHarg in the late 1960s. More recently, the original city of the city is a set of the country of the city.

nal idea of an ecological city (eco-city) design was first promoted by Richard Register in 1975, who founded an organization called "Urban Ecology" that focused on "rebuild[ing] cities in balance with nature" (Register 1987). In the next few years, Urban Ecology attempted to bring nature back to the streets, relying on sustainable energy sources and stopping the construction of a motorway in Berkeley (Register 1987, 2006). In 1990, Urban Ecology organized the First International Eco-City Conference in Berkeley to further spread their views. David Engwicht contributed his idea of an eco-city at the second eco-city conference, promoting a pedestrian-oriented model of urbanization in which people could freely move by walking or using bikes or public transport to diminish traffic or pollution (Engwicht 1993). Around 40 years later, Urban Ecology further emphasized that an eco-city should consist of "vibrant, equitable, socially supportive, ecologically sustaining and economically viable communities" (Liu, Sun, and Hu 2017). Register, Engwicht, and the Urban Ecology movement helped define the eco-city concept, although each country has its own interpretation shaped by different policies, intents, and visions. At present, local research and studies on eco-city paradigms and sustainable architectures in China are still at the initial stage and focus particularly on urban-planning practices and large-scale projects.

Several projects for new eco-cities and green towns for sustainable urban living have been planned and announced as a breakthrough in the current frantic pace of Chinese urbanization. However, to date, many of these cities remain unbuilt, such as the first carbon-neutral city of China, Dongtan new town near Shanghai (Lin 2014; Williams 2017). Others have been largely resized based on eco-urban design and the goal of providing sustainable green infrastructure. Binhai Eco-City near Tianjin, for instance, has been planned and developed with the support of Singapore experts and designers and emphasizes mass transit systems, widespread use of energy efficient practices, and minimizing environmental consequences (Lin 2014; Williams 2017).

Interest in the eco-city as an urban model started to develop after China's National Agenda 21 was prepared by the State Planning Commission and adopted in 1994. Since then, the Ministry of Environment Protection has sought to strengthen awareness of the notions of "the eco-county, eco-city, and eco-province" and has released guidelines with 5 basic requirements and 28 indicators (reduced to 19 indicators from 2007) based on economic, environmental, and social considerations, covering a broad variety of aspects, from the local level of urbanization, the ratio of tertiary industry to GDP and energy consumption intensity, to air and water

quality, forest coverage, and waste treatment (de Jong et al. 2016; Li and Qiu 2015). The Ministry of Environment Protection has also a system of awards for eco-city projects to encourage other cities to learn from and embrace new forms of sustainable and responsible urbanization (Bradbury and Kirkby 1996).

In general, the relevant literature and international experts consider SIP to be one of the best representative models of eco-city planning in China so far. Even though SIP is commonly defined as an industrial park, it is more than that. In China, an industrial park is not normally a large industrial town as in the US model; rather, it is an industrialized urban district with a complex network of industrial, residential, and commercial functions regulated to provide a variety of services and benefits to its employees (Tian et al. 2014). In SIP, the infrastructure system serves the employees of large multinational and local firms, who live in urban areas containing residential buildings, hospitals, education facilities, and shopping centers. Typically, the multifunctional districts filled with extensive, dense residential and commercial areas provide higher standards of living and require better-quality services than those available in conventional industrial areas (Tian et al. 2014). The eco-city is viewed as a possible solution to the multiple challenges of consumption-related waste and pollution from industrial and commercial factories. The implementation of the eco-city concept in the planning and design of SIP was considered useful for attracting investment, high-tech companies, and skilled immigrants, assisting development at an urban scale while ensuring additional support for the rapid economic development and urbanization of the larger metropolitan Suzhou area. During the different stages of the project's implementation, the central government strongly supported eco-city construction in SIP. Unlike traditional industrial parks, SIP not only provides services for basic industrial functions, but offers livable, green residential areas that are generally well maintained, efficient, and offer highly attractive commercial services. Most of the cities in China aim to build or are trying to build cities based on eco-city principles, and SIP was intended to serve as a model of ecological development—an exemplary showcase of technologies, methods, and completed projects other cities could learn from and possibly imitate.

The framework of the Singapore model was used as a foundation for the initial development of SIP. The experts from Singapore and China formulated over 300 planning proposals based on the extensive experience of Singapore's urban planning and adapted to the actual situation in Suzhou, including the framework of urban-planning works, marketing of completed

buildings, and provision of social services and management (Wan 2009). These proposals included preparing the master plan and laying out industrial, commercial, traffic, residential, and landscape functions. The concept of "new town," which has its origins in nineteenth-century UK planning, was introduced in the urban planning of SIP in 1994 by Singapore. The concept included the use of several other urban planning tools and methods, such as functional zoning, a neighborhood system, undeveloped land and a greenbelt, a multilevel road network, and an advanced service infrastructure (Shi, Liu, and Lin 2012). Singapore's experience in city planning and design, construction, and management practices was used during the different stages of SIP project development and construction to minimize short-term and long-term alterations of the original plans. With the goal of achieving high quality in projects at various scales and limiting malpractice and failures, strict building codes and an effective set of planning rules and environmental quality controls systems were applied at SIP from the beginning, to safeguard ecological sustainability and, ultimately, the economic, media, and social success of the entire SIP.

The changes in industrial structure following the transformation of the economic engines in SIP have reduced energy consumption. Since the early 1990s, the increase in the importance of the services sector at the expense of the industrial and agricultural sectors has been progressive and consistent. This process has been directly related to the growth in urbanization. In the last decade, primary industry represents only a tiny fraction of the economic output in SIP, and its proportion has continued to decrease. While manufacturing generally has high energy consumption and produces large quantities of pollutants, tertiary industry such as in the service sector produces less pollution and needs less energy consumption in general. Although secondary industry has become the main productive sector in Suzhou since the 1980s (especially the manufacturing of electronic equipment, and the telecommunications and automotive industries), its proportion has also been decreasing. The rate of tertiary industry has been increasing continuously, tending to become a key element of the current SIP economy. By shifting the priority from the industrial system, SIP has reduced pressure on the environment despite the rapid urbanization process. The local government has implemented a strict policy for the industry to protect the environment. In recent years, many chemical and electroplating companies producing large quantities of dangerous pollutants have been moved from the SIP urban area (SIP 2014). Moreover, the government seeks to implement strict annual measurements and audits on all companies. Companies using more than 3,000 tons of standard coal annually are forced to replace obsolete equipment with eco-friendly machinery; companies whose equipment meets the standards are provided a 10%–30% subsidy of the total investment of project equipment (SIP 2008). Such policies have helped SIP's industry sector protect the natural environment and the livability of the urban areas.

The local government has promoted and helped to improve efficient energy consumption. For example, the "Web Sludge to Biomass Fuel" project, which started operating in 2011, has already helped SIP reduce up to 70,000 tons of coal consumption, more than 180,000 tons of carbon emissions, 1,400 tons of sulfur dioxide emissions, and 60,000 tons of solid refuse (SIP 2018). Moreover, initiatives further foster the widespread use of e-bikes and shared systems of transportation (such as bicycles and cars).

### Conclusions

The process of fast urbanization in China during the last few decades has highlighted several problems and contradictions typical of a country and society striving to rapidly modernize its economy, urban environment, and cultural features. China's increasing need for urban mobility and evidently car-oriented urban development inevitably clash with the need to preserve the fragile pattern of the traditional city. There is a clash between the importance of further industrial development and the need to protect endangered ecosystems and precarious natural environments. It is also important to protect a social harmony increasingly endangered by the extremisms of a rampant capitalistic model of economic growth. These are just some of the challenges faced by Suzhou and many other cities in China.

In Suzhou and many other Chinese cities, two cities seem to coexist as one, neatly separated by time, scale, and forms. The historical city center is the core, with its original footprint, monuments, and old buildings and architecture. These aspects are embedded in vanishing neighborhoods that sustain a fine-grained fabric of narrow streets and still largely human-scale urban spots, with their traditional rites, centuries-old memories of still-passionate residents. This reality clashes with the new city. The historical city center is physically dwarfed by the new residential developments—extensive urban islands of towers, elevated highways, massive streets for cars, and sterile architectural objects lost in vast green parks and landscaped areas that could be appreciated only from the sky. It really is a tale of two cities: the old, small, and largely horizontal charming nucleus of the millennial core versus the new, big, vertical globalized promethean expansions

of the new limbs built around circulation infrastructure and superdense residential suburban districts. In the design of new forms of residential superblocks to foster a more social view of urban life and promote a more balanced social system in the contemporary city, the neighborhood center seems to be a fundamental nucleus of efficient and essential services to the community. However, it is also an important urban place to foster a sense of social cohesion in the contemporary sprawling Chinese city. Yet the organization of the spaces and functional articulation of this fundamental urban element reflect a completely passive attitude toward innovation, and the uncritical acceptance of often unfit building models and images that can hardly be integrated into the local context and "genius loci" of the place. Copycat architecture, the often uncritical acceptance of foreign models and schemes (e.g., the presence of enormous corporate buildings with flashy architectural styles and forms, high-rise complex urban developments, and car-oriented city planning), and the conflict between economic considerations and ecological responsibility (e.g., many old canals in Suzhou have been filled in to make room for new roads) are the most serious flaws in the development of several new urban areas in SIP. As in Suzhou, urban development elsewhere in China still does not take the local history and cultural and social specificity of the place into account, sacrificing them for the sake of economic growth, visibility, and media branding and exposition.

China is now lingering in a postgrowth, postindustrial condition heralded by demographic decline, slow growth, shrinking cities, resource depletion, environmental concerns, growing localism, and an ageing society. All these factors call for a new, comprehensive urban and architectural agenda for the rest of the twenty-first century. Obvious targets should include putting more efforts into heritage protection, ad hoc regeneration projects, and a clear emphasis on more sustainable forms of urban development. Only time will tell if SIP and the whole of Suzhou is a successful model of a green experimental eco-city with global ambitions and the responsibility to preserve and cultivate a very precious heritage of art, culture, and history. And in the rush toward international recognition, globalization, and economic development we will soon see if the new, vast artificial habitats of clustering high-rises, dense residential communities, massive urban public spaces, complex infrastructures, and carefully designed green spaces represent an optimal solution to the current challenges and contradictions that follow over 30 years of stellar economic growth and the related and largely inevitable transformation of society and the urban landscape in the contemporary Chinese city.

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# The Urban Geographies of a Small Island

A Dialectical Spatial Approach

Hong Gang

Hengyang is a landlocked city in south-central China that is rich in historical resources but economically backward. In the middle of the city's stretch of the Xiangjiang River, a major tributary of the Yangtze running south to north across many cities in Hunan Province (including Hengyang), perches the tiny island of Dongzhou. Because of its small size, insular spatiality, closed ecosystem, and oblong curved shape, the river island has been subject to a tourism development project undertaken by the municipal government. Boosted by visions of both the global trend of ecocultural island tourism and the ancient Chinese imagination of the Sacred Island (Luo and Grydehøj 2017, 25–44), the island has been a focus of development, undergoing a radical identity shift from a suburban agrarian backwater to an urban Neverland (or ideal place) that incorporates diverse urban functions during the post-2010 years (HLCCC 2014, 1673–76).

This paper focuses on Dongzhou Island within and beyond the aforementioned tourism context as a case study to explore the complexities and nuances of urban geographies and to raise related ethical issues. Following a review of the related literature on the subject and explanations of the theoretical framework and methodology that inform the project, the main body of the paper can be divided into two parts, one analytical and one critical. The former starts by analyzing three place-specific spatial dimensions of the island (*island as an absolute urban space*, *island as a relative urban space*, and *island as a relational urban space*), with a stress on their dialectical interactions. Then, to give the paper a critical component, the author proposes the concept of *spatial visibility* as an alternative analytical tool, other than spatial equality, to integrate everyday phenomenology with spatial politics and analytical description with critical evaluation in examining urban spatiality. The main argument of the paper is that urban spatiality is multilayered. All spatial layers are present, but some are more visible than others. Finding theoretical and practical ways to render the invisible visible and showing the tensions between them is a crucial phenomenological step toward justice in urban spaces.

#### Literature Review

In this section, three bodies of literature are reviewed based on their relevance to the research topic. The first is domestic literature specifically focused on Dongzhou Island. The second incorporates more general views on tourism from the human geography and cultural anthropology perspectives. The third focuses on the recent development of a variety of accounts of island tourism within whose frame the present case could fit.

# Naturalistic Fallacy

Previous scholarly literature on Dongzhou Island is sporadic, where it exists at all. All of it can be pigeonholed in standardized ecological research and related studies linking ecology and tourism (e.g., Liu et al. 2011, 97-101; Hao et al. 2012, 87–92; Peng 2012, 29–32; Peng et al. 2013, 375–78; Huang et al. 2014, 241-50; Li et al. 2015, 123-26), with one historicist exception investigating the etymology of the island's name (Wang 2016, 264-65). The literature is evenly distributed between 2011 and 2016, a period that coincides with the branding campaign initiated by the municipal government. Despite their different approaches and emphases, these research projects all take a naturalistic stance in treating the island as a contaminated environment to be purified, a broken gem to be mended. The production of urban spaces as social spatiality was not dealt with in even one single instance. It is in reaction to this tendency that this paper adopts a spatial approach. To be specific, we examine the urban island as a social space in which different players have different aspirations that are, not necessarily in conflict, but in dialectical tension. Hence, the aforementioned

research projects are used in the paper not only for a formulaic literature review, but as data representing a specific genre of urban space discourse.

## The Social Meanings of Tourism

Since the attention paid to Dongzhou by both public and intellectual circles stems largely from the development of tourism on the island, it is necessary to review the social meanings of tourism. Rich as it is with historical and natural resources, Dongzhou Island<sup>1</sup> had been a backwater in Xiangjiang River on the urban fringe of Hengyang municipality ever since the early wave of urbanization started in the 1980s. It was not until the post-2010 years that the island returned to the local public's attention as mainstream newspapers and television programs churned out reports on the municipal government's ambition to reframe it into a tourist spot that will integrate heritage, ecology, and leisure (Li 2011, 2015; Yi 2011; Zou 2013; Deng 2015; Tang and Liu 2016; Wei 2015; Wu 2016). A frequently quoted view of tourism defines it as "the activities of persons travelling to and staying in places outside of their usual environment for not more than one consecutive year for leisure, business and other purposes" (Gregory et al. 2009, 763). While this definition captures a major trait of tourism, its relational approach fails to consider the varieties and circumstances of touristic activities. Dongzhou Island doesn't fall under the definition above in that it mainly serves the local populations' wants and needs. It is also noted that while some Western academic minds usually, if not always, frame tourism as a quest to encounter authentic alterity, the touristic envisioning of Dongzhou Island promises, at best, a chance to both reclaim one's own past, which is assumed to have been lost, and to project a future of alternative urbanism that features a more sustainable way of life. In this regard, the more general framing of tourism as activities that seek to create "a time and place out of the ordinary" seems more fitting (Gregory et al. 2009, 763). As in many similar cases, the tourist vision of Dongzhou Island is close to a secular pilgrimage that employs both material and semiotic means to "sacralize" certain sites on the island as deserving of the "tourist gaze" (Gregory et al. 2009, 763).

Another strong tendency in the Western academic world, especially in the fields of human geography and social and cultural anthropology, is to examine tourism with the assumption that touristic meanings for places often clash with or replace local ones, thus eroding an original sense of place and reducing it to "placelessness" (Gregory et al. 2009, 763). Underlying this assumption is a myth of community solidarity and tradition ravaged by mass

travel. However, as Rapport and Overing (2000, 357) say, "Socio-cultural milieus are (and were) never isolated, bounded, or homogeneous entities, but environments always involved in change and always exposed to a range of influences (economic, socio-cultural, religious-political) which might seem to be alien and new." Due to its proximity to the mainland town, and its homogeneous ethnic makeup, Dongzhou Island, notwithstanding its agrarian past, has never really been a complete Other to the city.

## Ecocultural Island Tourism

Given the aforementioned gap between the literature on tourism and the nature of tourism in this case, it is appropriate to see it through a more specific lens: ecocultural small-island tourism. For instance, Lesvos, Greece, is examined as an "ecomuseum" that breaks the boundaries separating culture, nature, and history (Pavlis 2017, 135–50). Tourism innovation on Yakushima, Japan, is looked at against the backdrop of shrinking conventional island tourism. Likewise, the Battle Harbour Historic District in Labrador, Canada, is also studied in the context of turning wartime histories into tourism assets (d'Hauteserre and Funck 2016, 227–44). A more critical stance toward "heritagizing" island history for tourism can be found in Ronström's (2008, 1–18) research on Gotland, Sweden. The local case of Dongzhou fits within the global trend insofar as it involves primarily a genre of branding that foregrounds a synthetic landscape of historical heritage and natural ecology.

#### Theoretical Framework

The aims of the paper are to (1) illustrate the spatial-temporal complexities and nuances of urban geographies as instantiated in Dongzhou Island and the area in which it is situated, and (2) shed some light on the changing identity of lower-tier Chinese inland cities, offering a local case study of global urbanization for critical appraisal. Given these aims, the spatial model proposed by David Harvey (2006, 270–93) could prove very effective for both analytical and critical purposes, for two reasons. First, his model is *tripartite*, preventing it from slipping into simplistic binarism. Second, his model emphasizes the *dialectical* nature of space, guaranteeing that any perception and understanding of geographical phenomena based on this model is historical and dynamic. It is necessary here to briefly review its major points.

Largely inspired by predecessors of spatialized thinking such as Cassirer and Lefebvre, Harvey (2006, 270-76) divides space into three dimensions—absolute space, relative space, and relational space—and endows the model with a strong Marxist bent by putting the dialectical nature of his framework in relief. Absolute space is often fixed, bounded, and hence territorialized. It is the space of Newton and Descartes, usually represented as "pre-existing" and "immovable." Uncertainties and ambiguities are often banished from its territory. In contrast, relative space is the space of Einstein and "non-Euclidean" geometries. It has to be understood as (and only as) a web of relationships among various geographical objects. Relational space is that which is most alien to positivist measurement and crudely materialist quantification. It belongs to the space of Leibniz in the sense that a geographical object "contains and represents within itself" relationships to other objects. In other words, it is the human experiential dimension of space (e.g., collective and individual memories of places, artistic representations of places) that is usually amenable only to writers and artists, but also occasionally contemplated by radical thinkers on spatiality such as Whitehead and Deleuze. If it is appropriate to equate the three dimensions to the material, the conceived, and the lived spaces, what matters is not so much the technicality of classification as the "dialectical tension(s)" among them. As Harvey (2006, 292) puts it, "(t)he dialectical tensions must not only be kept intact. They must be continuously expanded." It is also noted that despite the mutual dependency of these spaces on a theoretical level, in real social life, absolute space always carries its own weight and authority, which means, at some point, space has to be materialized and made concrete. The model's ethical import boils down to this: the job of critical geographers and social researchers of spatiality is to analyze space in its concrete forms, set it in tension with other spatial dimensions, examine injustices, and ultimately reimagine it as something "so rich in possibilities" (Harvey 2006, 293).

As instantiated in this case, the aforementioned three spaces can be delimited as follows: (1) the absolute space of Dongzhou, which consists of both its physical island geographies and the municipal branding of the island. In this dimension, the island emerges as an autonomous entity with clearly demarcated borders and a distinct cultural identity; (2) the relative space of Dongzhou, which is grounded in its urban environs, especially the urban/suburban communities along the two sides of Xiangjiang River overlooking the island; and (3) the relational space of Dongzhou, which is the

most ephemeral and also the richest in human meaning, not least because it dwells in the minds and hearts of individual islanders, but also because, as a lived space, the island has simply disappeared since the government-planned displacement of its residents for tourism development during the years after 2010. This paper will focus on the particular urban geographies of the three spaces and their interactions.

## Methods and Data

To facilitate the dynamic interaction among the aforementioned three spatial dimensions, the research adopts multiple methods. For the section entitled "Absolute Urban Space," I refer to the journalistic discourse derived from the many special reports on the tourist project of the island, which began to be produced from 2011 by a major municipal public relations office as well as a government audiovisual commercial showcasing the utopian vision of Dongzhou as a tourist island. The data gathered for this section is processed to foreground the seemingly stable identity of the island in the official branding. For "Relative Urban Space," field observations of the island area are first conducted by the author under the theoretical illumination of urban island studies, presupposing the identity of island geographies and their insertion within, rather than their isolation from, their urban environs. The data gathered for this section are processed in a way that could saliently illustrate the differentiated nature of these landscapes. In the same section, ethical issues related to the particular development model embodied in the aforementioned zonal differentiation are raised by engaging with both critical theory (that is, Žižek's ideological critique of ecology) and more empirical studies (that is, research that examines domestic real estate and housing and the ethical impacts of China's urbanization model). The last analytical section, "Relational Urban Space," adopts a particular human geography perspective on memory and explores (only tentatively in this case due to the limited number of interview participants) the individual geographies of the now-depopulated island through semistructured, in-depth interviews with two former island residents. The data is processed on a largely narrative basis to *locus* the experiential richness of the island as an everyday lived space, in contrast in many respects to how it is *focused* in the previous two spatial dimensions. The "Reflection" section is interpretive and explorative; an alternative concept will be proposed for further theoretical debates and future researches.

## **Absolute Urban Space**

Xiangjiang River is a major tributary running from south to north across the central-southern Chinese province of Hunan into the Dongting Lake before its confluence with the Yangtze (HLCCC 2014, 200). Dongzhou Island perches at the very center of the reach of the Xiangjiang River as it flows through the southeast outskirts of Hengyang municipality. Two thousand meters in length, 200 meters in width, the island is surrounded by water on four sides; with beaches, the area is 1.67 hm². The area of water to the east of the island is 300 meters wide while that to the west is 500 meters wide (Hao et al. 2012, 88).

Once perceived as a backwater at the juncture of the urban and the rural, Dongzhou Island has experienced a radical shift in identity. This shift is reflected in a governmental initiative to develop the island starting from 2011; the municipal government of Hengyang has been engaged in transforming the island into an urban Neverland through imaging, branding, and commodification of island and waterfront space as a tourist spectacle for a largely landlocked local market (Gregory et al. 2009, 680). This small piece of land in the Xiangjiang River is presented, in the words of a government commercial, as "an urban island integrating ecological preservation, humanist history and civic leisure" (Chen 2017).

The effort to develop the island has a long history. Back in the early 1990s, local academics and cultural celebrities expressed concerns about how the island had been neglected during the first wave of massive urbanization in China. At that time, urban planning in the city was still largely restricted to the large areas of land on the banks of the river. The closest the island came to undergoing serious urban planning was the establishment of the Dongzhou Island Development Company. Due to a lack of financial resources and the slow bureaucratic systems prevalent in the city at that time, the effort was aborted. It was not until 2011 that urban development of the island was seriously put on the agenda, when the island was listed as one of the major urban planning projects by the municipal government. Boosted by the will of the provincial government to brand the Xiangjiang River into the "Oriental Rhine," the transformation of Dongzhou Island was incorporated into the provincial project of managing the Xiangjiang River, a project intended to improve both ecological sustainability and the image of the city. Considering the top-down manner in which decisions are made and resources are distributed in China, this was a pivotal moment in the development of Dongzhou Island (Yi 2011). Commissioned by the municipal government, the project was entrusted to Legend Tourism Investment, and much of the island space was designed by the international Steinberg Architects—a firm that has a history of designing urban waterfront landscapes for Chinese cities (see Steinberg Hart 2018a, 2018b for similar projects undertaken by the company in other Chinese cities). Until November 20, 2015, the government had expected to receive investment amounting to 233 million *yuan* for the packaged project of Dongzhou Island and the waterfront landscape along the eastern bank of the Xiangjiang River (Hengyang Bidding Office, 2015).

The island as an absolute space is best embodied in the branding rhetoric of Dongzhou Island foregrounding regional rather than national identity. A proposal submitted by the China Democratic League highlights a restoration of the Chuanshan Academy and the icon of the wild goose (Yi 2011). The Academy, a famous education and scholarly establishment in the late Qing period, is an institution commemorating Wang Fuzhi, a 17thcentury native politician who chose to be an intellectual recluse due to his refusal to serve the Qing dynasty, which was understood to be the dynasty of foreign conquerors who did not represent the Han-majority population. Through the interpretations of diverse political activists and intellectuals from Hunan during the late Qing period, Wang has somehow been turned into the spiritual father of the regional Huxiang culture, which, despite its rather ambiguous connotations, is generally thought to possess a collective ethos of rebelliousness, recklessness, independence, and above all, regional rather than national loyalty and pride (Platt 2007, 1-30). The Academy was relocated from the mainland town district of Wang Ya Ping onto the island in 1885 because its insular geography was considered ideal for isolated academic pursuits (Yi 2011). As for the wild goose, it has always been the cultural symbol of the city nicknamed as the "city of Yan," Yan being the romanticized ancient Chinese appellation of wild goose. Both the textual rhetoric in the proposal and the aerial representation of the island in the commercial point out the island's resemblance to a wild goose, symbolizing the spiritual totem of the city. The building of a wild goose statue on the island was also an item in the proposal (Yi 2011).

In the government commercial, Dongzhou's islandscape is visualized as an ensemble of urban landscapes consisting of Arhat Temple, the water bungalow, Chuanshan Academy, a boutique hotel, a cultural town, a museum, an aquatic theater, an ecological park, and a themed beach (Youku 2014). It is noteworthy that apart from the ecological and historical elements, urbanism that provides consumerist spectacles is also a salient theme of the commercial. The existence of this mélange of intense urbanity with ecocultural elements was probably less obvious in the previous

literature on ecocultural small-island tourism worldwide. The unabashed desire for urbanity curiously blended with more introspective ecohistorical yearning probably has something to do with the awkward position of most, if not all, inland Chinese cities stuck between unfinished urbanization and the already-emerging sensibilities of alternative urbanism.

From 2011 to 2018, the main local official paper, Hengyang Daily, has been churning out reports covering and justifying the government's plan to develop the island (Li 2011, 2015; Yi 2011; Zou 2013; Deng 2015; Tang and Liu 2016; Wei, 2015; Wu 2016). The initiative is justified mainly on two grounds: one is the contemporary decline of Dongzhou compared to the relatively successful exploitation and market reputation of Ju Zi Zhou, Changsha, and Jun Shan, Yueyang. Located in three major municipalities in Hunan, these three river islands have the greatest abundance of ecological and historical resources in the Xiangjiang River; the government's development of Dongzhou Island is in regional competition with provincial peers. In China, municipal officials' economic performance relative to their provincial counterparts constitutes a crucial benchmark by which their performance during the administration is assessed by those higher up the bureaucratic ladder (Chen 2016; Yi 2011). Another justification for the initiative, however, is the long-standing civil yearning, something not imposed from the top down (Yi 2011).

The completeness of island spatiality is bound up with a certain type of "geographical imaginary" that projects Dongzhou Island as an insulated Neverland sitting at the center of the city that represents the promise of the future. This vision promises an alternative urban life that is at once vibrant and sustainable, modern and historical, and global and local. For an inland city that has always considered the mainland part of the town as the place where everything that matters is happening, the insulated aquatic geography of the island has given the city a chance to reconfigure the urban space and reconstruct its identity.

However, on closer scrutiny, three paradoxes are manifested in the local government's imagining of the island: (1) the spatial paradox of centrality/insularity, (2) the ethical paradox of innocence/vulnerability, and (3) the temporal paradox of antiquity/modernity. In a commercial showcasing the touristic spectacle of the island, Dongzhou is depicted in the shape of a wild goose, long regarded as the much-romanticized totem of the city. While the actual body of the island is more streamlined, in the commercial, it is turned into a curved shape, complemented by background music mimicking the calling of a wild goose to evoke the image of the bird (Youku 2014). Spatially, the island, surrounded by Xiangjiang River on all four sides, is

framed at the very center of the city. However, to the general population of Hengyang, it was perceived as an abandoned island on the urban fringe. Ethically, the imagining of the island conveys a paradoxical feeling of both innocence and vulnerability. The innocent imagining of the island can be perceived in a controversy that arose during the planning process. The debate centered on whether fixed links (that is, bridges) should be built between the island and the mainland town. Supporters of bridge-building cited convenience and safety as justifications, but they were far outnumbered by people who were opposed to bridges. However, for Luo Wenjiang, a local scholar who spoke vehemently against bridge-building, the overriding reason was that a cement structure would look very odd against the backdrop of the beautiful island, ruining the insular integrity of the island (Yi 2011).

Most domestic research related to the island belongs to the field of ecology (Liu et al. 2011, 97-101; Hao et al. 2012, 87-92; Peng 2012, 29-32; Peng et al. 2013, 375-78; Huang et al. 2014, 241-50; Li et al. 2015, 123-26). They tacitly construct Dongzhou as a formerly "innocent" river island whose biodiversity and ecological security are endangered by the recent process of urbanization. Temporarily, the island was a sacred place for the city because it is home to the prestigious Chuanshan Academy. The Academy commemorates Wang Fuzhi, who, although the subject of historical controversies and very diverse interpretations, is considered the intellectual embodiment of the provincial Huxiang culture that champions autonomy, independence, reckless defiance of those in power, and the courage to stand alone in moral purity. Wang attained sanctified status in large part due to the reclusive life he chose to live among the mountains in his hometown (Platt 2007, 1-30). Interestingly, Dongzhou Island was chosen as the new locale for the Academy in the late 19th century in part because of its insulated geography, which was considered to be in keeping with Wang Fuzhi's voluntary exile. In the current developmental plan, the Academy is still heralded as a crucial landmark for the island; however, its political focus has been mitigated by the consumerist spectacles of the modern Pleasure Island.

# Relative Urban Space

The previous section examined Dongzhou Island as an absolute urban space. In this view, the island is insulated from its mainland environment. In other words, as a *focus*, the island is gaining attention, yet as a location,

it has disappeared (Ronström 2012, 153-65). Considered as a locus, Dongzhou is an urban island embedded in mainland areas on the two sides of the Xiangjiang River threading through the city (Grydehøj 2014, 183–90). My field trip to the area in April 2018 found an ensemble of urban landscapes characterized by marked areal differentiation. "Areal differentiation," probably the oldest Western tradition of geographical enquiry, is one of the three main conceptions of human geography. It refers to the "study of the spatial distribution of physical and human phenomena as they relate to one another in REGIONS or other spatial units." The term's use has waxed and waned since the classic era in the late nineteenth and early twentieth centuries, but since the 1980s, when it regained momentum, three positions can be distinguished. One is that place-making reflects human agency. Another is more critical, in the sense that it sees areal differentiation as a process of uneven development that forever rearticulates the "global division of labour under capitalism." The last one reconciles the previous two approaches by seeing places as the "co-product of human interpellation and social and environmental conditioning effects" (Gregory et al. 2009, 35). From this perspective, Dongzhou Island and its urban environs are markedly differentiated into three types of time-places: an island enclave of "futuristic antiquity" in the middle of the river, a fluid juncture on the eastern side of the river, and crystallized urbanism on the western side of the river.

Of the three landscapes, the juncture on the eastern side of the river is symptomatic of the city's urban development as a whole, for it holds in one patch both the past and the future. Traces of the past can be glimpsed in a half-demolished village right across the river from the island's eastern bank. A trip to the village brings you to a ruin within the city that is transitioning from a rural community to an urban showcase. Traces of its rural past are everywhere: clusters of peasant houses, chickens and dogs wandering about, abandoned tractors, vegetable plots, and burying grounds scattered about the front yard of almost each family house with tombs covered by traditional Chinese ritual flowers. If this is a land of the abandoned and the dead, it is also the land of the future and the living. A mile north along the eastern bank of the river is an upmarket neighborhood with the fancy name of "River Side Town House." It is a compound housing estate consisting of both apartments and villas, a stark contrast to the quasi-rural ruin just a mile away (Author, field observations, April 19, 2018).

A three-minute walk over a newly constructed antique-style bridge that is only accessible by foot will land you on the island. In comparison with the mélange of bourgeois housing blocks and rural ruins on the eastern



Fig. 2.1. A view from the eastern side of the river of the island (still under construction) and the commercial high-rise housing across the water. *Source:* Author, 2018.

side, the island presents a landscape of manufactured antiquity of such innocence and purity that it evokes a sense of the future rather than the past. The innocence and purity of the island are reinforced by its oblong shape—a feature that has made it easier for developers to arrange the various sights in surrealistic symmetry. From the northern to the southern tip of the island is scattered a chain of half-constructed spectacles consisting sequentially of a renovated Buddhist temple, an almost-rebuilt academy from the Qing period, a public square, and a shopping mall built in an antique architectural style. There is also a thoroughly modern fun fair for children at the southern tip of the island, which includes a boardwalk facing a suburban landscape that still holds traces of its industrial and agri-

cultural past farther south down the river (Author, field observations, April 19, 2018).

The town on the western side of the river used to be accessible only by taking small ferries, most of which were operated by the islanders themselves. In a few months, probably out of concern for public safety, the ferry services are expected to be taken over by operators authorized by the district government, with boats whose passenger capacity ranges from 10 to 50 people. Once on the mainland, you get the feeling that you are finally back in town, with its riverside boulevard and its combination of Westernstyle public spatial features, traditional Chinese iconicity, and ideological publicity. Rows of expensive residential neighborhoods have names projecting the vision of idyllic waterfront living, such as "King's Domain" and "Golden Shore," along with affiliated facilities such as car-care centers and high-class interior design and decoration companies. These constitute a version of urbanism crystallized over more than a decade of suburban renewal carried out by the city of Hengyang, and inland Chinese cities in general to some extent. This is an urbanizing model with real estate as its vanguard. The islands and waterfront views that once connoted rurality and underdevelopment are now deployed as ecological and cultural resources, thereby inflating property prices (Author, field observations, April 19, 2018).

Circumstantial factors have conditioned the aforementioned differentiated landscapes. The part of the town on the western side of Xiangjiang River has always been the main location where political, economic, and cultural resources are concentrated. Two official maps from the Ming and Qing periods testify to this fact. Depicting the walled main town of Hengzhou at the very center in minute detail, these maps almost ignore the eastern part of the town and Dongzhou Island (Yang 1963, 17-18; Rao 2008, 26). Since the late 1970s, the eastern side of the river has been designated as an area for heavy industries, an air force base, agricultural land, and fisheries, while the western side has been what locals call the town center. Boosted by the global trend of ecocultural tourism, the national shift toward ecological development and peer pressure from regional cities, the touristic development of Dongzhou Island gives the city a chance to reorient the relative positioning of the two sides, all the more so because the bridge, the only fixed link to the island, is built on the eastern side of the town, alongside which there will be a huge parking lot, high-end housing projects, and other ancillary businesses (Author, field observations, April 19, 2018).

However, there are three significant kinds of trap involved in planning and

executing urban spatiality that foregrounds islands and waterfront landscapes; one is *ideological*, another *ethical*, and the third *cultural*. The ideological trap concerns ecology as the absolute value today. The ethical issues have to do with the issue of economic justice involved in real estate—driven urbanization. The cultural one concerns our memory of local history.

The Slovenian philosopher Žižek (2008) argues that ecology, being more than a science or a field of environmental concerns, is probably the biggest ideological concept today. The word "ideological" is used in the Marxian sense connoting a "false consciousness" that distorts reality while seemingly engaging with it. It presupposes the existence of the "ultimate big Other," that is, "nature itself with its pattern of regular rhythms, the ultimate reference of order and stability" (Žižek 2008). In our case, this "ultimate big Other" is an urban Neverland that restores everything that has been lost to and dreamed of by the inland city during the past few decades' of uneven development, which has favored the urban over the rural and suburban, the material over the cultural, and the future over the past. At the heart of most urban island tropes is the imagery of a vulnerable land insulated or sheltered in the waters. One cause is the geomorphology of river islands. In the words of one researcher, the ecological environment of most river islands is "very fragile" due to their "closed ecological system" and "small size." The ecology of such places is so fragile that "once the environmental resources of the river islet are disturbed and damaged by external elements, it is very difficult to recover" (Peng 2012, 29). Another cause is the inappropriate attitude of recreational visitors toward the river island. Low-income local tourists who ignore environmental concerns are held to be chiefly responsible in this regard. Unscientific planning and inefficient management have also been identified as significant causes of damage (Peng et al. 2013, 375). "Vulnerability" is not just a descriptive term for the empirical status of the island. It is also a cognitive metaphor through which people have come to understand the island, a rhetorical trope employed to represent the island, and above all, the ideological framework within which ecology has become a secular global religion. However, this pattern of thinking runs the risk of pursuing idealism rather than realism, chasing "conspicuous sustainability" at the expense of other, more urgent economic needs, or worse, providing excuses for unecological attitudes and activities elsewhere by constructing a fetishized utopia (Grydehøj and Kelman 2017, 106-13).

The ethical issues are engendered by the real estate-driven model of urbanization, which features a *spatial fix* that converts formerly rural and suburban land into housing commodities. The coupling of urbanization

and real estate development is not unique to our case; in the words of one Chinese scholar, they are like "two lovers hugging and rushing together." On the one hand, the real estate industry is the vanguard of Chinese urbanization, providing jobs and urban housing and clearing the way for rapid development. On the other hand, urbanization offers the industry a bigger field to play in (Fu 2013, 193). Our case fits within the general framework described above, but there is one extra element: the branding of aquatic landscapes (island and waterfront places) by a land-based city to increase the natural and cultural appeal of a former suburban backwater, and, probably more importantly, to prepare the area as a new so-called "economic growth point" (Fu 2013, 196). Notwithstanding its many merits, the project carries potential ethical risks, which may or may not materialize. One risk has to do with the perceived zonal advantage of proximity to island and waterfront landscapes, which can fuel unscrupulous marketing by some developers, who highlight the cultural status of living near the island and the river as signs of extravagance and luxury. This type of frenzied marketing has been identified by domestic intellectuals as one of the significant ills of the condition of Chinese real estate today (Shen 2009, 48-49). The second risk has to do with the loss of balance in the distribution of benefits generated by the real estate marketization that started in China in 1998. The issue of distributive justice can be more problematic in our case since areas near islands and waterfront landscapes are more likely to be planned as gentrified zones than more affordable housing (Sun 2011, 57-58), though it must be noted that gentrification as a global urban trend is evaluated differently by different parties in different contexts (e.g., Boterman 2012, 2397-2412; Butler 2003, 2469-86; Atkinson 2003, 2343-50; Atkinson 2015, 373-88; Kern 2016, 441-57). The potential gentrification of the area near the island leads to a third risk: higher real estate price fluctuations tend to exert enormous effects on income distribution, which in the worst-case scenario could result in a closed loop of "low income-low capital accumulation-low income" that not only reinforces existing economic and social gaps, but ruins the equality of opportunity (Zhou and Liu 2015, 61-64). Also, the public nature of housing could be further jeopardized as islands and waterfront landscapes give local governments and developers, who more often than not have shared interests, more impetus to subject the area to up-market commercial projects instead of social housing programs (Fu 2013, 193-200).

As for the cultural trap, what is at stake is the nature of local history and the ways it is re-enacted. For now, the main strategies employed in fabricating the touristic memory of Dongzhou Island focus more on reenacting *bard* memories rather than *soft* memories and manufacturing *spectacular* landmarks rather than facilitating *experiential* activities. To expand a bit on the hermeneutic theory of Spanos (1977, 421–60), there is always a choice between two versions of interpretation when it comes to the tension between spatiality and temporality. His theory compels us to question whether we should *spatialize the temporal* or *temporalize the spatial*. In the former case, we run the risk of foreclosing spatial possibilities by turning the hermeneutic process into stasis. Regarding the issue of memorializing local histories in urban development, it would perhaps be better to go back to the simple fact that, *existentially*, history is all that has gone by, and although *epistemologically* it is impossible to re-enact all events and commemorate all people, *ethically* we have an imperative to pass on as many authentic histories as possible to future generations.

## Relational Urban Space

Apart from being an absolute urban space and a relative urban space, Dongzhou Island is also a relational urban space, that is, a lived space for its former residents. It is difficult to retrieve its lived realities since all former residents were relocated to the town before 2013 following the government's move to appropriate the island for wholesale tourism development. One way to approach this lost island life is through the memories of the island's former residents. It is necessary to bear in mind that a memory-based reconstruction of the island's lived realities through interviews does not yield a lived space in the objectivist sense, but the realm of individual geographies whose meanings are constructed by its former residents (Doucet and Koenders 2018, 3631–49).

Human geography sees memory as an inherently geographical activity; geographical places are regarded as warehouses storing and evoking personal and collective memories that "emerge as bodily experiences of being in and moving through space" (Gregory et al. 2009, 453). As a memorialized lived space, Dongzhou is a space marked by ambivalent meaning for the islanders. Through in-depth, semistructured interviews, it can be observed that the island represents both a place to escape from and a lost Eden. One respondent recounted her childhood memories of the island in the 1960s and 1970s as a land of deprivation, where drinking water had to be procured by digging wells, and poverty was extreme and the only way to escape was through education and state-planned recruitment for factories. The differential status of the island is also reflected in

linguistic terms; when asked what word Dongzhou residents had for the mainland town of Hengyang, the interviewee unhesitatingly identified it as a suburban area that is, though slightly better than the rural one, significantly inferior to *shili* (meaning "inside the city") (Author, personal interview 1, April 18, 2018).

On the other hand, a 62-year-old respondent became obviously nostalgic as she reflected on the lost island life. Having succeeded in becoming a head nurse in a major local hospital, among her peers she is regarded as an islander who has "made it." During the interview, she unconsciously dwelled on the good old days, reminiscing about the clean air, cool summers in comparison to the scorching summers of the mainland town, the communal atmosphere, the self-sufficient agrarian life based on growing vegetables and fishing, and everyday activities mediated by the river. One noteworthy incident occurred when the respondent was asked "What major events can you recall from your time spent on the island?" She immediately named two floods, in 1968 and 1976, when the once supposedly immune "miracle island" was totally submerged, leaving only the village rooftops visible. Both floods were recorded in a local official chronicle of hydraulic engineering (OHHCC 2014, 36-39). Having assessed the risks of keeping the island populated, the local government tried to persuade some of the residents to ditch the island for good and move permanently into public housing on the mainland. However, despite the physical impacts of the disaster and the government's good will effort to salvage them, the islanders insisted on staying on the island, because for them, mainland life insulated from the river was simply not an imaginable option. Another noteworthy account that bears witness to the persistence of the interviewee's identification with the island was her retelling how she used her personal connections at the hospital to give extra favors to the usually poor fellow islanders who came to seek medical help. She reported that she felt these people were closer to her than people from shili (Author, personal interview 2, April 19, 2018).

As for developing tourism on the island, one of the respondents thought positively about it so long as the process would bring economic gains to islanders, who she hoped would not have to leave the island to seek "small jobs" (usually referring to manual labor in infrastructure building and low-profit small retailing) elsewhere in the mainland *shili*. The welcoming attitude toward tourism on the island was shared by many islanders, if not all. One local village official, on hearing the news of the government's touristic initiative, organized the community to plant more peach trees to restore the peach-blossom landscape that is envisioned in official branding. How-

ever, when it turned out that the government was aiming at a wholesale transformation of the island based on the total relocation of its residents rather than a partial, moderate development that would not significantly change their island lives, the respondent expressed skeptical feelings similar to populist sentiments on social media (Author, personal interview 2, April 19, 2018).

#### Reflection

Through the previous analysis, the spatial-temporal complexities and nuances of urban geographies as manifested on Dongzhou Island and its riverine environs have already been explored. It is time to add a final, critical dash to the analysis by asking two simple yet difficult questions: (1) What are the relationships between these spaces? (2) Is there an ethically valid and conceptually effective way to approach these spaces that could do justice to urban realities rather than mythical perceptions and conceptions? Since the two questions are in effect two sides of the same coin, I will address them together by proposing a new model for thinking about urban spaces: *spatial visibility*.

Are the three spaces examined in this case equal to each other? They appear to be; at least in this paper, each is given equal weight. But this equality is more or less the result of theoretical reflection rather than a given empirical status. In reality, people simply live with these geographies rather than reflect on them; for them, spatial equality is nothing but conceptual. But this is nothing new; theorists and researchers have come up with a variety of ways to address the issue of spatial inequality (e.g., uneven development and gentrification, to name just two). With all due respect to the value of past frameworks, I propose a new model for approaching and understanding urban geographies: spatial visibility. I define the term as the extent to which, and the scope within which, certain spaces or spatial dimensions have the chance to be experienced, perceived, and, finally, possibly also understood in an urban setting. In reality, there is a tension among these spaces, and one of them always has a better chance to be visible. I argue that urban spatiality is multilayered. All spatial layers are present, but some are more visible than others (to revise the well-known moral from George Orwell). Finding theoretical and practical ways to render the invisible visible and show the tensions between the layers is a crucial phenomenological step toward justice in urban spaces.

In the case of Dongzhou, the absolute space is the most visible one,

transparent to both locals and nonlocals with normal exposure to mainstream media. The relative space is also quite visible, but only for locals who actually live in and around the area and for urban explorers who happen to have the leisure to stroll through it (me, for example). The shadowed area is the relational space. Subject to the volatility and ephemerality of individual experiences, it is made even more obscure in this case by circumstantial factors, such as the wholesale renewal of the island at the expense of planned displacement.

The concept of spatial visibility is both descriptive and critical. It is critical by being descriptive, and vice versa. Due to the limited space available here, I am only tentatively proposing the model, leaving it open to further theoretical debates and applications. I believe the merit of this model in urban geographical studies lies in its ability to capture the ethical importance of spatial productions by engaging with embodied experiences rather than conceptual abstractions.

#### Conclusion

This paper presents a case study of Dongzhou Island, Hengyang, China, as a means of exploring the complexities and nuances of urban geographies in order to raise related ethical issues. It starts by analyzing three placespecific spatial dimensions of the island with a stress on their dialectical interactions. It is observed that as an absolute urban space, the island is branded to be a geographical entity possessing fixed borders and a stable identity. These attributes are compromised as the island is examined as a relative urban space, in which its particular geography is placed back into an embedded contiguity with markedly differentiated urban environs. They are further destabilized as we move into the dimension of the island as a relational space in whose realm urban geographies could undergo constant morphological changes. Finally, to enable a conceptual grasp of the aforementioned spatial complexities, the author proposes the model of spatial visibility as an alternative way to integrate everyday phenomenology with spatial politics and analytical description with critical evaluation in examining urban spaces. It is argued that urban spatiality is multilayered. All spatial layers are present, but some are more visible than others. Finding theoretical and practical ways to render the invisible visible and show the tensions between them is a crucial phenomenological step toward justice in urban spaces. It is hoped that the research can make a modest contribution to reimagining urban spatiality as liberated and liberating spaces.

#### NOTE

1. One can gain a sense of this from Google maps; see https://www.google.com/maps/@26.8722883,112.6314439,1599m/data=!3m1!1e3?hl=en

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#### THREE

### The Rise of Chongqing and Queretaro

The Territorial Dimension of the Divergent Trajectories of Two Emerging Urban Economies in China and Mexico

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Developing countries such as China and Mexico play a fundamental role in the contemporary world economy as centers of capital accumulation and foreign-investment destinations. In these two countries, the localities of Chongqing and Queretaro are inland city-regions whose development trajectories and potential for production and investment are attracting international attention. The city of Chongqing registered the highest real gross domestic product (GDP) growth rates in China during the last decade. In 2016, Chongqing was the most dynamic local economy in the country, scoring an impressive 10.7% real GDP growth (World Economy Web 2019). According to a ranking elaborated and published by the McKinsey Global Institute in 2012, the economy of Chongqing would become the eighth most important in the world from 2020 to 2025, with an accumulated real GDP growth of 418%, only one place behind New York (Dobbs and Remes 2012). Queretaro has a similar recent successful record of economic performance. Capital investments have been expanding its local economy at the largest real GDP growth rates in Mexico, reaching an average of 5.5% during the last decade (Garza and Johnson 2018). In 2014, Queretaro's growth rate was 7.8%, almost three times as high as the growth registered by the national economy of Mexico (Salinas, Godinez, and Ortega 2017). Investments in manufacturing industries, transport infrastructure, and construction represent the main source of economic growth in the emerging urban economies of both Chongqing and Queretaro (Salinas, Godinez, and Ortega 2017; Martinez 2015).

The Chinese economy is approximately 13 times larger than its Mexican counterpart; therefore, the economies of Chongging and Oueretaro differ significantly from a quantitative perspective. The economy of Chongqing, equal to Qatar's in 2010, 49th largest in the world, represents merely 2.4% of the Chinese national economy, and Queretaro has a very similar share, 2.3%, in its respective national context (The Economist Intelligent Unit 2011; International Monetary Fund 2019). In other words, the economy of Chongqing is eight times as large as Queretaro's. From a qualitative approach, the historical background and state policies that shaped the developmental trajectories of these two territories from the 1960s to the early 2000s suggest similar but divergent processes. The regional developmental policies of the central government of China have been a crucial variable in the economic development of Chongqing. Fearing a foreign invasion during the Maoist era, the central government approved the "Third Front" in 1964, a strategy to relocate assets of state-owned enterprises (SOEs) in the defense industry from the coastal region to the still-rural interior, including Chongging (Naughton 1988). With the approval of this groundbreaking strategy, large light and heavy state-owned industries became the main productive pillars of the local economy. Thirty years later, the development of a national infrastructure project generated large-scale land-use change and demolition, bringing intensive capital investments to Chongqing with the Three Gorges Dam (Jackson and Sleigh 2000; Salazar 2000). The central government established some coastal cities as open territories during the first decade of the reform era, subsidizing infrastructure development to turn them into points of labor-intensive exporting industries at the expense of the inland provinces (Lin 2004; Yeung, Lee, and Kee 2009; Wedeman 2009). It wasn't until late 1990s that the central government started to restructure its large SOEs located in the Sichuan-Chongqing region (Chen 1998) and shifted public policy priority toward the provinces in Western China through the "Open Up the West" strategy (Goodman 2004; Shih 2004). These policies channeled flows of financial capital for infrastructure development and other fixed capital investments, becoming an economic turning point in the region.

In a similar process, state-funded investments to develop national heavy and light industries were at the core of the industrialization of the economy of Queretaro more than 70 years ago, becoming the foundation

of its later success in the 2000s. The Mexican federal government implemented protectionist policies to develop strategic national state industries as a basis for a competitive high-added-value exporting sector (De Gortari 2012). These policies funded the development of the metallurgy, textile, and automotive industries in Queretaro (De Gortari 2012). The decentralization of the mega-economic region of Mexico City in the late 1970s (Serna 2010) and the structural reforms through which the federal government deregulated the national economy in the early 1980s (Villarreal, Mack, and Flores 2017) contributed to the massive arrival of foreign investments to Mexico, paving the way for the emergence of new urban economies beyond the national capital. The small cities in the US-Mexico border region were the first recipients of these investments, mostly in manufacturing (Romero 2011). A decade later the inland regions, including Queretaro, were increasingly attractive as new destinations (Urbiola-Solis 2017; Carrillo and Salinas 2010; Carrillo, Martinez, and Lara 2007). Therefore, by late 1990s and early 2000s, the economies of Chongqing and Queretaro were among the preferred destinations for transnational investments targeted at internationally connected and cost-saving locations in developing economies.

This chapter presents a comparative assessment of the state policies and strategies that have underpinned the accelerated economic change of Chongqing and Queretaro, turning them into the most dynamic urban regions in China and Mexico. The main focus of the chapter is on assessing the role of the state in propelling large-scale land-use change and infrastructure development, which were fundamental to the urban transformation of these two territories. This chapter argues that, although the economic changes of Chongqing and Queretaro are contemporary issues in their respective national economies, their developmental trajectories diverge. Despite economic reform and opening, state policies have preserved and enhanced Chongqing as essentially a territory of stateowned capital under direct control of the central government of China. On the other hand, federal decentralization and economic structural adjustments, coupled with market-oriented local reforms, have turned Queretaro into a deregulated low-cost manufacturing inland base for transnational capital.

The two main sources of quantitative data for this chapter are the annual statistical yearbooks and economic census published by the National Institute of Statistics and Geography of Mexico and the Chongqing Bureau of Statistics. The existing literature in Chinese and Spanish about Chongqing and Queretaro provided valuable secondary sources of data.

The content of this chapter is divided in the following way. The next section, "A Territorial Approach to Economic Development: State Strategies in Chongqing and Queretaro," discusses the conceptualization of the role of the state in economic development through "territorial change." This section defines "territory" as a land area where the state exercises power over resources. This section explains that in the administrative system of China, local territories are unstable spatial assemblages of "nested" power hierarchies; the central government modifies these hierarchies to pursue national and regional development goals. On the other hand, the federal political system in which the Mexican economy is embedded grants territorial administrative autonomy to local governments. In other words, China is a centralized state and Mexico is a federation.

The third section, "Economic Change: Fluctuations and Investments," considers this difference in national political systems to analyze fluctuations in real GDP growth and capital investment in Chongqing and Queretaro in relation to the approval or absence of territorial reforms. This section introduces the automotive industry as the main productive engine in both local economies. The fourth section, "Industrial Parks, Taxation, and Capital Investments: Two Different Stories of State Power," compares the different ways the local governments of Chongging and Oueretaro establish industrial parks and other similar territories as part of their strategies to increase capital investments and production in their jurisdictions. This section analyzes industrial parks in relation to fiscal revenue collection and the industrial productive capacities of state-owned enterprises (SOEs). The main contribution of this section is to explain that industrial parks work for different purposes and favor different enterprises and institutions, according to the territorial characteristics of China and Mexico. The conclusions discuss the different state policies and processes that have shaped the divergent developmental trajectories of Chongqing and Queretaro. This final section also considers the role of national political systems when assessing state territorial strategies such as industrial parks or exporting zones, which often move from country to country based on what international organizations refer to as "policy recommendations." Finally, this chapter suggests the need to discuss the different urban experiences of cities in the local emerging economies of Latin America and China through interdisciplinary and comparative area studies. This academic practice could highlight variables and processes in our respective fields that were largely or completely ignored by the existing scholarship.

#### A Territorial Approach to Economic Development: State Strategies in Chongging and Queretaro

The national and local governments of China and Mexico intersect in their policies and strategies for spurring economic development in their respective territories. From a top-down perspective, specific ministries and secretaries in the central government of China and the federal government of Mexico design and approve regional development plans. The Ministry of Housing and Urban-Rural Development and the National Development and Reform Commission of the State Council are the two main planning institutions in China. The infrastructural projects these two institutions approve absorb substantial amounts of the public budget and entail largescale land-use changes. The China Development Bank, a state-owned bank that the central government established in 1994 under direct control of the State Council, is the main source of funding for these projects. The Mexican federal government abolished the former Secretary of Agrarian Reform in 2013, by establishing the Secretary of Agrarian, Territorial, and Urban Development (SEDATU). This reform produced a more comprehensive approach to urban planning. The SEDATU has the budgetary capacity to fund projects for urban and rural development through policy programs called fideicomisos (SEDATU 2019). The particular political systems of China and Mexico determine the different spatial outcomes of the projects and plans that these central and federal institutions develop.

From a geographical perspective, "territoriality" is the process that changes how the state exercises power over resources within a particular land area in relation to political or economic goals (Cox 2002). As a political process, "territoriality" unfolds differently in China and Mexico. The central government of China, through the Ministry of Civil Affairs of the State Council, has the prerogative to establish, abolish, reduce, or expand the administrative boundaries of subnational territories through a variety of strategies in accord with plans and policy targets issued by the State Council (Cartier 2015; Cartier and Hu 2016). In other words, the central government constantly adjusts the boundaries of the domestic political map of China. Changes in the configuration of subnational territories directly recalibrate the administrative capacities of their respective governments related to tax-revenue collection, land-use change, infrastructure development, and urban planning (Cartier 2011, 2015); thus, the central government plays a crucial role in changing the economic developmental trajectory of localities. The hegemonic and authoritarian Party-state system is undoubtedly the main political pillar that legitimates territorial change. In contrast, the federal constitution of Mexico provides legal territorial autonomy under a federal pact, guaranteeing that national authorities will not directly intervene in the configuration of localities. Nevertheless, territorial adjustments are possible. The congresses of state governments, the first subnational tier in Mexico, officially have the prerogative to abolish or establish new territories in their respective jurisdictions. Territoriality in Mexico is directly associated with local politics, rather than with national and regional plans issued by SEDATU. Therefore, the underlying institutional reasons for and frequency of territorial change in the federal system of Mexico are fundamentally different than in authoritarian and centralized China.

Territorial change is a process that unfolds embedded in the "nested" hierarchies of national territorial systems. The Chinese system has five main ranks: nation, province, prefecture, county, and town. Villages are also territories in the political geography of China with independent decisionmaking processes and even land-use planning capabilities, but they are outside the official territorial system (Lin 2009; Hsing 2010). Three main ranks form the Mexican territorial system: nation, state, and municipality. The municipalities (*municipios*) are the lowest tier of local administration. In 2019, the land area of Mexico was divided into 2,466 municipalities (Castro 2019). Queretaro is a state (estado), and its territory is divided into 18 municipalities. Therefore, analyzing economic development in Queretaro from a "territorial perspective" would entail the methodological consideration of changes or continuity in the nested territorial power relations formed by three main levels of administration, whereas in the case of Chongging it would entail at least five. The equivalent rank of Queretaro in the Chinese territorial system would be "province," same as Chongqing. However, Chongqing is not merely another province of China. It is one of the four cities at the provincial level, along with Beijing, Shanghai, and Tianjin. Chongqing is a city-province.

The Chinese state recognizes "cities" as administrative territories with extensive decision-making powers over public budget, land-use change, infrastructure development, and foreign direct investments (Cartier 2015). The rate of population and economic growth of a city in the political geography of China is directly related to its rank in the administrative territorial system (Chan 2010). Cities are territories at the province, prefecture, and county levels. In this sense, Cartier (2015, 3) introduces the concept of "territorial urbanization" as "the process through which the Chinese Communist Party and the Chinese government—the Party-state—governs the administrative divisions to establish, expand and develop cities." Therefore,

urban economic development in China is fundamentally an administrative process of state territorial governance. Province-level cities are directly under control of the central government because of their relevance in the context of the national economy (Leng 2010; Chung and Lam 2004). Furthermore, infrastructure development and SOEs in these territories are highly subsidized by the central government through preferential credit and financial transfers that banking institutions, such as the Chinese Development Bank, channel to city governments, Shanghai during the 1990s being the paradigmatic case (Huang 2008).

The central government officially separated Chongqing from the control of Sichuan provincial government in 1997, establishing it as city at the provincial level. The three main reasons behind this territorial reform were the importance of Chongqing in the "Open up the West" campaign as an emerging economy in the interior, its strong state-owned industrial base inherited from the "Third Front" during the Maoist period, and the development of the Three Gorges Dam (Chen, Chen, and Lin 2004; Martinez 2015). In other words, state-owned capital, in the form of financial transfers or fixed industrial assets, was at the core of the establishment of Chongqing as a city-province. In a diametrically opposite political context, months after the establishment of Chongqing in China, the federal government of Mexico decentralized power over the only territory it directly controlled: Mexico City, the national capital. State-shrinking neoliberal policies approved by the federal government, coupled with the institutional characteristics of the federal system, have gradually increased the budgetary burden on subnational governments, particularly states. These territories have the crucial administrative responsibility of planning and approving investments for public services, transportation, and other public policy areas (Guarneros-Meza 2009). Under hard budget constraints, the state administrations in Mexico approved further devolutionary and deregulatory policies through the late 1990s and early 2000s to outsource large sectors of the public economy to private investors, diminishing the role of state capital in the local economies (Guarneros-Meza 2009; Ashby, Bueno, and Martinez 2013). The different state administrations of Queretaro, though headed by leaders from different political parties, have all reproduced national-market-oriented structural reforms in local contexts since the late 1980s. These local reforms have fundamentally empowered private investors (Carrillo, Martinez, and Lara 2007; Carrillo and Salinas 2010) by lowering taxation rates, simplifying bureaucratic procedures, leasing an increasing number of plots of land, and relaxing control of syndicates over the local labor regime. These measures aim to offer an attractive low-production-cost scenario to investors, particularly in the manufacturing industries (Carrillo, Martinez, and Lara 2007; Salinas-Garcia 2012; Ashby, Bueno, and Martinez 2013). Beginning in the 1990s, the Queretaro state government gradually assumed the role of "promoter" of the local economy (Romero 2011), and the municipal governments maintained the main administrative task of operating urban public services.

Districts and counties are under control of city governments in the Chinese territorial system. Despite both administrative units being at the county level, their economic capacities are different. County governments have low budgetary revenues, but greater independence in decision-making capabilities over taxation and land-use change (Chung and Lam 2004). On the other hand, districts lack administrative autonomy and are under the direct control of city governments, centralizing access to and management of financial resources and extending the reach of infrastructure networks (Chung and Lam 2004). Thus, the more districts a city government has under its control, the greater its resources and economic power (Cartier 2015). Since the establishment of Chongging as a province-level city, the Ministry of Civil Affairs of the State Council, on behalf of the central government, has been centralizing territorial power relations in its urban governance by abolishing counties and establishing districts (Martinez 2015). From 2006 to 2015, the central government abolished six very rural counties and four county-level cities to establish ten new districts around the city's urban core area: the "nine central districts" (Beibei et al. n.d.), the inherited economic center of Chongging prior to the 1997 territorial reform (Xu, Huang, and Jiang 2010; Martinez 2015). In 2006, the city government issued a regional plan that incorporated the recently established districts into the "nine central districts" to form a larger metropolitan area: the "one-hour economic metropolitan sphere." This metropolitan area was 39.3% of the massive land area of Chongqing and received the bulk of the city's budget for public infrastructure development (Pei 2008). The economy of Chongqing registered high growth rates after the central government established Yongchuan, Hechuan, Nanchuan, and Jiangjin as four new districts under control of the city government. According to figure 3.1, in 2006, the real GDP growth of the city-province was 12.6%; in 2008, one year before the global economic recession, it registered an impressive 23.8% growth rate. During these years, the city government also received large financial transfers from the central government to subsidize infrastructure development as part of the "urban and rural integration" strategy in the "one-hour economic metropolitan sphere" (Martinez 2015). The key transport infrastructure of Chongqing is located within this large metropolitan region, including the transcontinental Youxinou Railway, part of the "One Belt, One Road" strategy. Chongqing also received the largest investments of the main industries in the local economy (automotive, industrial equipment, logistics, and construction).

The territorial strategies of the government of Queretaro to expand economic growth, particularly after the increasing capital investments in the early 1990s, were substantially different from the establishment of districts in Chongqing. The state congress did not abolish or establish municipalities in the state, leaving its territorial configuration intact. Instead, the state government merely increased deregulation of land-use change to create new space for capital investments, which drastically expanded beyond the historical urban core, Queretaro City, the state capital. In the late 1970s, agriculture started to decline as main source of economic growth, replaced by state-funded capital investments in metallurgic and heavy industries in Queretaro City (Carrillo and Salinas 2010). By the early 1990s, the largest share of economic production in the state was coming from the four municipalities that form the Queretaro City Metropolitan Area (QCMA): Queretaro City, Corregidora, El Marques, and Huimilpan (Carrillo and Salinas 2010; Serna 2010; Urbiola-Solis 2017). During the next decade, the main investments in the automotive, aeronautics, plastics, and metallurgic industries, which table 3.1 shows as key economic pillars of the state economy, were located in the QCMA. The Queretaro government incentivized companies in the light industries to relocate their production facilities to the northeast municipalities in the late 1990s. Some investments in textiles and food processing moved out of the QCMA, mainly to four municipalities in the eastern and northeastern part of the state: Ezequiel Montes, Cadereyta de Montes, Colon, and Tequisquiapan (Serna 2010). These largely rural municipalities located at the edge of the vast mountainous northern region of Queretaro hosted relocated investments from the QCMA to form the northeast agro-industrial corridor. The expansion of the state urban core region reached the municipalities of the southeast region as well, where a second industrial region emerged in the municipalities of Queretaro City, San Juan del Rio, El Marques, Corregidora, and Pedro Escobedo: the Queretaro-San Juan del Rio corridor (Carrillo and Salinas 2010; Serna 2010). In most of the municipalities of these two corridors, the labor force predominantly works in manufacturing (Salinas, Godinez, and Ortega 2017).

Whereas the administrative process of establishing districts in Chongqing worked as a centralizing territorial reform to accelerate economic development of the city-province, the QCMA and the two secondary industrial

TABLE 3.1. Main Territorial and Economic Variables of Chongging and Queretaro

Variable	Chongqing	Queretaro
Territorial power relations	Centralized province-level city (directly under supervi- sion of the Chinese central	Decentralized state (federal autonomy) Municipalities
	government)	Main economic core: Queretaro
	Districts and counties	City Metropolitan Area
	Main economic core: nine central	Secondary economic cores: The
	districts	northeast agro-industrial cor-
	Secondary economic core: One-hour	ridor; the Queretaro–San Juan
	metropolitan economic sphere	Del Rio industrial corridor
Land area	81,677 sq km	11,699 sq km
	0.85% of the national territory	0.6% of the national territory
Population	30,484,300 (2017)	2,038,372 (2017)
	27.94% in the nine central districts	43.11% in Queretaro City
GDP	2.4% of the national GDP (2017)	2.3% of the national GDP (2016)
	48.4% of the GDP from tertiary industries (2016)	53% of the GDP from tertiary industries (2016)
Key transport	Six national expressways	Two federal expressways
infrastructure	Jiangbei International Airport	Queretaro International Airport
	Youxinou Transcontinental	
	Railway (part of the "One Belt, One Road" strategy)	
	Inland port	
Main industries	Automotive	Automotive
	Heavy industries (machinery, industrial equipment, etc.)	Metallurgic Plastics
	Construction	Food processing Aeronautics

Source: Urbiola-Solis 2017; Chongqing Bureau of Statistics, various years; Martinez 2015; Pei 2008; Serna 2010; Salinas, Godinez, and Ortega 2017; Carrillo and Salinas 2010; INEGI, various years.

corridors in Queretaro were the spatial outcomes of a state-shrinking approach that extended land-use change in relation to the growing demand generated by the arrival of new capital investments. Throughout the 2000s, the establishment of the "one-hour economic metropolitan sphere" of districts under direct control of the Chongqing city government and the two industrial corridors outside QCMA in Queretaro produced moderate economic performance. In the northern and southeastern municipalities of Queretaro, extensive land-use change prompted rural families to sell their land and migrate to the emerging industrial corridors, where they entered the cheap labor force (Urbiola-Solis 2017). Unfortunately, that labor market did not offer enough opportunities. The northeast agro-industrial

corridor attracted merely 1.7% of the manufacturing companies (maquiladoras) from the QCMA (Carrillo and Salinas 2010). The Queretaro–San Juan del Rio corridor offered a much better scenario after the arrival of a promising industry that would become the main source of employment and investments throughout the 2000s: aeronautics (Salinas-Garcia 2012; Garza and Johnson 2018). The districts that the central government established on the peripheries of the nine central urban districts of Chongqing offered profitable but temporary and limited opportunities for development of new transport and industry-oriented infrastructure projects (Pei 2008). In the late 2000s, the focus of public policy to give a new boost to the local economies of Chongqing and Queretaro returned to their main core regions: the nine central districts and QCMA, respectively.

#### **Economic Change: Fluctuations and Investments**

The Queretaro government defined the state capital and El Marques as the two main municipalities at the center of the economic revival of the state during the second half of the 2000s, when a new wave of investments in the manufacturing industries helped achieve high economic growth rates. Bombardier, a Canadian-based transnational corporation in the aeronautics industry, initially arrived at El Marques and then started to expand into the urban periphery of Queretaro City by building assembly plants. Its first \$US200 million investment kicked off the arrival of aeronautics industry suppliers. By 2005, two Bombardier assembly plants were operating in the El Marques-Queretaro border, along with plants of other corporations in the same industry, such as Aernnova and Safran (De Gortari 2012). It was only after Bombardier officially opened that the Queretaro government invested in developing an international airport in the state capital (De Gortari 2012). According to figure 3.1, from 2005 to 2008, the economy of Queretaro had an average real GDP growth of 5.8%. In 2009 both economies entered recession as a direct consequence of the world financial crisis. The capital-intensive-dependent economy of Chongqing suffered a harder crash. It lost approximately 11% of its growth from the previous year, whereas Queretaro only lost around 5%. The abrupt slowdown of currency inflows from exports reduced the liquidity base of the Chinese financial system, which transfers financial capital according to policy priorities for the development of territories such as Chongqing (Walter and Howie 2012). The different ways the local economies of Chongqing and Queretaro recovered after the crisis reflect once again the divergent approaches of state territorial policies.

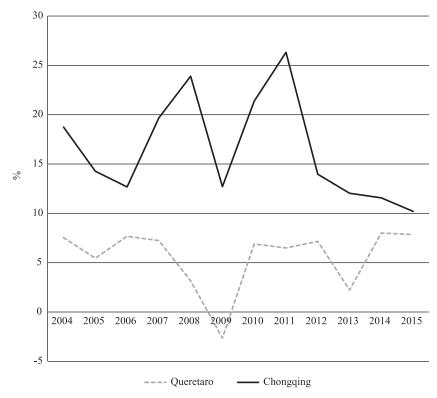


Fig. 3.1. Real GDP growth of Chongqing and Queretaro. *Source:* My own elaboration based on Chongqing Bureau of Statistics data from various years; INEGI various years.

The central government officially approved the establishment of Liangjiang New Area (LJNA) in three of the nine central districts of Chongqing in 2010 (Jiangbei, Yubei, and Beibei n.d.). The GDP of the local economy had 21.3% real growth in the same year, as figure 3.1 shows. The next year it reached a historical record with a 26.31% increase, the highest rate since the separation of Chongqing from Sichuan Province in 1997. LJNA is a national-level new area directly under the supervision and control of the central government through the National Development and Reform Commission. It was the third in China, after Pudong in Shanghai and Binhai in Tianjin. These territories are located at the center of transjurisdictional metropolitan areas and host large central government's SOEs in strategic industries, such as energy, telecommunications, and the automotive and financial industries (Huang 2008; Lu and Xiang 2016). When the central government approves the establishment of a national-level new area in specific districts and counties of cities, the China Devel-

opment Bank and other state-owned banks immediately transfer financial capital to the hosting city governments for infrastructure development (Li and Gui 2017). The establishment of LJNA in Chongqing brought the "nine central districts" back as the hot spot for investments in the city-province. Paradoxically, this territorial reform was also the main reason behind the accentuated economic slowdown of Chongqing in 2012, as figure 3.1 shows. The decline in economic growth from 26.3% to 13.9% occurred fundamentally because establishing a national-level new area entails the approval of the central government to set a new state apparatus to plan and manage taxation, land-use change, capital investments, and even welfare estate plans and programs in the new territory (Zhu and Lu 2016; Wang and Lu 2016; Gu 2016). In other words, the land area of LJNA was administratively "cut off" from Chongqing to bypass the city government and establish a direct power relation with the central government.

After the World Trade Organization accepted China as a full member in 2001, manufacturing industries in other developing economies had even more incentives to relocate their production to the coastal Chinese cities (Chan and Ross 2003). The local economies of in-land states of Mexico, such as Queretaro and neighboring Guanajuato, were significantly affected during the first half of the 2000s (Carrillo, Martinez, and Lara 2007). Figure 3.1 shows that the economic growth rate of Queretaro decreased 2.1% from 2004 to 2005. Wages rapidly increased in China, raising costs of production and consequently prompting labor-intensive investments to relocate once again. It wasn't until the late 2000s and early 2010s that the productivity of exporting manufacturing industries in Mexico recovered (Villarreal, Mack, and Flores 2017). After the 2008 world financial crisis, the state government of Queretaro pursued further flexibility in the local legislation to attract a new round of investments for reviving the local economy (De Gortari 2012; Ashby, Bueno, and Martinez 2013). Even lower wage costs, free access to land, and flexible labor and tax regimes were the main incentives that attracted investors to the state. The manufacturing industries expanded in the QCMA, generating increasing employment opportunities that gradually turned Queretaro into a top destination for domestic white-collar workers. By 2015, 25% of the state population was domestic migrants from other Mexican states (INEGI 2016). Consequently, aggregated demand in the tertiary economic sector increased in the early 2010s, particularly in the housing, amenities, and education industries (INEGI 2016; El Universal Queretaro 2014). This new demand generated from domestic migration produced a new wave of capital investments in the QCMA.

Figure 3.2 shows the fluctuations in the gross output value of the construction industry of Chongqing and Queretaro, including public and private investments in real estate, manufacturing, transportation, and other service-oriented facilities. New rounds of investments in the manufacturing industries and aggregated demand in the tertiary sectors fueled a dynamic real estate market mainly in three municipalities within OCMA: El Marques, Queretaro City, and Corregidora (Munguia 2016; El Universal Queretaro 2014b). Investments in construction reached a historical peak in 2011, when the output value of the industry registered 31.2% real growth in the state. Oversupply and speculation in the state capital temporarily hindered profits for the construction industry. However, increasing housing demand and new capital investments in manufacturing in El Marques and Colon municipalities (Banda 2018) have stabilized the overheated real estate market during the five year period from 2013 to 2018, pushing the construction industry to high real growth rates again (Estrella 2018). The gross output value of the construction industry in Chongqing registered a gradual decline after the establishment of LJNA. The massive investments that arrived in the three districts of LINA in 2009 produced high profits in the local construction industry. However, after the government apparatus of LJNA started to operate separately from the Chongqing government, the output value of the construction industry in the city suffered a considerable loss, as figure 3.2 shows. The real estate markets of Jiangbei, Yubei, and Beibei districts have been the most profitable in Chongqing since the mid-2000s (Pei 2008). By 2012, the Chongqing Commercial Daily described the real estate market of these three districts as the main "battlefield" of property developers in the city (Li 2012; Martinez 2015). Thus, the establishment of the new area was an administrative liability that the city government paid for by losing control over premium high-value regions of Chongging.

The main productive engine in the "nine central districts" and the QCMA is the automotive industry. The capital investments, employment, commodity production, and tax revenue this industry generates in both core areas constitute an important pillar in the economies of both territories. Chongqing and Queretaro are "automotive cities," but with very different characteristics in terms of corporate structure, profit-making appropriation, and regulatory frameworks. The automotive industry of Chongqing contributes 7.3% of the total vehicle production in China, mainly from the factories located in LJNA (Du 2012; Xia 2011; LJNAC 2011). Chongqing Chang'an Automobile Company Limited (Chang'an), a SOE of the central government of China for which the major stakeholder is the China Weap-

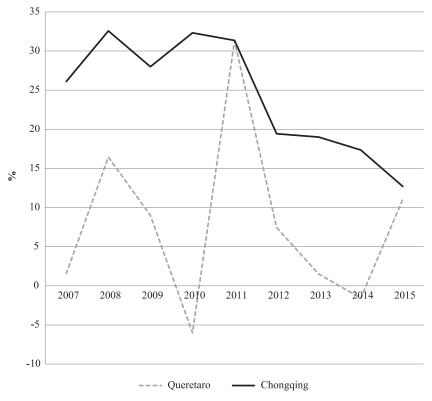


Fig. 3.2. Construction gross output value in Chongqing and Queretaro. *Source:* My own elaboration based on Chongqing Bureau of Statistics data from various years; INEGI, various years.

onry Equipment Group, is the leading automotive company in Chongqing. This SOE was the main manufacturer of tanks and assault vehicles for the People's Liberation Army; it shifted its production to commercial vehicles in 1984 (Martinez 2015). All factories of Chang'an in Chongqing are located in the "nine central districts," and the largest ones are in LJNA. Chang'an is one of the "big three" automotive producers in China, along with Shanghai Automobile Industry Corporation and FAW Group Corporation from Changchun, Jilin Province (Li 2009). Chang'an has three joint ventures with world-leading automakers: Ford from the United States and the Japanese Suzuki and Mazda. Chang'an generates the highest annual liquid revenues and has the strongest market capitalization rates among all companies in Chongqing (CEC and CEDA 2011), making it the main corporate pillar of the local economy.

The intertwined and flexible chains of production of the "Big Three" American automakers (Chrysler, General Motors, and Ford) that produce transport equipment play a key part in the export economy of Mexico (Villarreal, Mack, and Flores 2017; Ramirez, Calderon, and Sanchez 2018). Queretaro is one of the main poles in the industry. In this sense, Ramirez, Calderon, and Sanchez (2018) define Oueretaro as a "North American Free Trade Agreement city" (or "NAFTA city"), acknowledging the arrival and expansion of the American automotive industry supply chain in the state. The largest factories of the auto industry in Queretaro are located in the QCMA municipalities and annually contribute approximately 15% of the national production of auto parts (Salinas, Godinez, and Ortega 2017, 44). Since the early 2000s, investments in the auto industry have been the largest source of expansion of the local manufacturing sector. In 2006, the production of auto parts and industrial equipment contributed 12.2% of the GDP of Queretaro, and four years later this share had increased to 24.5% (De Gortari 2012, 11). Paradoxically, the auto industry is formed exclusively by suppliers of the production chain of the Big Three American automakers, which means that no transnational automotive corporation had invested in establishing an assembly plant in the state as of 2019. The state government negotiated for years to attract a massive investment for a Toyota plant where "Tacoma" vans would be assembled and exported to the American market, but ultimately the Japanese transnational decided to invest in the neighboring state of Guanajuato. In December of 2019, the Toyota plant started operations to produce the first "made in Guanajuato" Tacoma vans (Celis 2019).

Despite not having direct investment from transnational automakers, more than 100 tier-one and tier-two automotive-industry suppliers generate robust production in the auto industry in Queretaro (Salinas, Godinez, and Ortega 2017, 35). These companies supply automotive production chains located in United States and other neighboring Mexican states, such as Guanajuato and Aguascalientes, where massive investments from General Motors, Volkswagen, and Honda produce the bulk of the demand (De Gortari 2012). The arrival of the dynamic aeronautic industry in 2005 incorporated and further expanded the automotive supply chain, increasing demand for land and labor (Luna-Ochoa, Robles-Belmont, and Suaste-Gomez 2016). The production of aeronautics was 10% of the state's GDP in 2013, and two years later it was generating more new employment than its automotive counterpart (Salinas, Godinez, and Ortega 2017). The local governments of Chongqing and Queretaro have established territories within the "nine central districts" and the municipalities of the QCMA,

particularly in El Marques and Queretaro City, to provide space for the arrival of new investments in the manufacturing sectors, including the automotive industry. The "industrial parks" are a common territorial strategy by which both local governments seek to meet the requirements of new investors, offering access to land, transport infrastructure, and urban public services. The next section assesses the fundamentally different approaches of the two local states to planning and managing industrial parks in relation to tax revenue collection and state-owned capital.

## Industrial Parks, Taxation, and Capital Investments: Two Different Stories of State Power

The establishment of industrial parks or economic development zones is a territorial strategy that national and local governments in developing economies have implemented to attract foreign direct investments (FDI) to increase employment rates and capital investments. Such a zone can be defined as "A geographically delimited territory providing special facilities for foreign branch plants, using imported inputs to manufacture commodities for export. Plants locating within the territory are subsidized with some combination of infrastructure, tax advantages, relaxed labor regulations, and eased imports and exports" (Gregory et al. 2009, 234). Industrial parks and similar territories in China and Mexico are embedded in different territorial systems with fundamentally different administrative characteristics. Cartier (2018) points out that when the central or subnational governments of China establish "industrial parks" or "exporting development zones," such as LJNA in Chongqing, it is a spatial strategy that entails the administrative reproduction of the state apparatus. These territories are not merely exceptions in the Chinese administrative system with governing autonomy, but "territorial governing areas" (Cartier 2018) in which the central and local states intersect to structure a new way to administer resources according to national and regional plans. The state-owned and developmental banks, such as the Chinese Development Bank, channel financial capital for infrastructure development to these territories based on targets set by the National Development and Reform Commission and other planning institutions under the State Council of the central government (Walter and Howie 2012; Shih 2008). In other words, these territories, along with the SOEs they host, have preferential access to bank loans and financial transfers, depending on their rank and strategic importance in the national economy. In sharp contrast, the "industrial parks" embedded in the federal territorial administrative system of Mexico operate fundamentally disconnected from national and local economic planning strategies (Garza and Johnson 2018). Although the federal and state governments offer funding for project development in industrial parks, the lack of direct support from a strong national developmental bank or institution to offer sustained financial capital hinders the competitive profile of these territories in the world economy (Salinas, Godinez, and Ortega 2017).

The establishment of industrial parks in Queretaro has been the main strategy to attract investments and increase the economic development of QCMA since the 1960s. The state government announced the opening of the first parks in Queretaro City and El Marques municipalities. Kellogg, Singer, and Gerber, as well as some national companies in the heavy industries, arrived to invest (De Gortari 2012). Two decades later, in the context of decentralization and market-oriented structural reforms, the state government officially opened the model that would serve as a blueprint for the rest of the parks: the Benito Juarez Industrial Park, located in the state capital. Pioneering national companies in the heavy industries were the first investors in this park (De Gortari 2012). Initially, the idea of the state government was to create economies of scale, offering low production costs and subsidized public services (Urbiola-Solis 2017; Carrillo and Salinas 2010). However, deregulatory and flexible policies ultimately outsourced this task to groups of private developers, whose profit-making strategy prioritized short-term earnings at the expense of long-term strategic economic planning. The municipal governments have no authority or decision-making power in establishing and managing these territories in Queretaro.

Through the 1990s, the state government of Queretaro started to expand land-use change in the QCMA. A group of private developers created a company, "Industrial Funding of Queretaro" ("Fideicomisos Industriales del Estado de Queretaro"), that purchased land after the state changed its use from rural to industrial, to establish and manage industrial parks (Carrillo and Salinas 2010; Urbiola-Solis 2017). In 1996 there were 3,329 companies in just eight industrial parks, but 20 years later there were 7,302 companies scattered in 21 parks (Urbiola-Solis 2017). Other groups of investors and developers established similar companies as "Industrial Funding of Queretaro" to bid for the right to manage and promote newly established parks that opened throughout the 2000s. The fundamental role of the state government in this scenario was to expand land-use change and coordinate the property management of the parks with groups of private developers. Municipal governments are basically absent from this territorial process.

The establishment of the Aeronautic Industrial Park on the Queretaro-El Marques border was a territorial strategy of the state government tailored to the arrival of transnational investments in the aeronautic industry (Garza and Johnson 2018). When Bombardier, the largest corporation in the park, officially approved investments in Queretaro, the state government immediately commoditized rural land for industrial use and approved the development of an international airport (Luna-Ochoa, Robles-Belmont, and Suaste-Gomez 2016; Garza and Johnson 2018). Furthermore, the state government created and funded six programs for human resources development, approved reforms to the local labor market to guarantee low costs of production, and reformed the fiscal regime to offer preferential rates that allowed aeronautic companies to defer tax payments (Salinas-Garcia 2012). The Aeronautic Industrial Park works as a territorial exceptionality in the QCMA, bypassing the Queretaro City and El Marques municipal governments in the context of an "entrepreneurial" state government. By 2017, the bulk of manufacturing investments in the automotive and aeronautics industries were located in the eight main industrial parks in the municipalities of the QCMA: Queretaro Industrial Park, Benito Juarez Industrial Park, El Marques Industrial Park, Finsa, Queretaro Airport Industrial Park, Bernardo Quintana Arrioja Industrial Park, Aeronautic Industrial Park of Queretaro, and San Juan del Rio Industrial Park (Salinas, Godinez, and Ortega 2017). The manufacturing industries in these territories are the largest source of fiscal revenue of the state government, contributing approximately 11.7% of the fiscal revenue in 2016 (INEGI 2016).

As figure 3.3 shows, throughout the 2000s, the rate of fiscal revenue collection of the state government was indirectly related to the establishment of industrial parks and the arrival of foreign investments, contrary to what happened in Chongqing. The GDP–fiscal revenue ratio measures the proportion of revenue collection in the GDP of Chongqing and Queretaro. High ratios reflect low rates of tax revenue for the local governments in relation to economic growth, whereas low ratios reflect an increasing share of the state in the economy through high tax revenue collection. The GDP–fiscal revenue ratio of Queretaro has remained between 12 and 10 throughout the decade in which the state government extended land-use change for establishing industrial parks. In 2004, the ratio was 11.6, equal to 8.6% of the local GDP. It increased during the years after the world financial crisis, reaching 11.9 in 2008, showing a further deregulatory policy trend pushed by the state government in an attempt to attract more investments. The GDP–fiscal revenue ratio of the Chongqing government

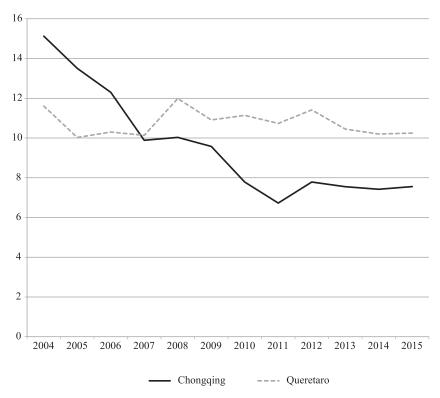


Fig. 3.3. Ratio of GDP to fiscal revenue in Chongqing and Queretaro. Sources: My own elaboration based on Chongqing Bureau of Statistics data for various years; INEGI, various years.

shows an opposite trend, reflecting increasing size of the state economy in relation to economic growth. This suggests that the gradual parceling of the territory of Chongqing into different territorial governing zones, such as LJNA, is fundamentally a process that has expanded the productive and financial capacities of the local government and SOEs. Figure 3.3 shows that in 2004 the GDP-fiscal revenue ratio of Chongqing was higher than Queretaro's, registering 15.1. It gradually declined, intersecting with Queretaro's in 2007. Particularly after the 2008 world financial crisis, the ratio declined, reaching its lowest point in 2011, suggesting that the state-owned economy in Chongqing considerably increased its share in the local GDP.

The central government, through the National Development and Reform Commission, and the Chongqing city government started to parcel out the territory of Chongqing in the early 2000s. The New North Zone opened in 2000 to provide land for the development of the Chang'an-Ford and Chang'an-Mazda factories in the southern Yubei district, as a first step toward transforming Chongqing into an "automotive city" (Liu 2011; Tencent 2019). After the expansion of its productive capacities, Chang'an formed a joint venture with Yubei district government to establish a real estate company (Martinez 2015). During the early 2000s, Chang'an expanded to the other nine central districts of the city's core, opening factories in Ban'an, Jiangbei, and Yubei districts (Martinez 2015). The Chongqing city government opened the Airport Development Zone (ADZ) near the Jiangbei International Airport, and it granted the largest plot of land to Chang'an for developing a new factory in Yubei district (China Auto 2007; Martinez 2015). In the middle of this large-scale, intensive process of land-use change across the vast territory of Chongqing, Chang'an was in a privileged position to speculate and collect high rents from land lease and development.

After the economic reform in late 1970s, SOEs remained as large land-owners in all Chinese cities. The value of their assets dramatically increased in the context of accelerated urbanization, incentivizing them to engage in speculation. In this context, Hsing (2010) defines these SOEs as "socialist land masters": state entities that collect high revenues from real estate speculation. Chang'an is not the exception. As part of the "Third Front" strategy during the Mao era, the central government granted Chang'an access to large land areas in premium locations in the city. The development of the Three Gorges Dam and transport infrastructure projects, such as expressways and a metropolitan light train, turned "Guanyin Qiao," an old marketplace located in the Jiangbei-Yubei districts border, into the highest land-value commercial district of Chongqing. Chang'an has its largest factory and several retail stores located near "Guanyin Qiao," assets in a premium location that could have an incredibly high commercial value.

In 2010, the central government approved the official establishment of the LJNA by merging the New North Zone and Airport Development Zone. As the third "national-level new area" of China, the LJNA became a centralized territory within the "nine central districts" of Chongqing, directly under the planning control of the NRDC. The fiscal regime of the LJNA divides the revenue of the three main categories of urban taxes between the LJNA government and the central government, bypassing the Chongqing city government (CLJNAMC n.d.). The fiscal capacities of the LJNA and the central government are therefore strengthened. Under this fiscal arrangement, investments within LJNA are either reinvested within the territory, without any dispute in the decision-making process with the

Chongqing city government, or transferred directly to the central government. The increasing costs of living of some Chinese cities render their economies unable to offer low-cost production to investors, so they are presumably not considered by foreign companies aiming to relocate their factories. Nevertheless, research demonstrates that foreign investors arriving to China are willing to absorb high tax rates in urban agglomerations as long as they can access premium urban public services and transport infrastructure (Chen, Li, and Liu 2017). In sum, the territorial governing areas, such as the LJNA, are therefore capital-intensive agglomerations that yield high tax rates to local governments.

#### Conclusions

This chapter assessed the emergence of two inland city-regions, Chongqing and Queretaro, in the different political geographies of two developing economies: China and Mexico. This chapter argued that the role of the state in modifying territorial governance was the main variable behind the divergent developmental trajectories of these two localities. The central government of China, through the Ministry of Civil Affairs of the State Council, approves territorial changes of subnational jurisdictions, whereas the Mexican federal government holds a mere regulatory function through SEDATU. From a local perspective, "cities" in the political geography of China are administrative territories whose governments have access to preferential transfers of financial capital according to their rank, and control a large pool of resources. The establishment of districts is the main administrative strategy by which the Chinese central government empowers city governments and centralizes urban governance. In other words, changes in the domestic political map of China empower both the central and city governments. In contrast, the intertwined economies of states and municipalities in the Mexican federal system function under a flexible regulatory approach. Therefore, economic growth in the "nine central districts" was a process derived from administrative establishment of districts under direct control of the Chongqing city government. On the other hand, economic agglomeration in the QCMA and the Queretaro–San Juan Del Rio industrial corridor were spatial outcomes of the deregulatory policies of the Queretaro state government, framed in the decentralized Mexican federal system. Therefore, even though Chongqing and Queretaro are successful economic emerging territories, the policies that shaped them reflect a fundamentally different political approach, empowering drastically different institutions that ultimately appropriate profits and shape decision-making processes.

Industrial parks, as territorial strategies for propelling investments and economic growth, work in fundamentally different ways according to the political economic context in which they are embedded. In the centralized and hierarchical administrative system of nested territories of China, creation of industrial parks and zones is a strategy to streamline management and govern resources in favor of SOEs, and to reproduce the state apparatus by setting up new local bureaucracies. As this chapter discussed, the establishment of LJNA in Chongging enhanced the fiscal capacities of the city and central-government revenue, as well as granting Chang'an, a central SOE, access to land and resources for expanding its productivity. Chongqing remains a territory dominated by state-owned capital, as it was during the Maoist era. The infrastructure development and new investments in the manufacturing industries fundamentally reproduce state power, giving new profit-making opportunities to SOEs. The industrial parks in Queretaro tell a different story. The state government works fundamentally as a "broker" or intermediary between private groups of developers that manage industrial parks and manufacturing industries. The federal government has a secondary role exclusively as funding provider for project development; the municipal authorities have no planning powers at all over industrial parks.

International media and hegemonic scholarship on political economy and regional development designed to assess core areas in the world economy could certainly find parallel processes in the expansion of industrial parks and exporting zones in Chongqing and Queretaro. Conceptual frameworks and narratives that stress the significance of mobile, flexible capital across the globe overlook the role of the state in the economy, reproducing the same assessments across case studies, disciplines, and area studies. This chapter juxtaposed the two different experiences of Chongqing and Queretaro as emerging urban economies through a territorial perspective, considering the fundamentally different political geographies of China and Mexico as a conceptual framework to assess the divergent ways economic development can unfold in relation to state power.

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#### **FOUR**

# Migration, Expatriation, and Heterosexuality in a Globalized City—Singapore

Liangni Sally Liu

Singapore, a city-state in Asia, soared to rank fifth in the world in the Global Cities Outlook Report 2018, just after San Francisco, New York, London, and Paris. It is the only Asian city to feature in the top ten of the report (Loh 2018). This rank indicates the "global elite" status of this citystate according to its achievements in economic performance, governance, livability, and life quality. The city-state's economic strength has attracted many foreign direct investments, and businesses set up their regional headquarters there, so there is a large expatriate population. The term "expatriates" in the Singapore local context often refers to Western migrants who are highly educated, mobile, skillful, and professional; they are usually Employment Pass (EP)1 holders, and/or belong to "the transnational business class" who work as managerial and entrepreneurial elites in Singapore (Yeoh and Chang 2001). The 2010 Singapore census data show that the nonresident population accounted for 25.7% (about 1,305,011) of the total population of about 5,076,732. Within the nonresident population, the expatriate population accounts for 22% (about 240,000) of the city-state's total nonresident workforce (Yeoh and Lin 2012). This expatriate population is embedded in a culturally and racially diverse Singapore where locals and immigrants have given the place a mix of Chinese, Malay, Indian, and European influences, all of which have intermingled.

The chapter considers Singapore as a highly globalized city-state with a high density of professional expatriates to inquire about complex issues surrounding heterosexuality as it is associated with transnational migratory mobility, ethnicity, race, class, and gender. Rather than applying a narrow definition of heterosexuality as the physical and sexual intercourse between male and female, in this research heterosexuality has been defined with a broader meaning, to include personal and sexual intimacies, contacts, and relationships. Based on the content and textual analysis of messages on several online forums commonly used by Singapore expatriates, this chapter emphasizes the highly contextual nature of the heterosexuality of expatriates in a multiracial, multicultural Singapore society, where the social, cultural, and economic fabric is woven of local elements and also many transnational elements. This context has produced special "contact zones" (Pratt 1992) that open various opportunities for expatriates to be in contact with others and form intimate relationships. The chapter intends to address three research questions: (1) How does Singapore as a globalized city provide contact zones for professional expatriates to have cross-cultural sexual encounters and relationships with both locals and other expatriates from similar or different cultures? (2) How does expatriate status influence those expatriates' views and experiences of heterosexual intimacies? (3) How do ethnicity, class, and gender influence and interact with each other in heterosexual encounters among Singapore's expatriates?

The theoretical significance of this research lies in an important but often-overlooked research area—the intersection between heterosexuality and transnational migration. In other words, the research investigates how migration life, especially transnational migratory mobility, is sexualized, and vice versa, how heterosexuality is mobilized and influenced by migratory mobility.

I begin with an introduction to the research subject (expatriates) and the location (Singapore). This is followed by a theoretical literature review and methodological discussion. After the methodological discussion, I present the key empirical findings of the media analysis, followed by concluding remarks.

#### A Contesting Concept of "Expatriate"

Rather than a neutral word, "expatriate" in the Singapore context has some particular connotations. It is often used in both government and public discourse to refer to Westerners who work and live in Singapore based

on work contracts. They are a direct result of this city-state's economic restructuring from a production and manufacturing emphasis to higher skills and growth in the service and financial sectors, and finally toward a high-technology society. The economic restructuring creates a huge demand for skillful elites who can help link the regional economy to global networks. To recruit these professional elites, the Singapore government introduced a series of intensive recruitment programs and opened up immigration eligibility criteria. These migrant elites hold much human capital and power, which significantly influence the local and regional economy. They are envisioned as a group of people who can navigate comfortably and smoothly anywhere in the world, a group called "transnational elites" (Yeoh and Chang 2001, 1,032). They flow into or through the city and bring with them well-established cosmopolitan networks, cultural practices, and social relations. In some works, they are termed "transient migrants," working for foreign banks or other advanced-producer service organizations (Beaverstock 2002), or the "transnational capitalist class," professional and managerial elites who move from one global city to another and constitute an important strand in migration studies. Castells's work emphasizes the hypermobility of the transnational subjects constituting this elite circuit—forever on the move, in transit, unmoored, part of the "space of flows" (Castells 1996a, 493).

The use of the word "expatriates" in Singapore also distinguishes their superior status from that of "foreign workers." "Expatriates" in Singapore have many privileges, such as eligibility to bring their spouses and children with them, the right to apply for permanent residence or citizenship, and flexibility in employment choices. They have been treated as a valuable professional labor force that the nation should work to encourage and retain in Singapore. "Foreign workers," on the other hand, are lowskill labor migrants and usually hold Work Permits (Yeoh 2006). They are subject to stricter regulatory control, enjoy few privileges, and face restrictions such as the not being eligible for the dependent's pass or to apply for permanent residence; they have been treated as a "use and discard" transient workforce. Critically speaking, these two terms imply two very different migrant groups with different social, economic, and political statuses. They are the product of Singapore's stratified immigration regime, which "lock[s] transmigrants into two structurally determined sectors of society and the economy, with currently, no possibility of interpenetration" (Yeoh 2006, 26).

It is not the focus of this chapter to discuss the split politics of Singapore's migration management and control system; however, the racial-

ized privileges of the Western expatriates in Singapore together with their higher socioeconomic status need to be recognized in studying their heterosexuality, because these privileges might be a significant determinant of their heterosexual behaviors and patterns. Some recent research used the notion of "white privilege" (McIntosh 1988) to demonstrate unequal outcomes in education, income, and job opportunities in some social contexts with a white majority (Khan 2011; Bhopal 2018). The research will demonstrate how relevant the notion of "white privilege" that derived from a colonial context is to the research on the expatriates' heterosexuality in a contemporary context, and how the research might adopt the notion as an analytical tool.

## Singapore—a Perfect Place for Research on Migration and Heterosexuality

Singapore is a fascinating location to study the intersection between heterosexuality and transnational migration and mobility. First, many professional expatriates perceive it as a temporary work and residential place rather than a permanent place to live (Yeoh and Chang 2001; Yeoh and Khoo 1998). Given that these expatriates' residence status in Singapore is temporary and their strong sense of connection to somewhere else, their heterosexual relationships can extend across several places on different continents. Their heterosexual relationships can take place in their current place of residence, Singapore, but these relationships can also be connected to these expatriates' original locations or wherever they have been over the course of their careers. Heterosexual relationships may take place in different geographical locations, but can also exist in different time-space contexts. All the current relationships these expatriates embark on and those that took place in their past create a multilayered dimension of their current heterosexual intimacies. The temporal complexities they are situated in, in terms of time and space, create a rich context for examining the formation and negotiation of their heterosexual subjectivity—for example, how they develop sexual identities that are both transnational and "foreign," depending on the geographic areas they shift between, how they experience heterosexuality, and how their experience might be constrained and enabled by power relations specific to being expatriates in Singapore.

Second, Singapore's global-city status can also shape expatriates' views and practices regarding heterosexual intimacies, because the global-city

status has attracted people from different countries and cultures to the same locality, and then informed the configuration of its population—a population that comprises transients, sojourners with temporary residential status, immigrants, and citizens with longer-term settlement intentions (Hannerz 1993). This population configuration has thus created a diverse social and cultural context for the study of the research subject. Through the long history of colonization, decolonization, postcolonization, and the contemporary modern construction of this city-state, its local cultural context has not been purely Asian or purely Western. Instead, it is a highly hybrid context in which the Asian part of the culture is highly Westernized and the adopted Western aspects of value and culture are localized (Yeoh 2013). This cultural diversity is managed through an oversimplified and arbitrary racial categorization, called CMIO (Chinese, Malay, Indian or Other), that is partly derived from the colonial years and remains a key governance strategy to manage race and race relations and the distribution of social resources (Yeoh et al. 2019).

In such a social and cultural context, the expatriates have established a multiplicity of "contact zones" where the locals and migrants, residents and nonresidents, are strategically and politically mixed. These "contact zones," defined by Pratt as spaces that resulted from global capitalism, generate encounters among people from different cultural, social, and economic backgrounds; consequently, these encounters create new patterns of intercultural intimacy, interracial heterosexuality, and even transnational family life (Pratt 1992). These contact zones are frontiers where differences are encountered and negotiated on a daily basis, not only across cultures but also across gender (Yeoh and Willis 2010). Therefore, Singapore, as a multiracial if not multicultural society, provides great opportunities for people of different ethnicities to be in contact with each other, and offers a cross-cultural context for expatriates to experience heterosexual intimacy.

#### The Research Gap Identified

Global scholarship on migration and heterosexuality studies has remained theoretically problematic, for three reasons. First, there is a gender bias/ preference in the literature exploring connections between migration and heterosexuality studies. These studies primarily focus on migration associated with gender, in particular migrant women (Luibheid 2004), and largely look at how gender relates to the decision to migrate and organizes migration processes, how gender shapes processes of settlement, how

immigrant women and men are incorporated into the labor market in the host country, and how migration alters gender relations (Pedraza 1991). A number of studies also touch on the gendered politics of female migration (Yeoh and Huang 2010; Yeoh and Willis 1999), and women migrants' negotiation of sexuality in diasporic space (Farrer 2008; Farrer 2013; Hong and Yeoh 2015). On one hand, these bodies of literature offer valuable tools for research endeavors interested in linking heterosexuality and migration. On the other hand, however, gender-focused research may fall short in sexuality analysis, and existing research questions in the literature that are formed around gender must be revised to better allow space for sexuality-related inquiries.

The second problematic dimension of existing studies on migration and heterosexuality is that they overwhelmingly investigate sexual practices (particularly those of heterosexual women) and identities in non-Western/nondeveloped contexts. Obermeyer (2000) and Rydstrom (2006) examined how traditional gender relations and heterosexuality were being transformed through globalization in Morocco and Vietnam, respectively. Hong and Yeoh explored female Vietnamese migrants' heterosexuality in Taiwan in association of transnational labor migration (Hong and Yeoh 2015).

The last pitfall of the existing studies on heterosexuality associated with transnational migration is that most studies do not explicitly address the links between transnational migratory mobility and the lived experiences of transnational migrants, including their heterosexual intimacies. The international migration of professional migrants has increased rapidly over past decades. They are skilled professionals who are needed as multinational companies' activities have increasingly crossed national borders. This trend has been recognized in much existing research from an economic perspective; much research on transnational elites has taken a structural approach to focus on the institutional mechanism controlling and promoting the new patterns of skill transfer (Beaverstock 1996, 2002). Detailed research topics include the transnational career pathways associated with internal labor market strategy, corporate and social networks, and the impact of government policy on attracting and/or constraining expatriate flow and mobility (Hui 1997; Perry 1991; Ye and Kelly 2011; Yeoh and Lin 2012; Yeoh and Willis 1997). However, much less has been researched from a social and cultural angle. In many of these existing studies, expatriates have been treated as highly mobile individual careerists circulating in an intensely fluid world of inter- and intrafirm transfers and career mobility, but their individual and embodied experience of expatriation as part of the international circuit is largely missing (Yeoh and Willis 1999; Yeoh and Willis 2004).

Recently, academic efforts have emerged to bring the everyday life experience of expatriates more forcefully into the scholarly discussion. Yeoh and Willis's research on Singaporean and British transmigrants in China contrasts the effect of cultural differences between these two elite groups, distinguished by nationality and historical connections with China, on the dynamics of the "contact zones" emerging in various cities in China. Indeed, expatriates' embodied experience of overseas life has potentially valuable implications for theorizing about identity-making (e.g., sexual, racial, cultural) against the backdrop of transnational mobility enabled by globalization. Intimate/sexual relationships occupy an important space in one's embodied and lived experience. As Luibheid pointed out, "how . . . current structures of global capitalism depend on and make possible relationships and identities that are not just gendered but also variously sexualized" (2004, 229) is an important question that should be addressed in current migration research. It has been observed that in the current era, transnational migratory mobility produced by increasing globalization has led to a phenomenon where sexual activities/encounters/experiences across national borders have become common (Corboz 2009). Corboz points out that "sexuality can no longer be analyzed or understood without taking into account the effects of these global flows" (Corboz 2009, 1).

Limited research endeavors that try to bring migration and sexuality more closely together intend to take sexuality as a focal point of discussion. Such research tries to link sexuality to the broader concepts of cosmopolitanism and "global cities," but the role that migration plays in intimate/ sexual relationships has never been brought out explicitly. For example, Huang and Yeoh edited a special issue of the Asian Studies Review on the topic of heterosexuality and the global cities in Asia (Huang and Yeoh 2008). In this special issue, the editors and contributors gave particular attention to how sex and sexual practices and identities in Asian cities are shaped by global processes and local and regional transformations in popular culture. Walsh looked at heterosexual intimacy among single British transient expatriates in Dubai (2007). Clark researched Chinese women who used international marriage as a means of leaving China to move to Western countries (2001). In their separate studies, Lang and Smart (2002) and Shen (2005) examined the sexual strategies of mobile elite men (ethnic Chinese business migrants) who used the opportunity structures of transnational investment migration to maintain multiple households or to gain access to multiple female sex partners. Zhou (2012) explored mainland

Chinese immigrants' change of views and practices of sexuality in their post-immigrant lives in Canada, and Liu-Farrer studied extramarital sexuality among Chinese migrants in Japan (Liu-Farrer 2010). Liu-Farrer is particularly interested in Western expatriates' personalized relationships with Shanghai, another newly emerging global city, as well as their intermarriage with local Chinese. In these studies, Farrer used the concept of "contact zones" (Pratt 1992, 7) to argue that these zones as a space resulted from global capitalism; they generate encounters among human beings of different cultural, social, and economic backgrounds; and thereby create new patterns of intercultural intimacy, interracial sexuality, and transnational family life (Farrer 2008, 2013).

Overall, existing studies do not make strong connections between transnational migration and heterosexuality. The research presented in this chapter tries to overcome the research limitations mentioned above, and attempts to understand the interplay involved in one type of transnational migration, expatriation and the heterosexuality of both male and female expatriates from developed countries (Beaverstock 2002; Castells 1996b; Findlay et al. 1996; Smith 1999; Yeoh and Khoo 1998) in a specific developed economic context in the Asian region—Singapore. It has the potential to tackle an often-ignored yet important research area—that is, what heterosexuality and migration have to do with one another; in other words, how migration life, especially the transnational migratory mobility, is sexualized, and vice versa, how heterosexuality is mobilized and influenced by migratory mobility (Ahmadi 2010; Mai and King 2009).

#### Methodological Notes

The empirical data for the chapter is based on content and textual analysis of relevant messages and articles published on several online forums commonly used by Singapore expatriates, and the responses and replies to the messages and articles. A number of online forums were surveyed from January to August 2018, including ExpatSingapore forum (www.expatsingapore.org), ExpatBlog (www.expat-blog.com/forum/), and InterNations-Singapore forum (www.internations.org/singapore-expats). The majority of the information used to form the core arguments of the chapter is drawn from www.expatsingapore.org. This online forum is very popular among Singapore's expatriates. The website statistics for this period show that there have been 500,074 posts in 50,501 topics by 122,131 members; many registered members are expatriates and actively and regularly use

the online forum to exchange information, to obtain practical knowledge to adapt to Singapore's local life, to stay in touch with fellow expatriates, to make friends, and to broaden their personal and professional networks. Posts on this forum can be a useful platform for investigating what is going on with the expatriate community in Singapore, what those expatriates do, what their daily and professional lives are like, what they enjoy and what they struggle with, and what they have been through as they pursue their careers and life passions far from their home countries. More importantly, information drawn from this forum is based on true-life experiences and stories shared by Singapore's expatriates and grassroots voices. Within this forum, post entries on such topics as "Social, Entertainment and Daily Messages," "Living in Singapore," and "The Archive" contain the most relevant posts and have resulted in high numbers of hits, responses, and discussions on topics that my research is particularly interested in, such as "relationships," "marriage," and "dating."

After relevant data was collected, a content analysis was performed first. Line-by-line open coding was used to break segments of the data into different thematic categories. The second step of data analysis was textual analysis within each thematic category. The analysis turned to focus on the interpretation of messages found within the text and/or across texts. The hidden social, cultural, and even political meaning of the text was examined. Such content and textual analysis of the relevant posts and articles and the replies they attracted can establish some important dimensions of the heterosexual intimate lives and experiences of Singapore's expatriates.

Two important methodological issues need to be acknowledged. First, since the research only investigates heterosexual intimacies of the expatriates in Singapore, the results cannot be fully applied to homosexual intimacies. The second issue concerns the empirical data source of the research. Since the data were collected from online discussion forums, the data is actually user-generated information. While cyber-ethnography is becoming popular recently, the online and offline identities of the online media users (Rybas and Gajjala 2007), especially those who practice trolling behaviors online (Hardaker 2010), is always a methodological concern regarding the authenticity of what the data presents. In the research, on one hand, we as researchers are fully aware of this methodological dilemma; on the other hand, I have avoided analyzing "authenticity" as a concept, and am taking all participants' comments on the online forums as prima facie representations of their fluid online selves. For readers of the paper, I need to point out that the findings from the research are more indicative than conclusive. Complementary methods such as in-depth interviews or focusgroup meetings with the expatriates might be useful to further study the topic, because these approaches can triangulate the data sources to produce more nuanced conclusions.

# What Do the Online Forums Tell Us? Is the Goal Just to Be "Out and About"?

The content and textual analysis of the online forum discussions showed that the expatriates in Singapore have many opportunities to find and enjoy heterosexual intimacies. A blog article on the website of InterNation Singapore states:

You are an expat. You've lost touch with the soil. You get precious. Fake European standards have ruined you. You drink yourself to death. You become obsessed with sex. You spend all your time talking, not working. You are an expat, see? You hang around cafés.

Although the above depiction of the expatriates' heterosexual lives may be exaggerated and not intended to be taken literally, phrases such as "you become obsessed with sex" represent a sanctioned public articulation of expatriates' heterosexual behaviors, especially the expatriate men's heterosexual behaviors in that particular place. Similarly, "expatriate men can easily get girls" is another prevailing perception among Singapore locals as well as the expatriate community. However, this heterosexual enjoyment comes with a downside—that is, while finding a sex partner is easy, finding romance, love, or long-term relationships is comparatively difficult. Another forum post asked,

Why should I spend my time to negotiate, to try to understand another, please another, impress another when I can reach my ultimate objective of sex by going to the local bar and hook up with someone with no strings attached? Why should I invest my time and energy in a relationship when I do not have to?

Another forum participant following the discussion said,

Who can blame them [expatriates]? Singapore is a fabulous party town filled with gorgeous, fun, educated and available men and women. Those who find each other, become good friends and enjoy being "out and about" are generally focused on having as much fun as humanly possible. There is nothing wrong with it? Right? Like it or not, this is a real phenomenon here.

This type of casual heterosexuality, of being "out and about," in today's world is nothing new; it is just a form of self-actualization. However, for the professional expatriates, apart from this personal preference for self-actualization, such patterns of casual heterosexuality result largely from the nature of their jobs and their temporary residence status in Singapore. One forum participant explained her heart-broken experience with her expatriate boyfriend:

I'd gone through the very painful process of ending a relationship largely because the two of us couldn't imagine any future in which we'd both be happy living in the same country. I will never put myself in that kind of situation again. It is just illusionary that I would find some nice American boy who wouldn't mind if I wanted to travel a few months a year for businesses. But, of course, life will never work that way. Of course, as a human being, I will meet some guys and spend time with them, but I will never allow myself to get so serious again.

The words like "life will never work that way" reveals the difficult reality this expatriate woman faced of how to balance her professional life, which requires her to be highly mobile, with a meaningful relationship that requires both her and her partner to be more geographically stable. Expatriates' work often requires them to be highly mobile and flexible, and able to quickly move from one country to another for a series of international assignments, or to frequently travel back and forth between different places. Many of them only hold EPs for a few years based on their work contracts. The frequent travel and the resulting physical separation from their partners, however, can be harmful to their relationships. Their temporary residence status creates a cognitive boundary, making them hesitant to engage in serious and long-term relationships. Therefore, the reality is that many expatriates participate in casual heterosexual relationships not because they really want to, but because they have to choose being "out and about" to satisfy their need for heterosexual intimacies but without being emotionally attached to their successive sex partners. In other works, these casual heterosexual relationships are called "transient heterosexual acts" (Kitiara 2008, 595; Walsh 2007, 507), which are produced by a negotiation

between migratory moves and heterosexual relationships, and between intimate identity and subjectivity in the circumstances of this global city-state.

The situations described above demonstrate a significant feature of many heterosexual relationships among Singapore's expatriates—their impermanence. This feature is one of the compelling aspects of expatriates' lives in a foreign Asian country, and it is often conditioned by their low expectations from relationships. It holds them back from fully investing their emotion and passion into loving someone and committing to long-term, serious relationships. As another message said, "To have a relationship, you just have to be at the right place and at the right time. I wouldn't date anyone if I am on a temporary visa in a foreign country." Several online discussions imply that many heterosexual relationships of expatriates must remain at a superficial level as casual, transient, or short-term arrangements.

# Singapore—"A Temptation Island"?

The instability and impermanence of heterosexual relationships exists not only among single expatriates but also among married expatriate couples. Another prevalent sentiment in Singapore is that expatriate men can hardly resist the temptation of the many local Asian women, who usually prefer expatriate men, to whom their Asian appearance and cultural identity are an exotic and powerful attraction. Therefore, local Asian women are perceived as a big threat to expatriates' wives. Numerous posts that discussed the expatriate men's engagement in extramarital relationships are strong evidence of this phenomenon. In one online forum, an expatriate woman accused the local Asian women of being "out to steal their men," and another expatriate woman posted a message titled "Do all married men cheat in Singapore?," which attracted hundreds of responses. Some responses analyzed the reasons from the male perspective:

It's hard not to (have affair) when the local minxes pay you so much attention and basically worship the ground you walk on (It is really easy to string them along and make yourself out to be richer/more important than you really are)—so you take the chance and do it, expecting not to get caught and to be frank most get away with it.

Some replies analyzed the reasons from the female perspective:

There are so many men here with good qualities. They are in good quality, and that's why they are coming to Singapore. This place is

a concentration of excellent professionals with status, and they are financially well-off. It's not easy for women to resist the surrounding too. Look, how about there is a young guy, a nice young guy, in his 30s, professional, good-looking, has a taste for lifestyle compared with the husband in his 40s with a beer belly and bald head back to home.

The "richer" and "important" outlook of the expatriate men is obviously connected with their being professionals and their better socioeconomic status and reflects the instrumentalism in normative discourses about why expatriate men can get the attention of local Asian women. This instrumentalist approach is a widespread stereotype about local Asian women's desire for expatriate men. One expatriate woman criticized the local women as "money diggers": "How many locals have Expat type salaries and allowances? Of course, the local women love them." Apart from the instrumental reason, racial preference also matters, and this racial preference is closely linked with how different cultures deal with gender relations. One expatriate man discussed the issue:

I am referring to the push factors that mean that many Asian women from developing and developed Asia have a racial preference for white men. I was once told by an Indian lady that Westerners do whatever. Western culture is a lot of freer than Asian culture, and therefore this informs the dynamics between race and sex when it comes to dating.

With all the attention and desires of the local Asian women, it is hard for expatriate men to resist the temptations the Asian women present. One common theme that can be drawn from these posts is that Singapore is "a temptation island"—a place with a lot of distractions and opportunities for expatriates, especially men, to pursue heterosexual encounters. Walsh's study uses a similar phrase—"landscape of desire"—to describe Dubai's holiday-like space and environment, which may stimulate the single expatriates' discourse about the transnational city's influence on their heterosexual performance. The Singapore case is not significantly different in terms of the multiplicity and fluidity of the "contact zones" forged by global networking and interactions with cultural diversity, which offer great chances for expatriates to have heterosexual encounters and explore heterosexual pleasure. The night-time economy is critical in the production of random and extramarital heterosexual encounters. One participant mentioned,

I don't blame Singapore, but I did watch how local women chased white men, in night clubs and bars in particular. They dressed up, flirted, danced, and asked for numbers. In those kinds of places, dramatic bodily intimacy and tactility more likely take place. I understand. The music is cheesy. It all produces places where it is easier to flirt with or kiss a stranger.

# A Gendered- and Racialized Inequality

The media analysis found that there are gendered and racialized patterns in the expatriates' heterosexuality; in addition, the gendered and racialized factors are interwoven into each other to produce different heterosexual patterns for both genders. First, compared with the expatriate women, the view is expressed that local Asian women are easier to get along with. One expatriate man mentioned,

I find most expat women to be high maintenance. Most local women I've dated were much more down to earth, and easy to get along with. I have never seen one expat guy here who would go looking for expat women to start a relationship with. The one or two single expat women I have ever talked to here, are the strong type (to be here alone you have to be), and this can be quite off-putting to guys.

Secondly, as for the local Asian women, they like expatriate men as mentioned before. Another example:

Apart from those bimbo local girls, I mean those gold diggers, wearing very tight and short skirts to wander between different bars and night clubs, there are a lot of smart professional local women in the town. Many of them are pretty keen to meet and party with expat men.

Therefore, the intentions and temptations of both expatriate men and local Asian women are matched. However, this mutual attraction does not take place equally between expatriate women and expatriate men or between expatriate women and local Asian men. In general, while expatriate women in Singapore find that their experience in Singapore meets their career expectations, finding romance proves trickier. A 40-year-old expatriate woman revealed, "I feel I have been rewarded career-wise here [Singapore];

however, I am in a place for I don't know how long where there just aren't that many available guys interested in me." This comment is not uncommon. Younger expatriate women also described their time in Singapore is loveless. An expatriate woman in her 20s wrote,

I feel washed up already. That is ridiculous. You know, you begin to doubt yourself about the inability to pique anyone's interest. That's a painful reality. The odds are completely against you. To see so many [expat] women I know burned, to see so many texts and calls go unanswered, to see so much disappointment means that you have to set low expectations in Singapore.

Unlike expatriate men, whose social and economic status as expatriates wins them advantages in the relationship market, for women, expatriate status and their gender put them in a vulnerable position in negotiations for meaningful relationships. Sometimes, even their professional profiles work against them in the dating market.

Taking another example here, a post entitled "Lonely expat life for single women—Is it true?" has received numerous replies. Many have tried to use an analytic approach to rationalize the underlying reasons why expatriate women lack dating opportunities in Singapore. While the powerful status and high profile of expatriate women in Singapore is one major reason that works against their status as they look for love and relationships, another important reason is that expatriate women face double obstacles in the local dating market. First, they give up their opportunities to date local Asian men. Most expatriate women prefer to not to date local Asian men; a major concern is the patriarchal culture and its implication for the relationship. For instance, one expatriate women replied, "Imaging the situation—A wealthy local Asian guy who wants to impress his friends with a smart, educated, well-travelled, well-dressed Western woman, at least for a while-until he finds out she has an opinion and purchasing power." The strong minds and financial independence of expatriate women are not compatible with the Asian patriarchal culture—which requires women to be subordinate to the opposite gender. The expatriate women would intimidate the men and put them off. Expatriate women are aware of these dynamics, so most of them don't pursue opportunities to try dating local Asian males. Second, while expatriate women prefer to date expatriate men, many expatriate men are more interested in dating local Asian women because they are more appealing physically and their relationship expectations are much easier to satisfy. Thus, expatriate women lose their

chances to pursue relationships with their expatriate male counterparts. Another reply from an expatriate woman said

It's hard to compete with local women when it comes to expat men, because of different relationship expectations. Expat men prefer women who are content with a casual arrangement, at least at the very beginning. Well, the local Asian women's approach of "out and about" feeds up the expectation well.

As a matter of fact, there are far more expatriate men than expatriate women in Singapore, so expatriate women should have good chances to pursue relationships with expatriate men. However, their high expectations for relationships scare away expatriate men, who take easy options offered by the local Asian women. Thus, male and female practices of heterosexuality are distinguished by a gendered discourse of emotion (Pringle 1999). Although expatriate women may have powerful career paths, they are in a culture that portrays heterosexual relationships as romantic and femininity as insecure, beautiful, and vulnerable. Expatriate women may invest considerable emotional labor in a heterosexual relationship, and they often want it to be serious and long-term. In contrast, expatriate men tend to adopt the practices of widespread "player" masculinity and become empowered by the idea that relationships are a "game" and women a "conquest." As can be seen, expatriate men and women draw on cultural norms and resources to position themselves differently in gendered ways when practicing their heterosexuality; their approaches and experiences are shaped within a defined discourse about love, sex, and romance.

#### Discussion

The research produced three major findings. First, Singapore's status as a globalized city as well as a multiracial/multicultural society facilitates the creation of special contact zones for expatriates to have multiple opportunities for heterosexual encounters and relationships with both locals and other expatriates from similar and different cultures. These highly hybrid multicultural contact zones create an interesting context for expatriates to explore and enjoy their heterosexuality. This multiplicity of "contact zones" offers the privileges of heterosexual freedom, encounters, and pleasure for the expatriates.

Second, the research found that the expatriate identity and status in

Singapore offer many chances for heterosexual enjoyment and empowerment, but it can also limit the capacity to develop serious, long-term relationships, and even play a destructive role in expatriate couples' marriages or long-term relationships. The problem is rooted in the professional and economic profiles of the expatriates, in the transnational migratory mobility conferred by their job nature, and in their ethnicities and races. Their global talent profiles and associated high income and privileges are usually attractive to the opposite gender. Thus, affairs outside of marriages or relationships may occur. There is a strong link between the expatriates' professional profiles and the privileges these profiles imply. This is an instance of the established notion of "white privilege," a stubbornly static structural variable of ethnicity and race that determines social and class hierarchy (McIntosh 1988). This "white privilege" appears especially striking when considering the position of the expatriates in their heterosexual encounters in Singapore. However, everything comes with both positive and negative sides. As mentioned before, the transnational migratory mobility of the expatriates, manifested by their temporary residence status in Singapore, frequent travel, and multiple transitions from place to place for business reasons, makes it difficult for expatriates to forge serious and long-term relationships. Many expatriates understand this problem, and therefore prefer to have casual or transient heterosexual relationships. As a matter of fact, the research shows that having casual or transient heterosexual arrangements is a protective mechanism that many expatriates have adopted to protect themselves from the hurt of relationship breakups.

Lastly and most importantly, the research found a gendered inequality in the social construction of the heterosexuality of Singapore's expatriates. This gendered inequality is interwoven with factors such as class, ethnicity, race, and the underlying privileges of the expatriates to create a racialized and gendered pattern of heterosexual empowerment and disempowerment. The positive personal credentials of many expatriates, such as financial power, high education, and rich life and work experience, are advantages for expatriate men to enjoy their heterosexuality in Singapore, but they are disadvantages for expatriate women searching for love and long-term heterosexual relationships. Expatriate women have a limited dating market with local Asian men because the gendered subordination and patriarchal culture in Singapore. Few want to trade their independence and equal status for a subservient one. The expatriate women also have a diminished dating market with expatriate men, their preferred dating choice, because expatriate men tend to prefer the local Asian women, and

the local Asian women like expatriate men, too. This match between expatriate men and local Asian women is rooted in the traditionally gendered subordination of females to males in patriarchal cultures. It is also rooted in the ethnicity, race-informed privilege, and higher social-economic status of expatriate men. The privileges and class characteristics make expatriate men a preferred choice for local Asian women for dating or relationships. In addition, the deep-rooted colonial culture of Singapore, with its historical assumption of white superiority and local inferiority, feeds into the ethnicity- and race-informed preferences and dynamics of the expatriates' heterosexuality.

In summary, the study of Singapore expatriates' heterosexuality has shown that it is highly spatial, temporary, casual, transient, transnational, and contextual. The gendered and racialized pattern of heterosexual empowerment and disempowerment among Singapore's expatriates shows that gender and ethnicity can create privileges and disadvantages. The privileges are embedded in and encouraged by Singapore's cultural and social contexts. Due to the colonial legacy, some ethnic groups in the society are considered more important and superior, and these groups have advantages in the relationship market. The CMIO (Chinese, Malay, Indian, Others) racial categorization system that Singapore uses efficiently reinforces ethnic and class divisions, and creates a racially hierarchical social context that tolerates the racialized and gendered pattern of expatriate heterosexuality. The multiracial and multicultural social context of Singapore creates both possibilities and constraints for the expatriates to experience heterosexual intimacies during their residence in Singapore. In this context, the real or imagined/constructed divisions between the East and West, international and local, thoroughly infiltrate each other, highlight some competing discourses on expatriates' heterosexuality.

#### NOTE

1. The Employment Pass (PE) is a visa category offered by the Ministry of Manpower of Singapore. It allows foreign professionals, managers, and executives to work in Singapore. PE holders need to earn at least SG\$3,600 a month and have acceptable qualifications.

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# City-Regions Reconsidered

Allen J. Scott

#### A Prospect of City-Regions

The idea of the city-region has been present in the literature on urban studies at least since the publication of Patrick Geddes's Cities in Evolution in 1915. However, it was only after the 1980s and 1990s, when attention was focused on certain disproportionately large and economically vibrant "world cities" (Friedmann and Wolff 1982; Knox and Taylor 1995) and "global cities" (Sassen 1991), that the term "city-regions" started to proliferate in the literature, particularly in association with the qualifier "global" (Scott et al. 2001; Simmonds and Hack 2000). This trend, of course, reflected the widespread emergence of large spatially extended urbanized areas all over the world, each of them locationally anchored by one or more metropolitan centers, and each of them spreading far outward into diffuse hinterlands comprising mixes of agricultural land, suburban tract housing, miscellaneous industrial and commercial properties, local service centers, and subordinate urban settlements (Davoudi 2008; Scott et al. 2001). Along with the term "global city-regions" came a diversity of related expressions, such as the "postmodern metropolis" (Dear 2001), "mega-urban regions" (Laquian 2005), "regional urbanization" (Soja 2012), and the "polycentric metropolis" (Hall and Pain 2012), each representing an alternative attempt to provide a concise descriptive label for this burgeoning phenomenon in the late 20th and early 21st centuries (cf. McCann 2007; Rodríguez-Pose

2008). In whatever manner we may designate them, city-regions are now everywhere in evidence where capitalism prevails, though at very different levels of integration into the capitalist system and with very different empirical manifestations from one case to another. Indeed, they are now so widely distributed and so intricately interconnected with one another across all five continents that the prefix "global" has become to all intents and purposes redundant.

The literature on city-regions has grown by leaps and bounds since the turn of the 21st century. One major segment of this literature is focused on the economic forces that generate these urban behemoths, with special reference to the logic of agglomeration, growth, and spatial interaction (e.g., Scott et al. 2001). Another important body of work seeks to decipher the political dynamics and quandaries of city-regions and the multiple problems of governance and policy that they pose (e.g., Ward and Jonas 2004). Among the many other issues that have been raised in this literature, special reference must be made to the comments of some scholars—notably those of a postcolonial persuasion—that call into question the whole concept of the city-region as an object of social enquiry. In the present paper, I seek to provide a perspective of this entire terrain of investigation and to reflect on some of the debates that have arisen in regard to the origins, character, and theoretical status of city regions. I proceed by laying out a brief conspectus of city-regions in the world since the mid-1950s. I consider how the contemporary capitalist system and globalization have fostered an evolutionary trajectory in which a certain number of favored locations have mushroomed to form a postmetropolitan worldwide grid of city-regions. A variety of critical features concerning the internal organization of city-regions in the 21st century are then brought into view, and some basic issues of governance and policy are subjected to scrutiny. The argument concludes by calling into question a number of current critiques in the urban studies literature that seek to consign city-regions into a chaotic mass of "ordinary" cities and to relegate ideas about them to the status of failed Eurocentric concepts fabricated in the Global North.

# City-Regions around the World

As argued in detail elsewhere (Scott and Storper 2015), all cities exhibit a common genetic and synchronic constitution that is constructed in a two-fold process involving, on one side, a set of gravitational forces in geographic space leading to spatial polarization and the clustering of social and

economic activities, and on the other side, a necessarily extensive spatial ordering of these activities, leading to variegated and interdependent patterns of land use in any given agglomeration. From this perspective, cityregions are cities like any other and there can be no clear line of division that separates them from the rest of urban reality as a whole. Despite the absence of any sharply defined break, city-regions are nonetheless distinguishable as a broad category of urban phenomena by reason of their size, spatial extent, multipolarity, functional heterogeneity, political influence, innovative capacities, and global interconnectivity. These features mark them out as calling for scholarly examination, not, as Robinson (2006) avers, to the necessary eviction of other kinds of cities from the world map, but as one peculiar class of cities that is of major social and political significance in its own right and that offers important potential insights into urbanization processes as a whole. The city-regions thus defined form a mosaic (Scott 1998) or archipelago (Veltz 1996) of interconnected nodes that compete and cooperate with one another across the entire globe. First, city-regions are widely distributed across all five continents. Second, they are more abundant in less economically developed parts of the world than in the more advanced capitalist countries (cf. Stren 2001). Third, China, and to a lesser extent India, stand out as major national hubs of cityregions, and these have expanded at an accelerated pace in harmony with the high rates of economic growth and the penetration of global capitalism into both countries, especially China, since the mid-1990s (Schneider and Mertes 2014; Wu 2017).

The data set forth in tables 5.1-5.3 add depth to these remarks. Table 5.1 shows that there were 501 cities across the globe with populations of one million or more in 2015, of which 44 were in the 5-10 million size class, and as many as 29 had populations of above 10 million. Table 5.2 indicates that more and more of the world's population is accommodated in cities of all sizes, but an increasingly large proportion of the total urbanized population is contained in the very biggest centers. Table 5.3 shows that these trends have been associated with a recent decisive shift in patterns of urban growth from Europe and North America to other parts of the world, and above all to Asia and Africa. All three tables, taken together, make it abundantly clear that large-scale urbanization has proceeded apace on all five continents since the 1950s. Despite the comments of some analysts (e.g., Cairncross 1997; O'Brien 1992) to the effect that the internet is undermining distance constraints, this trend will in all likelihood continue for the foreseeable future, given the persistent, if not intensified, force of agglomeration economies in the new capitalism of the 21st century. A

TABLE 5.1. Number of Cities Worldwide in Different Size Categories, 1950–2015

	Number of cities					Percentage change		
Population range	1950	1970	1990	2015	1950–70	1970–90	1990– 2015	
>10 million	2	3	10	29	50	233.3	190	
5–10 million	5	15	21	44	200	40	109.5	
1-5 million	71	126	239	428	77.5	89.7	79.1	
300,000 to 1 million	229	413	706	1,191	80.3	70.9	68.7	
Total	307	557	976	1,692				

Source: United Nations, World Urbanization Prospects data set, 2017.

TABLE 5.2. Total World Population Living in Urban Areas by Different Size Categories, 1955–2015

	Population in millions			Percentage change			
Population range	1950	1970	1990	2015	1950–70	1970–90	1990–2015
>10 million	24	55	153	471	131.9	178.8	208.7
5–10 million	32	106	157	307	230	48.2	95.4
1–5 million	129	245	459	847	90	87.7	84.4
300,000 to 1 million	115	216	359	633	87.2	66.6	76
<300,000	447	729	1156	1,699	63.2	58.6	46.9
Total urban population	746	1,350	2,285	3,957			
Urban as a percentage of the world population	29.6	36.6	42.9	54			

Source: United Nations, World Urbanization Prospects data set, 2017.

TABLE 5.3. Percentage of Total Population Living in Urban Areas by Major World Region, 1955–2015

Year	Africa	Asia	Europe	Latin America	North America	Oceania	World
1955	16.1	19.3	54.3	45.2	67	64.8	31.6
1965	20.6	22.9	60.2	53.3	72	69.1	35.6
1975	24.7	25	65.4	60.7	73.8	71.9	37.7
1985	28.9	29.8	68.8	67.6	74.7	70.7	41.2
1995	33.1	34.8	70.5	73	77.3	70.6	44.7
2005	36.3	41.1	71.7	76.9	80	70.5	49.1
2015	40.4	48.2	73.6	79.8	81.6	70.8	54

Source: United Nations, World Urbanization Prospects data set, 2017.

remark of special importance is that of the 78 cities in the world that had populations of more than one million in 1950, two-thirds were in the more economically developed nations, whereas in 2015 two-thirds of the 501 cities in the same size class were located in Africa, Asia, and Latin America.

Among their many other prominent features, these large cities or cityregions function as basic motors of the global economy, as critical centers of national economic development, and as foci of economic innovation. According to data from the Brookings Institution, 300 of the world's largest metropolitan areas in 2014 produced as much as 41.1% of global GDP. The 30 largest metropolitan areas alone produced 12.7% of global GDP, yet had just 7.1% of the global population, giving a ratio of the former percentage to the latter of 1.8 (cf. Sassen 2012). Of these 30 metropolitan areas, 7 were located in the advanced capitalist countries and yielded in aggregate an equivalent ratio of 3.4; the remaining 23 metropolitan areas elsewhere yielded a ratio of 1.2. These reflections point directly to the high levels of economic productivity in large urban areas in the advanced capitalist countries compared with the rest of the world. At the same time, while the productivity of major cities in low-income countries may be relatively subdued, it still remains unusually high compared to the less urbanized areas that surround them.

# The Emergence and Dynamics of City-Regions

#### Intimations of a New Urbanism

City-regions began to make their decisive historical and geographical appearance in North America and Western Europe shortly after the end of World War II. The same period saw a resurgence of interest by urban theorists in unusually large and influential cities, as represented by the work of Dickinson (1947), who resuscitated the term "city-region," and Freeman (1959), who adapted the idea of the "conurbation" (a further term coined by Geddes) to designate coalescing clusters of overgrown British cities. At about the same time, Gottmann (1961) devised the notion of "megalopolis" to describe the great multicity built-up area extending from Boston to Washington, DC, in the United States. Despite these early symptoms of a phase change in patterns of urbanization, the postwar decades were actually a period in 20th-century capitalism when the classical metropolis was the dominant expression of large-scale urban development, with its well-defined central core, its extensive but still relatively restrained suburbs, and

its dominant bipartite social structure comprising blue-collar and white-collar workers, who tended to inhabit distinctively different residential areas. The internal integration of the metropolis in Fordism was secured by relations between the city and the suburbs forming virtuous circles of production and consumption (Scott 2017; Walker 1981). This was also a period of vibrant urban growth based on Fordist economic development and Keynesian welfare-statist sociopolitical arrangements (cf. Brenner 2003; Marglin and Schor 1990).

In spite of an incipient surge of city-regions in the advanced capitalist countries in the 1960s, the crisis years of the 1970s were accompanied by a severe interruption of urban growth as the agglomerative forces of the classical Fordist economy waned. Concomitantly, urban and regional theorists began to express a marked pessimism about the possibilities of local economic regeneration (cf. Carney et al. 1980; Bluestone and Harrison 1982). As it happens, the bleak prospects of the 1970s were soon, and quite unexpectedly, to give way to a new and more buoyant era. The 1980s and 1990s represent a so-called "post-Fordist" moment in which a series of dramatically new and interdependent developments across a wide spectrum of society and the economy came rapidly to the fore. These developments were in major respects due to extraordinary advances in electronic technologies of computing and communication, and the diffusion of new systems of production that increasingly mobilized the mental, behavioral, and affective skills of workers. The advent of post-Fordism was also strongly encouraged by expanding waves of globalization and a change in the political winds leading to strategies of governance and policy-making that actively fostered the reassertion of competitive markets. A number of dramatic changes in modalities of urban growth followed from these shifts, not only in the advanced capitalist countries, but in areas of the world that had been bypassed by the earlier Fordist phase. This short but pregnant post-Fordist phase in the 1980s and 1990s can be seen as ushering in a third wave of capitalist evolution focused on what I have elsewhere identified as the cognitive-cultural economy (Scott 2017).

The rise of the new capitalist economy was not uniquely responsible for the conspicuous development of city-regions that occurred all over the world in the decades following the early 1980s, but it did offer a fertile terrain that enabled many novel expressions of urbanization to blossom even as they also helped to generate new problems and predicaments of urban life. Above all, the new economy reignited the play of agglomeration economies, without which the competitive advantages of cities as clusters of capital and labor are unsustainable, and it boosted local economic devel-

opment by making it possible for favored urban centers to find specialized niches within an increasingly global division of labor, and hence to export more and more of their products to far-flung markets.

#### The Third Wave

The 19th-century workshop and factory system formed the basis of a first wave of capitalism and urban development; the mass-production economy and its associated metropolitan pattern of urbanization in the 20th century gave rise to a second wave; and the emerging cognitive-cultural economy of the 21st century represents an as-yet-unfinished third major wave. It is in this third wave, with its transformative effects on urban social and economic life, that city-regions everywhere are starting to come into their own as assertive types—or subtypes—of urban agglomeration.

Old pre-Fordist and Fordist modalities of economic organization are far from having been entirely displaced by the new digital, knowledgebased, and globalized capitalism that is now moving rapidly ahead. Even so, a host of new and restructured sectors based on electronic technologies and cognitive-cultural labor processes have penetrated into vast swaths of the modern economy and have gravitated above all to favored urban locations. Among these sectors, technology-intensive production and software development, business and financial services (including corporate headquarter functions), revivified craft activities, and cultural industries of many different sorts have played a special role in promoting recent rounds of urban growth. These sectors tend to concentrate especially in large city regions, though they may also be found to varying degree in smaller cities. There is an extensive literature on the incidence of sectors like these in urban areas (e.g., Clark 2002; Hutton 2015; Scott 2017; Storper 2013; Taylor and Derudder 2016), so I will at the outset offer only a few broad comments on this matter. Most importantly, the net outcome of the changing economic environment has not only been a vigorous resuscitation of agglomeration economies and urban growth, but also a broad shift in intra-urban divisions of labor and social life, and, concomitantly, in the structure of residential space. As a consequence, the dominant white-collar/blue-collar principle of social stratification and neighborhood formation that characterized classical Fordist patterns of urban residential space has tended to give way to a new configuration marked by a deep and durable divide between highly paid and qualified technical, managerial, professional, and creative workers on the one side, and a mass of low-wage, unqualified service workers, shading off into an impoverished precariat or underclass on the other side (Scott 2017; Standing 2016).

Outcomes such as these are clearly present in the advanced capitalist countries, but they are evident, too, in major city-regions throughout the less economically advanced parts of the world. Significant numbers of cities in poorer countries grew in the decades following World War II (i.e., in the Fordist period) on the basis of import substitution, and then, in the context of post-Fordism and its aftermath, these and an ever-enlarging cohort of other cities in the same countries moved to a regime of accelerated growth founded on export-oriented strategies, international subcontracting, and foreign direct investment. Nowadays, the larger urban centers in these countries—many of them with enduring traces of a colonial past—participate aggressively in the new capitalism, not least by means of their widening role as centers of prime business and financial functions in response to local, national, and, increasingly, international demands (Raiser and Volkmann 2007). Erstwhile Third World cities such as São Paulo, Santiago, Guangzhou, Shanghai, Mumbai, Singapore, Seoul, Bangkok, Ho Chi Minh City, Jakarta, Kuala Lumpur, Manila, Dakar, Accra, Lagos, and Nairobi, to mention only a few representative examples, play a significant role in the new economy of global capitalism, despite the extensive swaths of poverty and informality that they continue to harbor (cf. Davis 2006; Roy 2011; Smit et al. 2017). At the same time, burgeoning city-regions in low-income countries act as centers through which potent developmental impulses radiate outward to the rest of the national territory (El Kadiri and Lapéze 2007; Sid Ahmed 2007; Vázquez-Barquero 2007).

# Anatomy of City-Regions: Four Geographies

# Inside the City-Region

City-regions are composed of a remarkably heterogeneous variety of social and economic entities and relationships. What imbues these phenomena with an essentially urban character is their functional recomposition within a polarized spatial lattice or urban land nexus—that is, an agglomerated tissue of locations tied together by the cascading interdependencies that constitute the economic and social lifeblood of the city (Scott and Storper 2015; Storper and Scott 2016). In capitalist cities, the primary components of the urban land nexus can be systematized by reference to three principal types of interlocking and overlapping land use: production space, in

which goods and services are generated and exchanged; social space, where differentiated residential neighborhoods make up most of the urban land-scape; and circulation space, which channels movement and communication through the entire fabric of the city.

The city-region is also distinguishable—at least qualitatively—from other urban forms, first by its tendency to exceptionally active development and redevelopment on its high-density, polycentric, intensive margins, where business and retail functions cluster together, and second by the insistent outward spread that proceeds endemically on its far-flung, lowdensity, extensive margins where housing tends to lead the way. The whole of this extensive structure of social and economic life is held together by intersecting multimodal networks that comprise the main elements of the city-region's circulation space (Lang and Knox 2009; Nelles 2013; Neuman and Hull 2009). For instance, the extensive city-region of the Ile de France, with Paris at its center, is traversed by a tentacular commuter rail network forming the Réseau Express Régional that complements the rest of the transport system in serving the dense daily and weekly demand for local travel. Note that the structure of the network consists of radial spokes reinforcing the centrality of Paris—with emerging concentric links toward its geometric center. In China, to take another example, efforts to consolidate the great city-regions of Beijing, the Yangtze Delta, and the Pearl River Delta are actively progressing by means of public investment in dense transport networks designed to forge each region into a single functional entity (Quan and Li 2011; Zhao et al. 2017). Moreover, the development of transport infrastructure and the lateral spread of the city-region tend to proceed in a recursive relationship with one another; that is, improved accessibility in peripheral zones is conducive to the further outward expansion of the built-up area of the city-region, while the outward shifts of the built-up area create demand for yet additional rounds of investment in transport infrastructure. As this twofold process moves ahead, the advancing frontier of the city-region swallows up towns and cities that lie in the pathway of its lateral spread, and these settlements are incorporated into a steadily enlarging, continuous built-up area. These general trends mean, too, that individual city-regions lying adjacent to one another may expand to the point where they coalesce into a supercluster or a conglomerate cityregion comprising two or more core areas of more or less equal size. The great urban expanse of the Yangtze Delta, the megalopolis of the eastern seaboard of the United States, and the Tokyo-Yokohama region in Japan are all, in varying degree, advanced cases of this supercluster phenomenon.

These overall processes of growth and development peculiar to con-

temporary city regions are accompanied by significant shifts in intra-urban patterns of land use and social life. The outward forms of these emerging patterns differ widely from one instance to another, but all of them can be comprehended under the broad diagnostic umbrella of capitalist urbanization in the third wave. Four particularly dramatic cases are now examined.

#### Aestheticization and Land-Use Intensification

Locations in intra-urban space where relatively high levels of accessibility prevail are frequently subject to a syndrome of rising rents and increasing land-use density that pushes them continually to ever-increasing prominence on the urban landscape. This syndrome takes on particular emphasis as it becomes manifest in the formation of hierarchical, polycentric, and spatially ordered commercial centers in city-regions, or, in the more arcane vocabulary of Batty (2013), as it is expressed in the fractal dynamics of the city. The biggest, most functionally diverse, and most visible commercial center in any given city-region typically lies at the gravitational core of the system as a whole and serves as the dominant central business district (CBD) of the entire built-up area.

In the crisis years of late Fordism, the CBDs of many large American metropolitan areas entered a period of stagnation, and in certain instances, serious decline. The new capitalism heralded by post-Fordism, however, marked a turn in the fortunes of these areas that was forcefully inscribed on the urban landscape by the economic and architectural resurgence of their CBDs. This expansionary trend was echoed in major city-regions in less economically developed countries as the new capitalism penetrated beyond North America and Western Europe into other parts of the globe. One of the signal features of the new capitalism is the important role that advanced retail, service, business, and financial sectors play in the economy as a whole, and the more upscale producers in these sectors have a definite proclivity to locate in major business districts where their informationrich interactions generate mutually sustaining agglomeration economies. A large segment of the economy of these districts' functions, by the same token, as a burgeoning employment hub for qualified professional, managerial, and administrative workers drawn from all parts of the city.

In view of their centrality and accessibility, major business districts are especially susceptible, as they always have been, to continual rounds of vigorous land-use intensification, where the latter term is defined as the redevelopment of real property in order to raise output levels and to

increase land rents per unit area. One of the signs of this process is the persistent, often cyclical razing of buildings in central areas of the city and their replacement by yet higher buildings with increased floor space. Since this process is especially assertive at locations where land rents are already high, it is almost always most pronounced in the CBD, and especially in those parts of the CBD that specialize in advanced office functions (Scott 2018b). As a result, the towering buildings that accommodate these functions almost always play a prime role as visible icons of wealth, power, and influence. Indeed, the iconic status of these buildings is more often than not consciously emblazoned in overt aesthetic symbols constituting much of their visible form. Even in Fordism, aestheticization of landmark CBD buildings was commonly practiced, especially by means of the spare, streamlined, and understated architecture of the so-called "modern movement" that in its heyday flourished in large US cities. In today's dominantly cognitive-cultural capitalism, the deepening impulse to aestheticize the landscape of CBDs is more likely to be projected through highly ornamented structures that tend to emphasize idiosyncrasy and ostentation. Sklair (2001, 2005) has argued, as well, that the bombast of many buildings in the cores of major city-regions today owes something to the self-conception of a brash transnational capitalist class whose members circulate with increasing frequency across the globe from one major bastion of finance and business to another. In any case, the unmistakably upward thrusting and aestheticized structures of advanced CBDs in all parts of the contemporary world are readily identifiable in flagship cases such as One World Trade Center in New York, the Swiss Re Building in London, and La Défense in Paris. Equivalent, if not more conspicuous, illustrations can be found in increasing numbers of city-regions in the Global South, such as Kuala Lumpur's Petronas Towers, the Taipei 101 skyscraper in Taiwan, and the Burj Khalifa in the United Arab Emirates (cf. Schmid et al. 2011).

Nowadays, central-city redevelopment is also typically accompanied by large public and private investment in cultural facilities and other amenities calculated to enhance the attractiveness of downtown spaces to consumers and workers. In the spirit of the new cognitive-cultural capitalism, this sort of redevelopment is not infrequently staged in the guise of Disneyfied or aestheticized set pieces (Relph 1976; Sorkin 1992), as illustrated by the pedestrianized shopping and entertainment plaza that now occupies pride of place in Times Square in New York. In parallel with this trend, CBDs in the current wave of capitalism are also becoming more than ever before prime sites for ostentatious cultural projects such as Disney Hall in Los Angeles, the Shanghai Cultural Plaza, London's Royal Opera House,

or Tokyo's National Arts Center, all of which affirm their individuality by means of assertive symbolic gestures. The striking visual montages of CBDs in major city-regions today serve not only as indications of their upgraded retail, cultural, and business-service functions, but also as cyphers or branding devices that reinforce and dramatize the unique identity of each individual city (Anttiroiko 2014; Dinnie 2011). In this manner, they also function increasingly as beacons that serve to draw in flows of capital, tourist dollars, and highly qualified labor from across the entire globe.

# Residential Gentrification of the Inner City

Over much of the classical period of Fordism, inner-city residential areas in North America and many parts of Europe were dominated by workingclass families who drew their livelihoods from the profusion of blue-collar jobs available in the factories, workshops, and warehouses located in adjacent parts of the city. After World War II, accelerating streams of these jobs were directed from the inner city to the suburbs and beyond, thus encouraging—often with a considerable time lag—the outmigration of blue-collar workers, who could no longer earn an adequate living if they continued to reside in their traditional neighborhoods. This outmigration continues even today, though in contemporary city-regions it is countered by complementary inflows of relatively affluent white-collar workers seeking housing in selected inner-city neighborhoods. The remaining lowincome residents of the inner city accordingly have a further incentive to vacate the area, either because of rising rents and property taxes resulting from these changes, or because they have quite simply been evicted to make way for more prosperous residents (Slater 2006; Wacquant 2008). These are the core outward signs of the gentrification process in contemporary city-regions (the term gentrification was first advanced by Glass [1964] in her pioneering study of some early manifestations of this phenomenon in postwar London). The burning question that many theorists of gentrification have sought to resolve is why white-collar workers began to move in such large numbers after the 1970s from their traditionally preferred zone of residence in the suburbs to inner-city neighborhoods, and what accounts for the timing of the changeover? I argue here that this question can only be effectively answered by reference to the rise of city-regions in the third wave of capitalism.

Several different answers to the puzzle of gentrification have been forthcoming in the literature, including the perhaps dominant response

that invokes Smith's concept of a rent gap or an anomalous depression in the urban land-rent surface in areas close to the CBD (Smith 1979, 1987). While some researchers (e.g., Bourassa 1993) have contested the very notion of rent gaps, others have provided plausible evidence of their empirical existence (e.g., Clark 1988; Hammel 1999; Porter 2010). As early as the 1930s, Hoyt (1933) established that a rent gap existed in the inner city of Chicago, though (crucially) there was apparently no associated process of gentrification at this moment in time. More to the point, other researchers (e.g., Hamnett 2003; Ley 1986) have suggested that the rent gap—whether it exists or not—is neither necessary nor sufficient for gentrification to occur. Where a rent gap is present in the urban land-rent surface, gentrifiers will assuredly seek to take advantage of it, but if we are to account for the full extent of gentrification, we need both a timedependent mechanism that accounts for the initiation of the process in the fading years of Fordism together with some means of accounting for the continuing surge of white-collar workers into central cities even in situations where rising land rents and property values have eliminated whatever elements of a rent gap may have previously existed.

I have elsewhere offered statistical evidence to the effect that much of this puzzle can be resolved by reference to the changing employment patterns of the central city (Scott 2017, 2018a). Thus, on the one hand, the decline of blue-collar jobs in inner cities significantly loosened the competitive grip of high-density working-class housing over nearby neighborhoods after the 1970s; on the other hand, the explosion of high-wage service-sector jobs in central areas since the early 1980s has increasingly put a premium on land in these areas for white-collar settlement. Hamnett (2003), Ley (1986), and Zukin (1982), not to mention Glass herself, have likewise surmised that the explanation for the historical emergence of gentrification can be found in the relatively recent rejuvenation of business, financial, and high-level service employment in CBDs and the concomitant revalorization of accessible inner-city locations for whitecollar residence. To be sure, the incipient gentrification that Glass (1964) observed in parts of London in the late 1950s and early 1960s occurred at a particularly early stage, but central London at this point in time was already well on the way to becoming a global city-region with an abundance of high-wage elite labor. This explanation fits neatly into the wider proposition that the final decades of the 20th century were characterized by a major transition from Fordist to cognitive-cultural capitalism with concomitant radical changes in forms of production and employment in large city-regions. The social zeitgeist of cognitive-cultural capitalism

no doubt also helps to accentuate the gentrification process as a whole, given the increasing disenchantment of many middle-class individuals with traditional low-density suburban existence in contrast to the widening appeal of central cities as foci of cultural lifestyle consumption and associated amenities (Bridge 2001; Clark 1992).

The foundations of gentrification theory have been developed principally with respect to urbanization in North America and Western Europe. In recent years, some analysts have sought to extend the theory to city-regions lying well beyond these areas and have purportedly uncovered instances of gentrification in places as far-flung as Cairo (Abaza 2001), Istanbul (Islam 2005), Santiago (Lopez-Morales 2010), and Seoul (Shin 2009), to mention only a few. Other analysts, most notably Ghertner (2015), have criticized this projection of gentrification theory to city-regions outside the West on the grounds that the political context of land redevelopment in these areas usually differs radically from that which exists in more advanced capitalist countries. Ghertner's specific claims are that the discourse of gentrification cannot be extended to situations involving land-tenure change from nonprivate to private ownership or situations in which evictions are carried out by extra economic force. However, there is actually no compelling reason why these political pressures should be inconsistent with the essential meaning of gentrification as a process entailing the tension-ridden shift of land use from low-income to high-income housing. In fact, complications of these precise kinds frequently attend gentrification processes in the advanced capitalist countries and are acknowledged explicitly as such in published research (cf. Paton and Cooper 2016; Wacquant 2008). I shall take this general issue up again later when I deal with questions of idiosyncrasy and abstraction in the study of city-regions.

# Social Polarization and Informality in Contemporary City-Regions

Cities are invariably marked by social divisions that in turn are inscribed on the urban landscape in segmented patterns of geographic space. In particular, a primary class division almost always materializes in relationship to discrepancies between people with differential command over material assets and/or positions in the division of labor. Divisions of this kind are frequently articulated with variations of race, ethnicity, culture, and so on. This ancillary process of social differentiation is especially associated with subaltern migrant populations who arrive from far outside the mainstream of urban society, and who, by reason of deeply rooted differences from the

majority population, are channeled into distinctive neighborhoods or residential niches (Waldinger 2001).

Streams of poor migrants seeking to escape from destitution, hardship, famine, and other sources of social distress have always been attracted to large and relatively prosperous urban centers. Contemporary city-regions, from Los Angeles to Mumbai and from London to Shanghai, are subject to the same kinds of inflows, but with unique modulations that are becoming increasingly evident as the 21st century progresses. As much as 39% of the current population of Los Angeles is composed of foreign immigrants, many of whom are undocumented workers from Central and South America. Equally, a reputed 37% of Mumbai's population consists of migrants from rural India. A large proportion of these migrants constitute a sort of new servile class or precariat that is sporadically engaged either in the local informal economy or in providing low-wage labor to the rest of the urban community in activities such as casual restaurant work, domestic help, infrastructure maintenance, janitorial services, informal recycling operations, and temporary or part-time tasks in manufacturing—especially in low-grade workshops and factories that systematically contravene employment and environmental regulations.

The specific social forms assumed by this new servile class, and the intra-urban communities that emerge wherever it is present, differ widely from country to country and city to city depending on regulations governing population movements and on the capacity of any given city to absorb new immigrants into its employment structure. In countries where controls on inward flows to the city are few or nonexistent, and where local capacities for the absorption of outsiders into the urban mainstream are severely limited, there is a tendency for the immigrant poor to accumulate in dense, overcrowded shantytowns, such as the barrios, bidonvilles, favelas, etc., that occur in many city-regions of Africa, Asia, and Latin America (UN Habitat 2003). Even in advanced capitalist countries, urban life is severely disadvantaged for low-wage immigrants, though usually to a much lesser extent. In any case, wherever they may be located, and even given their tumultuous variety, communities of poor immigrants and other marginalized social fractions can almost always be characterized in terms of certain general features revolving around social exclusion, spatial segmentation, unstable employment prospects, and political dispossession in the wider context of large-scale urbanization. Variations on this theme can be found in the rundown racial and ethnic ghettos in contemporary American cityregions (Wilson 1987); in the migrant and Roma encampments in many different parts of Western and Eastern Europe, such as the Jungle de Calais where, until recently, several thousand refugees were concentrated (Wanneson 2015); and, of course, in the proliferating shantytowns of cities in the Global South, where poverty and informality exist cheek by jowl with some of the most advanced expressions of modern urban development. The proletarian slums that sprang up in the wake of the so-called "drift to the towns" in 19th-century Britain (cf. Engels 1845) exemplify the same basic trends. Intra-urban social and spatial disadvantage, in short, is continually created and recreated as a direct effect of the dynamics of urbanization in capitalism and is amplified to a high pitch in modern city-regions.

Some contemporary scholars would doubtless argue that the conceptual amalgamation of these assorted urban facets of poverty, social insecurity, and ghettoization in time and space represents a signal act of theoretical overreach. By way of rejoinder to this putative charge, the broad etiological features comprising the magnetic allure of large third-wave cities for the inhabitants of peripheral regions, the formation of a burgeoning subservient or servile class in contemporary urban society, and the persistent segregation of low-wage and minority populations in urban space, suggest that these phenomena raise common and mutually informative conceptual challenges, notwithstanding the enormous diversity of the cultural, administrative, and political logics that help to shape their concrete realization on the ground (Acquistapace 2018; McFarlane and Silver 2017; Roy 2011; Sampson 2012).

#### Postsuburban Mutations

The Chicago School of Urban Sociology painted a picture of the American suburbs in the early 20th century as a homogeneous white-collar residential zone (Park et al. 1925). Yet even at the time when the Chicago School theorists were promulgating their views of the city, the suburbs were assuming a much more complex character. Further, many large metropolitan areas in Europe had followed an altogether different pathway to suburbanization, as represented in the mid-19th century by widespread industrialization of peripheral locations complemented by broad tracts of housing for the working classes. As spatially distended polycentric city-regions were starting to make their historical and geographical appearance in late Fordism, North American suburbs had already reached a stage in terms of social mix and functional diversity such that some analysts were ready to concede that the resonances of the term itself were no longer adequate to the social reality it was supposed to represent. The concomitant and necessary

work of reconsideration was in many ways galvanized by the publication in 1991 of Garreau's *Edge City*, which showed that in addition to residential diversity, many parts of the urban periphery were being extensively colonized by economic and cultural functions such as business, shopping, and entertainment that were more traditionally thought of as being concentrated in downtown locations. In the same year a further influential commentary was presented by Kling et al. (1991), who described the burgeoning community of Orange County within the great Southern Californian city-region as a postsuburban phenomenon that in many ways resembled a metropolis in its own right. Even in these early accounts, the sense of the deepening functional separation of the suburbs from the central city was becoming apparent.

The term postsuburbia is now well established as a way to identify the outer reaches of large city-regions in third-wave capitalism (cf. Phelps 2015; Phelps et al. 2010), and numerous case studies have been carried out in places as far afield as Toronto (Keil and Young 2011), Vienna (Helbich and Leitner 2010), the Dutch Randstad (Bontje 2004), Seoul (Lee and Shin 2011), Santiago (Heinrichs et al. 2011), and Beijing and Shanghai (Wu and Phelps 2008, 2011). In addition, Firman and Fahmi (2017) have shown how, in the Jakarta city-region, a postsuburban polycentric landscape fostered by private developers and local political authorities has tended to steadily override the old *desakota* form of development, originally described by McGee (1991) as a wide and relatively uniform expanse of intercalated farms and houses (see also Hudalah and Firman 2017). These assorted studies all focus with varying degrees of emphasis on the character of postsuburbia as being first and foremost a terrain of widely varying land-use types and densities in sharp contrast to the conventional idea of the suburbs. Housing arrangements in postsuburban areas of modern city-regions range from traditional low-density detached and semidetached residences to high-rise apartment buildings, often clustered around points of access to transport services. In comparison to their former relative social homogeneity, fringe areas now encompass a diversity of population groups. These include not only medium-income individuals such as policemen, firemen, shop assistants, nurses, and middle managers fleeing from the central city to escape from high property values, but also low-wage immigrants and racial and ethnic minorities.

The residential areas of postsuburbia are at the same time systematically interspersed with both major and minor business clusters. The expansive technology and software parks and technopoles, new office complexes, university and college campuses, shopping plazas, sports stadia, conven-

tion centers, airports, and gated communities that thrive on the fringes of the city-region represent advanced elements of this developmental model (Lang and Knox 2009; Scott 1990; Teaford 1997). In many parts of the world, including China and India, new towns form part of this postsuburban patchwork (Datta 2017). These complex and rapidly expanding spaces, extending ever more insistently outward, are increasingly complemented by major recreational and tourist attractions with global appeal, as exemplified most forcefully by the Disneyland parks and resorts (descendants of the original Disneyland in suburban Los Angeles), which have been established in Marne-la-Vallée, Hong Kong, Shanghai, and Tokyo. In addition, the sprawling suburban areas of city-regions in the Global South frequently comprise extended squatter settlements housing large numbers of poor people engaged in informal production and trading activities (Davis 2006; Gilbert 2018).

As the economic and social shifts brought about by cognitive-cultural capitalism have penetrated into the urbanization process generally, it is evident that this new postsuburban phenomenon represents an increasingly complex and assertive counterweight to the central city. The fringe areas of the city-region no longer function—if they ever did—simply as socially homogeneous dormitory settlements, but have become foci of variegated social development and economic growth in their own right. Perhaps nowhere are these features more evident than in the city-regions of Southern California and the San Francisco Bay Area, where postsuburban communities such as Orange County and Santa Clara County now rival and in certain respects surpass central-city areas as full-blown, multidimensional urban excrescences.

#### Questions of Governance and Politics

#### Context and Overview

One of the key themes in the literature on large-scale urban regions concerns the geopolitical constitution of these entities and their relationship to the reterritorialization of the state (e.g., Etherington and Jones 2018; Jonas and Moisio 2018; Jonas and Ward 2007; Le Galés and Lorrain 2003; Lidstrom 2018; Purcell 2007; Tewdwr-Jones 2000). There is a tendency in much of the literature to expatiate on this theme by invoking neoliberalism as a basic driving force behind the rise of city-regions. "Neoliberalism," however, is a highly elastic and patently overworked term whose meanings

vary widely from one author to another. The term has its uses insofar as it signifies a shift (relative to Fordist-Keynesian systems of regulation) in the broad policy orientations of governing entities away from redistribution and indicative economic planning to private ownership, competition, and deference to the demands of business. That said, any meaningful application of the term to urban situations must be very much more specific about the detailed mechanisms in play if it is to pinpoint the effects of policy on the growth and development of city-regions. Two points of departure in pursuit of this more disciplined approach can be identified. First, an irregular but unmistakable process of political rescaling is currently under way in many countries, with the consequence that city-regions are taking on new significance as fountainheads of power and influence (Brenner 2009; Herrschel and Newman 2002; Scott 1998). Second, and as a corollary, city-regions everywhere are sites of continuing experiments focused on attempts to build effective frameworks of governance in the effort to manage their own internal affairs and to enhance their growing influence as both nationally and globally significant actors. These two matters of contention are now scrutinized in turn.

# Rescaling and the Span of Political Authority

In an early and provocative attempt to theorize the city-region, Ohmae (1995) proposed that in a globalizing world, local economic dynamism and prosperity would be best achieved if traditional nation-states were to give way to a system of self-governing regional divisions analogous in size to, say, Luxembourg or Singapore. Whatever theoretical merits this argument may have, it obviously has not made much progress in practical terms, given the continued political ascendancy of national states over their component geographic units. Even so, in a number of different countries today, decisive expansionary shifts can be detected in the spheres of political decision-making and maneuverability available to city regions. These shifts are sometimes initiated by central governments, and on other occasions they are secured by local political coalitions, but they all point more or less consistently to attempts to readjust the spatial balance of national affairs and to promote effective forms of subsidiarity—that is, the relegation of collective decision-making and action to the lowest efficient level. Subsidiarity here refers not only to economic development and competitiveness policies, but to the appropriate calibration of social administration relative to local needs and problems.

Rescaling initiatives like these are often associated with programs of local government reform. A widely cited case is the establishment of the megacity of Toronto in 1998, formed by the amalgamation of seven adjacent municipalities around the northern edge of Lake Ontario (Kantor and Nelles 2015; see also Courchene 2001). Moisi (2018) refers to recent trends in Finland, where the emergence of city-regions is accompanied by local demands for a more explicit and formal voice in national political affairs. In South Africa, various political agencies in the Gauteng city-region, which comprises a loose cluster of urban centers focused on Johannesburg, are actively seeking to build institutional conditions that will allow it to consolidate its status as the premier economic hub of Africa (Cheruiyot 2018; Greenberg 2010). Even Nairobi in Kenya has proclaimed its intention to build the groundwork necessary for it to play a role as "a world-class city-region" (Myers 2015). Unsurprisingly, the massive de facto city-regions focused on Beijing, Shanghai, and Guangzhou-Shenzhen in China have also been moving toward more formal political self-assertion—much encouraged by the Chinese central government—by means of strategic bundling of infrastructural investments and a search for overarching mechanisms of coordination (Bie et al. 2015; Wu 2017; Zhao et al. 2017). Similarly, the British government has been engaged for almost two decades in attempts to establish dynamic city-regions in the north of England and hence to promote the area's economic development and productivity potentials through enhanced agglomeration economies. A further important goal of these attempts is to build a counterweight to offset the currently overwhelming position of London and the southeast in the space-economy of England. These objectives were originally formulated as the Northern Way Agenda initiated in 2004, and were reformulated in 2010 when the Agenda was replaced by the Northern Powerhouse program, with the principal focus of revitalizing the cities of Manchester, Liverpool, Sheffield, Leeds, Hull, and Newcastle-upon-Tyne by means of new transport investments, the promotion of scientific and technological research, and the devolution of powers (Harrison 2010). Devolution itself is secured by means of customized "city deals" allowing for greater local control over business support, labor training, housing, and public transport (Etherington and Jones 2016, 2018). The recent establishment of a Greater Manchester city-region with a single elected mayor represents an important symbolic moment in the unfolding of the program. These exemplary cases of rescaling and self-affirmation are only a small sample of the many different and essentially ad hoc undertakings now proceeding around the world to capture the latent rewards of institution-building at the cityregion level, even if some of these undertakings are also complicit in reproducing the deep social divides that unfailingly run through urban society at large (see, for example, Etherington and Jones 2016, 2018). Conjointly, the motivation behind much recent institution-building in city-regions is ultimately rooted in a powerful logic of subsidiarization that sits well with the mosaic-like geography of contemporary capitalist society. Whether or not this trend enlarges the sphere of democracy and the right to the city remains a moot point depending precisely on the specific forms of political community that are put in place in any particular instance (Purcell 2007).

#### Structures of Governance

No matter how well or poorly any given city-region may be represented in an overarching political identity, the predicament-laden spaces that constitute its internal fabric call incessantly for remedial action as well as for collective decision-making with respect to strategic choices about developmental opportunities.

At the best of times, urban governments have limited tools and resources at their disposal for confronting internal problems and failures, but in the case of complex, overgrown city regions, the weaknesses of overall social management are especially severe. This challenge is exacerbated by the persistent tendency to balkanization of municipal government in probably the vast majority of city-regions, not only as a legacy problem, but also as an effect of the often-haphazard lateral expansion of the urban periphery where adjacent municipalities are simply absorbed into the widening geographic orbit of the city-region. The political geography of city-regions, then, is typically composed of multiple municipal governments that have strong incentives to focus on their own localized interests at the expense of the wider regional community, and this leads in turn to dysfunctional forms of intermunicipal competition. An argument has sometimes been offered on the basis of the so-called Tiebout hypothesis that the balkanization of the internal space of the city-region offers positive advantages to the citizenry at large because it potentially generates diversity in regard to the supply of local public goods and the quality of neighborhood life, and hence opens up a wide range of alternatives as to choice of residential location (Tiebout 1957). To be sure, different municipalities in the wider city-region do in practice offer different bundles of consumption possibilities, and individuals do make conscious decisions about choice of community. The necessary qualification to this observation, however, is that the implied semblance of politically balkanized intra-urban space to a well-stocked supermarket of housing and environmental options is well beyond the bounds of credibility. In the first place, options as to residential choice in contemporary cities are severely constrained not only by income but by issues of race, ethnicity, social class, and the need for access to relevant employment. In the second place, the many different exclusionary practices that intra-urban communities can and do utilize to discriminate against unwanted types of neighbors ensure that peculiar types of segmentation and distortion prevail in spatial housing markets. A consumer sovereignty model á la Tiebout of the formation of intra-urban space is far from any reality on the ground.

One possible means of rationalizing the governance of city-regions might be to concentrate all political authority into a single consolidated directorate. This solution would eliminate undesirable effects of balkanization, but it would also in all likelihood introduce inefficiencies into administrative affairs, given the diverse scales at which different urban services and public goods can achieve allocative optimality. In any case, any attempt to centralize the governance of the city-region is apt to face considerable resistance from those with vested interests in prior, more disaggregated arrangements. An alternative and probably more politically workable scheme of governance for city-regions can be found in hierarchical and/ or federal contractual structures of organization, with different decisionmaking units taking on administrative responsibility for the tasks most suitable to their capacities and range of spatial control (Purcell 2007). This approach is actually one that is in various stages of realization in many cityregions, and it has the advantage, too, of being able to build on pre-existing disjointed patterns of municipal geography. Possibly the most advanced case of an actual structure of this sort is represented by the Paris region, with its 1,295 communes and arrondissements and 8 départements, under the overarching umbrella of the Région Ile de France (cf. Bourdeau-Lepage 2013; Kantor et al. 2012). The latter organization is responsible for overall matters such as regional planning, economic development, education, and culture, and has an elected council chaired by a president. In addition, programs of cooperation between individual communes are regulated by socalled EPCIs (établissements publics de coopération intercommunale), roughly equivalent to councils of government in the United States, and scores of these bridging entities are currently active in the Ile de France.

Legal instruments that provide for intermunicipal collaboration, such as the French EPCIs, are of increasing importance in city-regions everywhere, not only because they make it possible to optimize the scale of local

service and public goods provision, but because they provide a mechanism for internalizing the externalities that inevitably flow across boundaries dividing one municipality from another. Groups of municipalities within city regions are accordingly turning more and more to these instruments to provide services in such matters as water supply, fire protection, policing, garbage collection, pollution control, public health, and the like. It is probably fair to say that no actual city-region in the world today has succeeded in constructing a stable, durable, and comprehensive framework of governance, no matter what its organizational form. Still, an approximate template is occasionally detectable in the more successful efforts that have pushed in this direction, namely—and in sharp contradistinction to any unitary arrangement—a conglomerate structure made up of loose hierarchical relationships complemented by assorted crosscutting organizations wherever these can significantly enhance operational effectiveness. There is no compelling reason, moreover, why a well-designed structure of this type could not also enhance the democratic assets of the city-region.

### Rescaling and Governance in Perspective

As Jonas (2013) observes, the dynamics of the city-region as such reside fundamentally in the intertwined effects of economic geography and geopolitics. On the one side, much of the city-region's substantive character is both directly and indirectly derived from processes of economic production, the division of labor, and the social reproduction of the workforce; on the other side, its internal organization and growth are regulated by political institutions in the context of endemic social contestation over the costs and benefits of this regulation.

As already indicated, the political institutions of third-wave capitalism have tended increasingly to shift into a register that is biased toward market mechanisms rather than one that sees markets as requiring Keynesian—welfare statist intervention. One of the effects of this changeover in the operational logic of governance at both the national and local levels has been a widening gap between high- and low-income individuals as redistributive policies have been increasingly jettisoned. Another major effect is manifest in the increasingly project-oriented approach (or "entrepreneurial governance" as Harvey [1989] terms it) of local policy-makers to ameliorative and reconstructive actions in the urban land nexus, and especially their proclivity to work with business entities in private-public partnerships devoted to such ends as the construction of infrastructure, the rede-

velopment of land, and the provision of services (e.g., Bonneval and Pollard 2017; Guironnet et al. 2016; Scott 2018b). Tax-increment financing, for example, is a common but essentially regressive planning procedure of this type throughout city-regions in North America and Western Europe. This procedure is based on the assignment of any tax increases that arise from private-public redevelopment activities to the private partner (Weber 2015). It is worth noting that the new landscape of collective action in city-regions also includes an ever-burgeoning body of organizations based on nonprofit and voluntary principles of management. These organizations focus on a wide gamut of social needs but are especially critical in addressing welfare issues that lie beyond the scope of governmental intervention in the post-Keynesian, post-welfare-statist city-region.

Economic geography is one crucial element underlying the rise and efflorescence of city regions, but their ultimate viability can only be secured if a basic groundwork of administrative and political arrangements as described above is also in place. As McGuirk (2007) has remarked, "cityregionalism is not self-fulfilling." But neither, by contrast, is the political sufficient in and of itself to generate or sustain the development of cityregions (Harding 2007). The precise roles of economic geography and geopolitics in this regard depend strongly on local and national context, but a preliminary synthetic judgment may be proposed by means of an appeal to arguments more fully articulated by Scott and Storper (2015). On the one hand, the genetic and structural roots of city-regions in capitalism revolve around the agglomeration of firms and households and the concomitant formation of intra-urban space as different social and economic actors sort themselves out into a polarized web of land uses. On the other hand, we must make provision for the collective management and coordination of this space, because individual firms and households, under capitalist rules of order, can never command the political authority necessary to correct the socially threatening failures and shortfalls that are likely to be generated by the dense collective presence of so many interacting agents in one place. As a corollary, the governance capacities of the city-region are typically focused on remedial action to prevent implosions of the urban land nexus and on strategic engagements in the spatiality of the city with the goal of reinforcing the social compact and securing the present and future material well-being of the citizenry conceived of as a sort of aggregate entity. National political agencies, as well as purely local organizations, make important contributions to this broad effort, as exemplified by the cases of Britain and China, where central governments have sought in recent years to improve the operating capacities of city-regions

to enhance their internal socioeconomic cohesion and to boost national development generally (Jonas and Moisi 2018; Wu 2017).

# City-Regions as Objects of Theoretical Enquiry: Realism versus Abstraction

In recent years, an insistent line of critique in urban studies has pushed vigorously on the idea that every city is unique and that therefore any effort at theoretical abstraction (or, in the more alarmist language of the critics, "universalization," with its undertones suggesting machinelike empirical invariance) is doomed to failure. The concomitant and unduly cautious focus on the particular has traditionally been associated with classical empiricism, but has recently been rehabilitated in alternative guises by a number of urban analysts, most notably those of a postcolonial persuasion (e.g., Robinson and Roy 2016). Advocates of this way of thinking are also prone to dismiss the concept of the city-region as a maneuver that assigns an arbitrary privilege to a few large urban areas while demoting the mass of "ordinary cities" to the status of residuals. In the words of Robinson (2006), the city-region idea is no more than a "regulating fiction," a distracting theoretical distortion that circulates through academia only on account of its supposedly (but spurious) global significance (cf. Bunnell and Maringanti 2010). Postcolonial scholars are also much given to the theme that urban theories hatched in the Global North are congenitally inapplicable to cities in the Global South by reason of their alleged Eurocentric biases (Roy 2009, 2011). Some analysts then go on to claim that only "provincialized" or geographically segmented accounts of urbanization can aspire to intellectual validity (Sheppard et al. 2013). Certainly, postcolonial and other scholars are quite correct to point to the arrant neglect of non-Western cities and viewpoints in urban studies hitherto. However, in the spirit of the entire preceding discussion, I propose that city-regions—in point of fact, all cities—can indeed be meaningfully conceptualized in generic terms by reference to a common set of innate structural conditions whose roots lie in agglomeration processes and the interactive logic of the urban land nexus. Even so, the urban process is also always intertwined with a local historical and cultural environment, and so while cities as a whole can certainly be problematized as a distinctive class of theoretical objects, they also exhibit great differences from one another in substantive terms across time and space. Three main points must now be made.

First, there can be no denial that Eurocentric bias is identifiable in many

different statements about the city emanating from the Global North. That said, it is manifestly indiscriminate to assert that such statements are congenitally contaminated in this way. The appropriate response to this facet of the postcolonial critique is not so much a labored disquisition on the disabling character of research programs that insist as a matter of a priori dogma on the need to provincialize theoretical enquiry, as it is simply to issue an invitation to relevant scholars to refrain from treating "Northern" theories as though they were carriers of a disease or an infection and to turn their efforts instead to concrete exercises of disconfirmation. Equivalently, as Peck (2015) has suggested, any test of urban theory (such as the proposition that agglomeration economies play a decisive role in the genesis of the city) must concentrate on the theory's claimed explanatory capacities rather than its geographic point of origin.

Second, and in contradistinction to what ordinary-city theorists see as an illegitimate privileging of one particular type of urban phenomenon, I propose that city-regions do in fact have strong identifying qualities that mark them out as posing special and legitimate research questions. Thus, city-regions play an increasingly active role as economic and political actors on the world stage; they represent critical articulations of production, trade, and financial relationships that mediate between their immediate national economies and the global system as a whole; they are national and, increasingly, international centers of cultural production, innovation, and dissemination; they are cynosures of global migration patterns; they are a prime focus of state rescaling strategies; and their intrinsic gigantism means that they face unique challenges in constructing viable frameworks of governance. There is nothing ordinary at all about these entities, and there is much about them that calls for insistent generalization. By contrast, the ordinary-cities program refuses as a matter of principle to go beyond matters of substantive specificity, and, as Smith (2013, 2,300) has pointed out, seeks only to understand cities "in an ideographic, provincial, nominalist, and comparative sense" (see also Van Meeteren et al. 2016).

Third, in no manner does attention to the commonalities of city-regions as a conspicuous kind of urban category lead to inevitable disregard either of the differences between them, or, indeed, of other kinds of cities. A strong commitment to generalized theoretical accounts of labor migration and resettlement in large cities, for example, is no impediment to the recognition of such disparate empirical cases as rural to urban migration in 19th century industrial England; the massive flows of documented and undocumented low-wage workers from Asia and Latin America into the city-regions of 21st-century America; the migration of laborers from

west to east in modern China (with its unique *bukou* system of control); or the more anarchical shift of people from agricultural villages to large cities in the Indian subcontinent. The empirical integrity of these individual cases remains undamaged even as they can also be characterized in terms of general models of rural-urban and interurban migration (e.g., Chiswick and Miller 2015). Similarly, in no way does a concern for generalization necessarily hinder the recognition of whatever kinds of provincial diversity may or may not exist in the way these matters fall out in empirical reality (North/South, Asia/Europe, democracies/dictatorships, Hindu society/Muslim society, etc.).

A final important comment must be made concerning the strong inclination of postcolonial scholars to assert that any attempt to build a theoretical understanding of urbanization processes is nullified by the allegedly watertight differences between cities in the Global North and Global South (cf. Marx and Kelling 2018). "Northern" theories are judged by many of these scholars to be not only irrelevant to Southern cities, but positively harmful to any effort to understand them (Roy 2009, 2011). In contrast to this view, I have tried to demonstrate above not only that this rigid compartmentalization of urban phenomena is unwarranted, but that there cannot by precept be a conflict between ontological realism and theoretical abstraction. We are justifiably on our guard when theories fail to pass critical empirical tests, but by the same token we must take care to avoid the gratuitous judgment that empirical diversity is necessarily a sign of theoretical incommensurability. Nevertheless, postcolonial scholarship, shorn of some of its more egregious theoretical excesses, serves an important function in bringing into the sphere of urban research questions about the cities of the Global South. Studies such as the ethnographic inquiries of de Boeck and Plissart (2004) on Kinshasa, or the biopolitical analysis of Johannesburg offered by Mbembe (2004), or the "story-telling" approach of Simone and Pieterse (2017), for example, are valuable not only for their own sake, but for any potential revisions of urban theory that they may suggest.

### **Epilogue and Exit**

In the present paper I have set out to review, synthesize, and enlarge on a mass of ideas about city-regions within the frame of reference of urban theory as a whole. City-regions have emerged in the 21st century as spatial entities with unprecedentedly massive and complex substantive content

and a hitherto unmatched spatial footprint. Some of them are equivalent in size to a small country. As such, they comprise widely ranging tracts of contiguous and semicontiguous built-up areas within a regional framework that may also incorporate outlying urban centers. Their fate is intimately bound up with 21st-century capitalism, which also, through diverse intermediations, stamps them with many of their most distinctive social and economic features. City-regions are now materializing at a rapid pace on all five continents, all the more so as their growth is to a large extent powered by expanding global networks of trade and interaction. All that being said, city-regions are replete with severe social and economic problems, including stubborn class divisions that always threaten to break out into open social disturbances.

In pursuit of an even-handed investigation, I have paid special (but by no means exclusive) attention to the roles of economic geography and geopolitics in the historical and geographical eventuation of city-regions. I have sought to assign to these two bodies of thought their proper explanatory place in this analysis, not on account of some arbitrary urge to give them equal weight, but out of a concern to decipher the distinctive but variable role that each of them plays in forging city-regions as concrete empirical phenomena. In summary, we can say on the one hand that economic factors exert a critical influence on the genesis and internal organization of the city-region via their expression in agglomeration processes, transactional relationships, and the valorization of intra-urban space; on the other hand, political factors secure the viability of the city-region by means of collective action focused on strategic management and steering of the urban land nexus. In the order of history, the economic and political dimensions of the city-region are inextricably intermingled with one another; in the order of analysis, their operational modalities and effects can be seized in terms of ceteris paribus propositions that pinpoint particular developmental mechanisms. Once these general points have been acknowledged, it is essential to reaffirm, once again, that city-regions are always at the same time conditioned by idiosyncrasies related to local material, social, and cultural circumstances. However, whereas it is always correct to affirm that difference is an essential property of city-regions as a class, it is never adequate to take this as the culmination of the conscientious analyst's quest.

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## PART II

# Latin America

Opening, Globalization, and Crisis

## Global Cities in Peripheral Countries

Argentina in the New International Labor Division

Ulises Girolimo and Patricio Feldman

The *global city* concept, introduced by Saskia Sassen in her book *The Global City: New York*, *London*, *Tokyo*, originally published in 1991 and developed in her later work, stimulated the proliferation of studies and research on multiple dimensions of the urban phenomenon. This concept is based mainly on the growth of financial markets, the expansion of international trade in services, and new flows of foreign direct investment that modify the existing urban hierarchies (Sassen 2001, 2003, 2007a). There is a "new form of organization of economic activity, with a central role in modifying the general conditions of accumulation, work and social reproduction" (Cuervo 2001, 119).

This paper takes a critical approach to the *global city* concept from a Latin American and Caribbean (LAC) viewpoint. It begins by reflecting on the theoretical contribution of the global city approach in the analysis of the LAC urban situation and the particularities these cities show when they are inserted into a globalized and increasingly *informational economy*<sup>1</sup> (Castells 1999). Later, it identifies the main characteristics of the positions occupied by countries, regions, and cities in the new economy. It points out three experiences that represent different ways that LAC cities are inserted in that new economy: (1) as *global cities* that attract financial capital, provide specialized services, and develop cutting-edge technology, (2) as *knowledge* 

cities that become the innovative environments of the 21st century, and (3) as enclaves that provide the lowest value-chain services in the informational development mode. The analysis focuses on the Argentinian case, specifically Buenos Aires city, which different analysts consider to be a global city, where informationalism² is strongly developed, and a model of urban governance characterized as urban entrepreneurship was established (Harvey 1989) and configured as an innovative environment (Castells and Hall 1994) that concentrates the development of technological and innovative activities. Finally, the paper describes the main challenges for cities in the context of new technological trends developed in the last decade, and outlines some considerations to design an alternative approach different from the dominant urban governance model.

### Global Cities: An Approach from the Periphery

#### The Discussion around the Global City Concept

Since the late 20th century, cities and regions are being modified by the reciprocal action of three interrelated processes described by Castells and Hall (1994): (1) a technological revolution based on information and communication technologies that generated deep transformations of all aspects of human life; (2) the shaping of a global economy that structures all economic processes on a global scale, working in real time; and (3) the emergence of the informational development mode, a model of production and economic management that bases its productivity on the capacity to generate and process information and knowledge.

Multiple studies agree about the importance of cities in the emergence, development, and consolidation of these processes (De Mattos 2010; Finquelievich 2016; Ciccollela and Mignaqui 2009; Castells 1999). The new means of production and innovation required by the new economic phases are created in cities. Cities and their regions compete with each other to insert themselves favorably into the world economy.

Sassen (2001, 2003, 2007a) has built one of the most influential theoretical approaches to analyze how the relationships between the local (urban) and global scale have been reshaped. She considers that the growth of the international financial markets, the expansion of international trade in services, and the new flows of foreign direct investment have produced changes in the existing urban hierarchies. The spatial dispersion of production contributed to the emergence of nodes that centralize the provision of services for the management and regulation of the economy.

These nodes are defined by Sassen (2001) as *global cities*, those that function as command points for the organization of the new economy. These are the geographic spaces in which the main financial centers and specialized services are located. Technological centers such as Silicon Valley also constitute strategic spaces of management of the global economy (Sassen 2007a). Within this framework, it is necessary to open a debate: What is the theoretical contribution of conceiving Latin American cities as global cities? What is the potential provided by this theoretical perspective for understanding the LAC situation? Is there any alternative concept?

Pradilla and López point out that the global city concept used to describe some LAC cities dilutes the existing asymmetries between the center and the periphery. These cities have some characteristics that radically differentiate them from the global cities of the developed world: "their location in terms of economic growth dynamics, negotiating power in the global context, provision of infrastructure and equipment, income level per inhabitant and quality of life of the population, [are] substantially different" (2007, 195).

According to Sassen's definition (2001), at least four specific attributes related to the notion of global city can be recognized: (1) they are command centers of the global economy;<sup>3</sup> (2) they are the privileged locations for specialized services that currently play a dominant role in terms of global economy; (3) the main technological innovations are located there; and (4) markets for specialized products and services are developed there. Pradilla (2008) indicates that the only resemblance between the global cities of the developed world and the global cities of the periphery is the population dimension and the urban extension. If we consider the attributes mentioned by Sassen (2001), the differences are substantial. No LAC global city has command power over the pillars of the world economy. Also, there is no clear evidence of a process within the peripheral cities of servicing the economic structure.<sup>4</sup> Although specialized services and the finance sector grew steadily in LAC cities, the level of development continues to be lower than central economies. LAC cities have some significant weak points related to technological innovation and its markets: technological dependency, lack of adaptation and technological innovation for local development, and scarcity of human resources oriented to scientific and technological development, among other issues.

Some information to support these statements is presented below. When considering the main technology-based companies in the world and analyzing their correlation with the cities where their head offices are located, it is clear that strong asymmetries persist between the central and outlying economies (fig. 6.1).

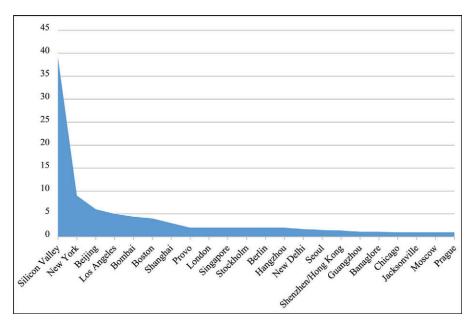


Fig. 6.1. Cities according to proportion of technology-based companies valued at \$1 billion, 2014–2015 (% of the total number of companies). *Source:* My own elaboration based on G. Tellis, "2016 Startup Index of Nations, Cities (Startups Worth \$1 Billion or More: 'Unicorns')."

No LAC global cities are listed in the ranking. Most global cities identified by Sassen are located in North America, Asia, and Europe (London, Beijing, New York, Los Angeles, Berlin, Moscow, etc.). If we consider the ranking of companies with the highest market capitalization in the world (fig. 6.2), the asymmetry is even more accentuated:

The companies with the highest market capitalization in the world are distributed between the United States and China, which are competing to dominate the First World's economy. In that scramble, the North American supremacy continues in force. However, as Ribeiro Costa and Da Motta e Albuquerque (2016) mentioned, while in 2005 only 16 of 500 of the world's largest global corporations were Chinese, in 2014 there were 95. Internet and financial services are the most outstanding activities in the world economy, but none of them originate from a LAC global city. If we consider the ranking of the main global cities of the world, prepared by Global and World City Group in 2018 (fig. 6.3), the data confirm the same tendency: a significant distance between the global cities of the center and the global cities of the periphery. Without discussing the ranking method-

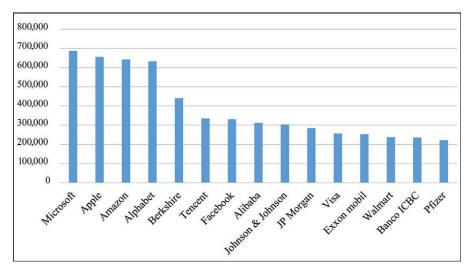


Fig. 6.2. World's highest market capitalization companies (2018). *Source:* Girolimo (2020), based on *El Pais* newspaper, with data from Reuters, Bloomberg Web, Corporate Information, and Infobolsa.

ology, it is clear that in terms of economic activity, human capital, cultural diversity, and circulation of information, the asymmetries are remarkable. In Latin America, only Buenos Aires is one of the 25 main global cities, which allows us to make three comments.

First, LAC global cities differ considerably from the global cities of the developed world, in terms not only of economic development and command power of the global economy, but in a variety of indicators: social, cultural, educational, technological, and political. Integration into global value chains—which reinforces preexisting asymmetries—responds to multiple factors: weakness of national innovation systems, lack of public and private investment in R&D, lack of leading-edge transnational corporations, strong internal inequalities, high external vulnerability, and low educational quality. The asymmetries are expressed not only in the hierarchy in the global economic scale, but in the different levels of human development.

Second, the LAC region continues to lag behind in the development of a techno-economic paradigm linked to information technologies. Castells (2001) used the notion of *black holes of informationalism* to indicate regions that are excluded from the centers of command of the information networks. However, LAC is not the most backward region in this matter. Other

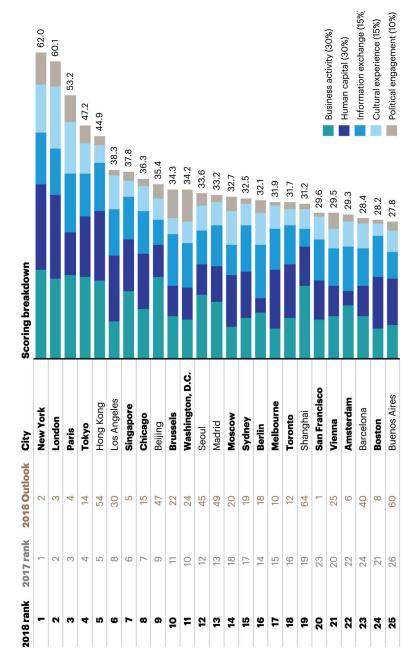


Fig. 6.3. Global cities rank. Source: A. T. Kearney 2018. Global Cities Report. Available from https://www.kearney.com/global-cities/2018

continents, such as Africa and some regions in Asia, have a lower level of development. Therefore, it is not an entirely excluded region, but rather a region subordinated to global financial, economic, and political power. In fact, Latin American global cities are among the top 70, which places them below the global cities of the developed world, but above other global cities in the periphery, such as Cairo, Doha, Ho Chi Minh City, and Nairobi.

Third, it is possible to assume that the technological innovation gap is closely linked to structural factors rather than the position that LAC global cities occupy in the global networks of information society. It means that there is deficit in the process of globalization, but a number of difficulties in production, economic, and social structures. Some of these structural shortcomings are associated with the weak synergy among the social actors of innovation: enterprises, universities, civil society associations, and local governments. If the concept of global cities proposed by Sassen (2001) does not fully apply to cities in peripheral countries, why are we still using it? This decision can be justified by four factors.

- 1. As mentioned by De Mattos (2006), the concept of global cities allows us to illustrate the existence of transnational productive networks that are developed and inserted in the different territories. This global network of corporations is usually located in the major urban centers of the world. It is possible to find these global networks in the large urban centers of the periphery, despite the fact that, as Brenner and Theodore (2002) remark, the hierarchical order on the global scale does not place them as command centers.
- 2. The existence of global cities reveals a transformation of capitalist accumulation: a change from welfare industrialism to informationalism. Some authors, such as Sassen (2001), De Mattos (2006), and Bell (1976), point out that this is the consolidation of the service sector as the dominant economic activity. Others, such as Zukerfeld (2008), identify the emergence of a fourth sector different to industry, agriculture, and services: the informational sector. The key point of both perspectives is that transformations in the development mode have a significant urban impact. Services are the structural strand of the urban economy, displacing industrial activity to the margins. In Latin America, this phenomenon is in line with a gradual deindustrialization process that has deepened socioeconomic problems.
- **3.** The great urban transformations of recent years have consolidated cities as polycentric spaces, crossed and intersected by multiple networks and characterized by processes of growing *metropolitanization* (Veltz 1997). This phenomenon is not typical of a single region or country; it is a transnational process.

**4.** The concept of the global city explains some transformations in the labor market that have some common characteristics in both central and peripheral countries: a trend toward reductions in formal employment in the industrial sector; an increase in the precariousness and flexibility of labor relations; and the growth of the informal work sector, which has a negative impact on the labor market, especially for women and young people, among others. These transformations have a significant impact on cities as they reproduce inequalities in income distribution. The global cities of Sassen (2001) are, first and foremost, unequal cities.

#### Latin American Global Cities

The similarities of global cities reflect a global tendency of increasing inequality as manifested in urban spaces.<sup>5</sup> Inequalities exist between socioeconomic levels and social classes, but also between regions, cities, and countries. Inequalities are expressed in a sociospatial division between those that manage to successfully insert themselves in the global flows of informationalism and those who remain in the old industrial development mode.

This spatial organization of the urban economy is evident in the predominance of economic activities such as finance, services, and the production of informational goods,<sup>6</sup> and the devaluation of other sectors of the economy, such as certain sectors of industry and services that produce little added value (Sassen 2001, 2007a).<sup>7</sup>

This new sociospatial order concentrates wealth in some urban areas, and consequently it increases the obstacles in accessing central spaces for people who remain marginal to financial flows and specialized services. Sassen (2007a) indicates that high prices and profit levels in the internationalized sector and its auxiliary activities make it increasingly difficult for other sectors to compete for urban space and investments. Some of the main characteristics of global cities in the central countries, such as London, New York, Paris, Tokyo, or Los Angeles, are also found in peripheral global cities such as Bangkok, Taipei, São Paulo, Mexico City, or Buenos Aires: a growing polarization between certain areas of the cities, social classes, and habitability spaces; the presence of multinational companies and technological infrastructure; and also meeting spaces between workers of different nationalities and cultures, among other factors. In Latin America, based on Sassen (2001) and Demographia World Urban Areas (2017), we identify seven LAC global cities: San Pablo, Mexico City, Bue-

City	Country	Population	Position in world ranking
São Paulo	Brasil	20,850,000	10
México City	Mexico	20,400,000	12
Buenos Aires	Argentina	15,355,000	20
Lima	Perú	11,460,000	31
Rio de Janeiro	Brasil	12,070,000	29
Bogotá	Colombia	10,705,000	36
Santiago de Chile	Chile	6,410,000	63

TABLE 6.1. Main Latin America Global Cities

Source: Compilation based on Sassen (2001) and Demographia World Urban Areas (2017).

nos Aires, Lima, Río de Janeiro, Bogotá, and Santiago de Chile (table 6.1). This selection is based on four fundamental criteria: (1) the population scale of urban agglomerations—they are among the 100 largest in the world; (2) their insertion in global flows of capital, knowledge, migration, technology, trade, and world production; (3) the degree of development of informationalism and the information production sector; and (4) their centrality in trade, production, and consumption flows at the regional level.

São Paulo, Buenos Aires, and Mexico City have higher development in the four mentioned indicators, which reveals the existence of strong asymmetries among the global cities of the region. However, despite certain differences, they have some common characteristics:

- They are framed in *metropolitanization* processes: exponential population growth, concentrated in major urban centers and their peripheries (De Mattos 2001). The essential feature of this process is disorder: the lack of urban land regulation, a high concentration of population, the advance of the urban frontiers to the surrounding land, etc.
- They are part of the *transnationalization* of production processes, capital, work, information, tourism, and trade, which expands the geographical scope of their interactions (Soja 2006).
- They are multimodal and polycentric. The border between the urban and nonurban region has been dissolved, and urban concentrations are formed away from the predominant major centers. Regarding this process, some authors (Soja 2006) use the concept of *city-regions*.
- They are developed in the context of sociospatial segregation processes, which facilitate social polarization between the high-

income population and the most vulnerable social sectors as expressed in the spaces where they live (Soja 2006; Sassen 2007a; De Mattos 2010).

- Urban land use is weakly regulated, increasing the housing deficit due to the increasing valuation of urban land in certain areas of the city, as promoted by real estate speculation (Pírez 2013; Maricato 2010).
- They are part of an asymmetric economic international order, in which the economic and political role of Latin America is subordinated to that of global economic powers; they play a secondary role in the global economy in terms of industrial production, trade, capital flows, and technological innovation (Pradilla 2008).
- They are unequal societies with structural problems linked to high levels of poverty, marginality, violence, and social, racial, and ethnic exclusion (De Mattos 2010; Pradilla 2008; Pírez 2014).
- It is possible to identify in these cities a process of *urban entrepre-neurship* (Harvey 1989) in relation to an urban management model that seeks to position cities as centers of capital attraction (financial, property, technology, etc.) oriented to urban development. Urban entrepreneurship as a form of urban management transforms cities into attraction poles for speculative capital, which modifies regional planning (Harvey 1989) and dismisses the main tools for regulating urban development (Pradilla and López 2007).
- Although these cities are inserted in the capitalist mode of production, they have characteristics such as the poverty of the original populations, accelerated urbanization, late industrialization, early deindustrialization, outsourcing, labor informality, an informal land and housing market, structural unemployment, violence, continuing poverty, and marginality, among others (Pradilla 2014).

# The New International Division of Labor: What Is the Role of Global Cities from Latin America?

#### The New Division of Labor

Castells (1999) described the global economic structure as a stable architecture and a variable geography. The architecture of the global order is an asymmetric power structure based on three major centers (Europe, North America, and the Asian Pacific) and multiple peripheries that depend on

the centers; they are economically poor and socially excluded. This composition of the global order has varied throughout the 21st century, but it has not mutated enough to say that a new architecture of global power exists. Hegemonic regions continue to exercise leadership, while marginalized areas still lag behind.

The new international division of labor generated a variable geography in which countries, regions, and cities are inserted into the global economy in terms of four variables: (1) producers of high added value, linked to informationalism sources (technology, information, and knowledge); (2) large-volume producers, based on the reduction of unit costs and economies of scale; (3) producers of primary goods or derivatives of natural resources; and (4) redundant producers, who are reduced to devalued sectors of the economy (Castells 1999, 174). These positions are not associated with specific countries. Castells points out that "all countries are penetrated by the four positions indicated because all networks are global in their reality or in their objective" (1999, 174). This means that marginalized areas are linked to high-value producers in some proportion, and large centers of wealth production have segments dedicated to economically devalued production.<sup>11</sup> Figure 6.4, prepared by Schteingart and Coatz (2015), groups countries according to their type of productive specialization. In this way, the new international division of labor mentioned by Castells (1999) can be visualized.

From the graph, the distribution of a group of countries can be analyzed in terms of innovative capabilities (expenditure on R&D as a percentage of GDP and per capita patents) and the export component (medium- or high-technology manufacturing, manufacturing of low technology, and primary goods). They can be classified into five groups: industrialized innovative countries; innovative countries based on natural resources; assembler countries; non-innovative primary countries; and intermediate countries (Schteingart, Santarcángelo, and Porta 2019).

The new international division of labor is not explained by the cleavage of primary goods versus industrial goods. The intersection between technological capabilities and the export-oriented production profile allows a more accurate picture of the position of countries in the world market.

The group of more developed countries matches the quadrant located at the top right of the graph. These are the industrialized innovative countries: United States, Germany, Japan, Italy, United Kingdom, South Korea, Taiwan, Sweden, and Finland, among others. The main characteristic of this group is that they have a strong technological capacity (high investment in R&D and a large number of patents) and a low and medium-low degree

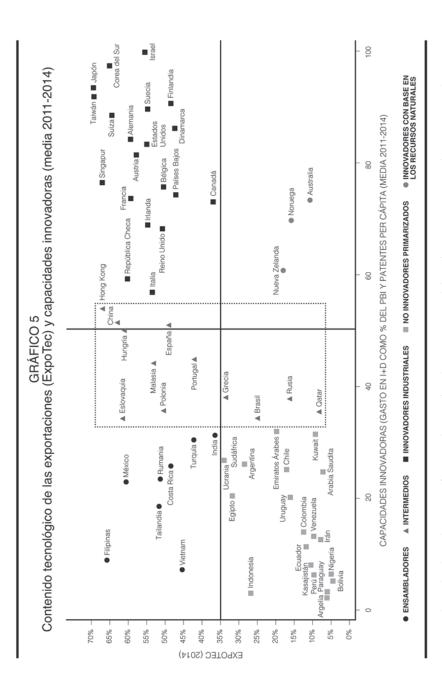


Fig. 6.4. The technological content of exports (ExpoTec) and innovative capabilities (average 2011–2014). Source: D. Schteingart, J. Santarcángelo, and F. Porta. (2019). "Cadenas globales de valor, innovación y empresas transnacionales: Un abordaje empírico." Revista Desarrollo Económico 59 (227): 113-50.

of specialization (that is, one good has no hegemony over others in the export basket), which reveals a much lower level of external vulnerability. Most of these countries export medium and high technology manufactures such as machinery and equipment, electronic, transportation equipment, and chemical industry (including medicines), but also knowledge-intensive services. The lower right quadrant belongs to innovative countries with economies based on natural resources, such as Australia, New Zealand, and Norway. These countries have a great technological capacity oriented to manufacturing derived from natural resources. With respect to the degree of specialization, Australia and New Zealand have a medium-low level, while Norway specializes mainly in oil exporting.

The lower left quadrant shows the non-innovative primary countries: Nigeria, Algeria, Iran, Qatar, Paraguay, Ecuador, Venezuela, Peru, Colombia, Argentina, India, and Brazil, among others. These countries have low technological capabilities and specialize mostly in exporting primary products or manufactured products of low technological content. Most of these countries have a high degree of specialization, with some exceptions (such as Argentina, South Africa, Brazil, India, Greece, and Indonesia).

The upper left quadrant belongs to assembler countries: the Philippines, Mexico, Thailand, Romania, Poland, Ukraine, Turkey, Costa Rica, Malaysia, and Portugal, among others. These countries show a low level of endogenous technological capabilities, but as assembler countries they export medium-level-technology manufactured goods. This group has a place in the global value chains, but in the links with less added value. <sup>12</sup> The middle quadrant features intermediate countries such as Spain, the Czech Republic, Malaysia, Hungary, China, Portugal, Greece, South Africa, Brazil, and Russia. These possess average levels of endogenous technological capabilities and there is significant heterogeneity in the goods they specialize in. <sup>13</sup>

This classification makes visible the diverse positions that countries occupy in the new international division of labor. The assemblers occupy the lowest positions in the global value chains. The industrialized innovators are at the forefront of technological innovation, and dominate the large financial, technological, and knowledge markets. Innovators based on primary resources have managed to add value and knowledge to the industry of primary goods or derivatives of natural resources. The non-innovative primary division is in the most fragile, vulnerable, and less value-added position in the global productive chain.

The asymmetric nature of global networks does not prevent governments from designing and implementing public policies to modify their

position in this new international division of labor. To work against exclusion, these policies need to foster innovation, invest in R&D, protect certain industries, push for the inclusion of technology in production, and improve productivity through knowledge.

Accordingly, countries' participation in the new international division of labor is not explained exclusively by the market's performance. In a context where innovation, knowledge, and technological change play a prominent role, national trajectories are linked to investment in R&D (fig. 6.5), the availability of highly qualified human resources (fig. 6.6), and high-tech exports (fig. 6.7), among other factors.

Investment in R&D as a percentage of GDP is a relevant indicator of a country's efforts, including both public and private investment, in pursuit of scientific and technological development. Central countries usually invest between 2% and 3% of their GDP in science and technology, the private sector's investment weighing heavily in this percentage. This happens in most of the countries that make up the quadrant of *industrialized innovators*, according to the graph elaborated by Schteingart, Satarcángelo, and Porta (2019). China, the main emerging economy, invests more than 2% of its GDP in R&D, and shows a sustained increase since 2010 (World Bank, n.d.).

LAC is very far from the investment levels of the European Union and the United States. On the contrary, it has shown a decreasing trend since 2015. Another relevant indicator is the number of researchers per 1,000 members of the economically active population. This indicator is useful if it is considered along with investment in R&D as a percentage of GDP, since it identifies a country's investment in science and technology, considering human capital one of its greatest resources.

As the graph shows, the data ratify the trend previously observed: there is a significant difference between the average Latin America and Caribbean countries and European Union countries such as Spain or Portugal. If we consider Argentina or Brazil, the LAC countries that make the greatest efforts to strengthen their scientific-technological systems, the difference is still very high. Another relevant indicator is high-tech exports as a percentage of total manufactured goods. Although it doesn't indicate a country's scientific-technological capabilities or the state investment in technological development, it is useful to identify the degree of development of the high-tech productive sector as a part of the industrial productive sector. If the two previous indicators (R&D as a percentage of GDP and number of researchers per 1,000 of the economically active population, are considered in relation to high-tech exports as a percentage of manufacturing, it is possible to identify a close relationship between variables.

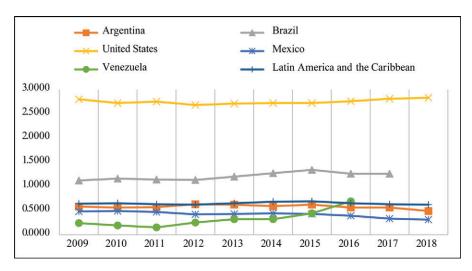


Fig. 6.5. Investment in R&D in terms of GDP (%). *Source:* Girolimo (2020), based on data from RICyT and Eurostat.

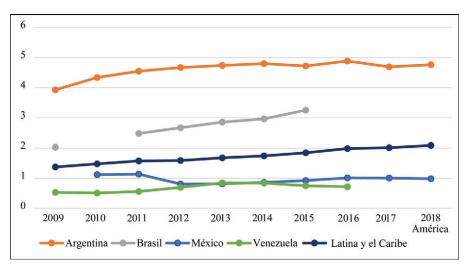


Fig. 6.6. Researchers per 1,000 members of the Economically Active Population (%). *Source*: Girolimo (2020) based on RICyT data.

The average for LAC countries is that 10% of manufacturing exports are of high-tech products, Brazil being the country with the highest growth (between 12% and 13%). In the European Union, it is above 15%, and in the United States it reaches 20%. These numbers indicate that the development of informationalism is uneven and has very different rhythms according to the geography of centers and margins described by Sassen (2007a).

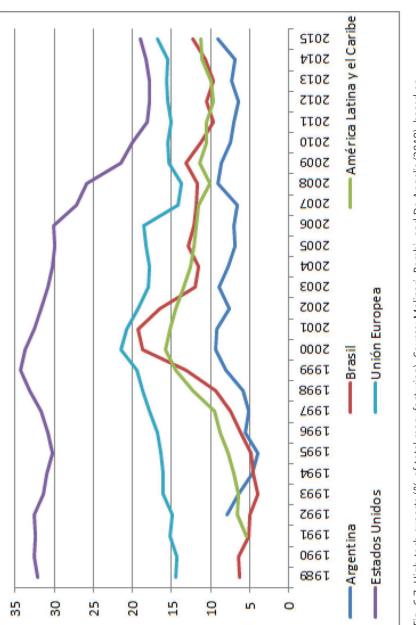


Fig. 6.7. High-tech exports (% of total manufacturing). Source: Molinari, Bembi, and De Angelis (2018), based on Comtrade (UN) and World Bank, published in Journal of Estado y Políticas Públicas, 10.

#### How Are Cities Integrated into Informationalism?

The global expansion of informationalism and the integration of cities into its operational dynamics has produced strong structural conditions that are not overcome only by incorporating information and communication technology (ICT), as the visions of the "Information Society" initially promised. However, it constitutes an open process involving "global, national and local agents, capable of changing courses of action" (Falero 2011, 96). Latin America can take different positions in the context of these transformations: passively accept the new scheme of global division of labor, or actively participate in that division (Falero 2011); give up control of the new means of production to central or more innovative countries and companies, which would reinforce their peripheral status in the capitalist system, or dispute the construction of alternative globalization (Santos 2001). Informationalism and globalization have urban impacts. They redefine spaces, structures, and social actors' behavior. Cities are one of the scenes where globalization develops, but also where they meet some kinds of resistance. According to Arocena, "globalization generates a logic that tends to reduce autonomy, increase interdependencies, increase territorial units fragmentation, and produce marginalization of some areas" (2000, 32).

In regard to Borja and Castells's proposal of 1998, globalization can provide some opportunities for cities. In line with Pérez (2001), these authors highlight that in the face of the new techno-economic paradigm based on ICT, cities can reposition themselves on the global stage. Bervejillo (1995, 18) mentions that this opportunity for repositioning is based on "previous levels of development," and in addition, it requires "a certain critical mass of strategic capabilities." Therefore, it is reserved for cities with medium levels of development and a remarkable capacity for strategic and territorial planning.

Sassen (2007b) points out that the knowledge economy cannot be thought of as antagonistic to the previous economy: each city needs to consider its history and specific characteristics for local development of a knowledge economy. Replicating models that do not consider the specificities of the local environment ignores the heterogeneity of informationalism.

Artopoulos (2015) highlights that in LAC it is possible to find *tech-nological entrepreneurs* who act in response to global incentives but lack a national strategy that promotes the use of knowledge for development. In this context of institutional weakness and the absence of national strategies or specific public policies, the figure of the *informational pioneer* emerges. Informational pioneers have become the new knowledge society champi-

ons, who manage to resolve the tension between industrialism and informationalism, building their own technological systems and organizational networks.

Artopoulos states that some companies have been able to innovate and produce knowledge for the use of ICT in various economic activities. Latin American Unicorns<sup>14</sup> are firms based on the intensive use of digital technologies that reach a stock market value exceeding \$1 billion in a short period of time. In Latin America there are six cases (table 6.2); four of them have emerged or have their head offices in Buenos Aires; two Unicorns are the only regional companies listed on Wall Street, and have permanent relations with Silicon Valley: MercadoLibre and Globant (Artopoulos 2015). In addition to Buenos Aires, the other two cities that gave rise to these companies are São Paulo and Rio de Janeiro. These cities show the characteristics of any innovation environment: they are economic cores connected to global innovation networks and have local networks of companies and institutions dedicated to innovation (Artopoulos 2015).

Beyond the emergence of some large technology-based companies with high global presence<sup>15</sup> in some LAC global cities, it is important to note other relatively new dynamics. Based on the empirical evidence analyzed, it is possible to recognize three concrete experiences that represent different ways of inserting Latin American cities into the new international division of labor:

• Global cities, as mentioned before, are those in which high technology and specialized services markets are located, and where informationalism develops with greater intensity. An example is

TABLE 6.2. Characteristics of Latin American Unicorns

Name	Valuation US\$ (billions)	Head office	Foundation	Sector
Mercado Libre	6.3	Buenos Aires	1999	E-commerce
B2W	6.2	Rio de Janeiro	2006	E-commerce
TOTVS	2.1	San Pablo	1983	Software
Despegar	1.3	Miami; founded in Buenos Aires	1999	Trips and tourism
Globant	1.02	Buenos Aires	2003	Technological services
OLX	N/D	New York; founded in Buenos Aires	2006	E-commerce

Source: Artopoulos (2015).

the presence of digital platforms that work well in these urban spaces (Uber, Rappi, and Airbnb, among others<sup>16</sup>). Besides, they help constitute the innovative environment that enables the emergence of large technology-based companies, such as the Latin American Unicorns.

- Knowledge cities are cities built to specialize in high-tech and become innovative environments. These are similar to the cities of science analyzed by Castells and Hall (1994): the projects of the Siberian city of Akademgorodok, the Korean experience of Taedok, and the Japanese multinuclear city of Kansai.<sup>17</sup>
- *Informational enclaves* specialize in the weakest value chains within the informationalism structure. They can be characterized as *assemblers*' cities of informationalism. An example is Zonamérica, the technology park within the Free Zone of Montevideo described by Falero (2011).

These experiences in Latin America exemplify different types of cities' insertion into the new international division of labor. The case of Yachay, promoted by the government of Ecuador, entails the creation of a city "designed to provide comfort to the human being, in harmony with nature and with adequate spaces for knowledge generation" (Yachay Ciudad del Conocimiento). The main goal of the project was to build a city specialized in knowledge-intensive activities. Its master plan-prepared by the South Korean company IFEZ (Incheon Free Economic Zone), which developed similar projects in other regions of the world—establishes four areas of the territory specialized in biotechnology, agro-tourism, knowledge, and industrial production. It has a technological science park with business incubators, prototyping laboratories, and coworking spaces, among other services and infrastructure; and it proposes to stimulate links between universities, technological institutes, and companies (Finquelievich 2016). In addition, it has a special economic development zone, which seeks to "attract technological, industrial and logistic investments through tax incentives for imports and facilities to carry out productive linkages linked to R&D processes" (Yachay Ciudad del Conocimiento 2019).

The case of Zonamérica, a technological park within the Montevideo Free Zone (Falero 2011), is another interesting one. It is a private free zone, created in 1990, which described itself from the beginning as a business and technological park. The project evolved to concentrate on different activities related to informationalism in Montevideo, Uruguay. Although activities such as software production are carried out, the predominant

activities do not involve any type of innovation, such as call centers and back-office services. Instead, what is left is a labor insertion of varied type, in some cases with a high qualification, but not generalized according to labor requirements (Falero 2011).

Zonamérica functions as an informationalism enclave. According to Falero (2011), this concept describes a situation where there are strong relations with developed countries and a weak connection to the national economy. The national and local economy is connected to the enclave only through the workers' consumption. These types of sites—along with free zones, science cities, and technological parks—are attempts to configure a new spatiality within the framework of informational capitalism. However, developing them does not imply that structural gaps have been overcome. In fact, informationalism enclaves do not exist in accumulation centers but are "a specifically peripheral reality, which suggests the idea of concentrated surplus extraction spaces characterized by its poor connection with the societies in which it is located" (Falero 2011, 266). The author adds that "it is necessary not to confuse the construction of social conditions for the deployment of peripheral informational capitalism forms with development" (269).

### What Happens in Argentina?

In Argentina, only Buenos Aires can be considered a global city, even with the previously mentioned reservations. However, this does not imply that other cities do not participate in the informational-global world dynamics. The Buenos Aires case, as a global city, has some particular characteristics:

• The Greater Buenos Aires agglomeration includes Buenos Aires City (CABA) and 24 municipalities of the Buenos Aires Province, divided into north, west, and south zones. It is a center formed by CABA and its conurbation, organized in three rings. It has 13 million inhabitants, almost 40% of the Argentinian population (Census 2010). Although CABA has a center and suburbs, it is such an extensive territory that other centers and their corresponding peripheries are also part of the urban agglomeration. It is a polycentric city with multiple asymmetries, including south/north zones, center/periphery, connected areas/isolated areas, and precarious urban settlements/urbanized neighborhoods, among other arrangements.

- This megacity has different political-administrative units. On the one hand, the center is CABA, which has the status of a province. The Buenos Aires Metropolitan Area, or Greater Buenos Aires, includes CABA and two rings of municipalities. Generally, CABA and the surrounding communities belong to different political parties. This situation creates difficulties<sup>18</sup> for a metropolitan urban management. The *real city* (the city comprised by its real territory) does not match the *formal city* (the city comprised in political-administrative terms) (Pírez 1995).
- A new urban governance model—referred by Harvey (1989) as *urban entrepreneurship*—has been implemented in a hegemonic way since the 1990s. This kind of urban management prioritizes capital appreciation, which triggers privatization of public space, commodification of urban public services, and an increase in real estate speculation, among other effects. Hidalgo and Janoschka (2014), in reference to other *global cities* in the region, such as Mexico City and Santiago de Chile as well as Buenos Aires, use the term *neoliberal city* to explain this process of convergence between dynamics of sociospatial exclusion and neoliberal policies.

The urban restructuring process that took place along with the capitalist restructuring process initiated in the 1970s in Latin American cities entailed the deployment of three complementary processes defined by Martinez Alvarez (2017), all of which were clearly evidenced in Buenos Aires: (1) the development of an urbanization process accompanied by neoliberal policies; (2) an intense association between the state and private sector in managing urban policy; and (3) the reconfiguration of metropolitan space structures. In Buenos Aires, on the one hand we have the advance of informationalism as opposed to welfare industrialism, which is reflected in the more flexible forms of production, and the progress of the sector dedicated to the production of informational goods. On the other hand, the establishment of an urban governance model stipulates that the maximization of capital in cities is a priority (Harvey 2008a). In relation to the three modes of insertion of Latin American cities in the new international division of labor. Buenos Aires shows some characteristics that allow it to be considered simultaneously a global city and an innovative environment (Castells and Hall 1994):

• The sector dedicated to the production of informational goods, as well as specialized services and finance, is intensively developed

and has a strong dynamism. To give an example, the software and computer services sector in Argentina, which grew exponentially at the beginning of the 21st century, is strongly concentrated in Buenos Aires. Of the 5,589 companies that produce software and computer services in the country, 3,164 (56%) are located in that city; 66,598 people (70%) of the 95,166 employees work in Buenos Aires (Employment and Business Dynamics Observatory 2016).

- Buenos Aires is the main market for technological innovations in Argentina, and one of the main markets at the regional level, along with other cities, such as San Pablo, Mexico City, or Santiago de Chile. Sixty percent of the ICT market in Argentina is concentrated in Buenos Aires (CAF 2013).
- These data highlight the availability of human capital and the wide availability of education; the University of Buenos Aires in 2019 was ranked 78th among the best universities in the world and 8th in Latin America, according to the QS ranking (QS Top Universities). The relationship between knowledge institutions and technological innovation processes is not linear, but it is a key factor in shaping innovative environments.
- The wide range of cultural, gastronomic, and audiovisual industries positions Buenos Aires as an attractive space for new global artistic and cultural trends, together with its cultural proximity to the global cities of the Western developed world. This environment is a fertile ground for social and technological innovations.

# Concluding Thoughts: Some Certainties and New Research Leads

LAC global cities are cities with peripheries problems (structural inequalities, poverty, underdevelopment, and peripheral informationalism), but they are also nodes of the global network, offering concentrated markets for specialized goods and services, an appealing market for technological innovation, demographic concentration, urban extension, and the development of knowledge-intensive productive sectors. Our research highlights the importance of studying the specific ways LAC cities are inserted in the global economy, in the context of a new international division of labor that includes (1) a distinction between the place occupied by countries in the international market that is not reduced to a polarity between primary goods and industrial goods, and (2) an increasingly leading role for technological innovation as a driver of development, which therefore has an

increasingly strong role in determining the place that countries occupy in global value chains.

In the context of informational development and the configuration of a new international division of labor, three experiences of the insertion of LAC cities into the global economy were identified: (1) as informational enclaves, (2) as knowledge cities, and (3) as global cities. In the first case, we considered the specific experience of Montevideo's Zonamérica in Uruguay, which reflected a particular expression of informationalism in Latin America: attracting capital and locating the production of knowledgeintensive goods and services in cities where human capital is available and the production costs are competitive. This situation operates in accord with a deterritorializing logic—the location of the informational nucleus is disconnected from the local socioproductive network. The second case, Yachay's experience in Ecuador, reveals the difficulties of designing from scratch a knowledge city project dedicated to high-tech production. Such initiatives tend to face numerous obstacles—a shortage of human capital for technological innovation, lack of space for the development of informal knowledge networks, and excessive productive specialization associated with capitals that remain disconnected from the pre-existing socioproductive apparatus, among others.

The global city concept used to characterize some of the most important urban centers of LAC, such as Buenos Aires, San Pablo, Mexico City, Lima, and Santiago de Chile, has certain limitations: they are not command centers of the global economy, but nodes that participate in transnational networks in a subordinate way. They do not constitute the epicenter of technological innovations, but they do utilize such innovations, and although they concentrate markets for specialized services, they do so mainly to outsource production by multinational companies whose command centers are located in the global cities of the developed world. Despite these limitations, the concept makes it possible to identify certain characteristics and functions that these cities possess at the regional level. For example, in Argentina, Buenos Aires stands out as one of the most prominent global cities in Latin America (as mentioned, it is among the top 25 global cities in the world). As a global city from the periphery, it shares a large number of the sociourban characteristics that the article pointed out: metropolitanization, polycentrism, structural inequalities, and spatial segregation. At the same time, it has features shared by the world's global cities: it has strong economic dynamism, it is a site of development for new technological trends, it includes companies dedicated to the production of knowledge-intensive goods and services, and it prioritizes the valuation of financial capital for the management of urban space and habitat, among other characteristics.

#### Are There Alternatives to the Hegemonic Model?

In recent years, the informational development mode has been modified as a result of two processes that situate innovation and technological change at the center of the scene: the emergence of 4.0 technologies (Basco, Beliz, Coatz, and Granero 2018) and the arrival of the platform society (Van Dijk, Poell, and De Waal 2018). According to Brynjolffson and McAfee (2014), there is a new period of strong technological progress in which the core technologies (digital, hardware, software, and networks) are not new, but are being significantly improved. In this context, there was a boom in integration systems, the internet of things, big data, artificial intelligence, cloud computing, robotics, and simulation of virtual environments and virtual reality, among others, which introduce qualitative changes in the organization of production, labor relations, and consumption (Basco, Beliz, Coatz, and Granero 2018).

Although this article does not explain the particularities of this new informationalism, we consider that cities face new challenges in the interurban competition. Its main goal would no longer be to improve the conditions for economic services, but rather to create innovative environments in which the predominant goods and services of the new global economy are developed. Peripheral cities face new challenges in improving their global insertion, but they must still address the social, economic, and urban structural problems they have faced for decades. In this context, the development of an alternative model faces at least four challenges:

- Problematize the hegemonic model of city modernization focused on the intensive use of technologies, and build a perspective that incorporate 4.0 technologies to resolve sociourban problems: access to housing, improvement of urban mobility, reduction of pollution, etc. It is about getting out of technological solutionism (Morozov 2015) to discuss which technologies are appropriate for which urban solutions.
- Democratize the discussion of the city project, considering local stakeholders: social movements, workers, the local productive sector, artists' groups, the scientific community, etc. It is necessary to enhance the debate about the use of 4.0 technologies, direct-

- ing their application to a collective project that contributes to the development of all social sectors, and not just transnational, national, and regional capital. To build inclusive and more egalitarian cities, it is essential to democratize the urban habitat and guarantee the *right to the city* (Harvey 2008b) for all its inhabitants.
- Design a regulation for *austerity platforms*<sup>19</sup> (Srnicek 2018) that are mostly developed in global cities (Airbnb, Uber, Glovo, or Cabify). It is necessary to protect the workers of these platforms and regulate activities that work on the margins of legality. Two hegemonic positions adopted by different global cities of the world must be questioned: (1) a *probibitionist* view, which prevents these platforms from operating, which usually affects the most vulnerable social sectors, such as immigrants; (2) a *consenting* view with the platforms, supported by the idea that the collaborative economy promotes employment and entrepreneurship by connecting consumers with independent workers.
- Promote the transformation of these cities as innovative environments for territorial development. For these purposes, strategies must be developed to locate and territorialize global processes such as informationalism. Given the delocalization effects of globalization, it is relevant to promote the debate about the role of science, technology, and innovation for territorial and socio-urban development.

#### NOTES

- 1. As Castells and Hall (1994) showed, in the informational economy, production and management base their productivity on technological change and the capability to generate and process information and knowledge.
- 2. *Informationalism* refers to a technological paradigm that replaces and subsumes the previous paradigm of industrialism (Castells 1996).
- 3. As Sennett (2000) indicates, there is a process of "concentration without centralization."
- 4. The development of the informal economy, which affects the physical aspect of these cities and has a significant impact on the socioeconomic structure, persists in the major urban centers of Latin America. Garza (2006) points out that in Mexico City, it is estimated that between 25% and 50% of the active economic population belongs to the informal sector.
- 5. According to the Oxfam Report (2017) only 8 people have wealth equal to that of the poorest half of humanity (3.6 billion people). The richest 1% of the planet has more wealth than the rest of the world population. Taking into consideration the United States as a symbol of inequality, the incomes of the poorest 50% of the country have been frozen during the last 30 years, while those of the richest 1% have increased by more than 300% in the same period.

- 6. Zukerfeld (2005) defines *informational goods* as those for which the marginal cost tends to be 0; that is, the cost of replicating them is negligible. They constitute an ideal type, therefore, a good will be more informative as its reproduction cost tends to 0. Although the goods that can be digitized are informational goods, the definition is not limited to them.
- 7. According to Sassen, global cities "accumulate large concentrations of economic power, while cities that were once important manufacturing centers experience excessive decay; city centers and business centers in metropolitan areas receive large-scale real estate and telecommunications investments, while low-income urban and metropolitan areas lack sufficient resources; highly specialized employees in the large business sector see their incomes increase to unusual levels, while workers with a medium or low specialization see their own collapse" (2007, 38).
- 8. The similarity in the difference (center-periphery) lies in the global dimension of the informational and financial networks; even having a command center spatially located in the central countries operates and develops in the big cities of the world as an "expanded space of accumulation" (De Mattos 2010).
- 9. Pradilla (2008, 6) points out that "Latin America and the Caribbean, in general, represent a relatively small part of the world economy, industrial production, trade, financial flows, and investments, widely dominated throughout capitalism for the so-called developed economies." The global cities of Latin America occupy a prominent position in the world economy, but through a role subsidiary to that of the global economic and financial centers.
- 10. In the case of Mexico City and San Pablo, the metropolitan areas of both cities exceeds 20 million inhabitants. The metropolitan area of Buenos Aires is the third largest urban agglomeration in Latin America, behind the two just mentioned. These 3 are among the 20 largest in the world (Demographia World Urban Areas 2017).
- 11. This new geometry is defined in variable and dynamic terms. A country dedicated to the export of raw materials can grow the segment that specializes in producing goods of high technological content. Global networks do not prevent governments from designing and implementing public policies to modify the insertion of countries into this new international division of labor. To avoid spatial exclusion from informationalism, governments can foster innovation, invest in R&D, protect certain industries, actively support policies for the inclusion of technology in production, and generally improve productivity through knowledge.
- 12. Schteingart and Coatz (2015) consider that this quadrant has existed since the 1960s, since the global relocation of the productive chains process began then.
- 13. Some belong to the primary non-innovative countries group (Brazil, South Africa, and Russia) but are close to the assemblers group, or they have close relationships to innovative countries based on natural resources; others are assemblers (Malaysia, Portugal, Hungary) in a border area with industrialized innovators; and others are industrialized innovators (China, Spain, Czech Republic) that share a border area with assemblers. It is important to remark a strong trend toward China's leadership in the industrialized innovators group.
- 14. Unicorns are new companies that, based on the intensive use of digital technologies, reach a stock market value of more than US\$1 billion in a short period of time (Artopoulos 2015).

- 15. These companies are characterized by their poor connection with the local production system and the territory where they are located. While they may have relevant offices and projects in these cities, they do not necessarily link enough with universities and research centers, smaller companies, and local governments. Feldman (2018) applies to them the term *innovation islands*.
- 16. According to Srnicek (2018), these are *austere platforms* that minimize the assets of their owners and obtain profits through a great cost reduction. He mentions that the current phase of the capitalist accumulation model can be defined as *platform capitalism*.
- 17. Although these cases were not aimed at productive development but sought to generate synergies from isolation and extreme scientific specialization, they are similar to Yachay in terms of building a city to develop high-tech projects.
- 18. Pírez points out that the main contradiction is "between the territorial scope of issues, problems and the territorial scope of local government and management" (2013, 4).
- 19. Srnicek points out that "austerity platforms operate through a hypertheorized model, in which workers are relocated, capital is fixed, and maintenance costs and training are relocated. All that remains is the basic extractive minimum—the control of the platform that allows generation of a monopoly income" (2018, 72).

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#### **SEVEN**

# The Regional Planning, Development, and Governance of Metropolitan Secondary City Clusters

A Case Study of Santiago and the Central Chile Region

Brian Roberts, José Tomás Videla, and Marcela Allué Nualart

#### **Definitions**

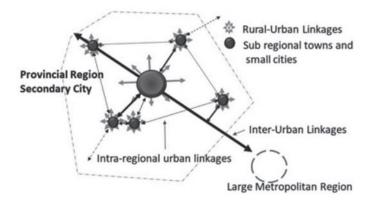
The term *secondary city* is commonly used to describe a level of urban settlement below the primate or primary city. Although population size still has a considerable influence on the importance and classification of secondary cities, recent studies point the need for a redefinition of the term, merging the traditional hierarchical definition with a systems and functional approach to city classification (Roberts 2014). Worldwide, there are over 4,000 secondary cities, ranging in size from 100,000 to 500,000 people (UN-Habitat 1996), and in the case of China, to 3 million people. Secondary cities are an important intermediary level of urban settlement within the city system. Collectively, secondary cities contain about 1.3 billion people or 16.5% of the world's population. The largest numbers of secondary cities are in Asia (Roberts 2014).

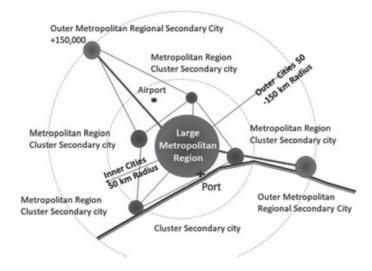
The performance of national and global economies depends on a wellfunctioning system of secondary cities. Through these cities pass many of the resources, goods, and services needed in large cities and rural and regional areas. They play a crucial role in the logistics and supply-chain systems that link more than 65% of the world's population living in rural areas, regional towns, and cities, and the 18.5% of the world's population that lives in large metropolitan regions and megacities. Despite the crucial functions and roles secondary cities play in support of national and global systems of cities, they are a neglected area of urban policy research and development; as a result, many do not function as efficiently as they could. Globally, secondary cities receive proportionally lower levels of investment infrastructure and support services than larger metropolitan regions. The growing inequity in the development of urban areas within countries is leading to recognition of the significant role of secondary cities in the overall development of regions (World Bank 2009). This paper is one of a series produced by teams of researchers for the Cities Alliance project, which takes a fresh look at the roles and functions of different types of secondary cities and how to formulate better policies to support their development.

There are three broad spatial typologies of secondary cities: (1) regional or provincial, (2) metropolitan clusters, and (3) linear corridor secondary cities (as in fig. 7.1). The spatial, economic, and function systems of these forms of secondary cities vary significantly, as do their locations. Their performance can vary widely, depending on whether they are located on coast-lines close to ports, inland, or in landlocked countries. This paper examines metropolitan-region clustered secondary cities using as a case study the Santiago and Central Chile Region (SCCR), because this provides a good example of some of the challenges facing the development of large metropolitan regions in middle-income countries in Latin America and other regions of the world. The case study involves a systematic investigation of how improved governance arrangements can help create sustainable economic growth and development of secondary cities at the edge of large metropolitan regions.

# The Challenges of Metropolitan Clustered Secondary Cities

The first clustered secondary cities were the European new towns planned in the 1950s. They were designed to reduce overcrowding in megacities such as Paris and London. Many of these new towns have developed into a ring cluster of satellite cities, some with populations exceeding 100,000. There is, however, a new pattern of metropolitan clustered secondary cities (MCSC) development emerging around the periphery of the world's largest urban regions. These are spillover cities that ring large metropoli-





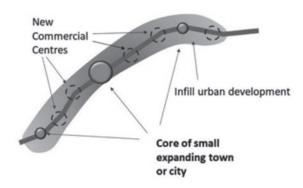


Fig. 7.1. Three different spatial typologies of secondary cities. Source: Roberts 2014.

tan centers. Most are not planned and are outgrowing their administrative boundaries. Many of these, such as those surrounding Bangkok and Jakarta, are associated with deindustrialization of older inner-city areas and relocation of firms to peripheral cities clustered around the greater metropolitan region. In Africa, many have consumption- or construction-based economies with high informal migrant settlement and high levels of unemployment.

Many metropolitan clusters of secondary cities face significant development problems. Those located in developing economies face difficulties in managing rapid urbanization and metropolitan population spillover, weak urban governance and management, high levels of unemployment, poor housing, and severe environmental problems. Some in Europe have experienced deindustrialization, which has led to significant economic adjustment and social difficulties. Many have become refugee/migrant settlement cities. In industrializing economies, many MCSCs are experiencing growth pressures from congestion, high rents, and the lack of space for expansion, forcing the relocation of manufacturing to economic enterprise and industrial zones on the periphery of the metropolitan area. In more advanced and middle-income economies, previously small towns and cities have grown into secondary-city growth centers, with regional shopping centers and commuter residential areas. This urban development pattern has generated inefficient and costly intraregional traffic and goods-andservices movements and high regional transaction costs to business; many local governments have been unable to keep up with the dispersed demand for infrastructure, public services, and connectivity. On the other hand, the core cities of metropolitan regions are struggling to generate the taxes and revenues required to fund the infrastructure and services necessary for the growing number of commuters and consumers who travel into the central business districts where most of the jobs and higher levels of services are available.

Achieving a more balanced approach to development and investment in MCSCs is challenging. Complex issues need to be understood and dealt with, involving multiple levels of governance. Parochialism, territoriality, duplication, and political economy issues have made it difficult to achieve good metropolitan governance and management. Much time and capital and many resources are wasted on the planning, development, and management of large metropolitan regions, simply because governments are unwilling to collaborate and share resources, knowledge, and information.

## The Central Chile Region: A Cluster of Cities

Central Chile<sup>3</sup> is dominated by the city of Santiago, one of the most prosperous cities in Latin America. The wealth generated from its rapid development has been underpinned by foreign direct investment (FDI) and, until recently, by Chile's mining boom, which resulted in significant investment, benefits, and prosperity flowing into the city. However, these benefits were not spread equitably across the metropolitan and adjacent regions in Central Chile. Many of the secondary cities clustered around Santiago have struggled to create jobs, attract investment, build infrastructure, and improve local governance services to make them more competitive and attractive places for people to work, live, and invest in value-adding enterprises.

With the prospect of declining minerals prices, the Santiago and Central Chile Region (SCCR) faces many challenges, which affect the level of central government funding flowing into the SCCR and other regional economies. Without diversifying and boosting the SCCR economies (WEF 2014), improving competitiveness, and fostering greater innovation to support endogenous and new export growth industries, the system of cities in Central Chile will not be able to keep up with the demand for infrastructure and other urban services. Thus, in this region, transaction costs to supply chains will remain high (OECD 2015), productivity and competitiveness will be stagnant, and governance arrangements will become more fractious. Reshaping the region's governance arrangements and building strategic infrastructure are crucial to achieving a more sustainable long-term growth and development pattern for the cities of the SCCR and for developing a stronger and more prosperous regional economy.

# The Santiago and Central Chile Region

The SCCR comprises Santiago and surrounding secondary cities, distributed in three subnational regions with a total population of around 10 million inhabitants. It represents about 55% of the country's population (INE 2012), and 56–57% of the national GDP and employment. SCCMR is dominated by the primary city of Santiago, followed by the secondary cities of Greater Valparaiso and Rancagua-Machalí (see table 7.1). These three urban areas are defined as "metropolitan areas" because they exceed the 250,000-inhabitant threshold set by National Council of Urban Development (CNDU 2017). Other small cities, such as San Antonio, Quillota,

Main urban areas	Population (millions)	Function	Administration
Greater Santiago	7 million, 97% urban	Capital city and the seat of the central govern- ment, financing, and manufacturing	37 municipalities in 4 provinces within the subnational metropolitan region
Greater Valparaiso	1 million, 92% urban	Transportation, manufacturing, tertiary education, tourism	5 municipalities in 2 provinces within the Valparaiso subnational region
Rancagua	0.3 million, 72% urban	Agriculture, mining	2 municipalities in 1 province within the O'Higgins subnational region

TABLE 7.1. Population, Function, and Administration for the Three Main Urban Areas in the Region

Source: Prepared by the authors based on INE 2012.

San Felipe, San Fernando, and Los Andes, are also influenced by the proximity of Santiago.

As shown in figure 7.2, the regional settlement pattern of this area is characterized by (1) the core area of Santiago, (2) a 30-km radial-like subsystem of more than 10 secondary cities and towns, some of them, such as Puente Alto and San Bernardo, being part of Greater Santiago; and (3) five extra-metropolitan corridors based on the main roads: to the south (connecting Santiago with Rancagua and farther cities), southwest (to the port of San Antonio and a series of resort towns), west (to Greater Valparaiso), north and northeast (connecting with La Calera, San Felipe, and Los Andes); and (4) the hinterland flanked by a dispersed inter-urban structure, which includes agricultural, mining, and tourism land uses, as well as environmentally protected areas (Munizaga 1993). The strategic infrastructure includes an international airport (on the west fringe of Santiago), three seaports (Quintero, Valparaiso, and San Antonio), and one terrestrial connection to the Mercosur zone through the Andes, at the northeast corridor. Although the area has a good development network of roads and urban services, it faces significant challenges in the development of strategic infrastructure (Roberts, Lindfield, and Steinberg 2016).

In terms of economic structure, the Central Chile Region accounts for 56%–57% of the national GDP and employment (Central Bank of Chile 2014, 24). Location quotient data show higher ratios than at the national level of workers employed in manufacturing, transport, personal services, trade, household services, and company services (see fig. 7.3). These ratios are explained by the role of Santiago, which represents a 79% of Central

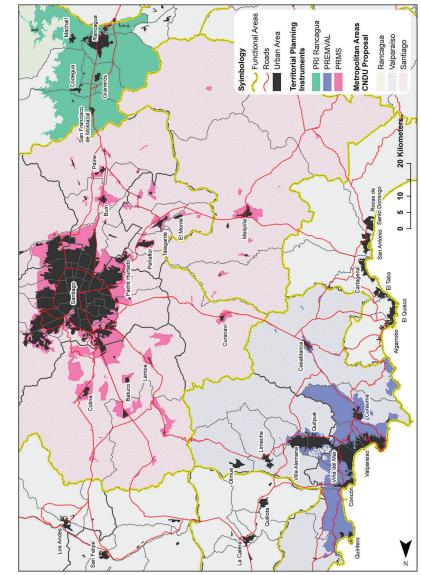


Fig. 7.2. Urban areas and main road corridors of the Santiago and Central Chile Region. Source: Prepared by the authors based on CNDU 2017 and Casado-Diaz, Martinez-Bernabeu, and Rowe 2017.

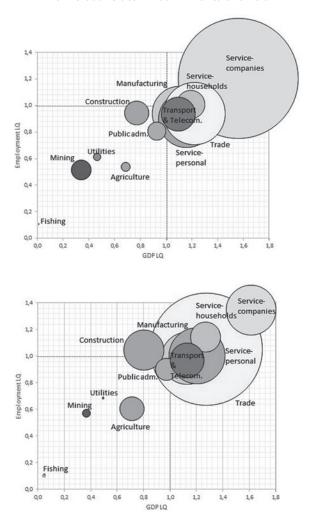


Fig. 7.3. Economic and employment location quotient (LQ) of the SCCR compared to national figures, measured by GDP per sector (horizontal axis) and workforce (vertical axis). *Source:* Prepared by the authors.

Chile's GDP, particularly as a provider of company services, an economic sector in which it has a ratio of 1.9 and 1.6 of GDP and employment respectively, compared to national levels. In Valparaiso, mining, utilities, manufacturing, construction, public administration, and most notably transport (with a ratio of 2.1) dominate the economy, while in the O'Higgins region (encompassing the city of Rancagua) agriculture, mining, and construction

are significant in terms of GDP and employment.<sup>4</sup> The prominent role of Santiago's economy for the region is also reflected in its GDP per capita, which is 1.1 times the national figure, while in Valparaiso and O'Higgins it is 0.8 and 0.7, respectively.

The urban and regional settlement patterns and economic structure of the SCCR began to evolve during the early 20th century. The development of the region has not been well planned (Friedmann and Necochea 1970), although some attempts at regional planning occurred during the 1960s and early 1970s. The more recent urbanization pattern of the SCCR has evolved because of macroeconomic and public administration policies implemented in the late 1970s and 1980. In response to regional growth management and spatial inequality problems, there are currently ideas about reintroducing regional development planning. The multiple jurisdictional layers of government in the region will, however, make this challenging.

#### Policy Initiatives and Regional Development

The government of Chile has sought to implement exogenous (export-oriented) policies for the country to capture opportunities resulting from FDI and global value chains to boost national economic and income growth. However, this has diminished the capacity of endogenous policies, because structural reforms were not enacted to drive the efficiencies necessary to enhance the competitiveness of subnational regions. Some regions and most local areas have neither the economic nor the decision-making autonomy to increase their attractiveness, manage risks, and plan for urban growth. The following paragraphs describe briefly the implemented structural macroeconomic, regionalization, and regional planning policies. The spatial, economic, and social consequences for Central Chile are discussed below.

#### Macroeconomic Policies

In the late 1970s, Chile began the shift from an import-substitution industry strategy to programs of market-driven liberalization, particularly through attracting FDI.<sup>5</sup> This change had a significant impact on the country's growth and the decentralization of employment and population. Between 1987 and 2002, Chile's rapid economic growth followed a more balanced pattern of regional economic and population growth (Rowe 2013), with

regions such as Valparaiso and O'Higgins turning employment losses to growth, and with remote and resource-rich regions, particularly in the north, experiencing significant growth. Moreover, the economic growth resulting from Chile's strong specialization in natural resources has been attributed to the proliferation of the global value chains, which is directly linked to FDI (OECD 2015).

# Regionalization and Decentralization Policies

Decentralization and regionalization have been part of the public discussion in Chile for several years now. An administrative system of 13 regions<sup>6</sup> was proposed in the early 1970s and implemented in 1974, accompanied by reforms that increased the role of local governments in providing services. This arrangement, as discussed later in this chapter, is now regarded as somewhat dysfunctional in terms of regional decision-making and infrastructure planning. Several policies implemented to increase regional development, such as the National Fund for Regional Development, the National Strategy for Competitiveness, and the Advance Human Capital Policy, have been insufficient. A relevant step to address regionalization occurred in 2013 with the amendment of law 19175 (BCN 2016), which allowed for the democratic election of regional councils. In 2016, the Senate approved a project to amend the Constitution to allow the democratic election of the regional authority. In practice, the gradual devolution of responsibilities to regional governments has not yet been fully adopted.<sup>7</sup>

# Spatial Planning Policies

Along with the shift in the country's macroeconomic policies during the 1980s, Chile changed its legal and institutional planning framework. During the 1960s and early 1970s, the ministries of housing (Minvu)<sup>8</sup> and planning (former ODEPLAN) started to develop comprehensive yet centralized regional plans, with financial and technical support from the Alliance for Progress.<sup>9</sup> These plans could not be implemented at the time, mainly because government planning departments did not territorially match with administration and management departments (Correa 2007). This centralized planning approach changed between 1975 and 1979 into a fragmented structure of more locally located agencies and a market-driven model of urban development, which still prevails<sup>10</sup> despite efforts by Minvu to amend it during the 1980s (Valdes 2012). Since the 1990s, the public role in planning has been more about financing and coordinating housing

and infrastructure projects, applying land-use controls, and more recently, implementing some internalization and compensation measures for large developments. The implications of this model are discussed in below.

### Challenges of Regional Accessibility, Equality, and Productivity

# National Concentration and Regional Specialization

The broad policies described above have had both positive and negative effects on the development of the SCCR region. The direct economic effects of FDI have been marginal for Valparaiso and O'Higgins. In the period 1974-2014, both subnational regions received only 2.4% of the national FDI, while 26.7% flowed into the balance of the Santiago metropolitan region, and approximately 27.5% flowed to the mining regions in the north of the country (DIRECON 2015). Variations in the flow of FDI to subnational regions have changed the composition of their economic base and employment, creating high migration between regions (Rowe 2013). Most subnational regions and their secondary cities remain highly specialized and export-oriented, while importing many goods and services from Santiago (Atienza and Aroca 2012). On the other hand, although the process of population concentration in Santiago has decelerated since 1970, Chile still has one of the highest urban primacy rates in Latin America<sup>11</sup> (Henderson 2003), clustering most of the value-added enterprises, population, and economic activity in the Greater Santiago area (Atienza and Aroca 2012).

# Urban Growth and Regional Accessibility

An important effect of the economic and planning liberalization policies of the 1970s and 1980s was an increase in the housing deficit that, coupled with the high net migration between regions, put pressure on the growth of Chilean cities, accompanied by an increase in the number of households living in shantytowns. Since the 1990s, the government has played an active role in reducing the housing deficit in Santiago and across subnational regions<sup>12</sup> and in improving road infrastructure, mostly using concessions. However, the growth in housing that occurred in secondary cities far from activity centers, such as Maipu and Puente Alto in Greater Santiago and Villa Alemana in Greater Valparaíso, was not usually accompanied by the provision of necessary public services, transport, and amenities.

Moreover, a considerable number of households still live in shantytowns.<sup>13</sup> Critical public services such as basic healthcare and primary education are not always effectively and efficiently delivered by the local governments in which most housing has been allocated. Several observers have linked this unequal access to amenities and services to local government expenditure capacity and household purchasing capacity (see De Mattos 2008; Orellana 2009; Orellana and Fuentes 2009; Poduje and de Grange 2015).

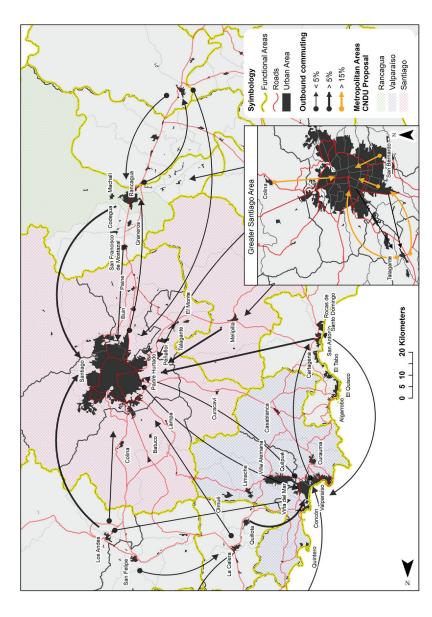
## Commuting and Labor Markets

Long-distance commuting in Chile has emerged as an alternative to migration (Rowe 2013), particularly affecting secondary cities within the Santiago metropolitan region and, to a certain extent, secondary cities in the adjacent subnational regions of Valparaiso and O'Higgins. Studies of Chile's population dynamics reveal that small cities and towns surrounding Santiago are part of a single greater metropolitan labor market (Casado, Martinez, and Rowe 2016), creating a single functional urban area (OECD 2016). In addition, as figure 7.4 suggests, Santiago is attracting labor from small secondary cities in the Valparaiso and O'Higgins regions (Rowe 2014). The lower cost of housing in these cities and higher concentration of employment in Santiago seem to have triggered these long commutes to work in SCCR (Rowe 2013, 221).

On the other hand, commuting from peripheral urban centers of the region may also be driven by push factors. Secondary cities provide an alternative to Santiago, with less expensive residential locations for middle-income households, and reasonable-quality infrastructure and social amenities (Portnov and Erell 2001, 152). Although in Chile low- and medium-income households have few locational options because they usually use social housing, some still can choose to live in other regions to avoid the higher crime rates, air pollution, and traffic congestion of Santiago (Rowe 2013). Either way, there is an increasing mismatch between the actual functional urban and regional areas, and the administrative boundaries of local-and regional-level governments that manage those areas.

# The Logistics of Main Industries and Industry Clusters

Another challenge for managing the actual functional area at the regional scale is the logistics of key industries. As discussed above (see "The Santiago and Central Chile Region"), the economy and employment of SCCR are dominated by Santiago, particularly by its manufacturing, trade, and



metropolitan areas in Chile and actual labor markets. Note 2: There are no comprehensive commuting statistics for 2002. Source: Prepared by the authors. Note 1: Provinces are used because they better represent the extension of Fig. 7.4. Employment centers and home-to-work daily commuting trips between provinces in the SCCR area, in Chile after 2002.

Region:		ntiago oolitan	area	Va	lparaís	0	O'Higgi	ns (Ra	ncagua)
Sector	USD million	%	firms	USD million	%	firms	USD million	%	firms
Agriculture	2,488	31	1,289	1,090	19	484	2,403	58	689
Fishing	0.3	0	54	44	1	71	8	0	10
Mining	4,411	56	119	3,310	57	21	1,543	37	8
Manufacturing	36	0	2,816	485	8	185	43	1	95
Services	979	12	414	74	1	63	9	0	6
Others	5	0	209	827	14	126	123	3	64
Total	7,919		4,910	5,830		950	4,129		872
% regional GDP	9%		_	39%		_	49%		_

TABLE 7.2. Subnational Regional Exports in US\$ Millions and Number of Exporting Firms in 2012

Source: Prepared by the authors based on Pro Chile, 2013.

service industries (see table 7.2). However, an examination of the subnational regions of Valparaiso and O'Higgins shows the significance of mining and agriculture for their economies and employment, which has important implications in terms of infrastructure and logistics: mining operations and agricultural areas are located in the region's hinterland but need good access to the ports of San Antonio, Valparaiso, and Quintero to expand their export potential.

A recent OECD report (OECD 2015) noted that logistics in Chile account for about one-fifth of the total product value in the manufacturing sector, which is twice the OECD average. It also noted that "improving infrastructure and logistics, along with other behind-the-border policies is likely to be more important to the development of the region than a further reduction in tariffs" (OECD 2015). Rising port costs, lack of capacity, and the slowness of the decision-making process for investing in infrastructure (see above, "Policy Initiatives and Regional Development") are significant factors holding back economic growth and development (Escobar 2014).

A range of more specialized industry activities is emerging in the region, comprising logistics, finance, tourism, mining, agricultural industries, and education. Little research has been done on the spatial manifestation of micro and macro cluster industries in the region, using spatial statistical analysis. Industry clusters have a high level of dependency on efficient logistics systems and supply chains, skills, knowledge research and development, and connectivity to markets. The SCCMR lacks sophistication, data collection, and analysis of spatial concentration of skills, technologies, research and development, and social capital to develop a more

integrated system of industry clusters, which could be used to boost a more decentralized and more specialized concentration of economic activities in the region's secondary cities. Fostering the development of industry clusters is considered crucial to enhancing specialization, innovation, and the adding of value to supply chains. The SCCMR has significant potential to develop an integrated set of regional industry clusters and to support cross-industry cluster collaboration in education, tourism, and agriculture in strategic locations within the network of secondary cities. This requires a more collaborative approach to the development of industry clusters, and targeting of strategic investment in hard and soft infrastructure to support their development across the region. Figure 7.5 shows the location of 26 firms with exports above US\$100 million in 2012, representing 85% of all exports in the SCCR. Two mining firms, Codelco and Anglo American, accounted for 52% of all exports in this region.

# Governance of the Region: Assessing the Efficiency and Effectiveness of the Planning and Provision of Built Systems and Social Services

The economic, regionalization, and planning policies implemented to support the development of the country and its subnational regions since the 1970s have had a significant impact on the dynamics of urban and regional growth and development. However, improvements in equality, competitiveness, and the efficiency of urban and regional systems have been slow. Reasons include a weak vertical and horizontal institutional governance framework; lack of a regional planning framework and delivery process that integrates housing location and infrastructure provision; and inadequate methods of assessing spatial and sociodemographic needs and budgeting of capital works and community support services in the governance decision-making process. If the issues of regional urban management and development are to be addressed, governance arrangements need to change, particularly the institutional frameworks and resource endowments (economic and social) that constrain the decisions of political and economic actors (Stimson, Stough, and Roberts 2006).

Table 7.3 outlines significant governance constraints resulting from the macroeconomic, regionalization, decentralization, and planning policies implemented in Chile in the last four decades, which make it difficult to solve the current and future regional challenges in the SCCR. Some related policy options are also outlined and later discussed in the document. The following sections describe and critically examine the institu-

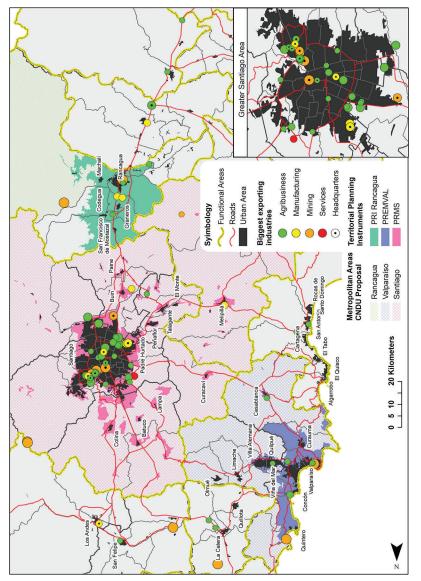


Fig. 7.5. Location of main exporting firms in the SCCR area by industry, and percentage of the population in poverty by municipality (local governments). Source: Prepared by the authors.

TABLE 7.3. Summary of Governance Constraints and Related Policy Options for Addressing Regional Challenges in the SCCR  $\,$ 

	Governanc	e constraints	
Regional challenges	Institutional framework	Regional planning and provision of infrastructure and services	Endogenous and exogenous policy options (see sec. 4.2 to 4.4)
National concentration and regional specialization in natural resources	Low incentives for cooperation and collaboration Low level of budget control and responsibility in local and regional government Insufficient powers in local and regional governments to design and implement exogenous policies		Fiscal devolution, and a participatory budget Increase in the policy capacity of regions and local councils Integrate social and economic policies across Central Chile to enable a regional system Integrate interregional and local environmental policies
Managing urban and metropolitan growth Managing functional urban and regional areas	No legislative powers to enforce coordination and collaboration between different public agencies and levels of government Lack of appropriate allocation of financial and human resources for urban and regional planning	No mandatory plans prepared at the regional level No coordination or integration between different plans No capital works asso- ciated with plans	Focus on local education and health Capture local taxes and local value Co-investment and intercity collaboration Improve connectivity of city networks
Allocation of housing and infrastructure		Inadequate methods of assessing spatial and sociodemographic needs and budgeting	Development of accessible housing and local activity centers
Provision of social services	Low level of budget control and respon- sibility in local and regional government	The prominent role of the private sector does not guarantee equal access to social services	Fiscal devolution and participatory budget An equal allocation and provision of services

Source: Prepared by the authors.

tional structures and planning procedures, and how they influence the efficiency and effectiveness of the provision of built systems and social services in the region.

# Institutional Framework and Budgeting: A Low Level of Coordination and Collaboration

Each of the 15 subnational regional governments of Chile is led by a presidential appointee known as an "intendent." Below these there are 54 provinces and 346 communes (local governments). At the regional level, all central ministries have regional secretariats (SEREMIs) led by a regional secretary, constituting a regional cabinet led by the intendent, but they have relatively low autonomy from the central government. SEREMIs design and implement regional policies and projects, including infrastructure, as well as a draft regional budget. Public participation in the regional government occurs through the election of councilors for the regional council. Local government areas are administrated by autonomous *municipalities* (although they get contributions from the central government based on their financial capacity), which are led by an elected mayor and a council of local representatives, and are responsible for delivering basic social services, such as waste management, primary and secondary education, and basic healthcare.

Despite the multiplicity of government agencies and the complexity of governance systems (as in figure 7.6), there are no legislative powers to enforce coordination and collaboration between regional and local governments and ministerial secretariats. This situation has made it difficult to achieve a workable, comprehensive regional planning system. Thus, the lack of statutory backing to prepare, implement, and monitor regional development plans undermines their value as instruments to guide subnational regional metropolitan planning. In addition, opportunities are limited for cooperation between subnational levels of government in the regions, and the central government provides little encouragement for such cooperation. Regional and municipal leaders have to constantly go to central agencies to secure resources for development projects, so it is very difficult to pool or leverage resources for projects that will simultaneously benefit several municipalities in the SCCR. The central government collects most taxes and then distributes revenues across ministries, subnational regions, and local councils. Thus, regional and local budgets are controlled, to a great extent, by the central government; only about 20% is controlled by regional and local governments (Decentralization Commission 2014). This low level of budget responsibility and control in local and regional government reduces their incentive and capacity to be more efficient and creates competition for central government funds rather than collaboration to foster growth. Table 7.4 shows the per capita expenditure in several municipalities across the SCCR. Note that LGAs with high poverty levels usually have the lowest per capita expenditure, receive a low proportion of revenues from local level taxes, and are relatively inefficient.

TABLE 7.4. Per Capita Expenditures (in USD) and Salaries-to-Expenditure Ratios of Selected LGAs in 2012

Local government area (LGA)	Estimated population 2012	Pop. in poverty (%)	Total per capita expenditure <sup>a</sup>	Per capita expenditure in public education	Per capita expenditure on basic healthcare	Local taxes revenue to all LGA revenues ratio
Greater Santiage						
Santiago	159,919	6.4%	997	232	49	0.76
Providencia <sup>b</sup>	126,487	3.0%	778	93	38	0.84
Las Condes <sup>b</sup>	289,949	1.3%	671	40	34	0.86
Vitacura <sup>b</sup>	78,964	0.3%	843	42	17	0.82
Maipú	888,377	3.9%	117	29	8	0.22
Puente alto	757,721	14.6%	83	43	32	0.23
Colina	116,410	7.3%	201	103	55	0.68
San Bernardo	315,221	17.9%	122	80	53	0.40
Greater Valparai	so Metropol	itan Area				
Valparaiso	269,446	16.9%	145	110	42	0.61
Concón	63,210	8.7%	141	33	32	0.67
Viña del Mar	289,968	14.0%	296	81	61	0.84
Quilpué	269,446	9.6%	145	74	41	0.61
Villa Alemana	135,368	12.7%	110	69	35	0.20
others not part of	a greater me	etropolitan are	a			
Rancagua	250,638	13.4%	123	87	48	0.55
San Fernando	73,994	17.4%	151	No info	No info	0.49
Quillota	88,803	14.2%	164	86	57	0.41
Los Andes	76,262	11.9%	167	101	26	0.55
San Antonio	99,868	18.8%	170	60	53	0.34
Melipilla	107,698	9.8%	125	120	61	0.36
Talagante	78,887	12.7%	124	80	36	0.32

Source: Prepared by the authors based on INE 2012, MDS 2013, and SINIM 2016.

Note: Data in boldface represent values below the median, except for "population in poverty" and "salaries against budget ratio" (an indicator of operational efficiency), which represent values above the median. Per capita expenditure on public education and healthcare is low in Las Condes and Vitacura because in these LGAs those services are provided mostly by the private sector.

<sup>&</sup>lt;sup>a</sup> Includes central government transfers.

<sup>&</sup>lt;sup>b</sup> These LGAs have the lowest poverty indexes in the country. Public services such as education and healthcare are usually covered by the private sector. Most of the region's employment is concentrated in these three LGAs, along with Santiago.

## Regional Planning and the Provision of Infrastructure and Services

The planning of the SCCR is piecemeal, and fragmented across several central agencies; appropriate allocation of financial and human resources in the public sector is lacking. Regional planning in Chile is guided by a series of mandatory and non-mandatory plans at the regional, metropolitan, and local levels, but there is a low degree of horizontal and vertical integration between these plans, and low collaboration across the institutions involved in their preparation. <sup>16</sup> Although there are mandatory planning instruments at the metropolitan level that could be used as an appropriate reference, these instruments only coordinate general regulations such as urban limits, urban expansion areas, and main road infrastructure; they do not define an actual administration or a governance scheme at the metropolitan level.<sup>17</sup> Nonetheless, a legislative proposal enacted on February 2, 2018 in the National Congress (law 21,074) puts forward a governance scheme for three metropolitan areas in the SCCR, based on a proposal prepared by the CNDU (CNDU 2017). However, there are 9,000 urban hectares that don't have, and will not have in the short term, a comprehensive governance scheme that could manage the actual functions of the whole area. In these "secondary" urban areas, relevant secondary cities play an important role in the economy of SCCMR, such as San Antonio, Calera, Quillota, Los Andes, San Felipe, and San Fernando.

In terms of infrastructure, the responsibility for planning public infrastructure and buildings is shared between several public agencies, particularly the Ministry and Regional Secretariats of Infrastructure.<sup>18</sup> In terms of residential infrastructure, the private sector provides affordable housing based on a public scheme of progressive vouchers, granted by the Ministry of Housing for low- and middle-income households. Affordable housing projects, particularly for low-income households, are built on low-cost lots located in areas with poor accessibility and levels of amenity. Education and healthcare-related services are provided by both the public and private sectors, while public utilities are managed by private companies overseen by public agencies. One relevant implication of this prominent role of the private sector in providing education and healthcare infrastructure and services is related to the location of that infrastructure. Both the public and private sectors look for locations that reduce the cost of land acquisition, but while the public sector tries to maximize the population catchment areas, the private sector attempts to maximize their market, not necessarily creating equal access to services.19

The decision-making framework and process for planning schemes and infrastructure projects are summarized in the upper central section of figure 7.6. Projects are submitted and listed in a centralized national portfolio of projects, which go through an evaluation in the National Systems of Investment (SNI) for a methodological review and approval by the Ministry of Planning. This is followed by Ministry of Finance approval to secure the necessary funds. Most projects need approval by the Ministry of the Environment, a process that includes public consultation as well as construction permits issued by local councils. Although the evaluation methods used in the SNI are continuously being updated to incorporate more robust analysis, the system is poor, lacking adequate techniques to develop integrated spatial packages of projects for Chile's regions (Escobar 2014). Evaluation of infrastructure projects under the SNI relies on two main economic methods: cost-benefit analysis and cost-effectiveness analysis, which focus on economic efficiency and the efficacy of the initial investment but cannot account for a myriad of other desirable outcomes, such as multiplier effects for the regional and national economy. SNI evaluates each investment project separately, and therefore does not consider the synergies and possible benefits of parallel sequencing for the planning, design, and implementation of projects. In addition, the final screening of infrastructure investment is held by the Ministry of Finance (Escobar 2014). The Ministry of Finance and SNI could see the potential of cost savings and cross-multiplier effects if a more consultative and collaborative governance approach were used to plan regional infrastructure.

## Priority and Opportunities for Policy Improvements in SCCR

The SCCR and its cluster of secondary cities face many development challenges. Internally, when framed as a system of cities and their hinterland, the region of Central Chile has a relatively diversified economy, with good accessibility to major transport infrastructure, an increasing integration of labor and housing markets, and relatively high figures in human development. However, these overall figures cover unequal distribution of and access to infrastructure and services both for citizens and businesses, particularly in the secondary cities clustered around Santiago. The region has a series of endogenous and exogenous development opportunities that, with the appropriate policies, can assist in the growth and development of secondary cities in the region. Positive external prospects include the level of

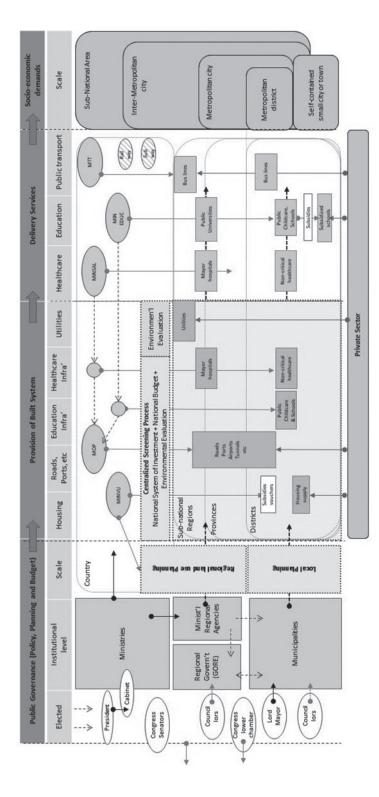


Fig. 7.6. Public institutions and planning processes for delivering infrastructure and social services, at the several spatial scales of the region. Source: Prepared by the authors.

Chile's integration in global value chains and the steady attraction of FDI, although reliance on exogenous-driven growth requires careful attention to the management of risks and development of the local economy.

Therefore, regional and local governance policy reform remains the highest item on the agenda for effective change in the region, because overcoming many of these development challenges will require changes in urban policy, management, governance arrangements, and practices. However, development policies within the SCCR system of cities are difficult to implement, and opportunities for collaboration, innovation, and change are being lost. As noted in the section "Governance of the Region" above and in table 7.2, this is due largely to the complexity and constraints of the institutional arrangements and responsibilities for planning, funding, developing, and managing regional and urban projects and services. Thus, fresh thinking by governments and regional development stakeholders in the SCCR is required to identify and formulate policies to support the development of the Central Chile region—especially its cluster of secondary cities.

# Policy Priority: Collaborative Governance of SCCR

The endogenous capacity for improved governance of the region will come only through better dialogue between the region's various institutions and stakeholders. An option that has proven successful in other regions is the creation of a collaborative and independent arrangement, such as a regional committee, 20 based on a series of chapters comprised of representatives of local, regional, and central-level stakeholders that participate in the planning and providing infrastructure and services in the region. The committee should not pursue structural changes, such as replacing existing organizations or legislative frameworks. Its focus should be on enabling the necessary conditions for more participatory and cooperative governance, leading to the creation of instruments and mechanisms that integrate the entire process previously depicted in figure 7.7. In the short and medium term, this committee can implement relatively simple yet effective initiatives such as regional forums and a common management information system (MIS) platform for regional data and information collection and sharing. Regional forums could build trust between the different levels and organizations involved in the governance of the region, while the development of a common management information system platform could be the catalyst for vertical and horizontal cooperation.<sup>21</sup> Finally, in the medium

and long term, this regional committee should engage with the various levels of government through the development of policy recommendations; key areas include economic development and integrated planning for infrastructure, housing, and transport. The following provides a useful framework and explores a series of development policies that could be implemented in the SCCR.

# A Policy Framework for Endogenous and Exogenous Growth and Development

Two high-level spheres of policy formulation and implementation are necessary for the region: endogenous and exogenous policies. These policies need to be applied to secondary cities and Santiago, to the subnational regions, and at national levels. Effective planning, development, and implementation of policies, programs, and service delivery by the three levels require a systems approach, rather than a sector approach. A systems approach would focus on urban governance; managing the built environment; social, economic, and environmental factors; and flows and logistics systems (as in fig. 7.7). Flow and logistics systems are highly dependent on the built environment.

Endogenous development policies and subsequent follow-through programs are crucial, with a strong focus on the region's cluster of secondary cities. At the same time, the national government needs to give more support to exogenous growth policies and programs to realize benefits and jobs from intraregional linkages, trade, and investment with other cities and regions. All levels of government in the SCCR need to look beyond local territorial interest, work with businesses and civil society, and think and act more globally to expand the horizons of regional and international trade, investment, and connections between the regions and the global system of cities. This set of integrated endogenous and exogenous develop-

Endogenous/Exogenous (systems)	Governance	Built Environment	Social	Economic	Environment	Logistics
National	<b>■</b> ← ↑	1	1	1	1	<b>+</b>
Central Chile Region	-		-	-	_	<b>+</b>
Santiago and Clustered Secondary Cities	-	-	$\downarrow$	+	-	<b>+</b>

Fig. 7.7. A framework for levels of endogenous and exogenous policy development, SCCR. *Source*: Prepared by the authors.

ment policies needs to be formulated collaboratively and applied at the national, regional, and systems-of-cities levels. Leadership is required to bring together the dual spheres of policy needed to support the sustainable development of the SCCR, because they are interdependent. The areas and levels of endogenous and exogenous policy need to be formulated and implemented concurrently by the three levels of regional governance. Table 7.5 summarizes broad endogenous and exogenous policies at the three tiers of jurisdiction needed to support the development of the region. The following section discusses some of the endogenous and exogenous governance policy opportunities.

# Governance Policies: Devolution, Innovative Budgeting, and Integrated Planning

As noted, regional and local governance policy reform is an important element for addressing development challenges and opportunities for the region's secondary cities. Endogenous policies are necessary to fix the unbalanced vertical and regional institutional arrangements of governance in the SCCR. For example, the current framework does not enable a proper needs-based assessment of planning and development decisions and budget allocations at the regional scale. The delivery of many social services, such as public education and healthcare, depends on local government, but local government does not have the capacity, resources, management efficiency, or incentives to improve their delivery; greater devolution of decision-making is required. Decentralization can allow local and regional governments to expand their pool of resources and raise capital, for example, through bonds and crowd-funding. Additionally, budget preparation processes must be made more participatory: national, regional, and local governments should prepare draft budgets, promulgate them, and seek feedback as a means of determining community priorities. Improved transparency and accountability of processes will result in greater ownership of and trust in the planning and budgeting process at all levels of governance across the SCCR. The municipality of San Antonio has implemented participatory budgeting since 2006, providing a model for other cities in the region to follow.

The existing institutional framework constrains the capacity of local government to implement exogenous policies; this is an area currently considered the exclusive domain of the national government. Thus, municipalities cannot fulfil the demands of their residents to manage external

Development Policies
and
Growth
Exogenous
ndogenous and
TABLE 7.5. Summary

		Regiona	I planning and provis	Regional planning and provision of infrastructure and services	nd services
	Institutional framework	Infrastructure and			
Systems scale	and budget governance	logistics	Social	Economic	Environmental
Policy Type: Endogenous growth and development	owth and development				
,	,			Capture revenues	
National	Fiscal devolution	,		from local taxes	
Central Chile region	Participatory budget;	Development of	,	Adding and cap-	
Santiago and secondary	increase the endogenous	accessible housing	Focus on local	turing local value	Improve waste
SOLO	local councils	centers	health		resource efficiency
Policy Type: Exogenous growth and development	wth and development				
National	Regional planning; co-	Improve con-	Integration of social and economic	l and economic	Integrated interre-
	investment; intercity and	nectivity of city	policies across Central Chile to enable	ral Chile to enable	gional environmen-
	international collaboration	networks	a regional system: i.	a regional system: i.e., education, hous-	tal policies: water,
Central Chile Region		more equal alloca-	ing, logistics		energy, air, natural
		tion and provision of services			disasters
Santiago and			Exploring net-		
secondary cities			works of human		
			and financial		
			capital		
Source: Prepared by the authors.	·S.				

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risks and insert themselves into the regional and global economy (Orellana 2009). The Decentralization Commission (2014) noted several initiatives that could be introduced to foster devolution to subnational regions and municipalities of exogenous policy-making and implementation.<sup>22</sup> In addition to devolution, there is a need for innovative and collaborative schemes to trigger decision-making, budgets, and co-investments at different ministries and scales in the hierarchy (a two-way flow of budget). In addition, the existing "silo effect" and separation approach in public institutions, which creates administrative isolation among different policy-making agencies, and competition between local governments for central funds, must change to a more integrated spatial systems approach to planning and delivery of services, which considers the interrelationships between Santiago and secondary cities as well as the role of the region in the global economy.

#### Conclusions

Metropolitan clustered secondary cities (MCSC) are one of three spatial types of secondary cities found around the world. Many, especially in developing and middle-income economies, face significant development and growth-management challenges. Most do not receive an equitable share of economic growth and development compared to the core metropolitan city areas of which they are satellites. Local governments of MCSCs tend to be weak, the housing quality poor, and infrastructure, community, and social services inadequate, often not meeting basic needs. The national urban policies of most countries seldom mention MCSCs. A new focus is needed for planning and managing their sustainable development. Secondary city development can vary enormously between countries and geographic regions and their positions in the regional, national, and global logistics systems. This makes policy development for guiding the management and development of MCSCs challenging.

Nevertheless, the case study of the Santiago and Central Chile Region provides interesting insights into some of the challenges facing the development of MCSCs in a middle-income, growing regional economy. The systems approach used to conduct the analysis of the SCCR helps unlock the region's development potential and identify policy directions. A new development model of regional governance is required for the SCCR region to address multiple tiers of government responsibility for planning and delivery of infrastructure, community services, human development, and environmental and logistics management. It is also crucial that policies

developed for the SCCR consider not only local/regional (endogenous) factors, but how the SCCR can work more collaboratively by developing exogenous relationships for trade, investment, and exchange through, for example, its association with other Asia-Pacific Economic Cooperation (APEC) nations (MFAT 2016). The region's future lies in engaging with the Asia Pacific realm as well as Latin and North America.

It is a new, untested concept, to apply a governance model for integrating multiple levels of government to develop and implement sets of policies to support endogenous and exogenous development using a system, rather than hierarchical sector, approach to urban governance. However, the complex systems of governance in the SCCR have created a situation of intricate and gridlocked decision-making that adds to the uncertainty of investment, contributes to the lack of balanced development and employment, raises transaction costs for business, and decreases competitiveness. These need to change. Prospects for endogenous development in the SCCR are good, but the way the region does things needs to change. Governments need to work with communities and business to implement change and create an enabling environment conducive to endogenous development. Greater collaboration, openness, transparency, and efficiency are needed at all levels of government to develop greater specialization and diversity and equitable patterns of development. If the region is to prosper, the SCCR cannot afford to rely on its core city, Santiago, to create most of the investment and jobs. Its secondary cities have much to offer in supporting the development of the region. It is crucial that the SCCR uses all the region's resources, capacities, skills, and capital to open opportunities for endogenous growth throughout the region—not just in Santiago.

This case study offers important lessons for the development of the SCCR in Chile and MCSCs in other countries and regions of the world. It demonstrates the need for national urban and regional development policies to give greater autonomy to MCSCs to operate and have more equitable access to national and regional resources to compete. Most MCSCs cannot function at the scope and scale required to become more competitive and autonomous, because national and metropolitan region policies continue to force dependency on the core metropolitan city for access to markets, capital, and the resources needed to support their development and their responsibility for delivering essential urban services. More equitable allocation of regional resources is required to enable MCSCs to develop greater specialization and depth of capital to create subregional jobs, investment, and development, which will take pressure off the overloaded systems of core metropolitan areas.

Greater autonomy does not mean MCSCs would operate independently. MCSCs are part of the intricate system of regional, national, and global cities, on which there are growing levels of dependency. To gain competitive advantage, MCSCs need to become more accepting of collaborative governance and to engage in collaborative competition when pursuing exogenous growth-development policies. Developing more efficient systems of linkages and flows in the systems of MCSCs is crucial to achieving more sustainable, balanced, and equitable economic growth and development of cities in all countries. For this to occur, however, it is vital that the role, importance, and functions of MCSCs be more extensively researched and their role in national urban policy, investment, and development better recognized. MCSCs can play a stronger role in supporting the development of city systems. To do this, policymakers need a deeper understanding of how their roles and functions relate to the development of metropolitan regions. These areas are the primary drivers of global and national economic growth and development, but they depend heavily on an efficient system of cities, especially secondary cities, that provide or act as a conduit to gain the significant resources and markets they need to be efficient and competitive. Continuing to build even bigger metropolitan regions eventually leads to rising transaction costs, congestion, highly stressed metropolitan urban systems, and inequitable patterns of urban development and access to services and wealth. Policy decisionmakers need to develop a more systematic, integrated, endogenous and exogenous systems approach to MCSCs and regional policy development. The research for this case study explicitly illustrates this need.

#### NOTES

- 1. A primate city is "the leading city in its country or region, disproportionately larger than any others in the urban hierarchy" (Goodall 1987).
- 2. The planning system in Chile considers that major cities have a population between 100,001 and 500,000 inhabitants, large urban areas a population between 500,001 and 1 million, and metropolitan areas a population larger than 1 million (INE 2005). According to the OECD, small and medium-sized urban areas range between 50,000 and 500,000 inhabitants, metropolitan areas between 500,000 and 1.5 million, and large metropolitan areas have a population above 1.5 million (OECD 2016). UN-Habitat uses 500,000 inhabitants as a threshold to differentiate between small and medium-sized urban areas (UN 2014).
- 3. For the purpose of this study, Central Chile is considered as including the subnational regions of RM (Santiago), Valparaiso, and O'Higgins (the city of Rancagua in particular).
  - 4. The differences between Valparaiso and O'Higgins in service-related sectors

are noteworthy, with the former showing above-national-average ratios and the second always showing ratios below, particularly in company services (ratio of 0.5). Additionally, with mining and agriculture so relevant to the economy of O'Higgins, the role of transport and telecommunications is quite low (ratios of 0.7).

- 5. Chile has a high share of inward FDI stock to GDP, which stood at 70% in 2014, higher than in several OECD countries with a similar market size or other resource-rich OECD countries (OECD 2015).
- 6. Two additional regions were created in 2007, increasing the total number of regions to 15.
- 7. In 2015, the government sent to the Congress two laws that, in short, considered the direct election of the regional authority, the devolution of capacities to regional governments, and the increase in financial support from the central government to local councils to improve their human resources. By mid-2016, these laws were still in the congress.
- 8. One of the functions of the Ministry of Housing and Urbanism (Minvu) has been to create a National Urban Development Plan in order to "consolidate a balanced system of cities" (Correa 2007). By the end of the 1960s, several cities in Chile had not only developed planning schemes, but established programs of works that allowed them to carry out their proposals.
- 9. Proposed by President John F. Kennedy, the Alliance for Progress would last 10 years with an investment of US\$20 billion in several countries. These resources came mainly from the US (Muñoz 2012).
- 10. Although a new urban development policy was enacted in 2014 and there are a series of current legislature proposals to modernize urban and regional planning, it still depends on an intricate set of laws and regulations (DDU-Minvu 2013).
- 11. The percentage of the urban population living in the largest city of the respective country (Browning 1989).
- 12. The quantitative housing deficit declined from 949,000 units in 1990 to 495,000 units in 2011 (DDU-Minvu 2013).
- 13. In 2015, there were 10,037 households living in shantytowns in the Valparaiso subnational region, 4,337 in the Santiago metropolitan region, and 1,103 in the O'Higgins region (TECHO 2017).
- 14. About one-third to two-thirds of the labor force in secondary cities surrounding Santiago commuted daily to Santiago, particularly from Puente Alto and San Bernardo, while 4% to 5% of the labor force of some secondary cities located in the subnational regions of Valparaiso and O'Higgins also commuted to Santiago. Most of the secondary cities with significant levels of commuting flow to Santiago have higher levels of poverty than the national average. These commuting flows have been increasing over time. Data from interurban toll highways (Copsa 2016) show that about 53,000 vehicles entered Greater Santiago on a weekday in 2016, up 60% since 2009 and almost doubling during the morning interval.
- 15. The intendent was replaced by a democratically elected regional governor, starting in 2017.
- 16. These plans are (1) general Regional Development Plans, prepared by the regional government, which typically include a vision and objectives on a wide range of topics; they are not mandatory and are seldom monitored; (2) a Territorial Arrangement Plan; (3) a Regional Plan for Urban Development, prepared by the

Regional Secretariats of Housing and Urbanism (SEREMI-MINVU), which are mandatory; and (4) a portfolio of infrastructure projects prepared by several ministries. At the local level, municipalities prepare a Communal Development Plan (PLADECO), based on socioeconomic factors, and a Regulatory Plan, which is mandatory, prescriptive land-use planning. Regional, metropolitan, and local plans need the approval of the Regional Council and the Ministry of the Environment. No transport planning is undertaken at the regional level, although the Ministry of Transport and Telecommunication develops transportation plans for metropolitan areas and the main secondary cities and assists local councils in implementing transport demand measures.

- 17. There are three such instruments in the SCCR: PRMS for Greater Santiago, PREMVAL for Greater Valparaiso, and PRI Rancagua-Machalí.
- 18. Most roads and other major infrastructure projects are built and operated by MOP or the private sector under a concession scheme, while the infrastructure of the railway and metro systems is owned and managed by public enterprises (EFE and METRO, respectively), with their specific portfolio of projects.
- 19. For example, the Santiago Metropolitan Region accounts for 58% of the national medical staff and 5% of health services, although it represents 35% of the country's population (INE 2012). The Valparaiso and O'Higgins regions have 11% of the staff and 10% of services but represent 15.5% of the population (Copsa 2016).
- 20. This type of framework operates in cities such as Melbourne, Sydney, and Portland. In Chile, the case of Antofagasta, a secondary city located in the northern region of Chile, is noteworthy. See http://creoantofagasta.cl/en/
- 21. This would require joint investment, though it could utilize the existing geospatial information platform of the central government and the national congress. See central government initiatives http://www.ide.cl/, http://www.geonodo.cl/, and hhttp://www.sinim.gov.cl, and the national congress https://www.bcn.cl/siit
- 22. The direct election of the regional authority; devolution of responsibilities, services, and programs to regional and local governments; the creation of management systems for metropolitan areas; the increase of regionally and locally controlled budgets (from the existing 18% to 35%, though still below the OECD average of 45%); creation of a national fund to compensate inequalities among regions, such as those in Canada, Australia, and Japan; regional systems for developing the human capital needed by each region; and the enhancement of public participation mechanisms.

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#### **EIGHT**

# Changes in Consumption in Peru during the Globalization Process

Nadia Nora Urriola Canchari

Globalization is a process that links good and capital markets from different countries, overcoming obstacles to international investments; this can help countries develop their technology and improve information processes sectors of production. It has been proven that, since the beginning of globalization, economic development has improved dramatically more in economies that participate and have open economic policies than in economies that have barriers to the international market (Edwards 1993; Gorssman and Helpman 1991). Studies of globalization have focused on the impact on economic development through measuring total imports, exports, and direct foreign investment, which are part of the Gross Domestic Product (Dollar and Kraay 2004; Dreher 2006). Most research shows that globalization has a positive effect on economic growth through international trade because this facilitates technology diffusion through the importation of high-tech products. In addition, it facilitates the benefits of the direct foreign investment (Zahonogo 2017; Almeida and Fernandes 2008; Baldwin, Braconier, and Forslid 2005; Barro and Sala-i-Martin 1997).

With globalization came a new formulation of urban hierarchies, recognizing cities with special characteristics as global cities. The principal characteristics of global cities are the presence of multinational enterprises, which operate permanently in those cities (Taylor 2004), and that the econ-

omy and policies of the country tend to remain stable over the long term (Allen 1999). Global cities are also characterized by technology development and IT improvement (Smith 2003). In Latin America, Mexico City, Buenos Aires, and Rio de Janeiro are considered global cities (Kotkin et al. 2014). However, the major cities that played important roles (in global economic, and politic spheres) since the conquest by European states were Mexico City and Lima, because both were crucial nodes in the transatlantic and transpacific trade (Roberts 2005). According to Morse (1971), those cities played an important role in ordering the internal economies of Spanish colonies. Nowadays, Latin American countries are configured around the major cities, which undertake economic and political projects in important sectors such as agriculture and extractive activities. Newly emerged regions around important urban centers include Cali and Medellin in Colombia; Guadalajara and Monterrey in Mexico; and Trujillo, Arequipa, and Huancayo in Peru (Walton 1977; Long and Roberts 1984). With the evolution of Latin American principal cities, at the end of the 19th century and beginning of the 20th, Latin American economies were developing based on their natural resources, exporting primary products to the world. The exporters were mainly national and foreign elites, who resided in the major cities. Secondary cities also grew, but more slowly than the major cities. In the 20th century, as result of the opening market, importation of goods also increased.

Lima, the capital of Peru, has developed significantly since 1990, the year of economic reform and of Peru's inclusion in the international market. Since then, given its current characteristics, it can be considered a global city because the infrastructure has been developed and business centers have been created. But compared to New York City and Santiago de Chile City, Lima needs to improve its political system to reduce existing socioeconomic gaps (Cortes 2013). This situation is reflected in the changes over time in consumers' acquisitions in Lima. In 1990, 89% of citizens acquired nondurable goods such as primary goods necessary for subsistence, but in 2017 the citizens' percentage had fallen to 53%. Regarding durable goods, in 1990 11% acquired them, whereas in 2017 this percentage had increased to 47%. This variation, and the lack of research on this topic, motivated the present analysis of the impact of economic growth in modifying citizen consumption during the globalization process in Peru between 1990 and 2017. We also analyze the influence of durable and nondurable good importation on the total value of imports, examining gross domestic product variation, gross domestic product per capita, the trade balance, and variation in consumption types.

# Peru in the Global Economy of the 1990s

To give a short economic history of Peru: it had problems beginning in 1970, due to the oil price shocks, which were followed by the debt crisis in the 1980s (Wegner 2015). For those economic problems, and in response to hyperinflation and the economic crisis, Peru started liberal reforms in 1990 with Fujimori as president (Stokes 1996). According to Stokes, by 1990, Peru had lived through many years of decline, with real incomes in 1990 below their level in 1974, and vast differences in income and wealth. The economic reforms were a response to the economic backsliding and growing macroeconomic instability. Multilateral bodies—particularly the International Monetary Fund, World Bank, and Inter-American Development Bank—played an important role in designing various structural reforms (Cuba 2013). Until the 1990 reforms, Peru did not participate in voluntary international credit markets. So, multilateral bodies played a decisive role in financing Peru's return to fiscal sustainability. The reforms included allowing price controls to be set by the market; an ambitious opening up of trade and finance, where tariffs and para-tariff barriers were gradually dismantled; the privatization and creation of regulatory bodies for cases of natural monopolies in energy, water, telecommunications, and transport; and the creation of an agency to oversee free competition (antitrust) and consumers' rights. The reforms also included rescheduling the public debt, strengthening the tax-collection agency, and reducing the fiscal deficit. Finally, the Central Bank was granted autonomy and given the single goal of ensuring monetary stability.

Since then, Peru has been recognized as one of Latin America's main success stories, with a solid macro policy and favorable external conditions. As result, the country has enjoyed high growth and employment with low inflation and gains in financial and social inclusion (Werner 2015). In 2014, the Peruvian economy was considered to be one of the strongest performers in the region.

As can be appreciated in figure 8.1, the GDP (in US\$) in 2017 had increased surprisingly compared with the value for 1990. For 1990, the year of the economic reforms, the GDP was US\$26.41 billion, and for 2017, it was \$US211.39 billion—an almost tenfold increase over 17 years. To clearly understand the improvement in economic growth, we need to analyze and compare the growth percentages in both years. While in 1990, economic growth was negative, with a value of –5%, in 2017 the economic growth was 3%. The improvement in economic growth can be observed in figure 8.2. In general terms, after 1990, the Peruvian economy started

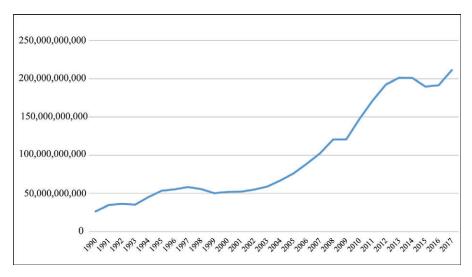


Fig. 8.1. Peruvian gross domestic product (1990–2017), in current \$US. The authors' elaboration. *Source*: Central Bank of Peru.

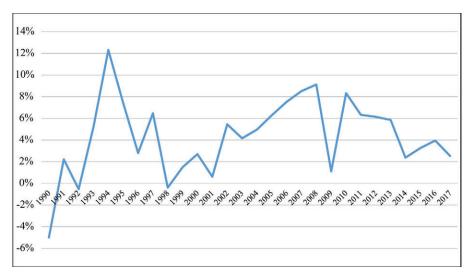


Fig. 8.2. Peruvian gross domestic product (1990–2017); annual % growth. The authors' own elaboration. *Source:* Central Bank of Peru.

recovering from two decades of stagnation and entered a new path of sustained growth (Carranza et al. 2003). But even when the reforms started in 1990, during the first decade of them, 1990–2000, the contribution to economic growth was negative, an average of –2.4% (Jimenez 2011). Thus, the economic reforms of the 2000s were crucial for the actual success of the Peruvian economy.

## **Macroeconomic Indicators**

Analysis of the macroeconomic indicators shows that the economic recovery was more evident after 1990. The first macroeconomic indicator analyzed was GDP per capita. Until 1990, and even during that year, GDP per capita was negative, showing that until 1990 the standard of living of the population declined. Only after 1993 did the standard of living become positive. As you can see in figure 8.3, this percentage fell during 1998–2001, due to the financial crisis of 1998, which showed that urgent reforms still needed to be implemented (Carranza et al. 2003).

In this descriptive analysis, we divide Peruvian economic development in two stages, the first between 1990 and 2000 and the second between 2000 and 2017. In 1990 and 2000, important changes were made to assure sustainable economic growth (as assessed in terms of GDP growth). According to the data, the average GDP per capita in the first stage was 1.5%, and in the second stage was 4%. The conclusion of this first analysis is that the living conditions of Peruvian citizens were better in the second stage, and after the new market regulations, than in the first stage, when the economic reform started.

The second macroeconomic analyzed indicator was the ratio of exports to GDP (or exports as a percentage of GDP). This indicator shows trade openness—that is, the value of all goods and services provided to the world, including merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as those in communication, construction, finance, information, business, and government, excluding employee compensation, investment income, and transfer payment (Birdsall and Hamoudi 2002).

Since 1990, as you can observe in figure 8.4, the value of this factor has been positive and constant, with a consistent increase after 2000 (the year new economic reforms were implemented). In general terms, during the first stage, the average growth of this ratio was 12%, and during the second stage, the average growth was 23%. This is why, according to the Global

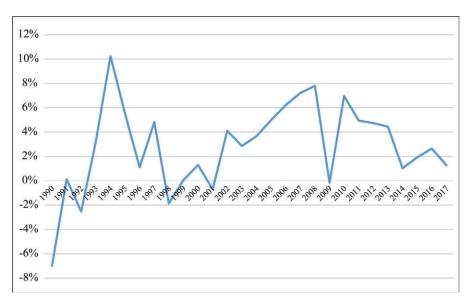


Fig. 8.3. GDP per capita: 1990–2017. The authors' own elaboration. *Source:* Central Bank of Peru.

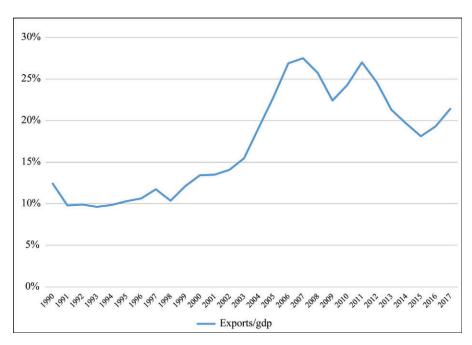


Fig. 8.4. Exports as a GDP percentage: 1990–2017. The authors' own elaboration. *Source:* Central Bank of Peru.

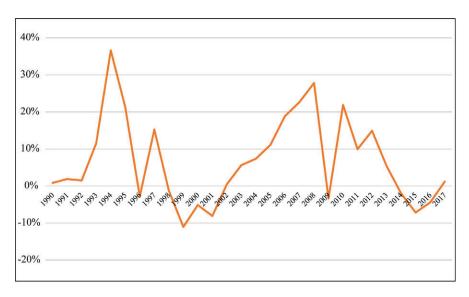


Fig. 8.5. Gross fixed capital formation growth. The authors' own elaboration. *Source*: Central Bank of Peru.

Economy (2019), Peru has the sixth-highest country ratio of exports to GDP in South America.

The third and fourth macroeconomic indicators are linked to fixed capital, which is one of the fundamentals of every economy because any economic activity requires machines, devices, equipment, roads, tracks, power grids, airports, water systems, telephones, and other fixed assets. Thus, it seems obvious that economic growth is strongly dependent on available fixed capital (Lach 2013). The third macroeconomic indicator analyzed to explain the improved Peruvian economy during the studied period is the gross fixed capital formation growth, as you can see in figure 8.5, which indicates the increase of physical assets in the country, not including land purchases. According to the data, after 1990 and during the first stage, the average growth of gross fixed capital formation was 7%. During the second stage, the average growth was 8%. Again, and as with the previous indicators, in the second stage the growth was higher than in the first stage, which means that after the second economic reform (the 2000s reform), Peru acquired more physical assets, other than nondurable goods and land purchases.

The fourth macroeconomic indicator is gross fixed investment as a percentage of GDP, which gives information about the percentage of the GDP that is invested in fixed assets for future production rather than being

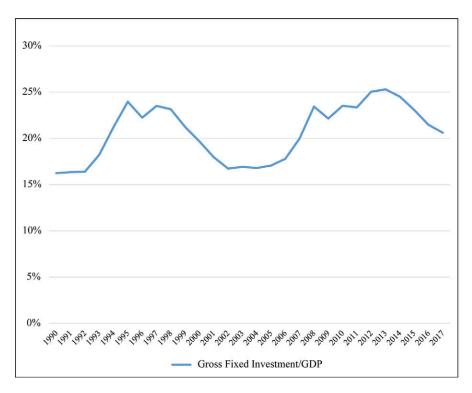


Fig. 8.6. Gross fixed investment as a percentage of GDP. The authors' own elaboration. *Source:* Central Bank of Peru.

spent, on the assumption that it will give benefits in the medium and long run. The average GDP percentage invested in the acquisition of assets was similar in the first and second stages (22%), which can be appreciated in figure 8.6. The average total of investment in the country compared to GDP is 22% from 1990 to 2017. It means that 22% of the GDP is used to acquire assets, with the goal of increasing production in the future. This percentage is low, considering that Peru passed from a primarily agrarian economy in the 1900s to a center for manufacturing in South America (García-Herrero et al. 2014).

Finally, the last macroeconomic indicator is inflation-rate growth, which indicates the percentage of currency devaluation during a period, or how much the currency lost its value, which increases the amount of money needed to acquire a product. As mentioned previously, and as can be observed in figure 8.7, in 1990 there was a hyperinflation problem. The inflation rate was 7,482%, which started decreasing after the economic

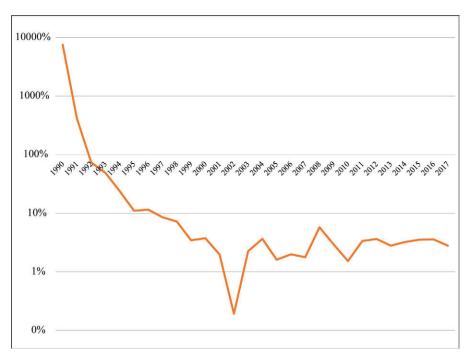


Fig. 8.7. Inflation rate growth: 1990–2017. The authors' own elaboration. *Source*: Central Bank of Peru.

reforms of that year. In general terms, in the first economic stage, the inflation growth had an average of 808%, and during the second stage, this average decreased dramatically to 3%. Thus, there were definite economic improvements after the economic reforms of the 1990s, and even greater improvements after the second economic reforms of the 2000s. The analyzed indicators show us that the economic situation of citizens improved from one stage to another, influencing their acquisition preferences and changing the imported goods they bought during the two analyzed stages.

#### Trade Balance

Peru is one of the Latin America countries that has numerous economic cooperation and free trade agreements with multiple countries (Ey 2017). Peru has been a member of the United Nations since it began, of the World Trade Organization since 1995, of the Asia Pacific Economic Cooperation Pacific Alliance since 2011, and of the Security Council during 2006–2007.

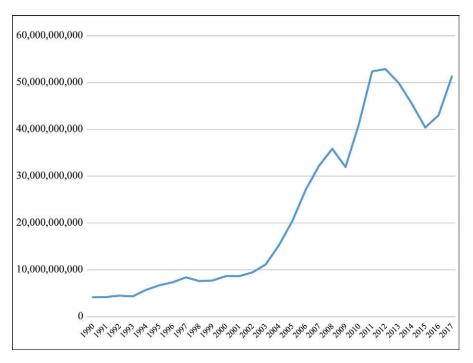


Fig. 8.8. Export value: 1990–2017. The authors' own elaboration. *Source:* Central Bank of Peru.

After 1990, and as you can see in figure 8.8, export value increased, but the increase was higher after 2002, when Peru started open-market policies in international trade. As you can appreciate in figure 8.9, the average growth was higher during the first stage (7%) than during the second (6%). This is comprehensible—the economy was recovering during the first stage, and during the second stage it was fortified by additional economic policies. During the first stage, economic reform was focused exclusively on economic growth, but during the second stage, economic reform focused not only on increasing nominal value, but on the safety and security of national companies and citizen benefits, which required the revision of some international trade.

Generally, and as you can observe in figure 8.10, the majority of exportation was traditional products, including those from fishing, agriculture, mining, and petroleum products. The majority of income came from mining products, as raw materials. Ninety percent of Peru's exports are destined for countries with which it has signed agreements (International Trade Centre 2012; Bermeo-Velasquez 2016). The principal exported products

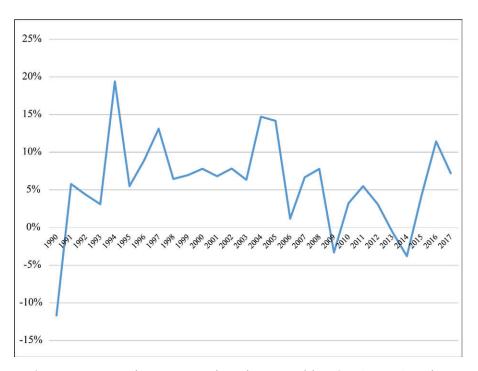


Fig. 8.9. Export growth: 1990–2017. The authors' own elaboration. *Source:* Central Bank of Peru.

are gold, copper, petroleum oil, natural gas, zinc, lead, iron, fishmeal, and coffee. The principal trading partners are the United States, China, Brazil, Colombia, Chile, Ecuador, Argentina, Venezuela, Switzerland, South Korea, Japan, Canada, Germany, Spain, the Netherlands, England, Mexico, and Italy (Ey 2017).

The export increase augments the income of the country and of citizens, which increases local demand for goods. It implies an increase in product imports because national production can't supply all of the demand. The categorization of this demand and how it changed in the studied periods are analyzed in the next section. But, in general terms, as can be appreciated in figures 8.11 and 8.12, importation during the second stage is higher (in nominal value) than during the first stage, and importation growth is similar in both stages, having an average growth of 9% in each stage. Finally, analyzing the trade balance of Peru (fig. 8.13), after 1990 it is positive, but the average during the first stage is negative, which means that during 1990 to 2000, import value was higher than export value; During 2001–2017, export value was higher than import value.

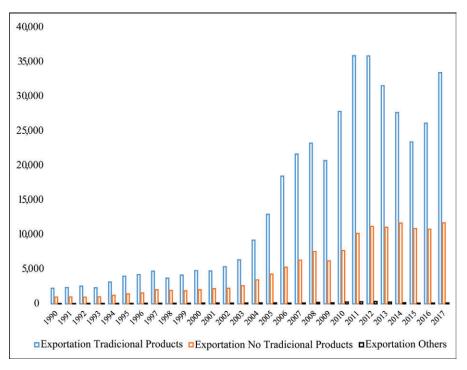


Fig. 8.10. Export types: \$US millions. The authors' own elaboration. *Source:* Central Bank of Peru.

Peru, as of 2021, has 32 bilateral agreements, but has only signed free trade agreements with the United States, China, Thailand, the European Union, the European Free Trade Association, the Southern Common Market or MERCOSUR, South Korea, Canada, Costa Rica, Chile, Mexico, Venezuela, Panama, Japan, Singapore, Cuba, the Pacific Alliance, and the Andean Community. In the Bilateral Reciprocal Investment Promotion and Protection Agreements (BRIPPAs), Peru has signed 28 agreements, including the trade negotiations for the Trans-Pacific Partnership Agreement.

# **Economic Growth and Imports**

After 1990, import growth showed a constant increase. In nominal terms, during both stages the major Peruvian expenditure was on primary goods (nondurable goods), followed by expenditures on capital goods, and then

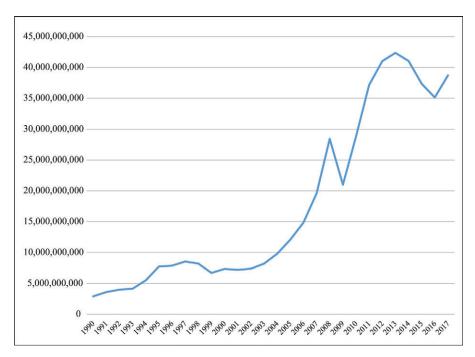


Fig. 8.11. Import value: 1990–2017. The authors' own elaboration. *Source:* Central Bank of Peru.

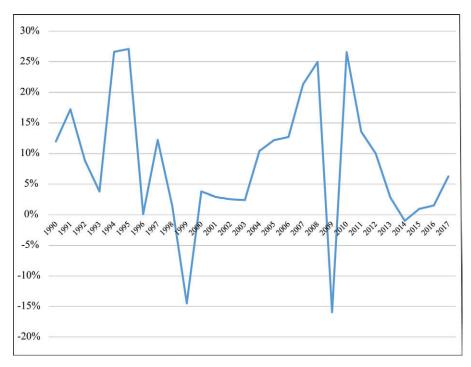


Fig. 8.12. Import growth. The authors' own elaboration. *Source:* Central Bank of Peru.

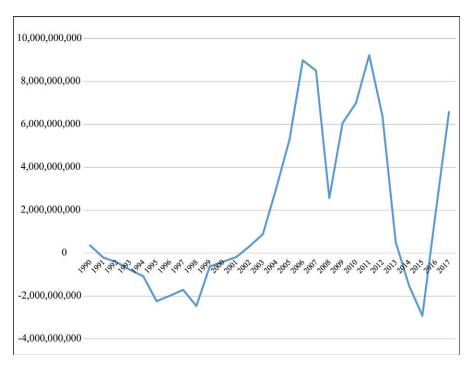


Fig. 8.13. External balance: 1990–2017. The authors' own elaboration. *Source*: Central Bank of Peru.

by goods for consumption, as can be observed in figure 8.14. Primary goods are usually characterized by lack of human investment; most are natural resources and raw materials. Final goods or final products are divided into consumption and capital goods. Consumption goods usually satisfy human necessities directly, while capital goods meet human necessities indirectly, such as by improving and promoting the capacity of production for durable goods.

According to the analyzed data, importation of capital goods is the second importation type, which indicates that the Peruvian economic situation has improved since 1990. According to Arup (2018), the capital goods imported were industrial goods, especially materials for construction and agriculture. The importation of consumption goods (fig. 8.15) shows that Peruvians increased the importation of nondurable goods during both studied periods. The nondurable products most demanded by Peruvians were intermediate goods, such as drugs for human use and footwear made of textile material on the upper part and plastic soles. The durable goods most demanded by Peruvians were vehicles and televisions,

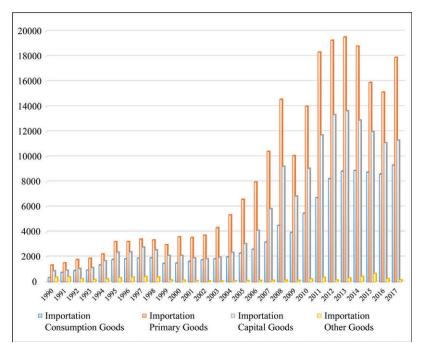


Fig. 8.14. Importation types: \$US (millions). The authors' own elaboration. *Source:* Central Bank of Peru.

which accounted almost a third of importation (Arup 2018). Analysis of the industrial sector in Peru shows that the major supply imports were for the industrial sector; the variations and growth can be observed in figure 8.16. The main countries of origin for imports were China, Taiwan, Pakistan, Colombia, and India (Garay and Company 2016).

# **Econometric Analysis: Methodology**

# Research Design

This research was fundamentally descriptive and analytical; it embraced the use of secondary data to determine the effect of salary increases (measured in GDP per capita growth), and the demand for durable and nondurable goods on goods imported to Peru, during two stages: 1990–2000 and 2001–2017. The analytical econometrical test used as a tool to model the annual time series data is the vector auto-regression (VAR) model.

For the current research, annual time series data covering the period

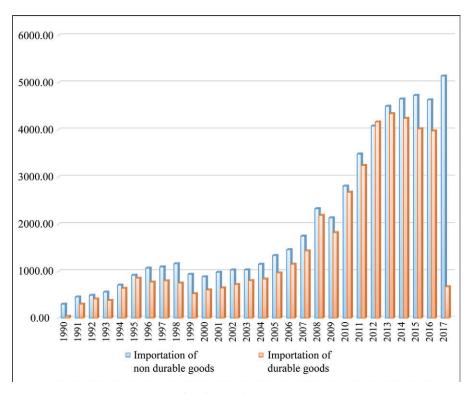


Fig. 8.15. Consumption goods: \$US (millions). The authors' own elaboration. *Source:* Central Bank of Peru.

between 1990 and 2017 were needed, including data on total importation goods value, the importation value of durable goods, the importation value of nondurable goods, the GDP per capita, and the inflation rate. The data for this research was obtained, as mentioned, from secondary resources, especially from the Peruvian Central Bank of Reserve (PCBR), PCBR Annual Reports, the National Bureau of Statistics, and World Bank Indicators.

# **Model Specification**

To examine the impact of the salary increase on the importation of goods, and the impact of the importation of durable and nondurable goods on the total importation value as a dependent variable, it's necessary to consider a dependence function, which includes the inflation rate as a main variable for the function. It is specified by the following equations:

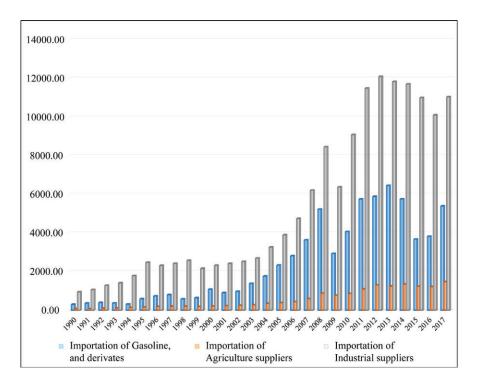


Fig. 8.16. Import of supply goods: \$US (millions). The authors' own elaboration. *Source*: Central Bank of Peru.

$$TIMP_{t} = f(IMPDG_{t}, INF_{t}, GDPPC_{t})$$
 (1)

$$TIMP_{\cdot} = f(IMPNDG_{\cdot}, INF_{\cdot}, GDPPC_{\cdot})$$
 (2)

To discard the differences in the measurement units, the natural logarithm is applied on both sides of equations (1) and (2), to minimize the gap between the dependent and independent variables.

$$LTIMP_{t} = \beta_{0} + \beta_{1}LIMPDG_{t} + \beta_{2}LINF_{t} + \beta_{3}LGDPPC_{t} + \beta_{4}TIMP(-1) + e_{t}$$
(3)

$$\begin{split} LTIMP_t &= \beta_0 + \beta_1 LIMPNDG_t + \beta_2 LINF_t + \beta_3 LGDPPC_t \\ &+ \beta_4 TIMP(-1) + e_t \end{split} \tag{4}$$

In the following study, the model was applied in two different stages, as specified in equations (5) and (6). For the case of the impact of durable goods' importation value:

$$\begin{split} LTIMP_{1990-2000} &= \beta_0 + \beta_1 LIMPDG_{1990-2000} + \beta_2 LINF_{1990-2000} \\ &+ \beta_3 LGDPPC_{1990-2000} + \beta_4 TIMP(-1) + e_{1990-2000} \end{split} \tag{5}$$

$$\begin{split} LTIMP_{2001-2017} &= \beta_0 + \beta_1 LIMPDG_{2001-2017} + \beta_2 LINF_{2001-2017} \\ &+ \beta_3 LGDPPC_{2001-2017} + \beta_4 TIMP(-1) + e_{2001-2017} \end{split} \tag{6}$$

For the case of the impact of nondurable goods' importation value, the following equations were used:

$$\begin{split} LTIMP_{1990-2000} &= \beta_0 + \beta_1 LIMPNDG_{1990-2000} + \beta_2 LINF_{1990-2000} \\ &+ \beta_3 LGDPPC_{1990-2000} + \beta_4 TIMP(-1) + e_{1990-2000} \end{split} \tag{7}$$

$$LTIMP_{2001-2017} = \beta_0 + \beta_1 LIMPNDG_{2001-2017} + \beta_2 LINF_{2001-2017}$$

$$+ \beta_3 LGDPPC_{2001-2017} + \beta_4 TIMP(-1) + e_{2001-2017}$$
(8)

Where

LTIMP = natural logarithm of total importation value in millions of dollars

LIMPDG = natural logarithm of durable goods' importation in millions of dollars

LIMPNDG = natural logarithm of nondurable goods' importation in millions of dollars

LINF = natural logarithm of inflation rate per year

LGDPPC = natural logarithm of GDP per capita in dollars

LTIMP (-1) = natural logarithm of one-year-lagged total importation value

 $e_{t} = error term$ 

 $\beta_0$  = constant term

 $\beta_1$ - $\beta_4$  = parameters of explanatory variables estimated in the model

## **Estimation Procedures**

In this case, for the short-run analysis, the regression for the multivariable series (vector auto-regression model) was used, enforced for the unit root test. Regarding the unit root test: the usage of vector auto-regression (VAR) model methodology on time-series data usually requires that the data be stationary to avoid the problem of spurious regression. A variable is considered stationary if it has a constant mean, variance, and auto covariance at any measured point. If the time series isn't stationary at the

base level, it would be stationary after successive differencing. The order of integration of a series is the number of times it needs to be differenced to become stationary. A series integrated in order I (n) becomes stationary after differencing n times. In this study the stationary test was carried out using the augmented Dickey Fuller (ADF) test, which was formulated by Dickey and Fuller (1979, 1981). The decision rule states that the series is stationary if the ADF test statistic is greater than the critical value, and that it isn't stationary if it is less than the critical value. The general ADF Test form is represented by the following regression:

$$LGDP_{t} = \beta_{0} + \beta_{1}LATX_{t} + \beta_{2}LANTX_{t} + \beta_{3}LLF_{t} + \beta_{4}LFKF_{t} + \beta_{5}LGDP(-1)$$

$$+ e_{t} \Delta Y_{t} = \alpha_{0} + \alpha_{1}Y_{t-1} + \sum_{n=1}^{N} \alpha \Delta Y_{t} + e_{t}; \text{ it includes only the drift}$$
 (9)

$$\Delta Y_{t} = \alpha_{0} + \alpha_{1} Y_{t-1} + \sum_{n=1}^{N} \alpha \Delta Y_{i} + \delta_{t} + e_{t}; \text{ it includes the drift and linear time trend}$$
 (10)

Where:

Y = time series of specified variable

t = time trend

 $\Delta$  = first differencing operator  $\Delta Y_{t-1} = Y_t - Y_{t-1}$ 

 $\alpha_0$  = constant term

N = optimum lags' number

e<sub>t</sub> = random error term

Regarding the vector auto-regression model: to specify a VAR model, we need to specify which variables will be included, considering that not all of them are of interest; they should be chosen based on our economic theory or according to our a priori ideas. According to Clements and Mizon (1991), this involves a marginalization process in the joint probability density of the VAR model, which must be interpreted according to the relevance of the chosen variables. After the model specification, we need the appropriate lag length of the VAR model, deciding how many lags will be used for the model analysis. The most common statistical method is the Akaike criteria. An alternative method is to choose a rather large lag length a priori, and check if the results on the regression are independent of this assumption (Blanchard and Quah 1989). However, it's been shown that there could be two problems if a small lag length or a large lag length

is chosen. A large lag length number of observations typically leads to poor and inefficient estimates of the parameters, and a short lag length induces spurious parameter significance. So, the theory suggests using some statistical criteria to choose the smallest lag length, which can be adjusted to allow for more lags if the residual is nonwhite (Bjørnland 2000). In general, it is more important to assure that the model is dynamically well specified, which includes the absence of correlation, and the existence of heteroscedasticity and normality in the integration order must be checked. An unrestricted VAR, which is congruent, and which captures the dynamic relationships in the data with constant parameters, must be selected.

As in the case of an ordinary least squares (OLS) model, the VAR model can be estimated through a single equation, which must be consistent, and under the assumption of normality of errors as a linear model. The unrestricted VAR models are a reduced form and are therefore uninterpretable without "reference" to theoretical economic structures. To understand the model, suppose that  $z_t$  is a  $(n \times 1)$  vector of macroeconomic variables whose dynamic behavior is governed by a finite structural model:

$$\beta_0 z_t = \gamma + \beta_1 z_{t-1} + \beta_2 z_{t-2} + \dots + \beta_p z_{t-p} + u_t$$
(11)

Where  $\gamma$  is a constant,  $\beta_i$  is a  $(n \times n)$  coefficient matrix, and  $u_i$  is a  $(n \times 1)$  vector of white-noise structural disturbances, with covariance matrix  $\Sigma$ . A reduced form of  $Z_i$  can be modeled as:

$$z_{t} = \delta + \alpha_{1} z_{t-1} + \alpha_{2} z_{t-2} + \dots + \alpha_{p} z_{t-p} + e_{t}$$
(12)

Where  $\delta = \beta_0^{-1} \gamma$ ,  $\alpha_i = \beta_0^{-1} \beta_p$ , and  $e_i = \beta_0^{-1} u_i$  is a white-noise process, with non-singular covariance matrix  $\Omega$ . To go from the reduced form to the structural model, a set of identifying restrictions must be imposed. It is now common to assume that the covariance matrix for  $u_i(\Sigma)$  is diagonal, while  $\beta_0$  has unity on its main diagonal but elsewhere is unrestricted. This implies that each member of  $z_i$  is assigned its own structural equation, which ensures that the shocks can be given an economic interpretation. The  $\alpha_i$ s and  $\Omega$  can be estimated by applying OLS to the reduced form (11). However, if  $\beta$  is unrestricted, one cannot estimate  $\beta_0$  as the  $\alpha_i$ s contains pn² known elements and there are  $(p+1)n^2$  unknown elements in the  $\beta_i$ s. Instead one solves for  $\beta_0$  from:

$$\Omega = cov(e_t) = cov(\beta_0^{-1}u_t) = \beta_0^{-1}\Sigma(\beta_0^{-1})'$$
(13)

As in any model, the VAR approach must be estimated to low-order systems, and the omitted variables will be included in the residuals, which may lead to major distortions in the response, making them of little use for structural interpretations (Hendry 1995). Another problem is that all measurement errors or misspecifications of the model will induce unexplained information that will be in the disturbance terms, making interpretation difficult and raising the risk of overinterpretation. However, it doesn't imply that those responses are useless; rather, it emphasizes the need to be careful with the characteristics of the data, encouraging the model with congruence. To avoid any problem with the VAR model results, the recommendation is to identify the model using the economic theory, either tight or loose, and if necessary analyze the introduction of other relevant variables.

### Results and Discussion

## **Empirical Results**

Before providing the comprehensive econometric analysis, we need to briefly interpret the statistical analysis. The definitions and summary of the statistics of those variables were provided in tables 8.1 and 8.2, both of which represent the analyzed period. In the case of the first stage (1990–

TABLE 8.1. Summary Statistics of Variable, from 1990 to 2000

Variables	Mean	Median	Max	Min	Std. Dev.
TIMP	6050000000	6710000000	8540000000	2920000000	2070000000
IMPNDG	783000000	888000000	1170000000	300000000	294000000
IMPDG	554000000	606000000	861000000	38200000	253000000
INF	735	12	7482	3	2241
GDPPC	1887	16	2342	1210	370

Source: Researcher's compilation from Stata 13.0.

TABLE 8.2. Summary Statistics of Variable, from 2001 to 2017

Variables	Mean	Median	Max	Min	Std. Dev.
TIMP	25300000000	28400000000	42400000000	7200000000	13400000000
<b>IMPNDG</b>	2780000000	2330000000	5140000000	987000000	1560000000
IMPDG	2230000000	1830000000	4340000000	648000000	1470000000
INF	3	3	6	0	1
GDPPC	4441	4209	6583	1981	1776

2000), it reported that the average of the importation value was \$6.05 billion with \$2.07 billion as the standard deviation. In the case of non-durable goods importation, the average is \$783 million and the standard deviation is \$294 million. For the case of durable goods importation, it has an average of \$554 million and a standard deviation of \$253 million. It also showed that the inflation average was 734.79%, with \$2,240.82 as the standard deviation. Finally, the GDP per capita averaged \$1,886.84, with \$369.79 as the standard deviation.

During the second stage (2001–2017), the average of the importation value was \$25.3 billion with \$13.4 billion as the standard deviation. Nondurable goods importation averaged \$2.78 billion and the standard deviation was \$1.56 billion. Durable goods importation averaged \$2.23 billion, with a standard deviation of \$1.47 billion. The inflation averaged 2.75% with a standard deviation of 1.24%. Finally, the GDP per capita averaged \$4,440.87 with \$1,775.56 as the deviation standard.

From this empirical result, we can observe that inflation changed significantly over both periods. During the first analyzed period of 10 years, and as a consequence of the national economic crisis, it was more than 700%. After 2001, and as result of the new constitution and economic policies (opening the national market), the inflation rate was only 3% during the last 17 years. Import value increased almost 320% as the average from one period to the other. For durable and nondurable goods importation, in both stages the major value was for nondurable products, but the major increase was for durable products. In the case of nondurable products, it increased 255%; in the case of durable products, it increased 300%.

#### Unit Root Test Result

To support the VAR model, the augmented Dickey-Fuller test was performed on all variables (total importation value, importation of nondurable goods value, importation of durable goods value, inflation rate, and per capita GDP). The results of the augmented Dickey-Fuller test for showing the existence of the unit root of once-differenced data are presented in tables 8.3 and 8.4, for both studied periods.

The result in table 8.3 confirmed the stationary test of the variables at the level form I (0) for the LTIMP, LIMPNDG, LIMPDG, and LINF, and for the LGDPPC for the first studied period. According to this, the null hypothesis of nonstationary could be rejected at 5% and 10% critical value level, confirming that the ADF test statistics were greater than the critical value, which could also be understood as the *p*-value, which was significant at the level form I (0) because it was less than 0.05. Since the

			Critical values	Critical values	Critical values	
Variables			(1%)	(5%)	(10%)	Result
LTIMP	At level	-1.975	-2.896	-1.860	-1.397	It's stationary
LIMPNDG	At level	-3.195	-2.896	-1.860	-1.397	It's stationary
LIMPDG	At level	-8.320	-2.896	-1.860	-1.397	It's stationary
LINF	At level	-7.656	-2.896	-1.860	-1.397	It's stationary
LGDPPC	At level	-2.591	-2.896	-1.860	-1.397	It's stationary

TABLE 8.3. Unit Root Test for Order of Integration of Variables (ADF) 1990-2000

Source: Researcher's compilation from Stata 13.0.

null hypothesis was rejected for all variables at a convenient significance level, the variables didn't have a unit root at levels. Therefore, we could conclude that the variables data were stationary at the level of order zero I (0). Those stationary tests supported the econometric model of equations (5) and (7).

The reported result in table 8.4 confirmed the stationary test of the variables at the level form I (0) for the LTIMP, LIMPNDG, LIMPDG, and LINF, and for the LGDPPC during the second stage. According to this, the null hypothesis of nonstationary could be rejected at the 5% and 10% critical value level, confirming that the ADF test statistic was greater than the critical value; this could also be understood as the *p*-value being significant at the level form I (0) because it was less than 0.05. As in the previous explanation, since the null hypothesis was rejected for all variables at a convenient significance level, the variables didn't have a unit root at levels. Therefore, we could conclude that the variables data were stationary at the level of order zero I (0). Those stationary tests supported the econometric model of equations (6) and (8).

TABLE 8.4. Unit Root Test for Order of Integration of Variables (ADF) 2001–2017

			_			
Variables			Critical values (1%)	Critical values (5%)	Critical values (10%)	Result
LTIMP LIMPNDG LIMPDG LINF LGDPPC	At level At level At level At level At level	-1.516 -3.195 -1.421 -3.394 -1.605	-2.624 -2.896 -2.624 -2.624 -2.624	-1.761 -1.860 -1.761 -1.761	-1.345 -1.397 -1.345 -1.345 -1.345	It's stationary It's stationary It's stationary It's stationary It's stationary

# Regression Model

For the analysis and comparison of the two periods, we divided the importation products on the basis of durable and nondurable goods. The result of the regression equation (5) is shown in table 8.5. It indicates that this function fit the model best with significant effects on the total importation product, having 99.02% as the  $R^2$ . This result implied that the independent variables explained 99% of the total variation in the total importation value. The F-statistic was 0.0000, which indicated the parameters were significant at 5% and even 1%. The eigenvalue stability condition, the Breusch-Godfrey LM Test, and the Jarque-Bera probability were acceptable and supported the stability of the model.

So, the equation for the model defined in equation (5) was given as:

$$\begin{split} LTIMP_{_{1990-2000}} &= 9.2 + 0.07 LIMPDG_{_{1990-2000}} - 0.05 LINF_{_{1990-2000}} \\ &+ 1.21 LGDPPC_{_{1990-2000}} + 0.13 TIMP(-1) \end{split}$$

According to this equation, an increase of 1% of the importation of durable products (LIMPDG) led to an increase of 0.1% in the total importation value (LTIMP) during 1990–2000, but it's not significant in the equation. This is because during that time period Peru was under economic reform, which had a negative impact for the consumer. Even so, during that time the durable good importation value increased.

In the case of inflation, an increase of 1% in inflation resulted in a decrease of 0.5% in the total importation value (LTIMP), and it's signifi-

(1990–2000)				
Variable	Coefficient	Std. Error	t-statistic	<i>p</i> -value
D(LIMPDG)	0.068450	0.123	0.55	0.58
D(LINF)	-0.048376	0.020	-2.35	0.02
D(LGDPPC)	1.218612	0.323	3.77	0.00
D(LTIMP-1)	0.127928	0.982	1.30	0.19
Constant	9.197757	2.200	4.18	0.00
R-squared	0.990200			
Prob (F-statistics)	0.000000			
Eigenvalue stability condition	0.127928			
Breusch-Godfrey LM test	0.012710			
Jarque-Bera (Prob)	0.637280			
_				

TABLE 8.5. Short-Run Dynamic of Factors that Affect Importation of Goods (1990–2000)

cant in the model. This can be explained by economic theory: high inflation means a decrease in the value of the national currency, which means that more money was needed to acquire each US dollar. This has a direct effect of reducing total imports.

About the GDP per capita (GDPPC), an increase of 1% on this variable produced an increase of 1.2% in the total importation value (LTIMP), with high significance. Like the previous variable, economic theory can explain this result. An increase on the GDPPC directly augments consumption, which means that total importation increases. The constant has a positive, significant impact on the total importation value (LTIMP). An increase of 1% for products other than durable goods, such as capital, stocks, and nondurable goods, increased total importation value (LTIMP) by 9.2%.

Finally, about the lagged total importation value (LTIMP-1): it has a positive impact on the total importation value (LTIMP) in Peru, but it isn't significant even at 10%. When the lagged LTIMP increased by 1%, it implied an increase of 0.13% in the total importation value (LTIMP). This result, according to the multiplier-accelerator interaction, implied that the previous period LTIMP increased the consumer income and consumption level of the country, leading to an increase in the total importation value in the current period. The results of the regression equation (6) are shown in table 8.6. They indicate that this function best fit the model with significant effects on the total importation product, having 99% as the  $R^2$ . This result implied that independent variables explained 99% of the total variation in the total importation value. The F-statistic was 0.0000, which implied that the parameters were significant at 5% and even at 1%. The eigenvalue stability condition, the Breusch-Godfrey LM test and the Jarque-Bera probability were acceptable and supported the stability of the model.

TABLE 8.6. Short-Run Dynamic of Factors that Affect Importation of Goods (2001–2017)

Variable	Coefficient	Std. Error	t-statistic	<i>p</i> -value
D(LIMPDG)	0.662505	0.038	1.74	0.08
D(LINF)	0.044022	0.026	1.69	0.09
D(LGDPPC)	1.624430	0.191	8.50	0.00
D(LTIMP-1)	-0.193376	0.126	-1.54	0.12
Constant	13.408620	1.370	9.79	0.00
R-squared	0.988900			
Prob (F-statistics)	0.000000			
Eigenvalue stability condition	0.193376			
Breusch-Godfrey LM test	0.120680			
Jarque-Bera (Prob)	0.008130			

So, the equation for the model defined in the equation (6) was given as:

$$\begin{split} LTIMP_{2001-2017} &= 13.4 + 0.67 LIMPDG_{2001-2017} + 0.04 LINF_{2001-2017} \\ &+ 1.62 LGDPPC_{2001-2017} - 0.19 TIMP(-1) \end{split}$$

According to this equation, an increase of 1% of the importation of durable products (LIMPDG) led to an increase of 0.7% in the total importation value (LTIMP) during 2001–2017, which is significant in the equation. As explained, after 2000, the Peruvian economy was stronger and the international investment also grew during that period, having the direct effect of augmenting internal consumption and increasing durable good importation (LMPDG), which also has a direct positive effect on the total importation value.

Regarding inflation, an increase of 1% in inflation resulted in an increase of 0.4% in the total importation value (LTIMP), and it is significant in the model. It means that the Peruvian economy is strong enough that the increase in the internal prices doesn't affect internal consumption and total importation value. The constant has a positive and significant impact on the total importation value (LTIMP). An increase of 1% of products other than durable goods, such as capital, stocks, and nondurable goods, increased total importation value (LTIMP) by 13.4%. This is true for the majority of international trades between Peru and countries from all continents.

Finally, the lagged total importation value (LTIMP-1) has a negative impact on the total importation value (LTIMP) in Peru, but it isn't significant even at 10%. When the lagged LTIMP increased by 1%, it implied a decrease of 0.2% in the total importation value (LTIMP). This result suggests that the previous period LTIMP decreased the total importation value in the current period; the explanation is that in terms of national investment, due to the 1980s national crisis, people preferred to invest or save money rather than spend it. A comparison of the importation value of durable goods during both periods shows that even when it was higher in nominal value during the first stage of 1990–2000, in terms of percentage it was higher during 2001-2017. So, while in the first stage the impact on total importation value was only 0.07% per 1% growth of durable goods importation, during the second stage this impact increased to 0.7%. The second analysis was done for nondurable good importation as a dependent variable of total importation value, as represented in the equations (7) and (8), to compare the two periods. The result of the regression equation (7) is shown in table 8.7. It indicated that this function best fit the model with significant effects on the total importation product, having 99.22%

Variable	Coefficient	Std. Error	t-statistic	<i>p</i> -value
D(LIMPNDG)	0.375007	0.224	1.68	0.09
D(LINF)	-0.049423	0.015	-3.28	0.00
D(LGDPPC)	0.993355	0.256	3.87	0.00
D(LTIMP-1)	-0.064065	0.115	-0.56	0.58
Constant	8.910242	1.469	6.07	0.00
R-squared	0.992200			
Prob (F-statistics)	0.000000			
Eigenvalue stability condition	0.064065			
Breusch-Godfrey LM test	0.022140			
Jarque-Bera (Prob)	0.860790			

TABLE 8.7. Short-Run Dynamics of Factors that Affect Importation of Goods (1990–2000)

Source: Researcher's compilation from Stata 13.0.

as the  $R^2$ . This result implied that independent variables explained 99% of the total variation in the total importation value. The F-statistic was 0.0000, implying that the parameters were significant at 5% and even at 1%. The eigenvalue stability condition, the Breusch-Godfrey LM test, and the Jarque-Bera probability were acceptable and supported the stability of the model.

So, the equation for the model defined in the equation (7) was given as:

$$\begin{split} LTIMP_{_{1990-2000}} &= 8.9 + 0.4 LIMPNDG_{_{1990-2000}} - 0.5 LINF_{_{1990-2000}} \\ &+ 1.0 LGDPPC_{_{1990-2000}} - 0.1 TIMP(-1) \end{split}$$

The results of the regression equation (8) are shown in table 8.8. They show that this function best fit the model with significant effects on the total importation product, having 99% as the  $R^2$ . This result implied that independent variables explained 99% of the total variation in the total importation value. The F-statistic was 0.0000, which implied that the parameters were significant at 5% and even at 1%. The eigenvalue stability condition, the Breusch-Godfrey LM test, and the Jarque-Bera probability were acceptable and supported the stability of the model.

So, the equation for the model defined in the equation (8) was given as:

$$\begin{split} LTIMP_{2001-2017} &= 15.9 - 0.31 LIMPNDG_{2001-2017} + 0.04 LINF_{2001-2017} \\ &+ 1.99 LGDPPC_{2001-2017} - 0.08 TIMP(-1) \end{split}$$

(2001 2017)				
Variable	Coefficient	Std. Error	t-statistic	<i>p</i> -value
D(LIMPNDG)	-0.309423	0.172	-1.80	0.07
D(LINF)	0.035709	0.027	1.34	0.18
D(LGDPPC)	1.984000	0.280	7.08	0.00
D(LTIMP-1)	-0.083213	0.123	-0.68	0.50
Constant	15.903280	1.924	8.27	0.00
R-squared	0.989000			
Prob (F-statistics)	0.000000			
Eigenvalue stability condition	0.083213			
Breusch-Godfrey LM test	0.992870			
Jarque-Bera (Prob)	0.001010			

TABLE 8.8. Short-Run Dynamics of Factors that Affect the Importation of Goods (2001–2017)

Source: Researcher's compilation from Stata 13.0.

As in the previous analyses of durable good importation, there is a difference in the nominal and econometric analyses. In nominal terms, the value for nondurable goods in the second stage increased, but the impact on total importation value was positive during the first stage and negative during the second stage, which shows the change in goods consumption. After the economy stabilized and international trade strengthened, consumers preferred to consume durable goods more than nondurable goods. The infrastructure also changed in the second period to augment international investment, which influenced the types of goods imported.

#### Conclusions

Over the past two decades, economic contributions and global output have been crucial to the continued economic development of Peru. Productivity was a critical factor in improving positive economic growth, which was greater during the first decade of the studied period, as a result of the neoliberal policies applied during the 1990s and 2000s to address the economic crisis of the 1970s and 1980s. In addition, and thanks to technological progress and industrialization, productivity and economic growth were higher after the 2000s. Capital was also important for economic growth in the long run. After the economic reforms, it became more important than it had been in previous decades. The analyzed macroeconomic indicators also showed that economic growth was possible thanks to the country's productivity increase.

In this context, the main objective of the study was to make a descriptive analysis of consumers' preference changes during 1990–2017. The analyzed period was divided into two stages, 1990–2000 and 2001–2017. The economic description used some macroeconomic indicators to understand the economic reforms' impact in the society. The study included analysis of the international balance, export and import growth, and classification of those variables. The results showed that the reforms had a positive impact on economic growth, and the majority of the importation was for capital and durable goods as a result of positive production growth and industry development. The econometric model regression fortified the previous conclusions, which showed that even with a higher nominal increase of nondurable goods during the first stage, in terms of percentage and influence on total importation value, it was durable goods that had the major impact during the second stage.

But it's also necessary to remark that during the second stage, public investment was clearly reduced, which is linked to the privatization of public enterprises and the adjustment of fiscal policies linked to the orientation of the Washington Consensus. According to Jimenez (2011), there is no correct development strategy that will benefit the national enterprise as the policies from the 1970s or 1980s did. And even when current economic policy is having a positive impact on citizens' standard of living (which is reflected in the consumers' preferences changes, and in the enterprises' demand), a new industrial strategy must be considered. It should be based on natural resources, on internal market expansion (through the infrastructure), and a new financial scheme of Peru's capital market. To continue to have economic growth and the benefits it provides to citizens, the focus needs to be on activities that will produce sustainable development, which will be reflected in benefits to citizens.

## APPENDIX

TABLE 8.9. Main Macroeconomic Indicators of the Peruvian Economy (1990–2017)

Year	GDP per capita	Exports / GDP	Gross fixed capital formation growth	Gross fixed investment / GDP	Inflation rate growth
1990	-7%	12%	1%	16%	7,482%
1991	0%	10%	2%	16%	410%
1992	-3%	10%	1%	16%	74%
1993	3%	10%	12%	18%	49%
1994	10%	10%	37%	21%	24%
1995	6%	10%	21%	24%	11%
1996	1%	11%	-3%	22%	12%
1997	5%	12%	15%	23%	9%
1998	-2%	10%	-1%	23%	7%
1999	0%	12%	-11%	21%	3%
2000	1%	13%	-5%	20%	4%
2001	-1%	14%	-8%	18%	2%
2002	4%	14%	0%	17%	0%
2003	3%	15%	6%	17%	2%
2004	4%	19%	7%	17%	4%
2005	5%	23%	11%	17%	2%
2006	6%	27%	19%	18%	2%
2007	7%	27%	23%	20%	2%
2008	8%	26%	28%	23%	6%
2009	0%	22%	-3%	22%	3%
2010	7%	24%	22%	24%	2%
2011	5%	27%	10%	23%	3%
2012	5%	25%	15%	25%	4%
2013	4%	21%	5%	25%	3%
2014	1%	20%	-2%	25%	3%
2015	2%	18%	-7%	23%	4%
2016	3%	19%	-4%	21%	4%
2017	1%	21%	1%	21%	3%

Source: World Bank and Central Bank; own elaboration.

TABLE 8.10. Trade Balance: 1990-2017

Year	External balance	Exportation value	Importation value	Exportation growth	Importation growth
1990	357,915,186.8	4,145,688,961	2,921,894,003	-12%	12%
1991	-202,160,918.6	4,190,478,468	3,595,304,544	6%	17%
1992	-423,301,976.2	4,500,645,313	4,001,389,935	4%	9%
1993	-775,761,612.6	4,336,828,767	4,160,419,086	3%	4%
1994	-1,075,086,923	5,732,107,084	5,499,211,486	19%	27%
1995	-2,241,477,435	6,717,350,829	7,732,892,487	6%	27%
1996	-1,986,568,590	7,357,698,733	7,864,212,369	9%	0%
1997	-1,710,979,575	8,418,168,168	8,535,536,537	13%	12%
1998	-2,461,965,127	7,605,311,668	8,218,739,967	6%	1%
1999	-622,962,395.8	7,727,286,157	6,710,484,595	7%	-14%
2000	-402,661,751.5	8,676,752,916	7,357,571,260	8%	4%
2001	-178,748,287.3	8,637,724,124	7,204,478,226	7%	3%
2002	321,107,719.2	9,462,717,116	7,392,792,281	8%	3%
2003	885,883,939.9	11,167,509,772	8,204,848,767	6%	2%
2004	3,004,393,434	15,298,201,418	9,804,775,980	15%	10%
2005	5,286,075,476	20,421,330,421	12,081,608,791	14%	12%
2006	8,986,065,150	27,068,649,606	14,844,082,095	1%	13%
2007	8,503,497,347	32,206,455,737	19,590,521,779	7%	21%
2008	2,569,297,760	35,836,836,529	28,449,181,869	8%	25%
2009	6,059,832,063	31,948,077,817	21,010,687,576	-3%	-16%
2010	6,987,761,349	41,051,644,190	28,815,319,466	3%	27%
2011	9,224,439,966	52,392,070,005	37,151,521,600	5%	14%
2012	6,392,669,538	52,881,407,340	41,017,937,140	3%	10%
2013	504,451,863.8	49,908,212,739	42,356,184,715	-1%	3%
2014	-1,509,467,651	45,392,391,687	41,042,150,550	-4%	-1%
2015	-2,916,435,593	40,404,471,800	37,330,790,127	4%	1%
2016	1,888,161,604	43,000,503,689	35,131,619,107	11%	2%
2017	6,571,173,347	51,290,520,440	38,703,861,013	7%	6%

Source: Own elaboration with data from World Bank and Central Bank.

TABLE 8.11. Consumption Goods/Supply Goods 1990–2017

	Consumption goods: \$US, in millions		Supply goods: \$US, in millions		
Year	Importation of nondurable goods	Importation of durable goods	Importation of gasoline, and derivatives	Importation of agriculture supplies	Importation of industrial suppliers
1990	300.07	38.20	305.01	83.81	944.61
1991	454.41	300.28	367.87	78.85	1,067.33
1992	492.30	411.65	395.68	107.00	1,278.25
1993	560.52	380.60	370.88	115.24	1,404.03
1994	711.90	641.88	316.30	135.01	1,780.54
1995	924.02	860.88	589.16	162.15	2,469.59
1996	1,071.11	775.92	733.87	187.72	2,307.99
1997	1,096.45	803.07	802.88	203.78	2,415.64
1998	1,165.98	756.28	582.24	204.43	2,572.83
1999	943.84	523.79	640.99	185.29	2,153.57
2000	888.37	605.84	1083.31	212.09	2,315.15
2001	986.64	648.26	908.11	228.88	2,414.20
2002	1,032.15	721.99	975.12	248.79	2,516.46
2003	1,034.62	806.66	1,376.19	277.95	2,685.75
2004	1,152.75	842.38	1,753.64	348.51	3,261.48
2005	1,337.78	969.98	2,325.42	384.16	3,890.33
2006	1,462.58	1,153.53	2,807.99	435.93	4,737.51
2007	1,750.69	1,438.23	3,631.04	588.49	6,209.01
2008	2,328.35	2,191.75	5,224.62	874.05	8,457.69
2009	2,136.95	1,825.42	2,929.31	773.41	6,373.73
2010	2,808.52	2,680.22	4,063.01	867.67	9,092.80
2011	3,488.55	3,245.21	5,751.65	1,092.37	1,1488.46
2012	4,082.38	4,169.67	5,885.33	1,291.60	12,096.28
2013	4,501.51	4,341.76	6,453.66	1,244.14	11,830.04
2014	4,656.51	4,242.59	5,754.21	1,338.70	11,704.38
2015	4,731.25	4,022.81	3,670.86	1,236.48	11,003.19
2016	4,638.22	3,976.22	3,819.07	1,212.61	10,108.29
2017	5,142.81	676.10	5,389.41	1,466.70	11,044.24

Source: Own elaboration with data from World Bank and Central Bank.

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#### NINE

# Urban Conflict and Transnational Crime in Latin American Cities

John P. Sullivan

Urban conflict and transnational crime are pressing concerns in many regions. This is especially true in Latin America. This chapter explores the relationship between crime and conflict in Latin American cities. The concepts of "global cities" and "global gangs" are reviewed to illuminate the interactions between illicit and licit activities—that is, underworld and upper-world economic flows and political economy—corruption, and linkages to global and transnational economics.

# The Rise of Urban Conflict

Urban conflict comes in many guises. These can include full-blown urban warfare involving international armed conflicts, noninternational armed conflicts, or a complex combination of both; endemic crime; and urban terrorism and civil strife (Konaev and Spencer 2018; Sullivan 2018a). Obviously, conflict in urban settings poses many challenges to the populace and the state. While protecting the public is foremost among these challenges, a range of tactical, operational, and strategic considerations arise for police, state security services, and urban political organs—mayors, city councils, and the public services they provide, ranging from physical infrastructure through healthcare, education, and policing. The most

important of these activities is sustaining the legitimacy of the state in contested areas, ranging from neighborhoods spanning a few city blocks to entire slums, barrios, colonias, or favelas. Operational challenges in urban settings include population density; diverse demographics; terrain features such as high-rise buildings, tunnels, and subterranean spaces; mixed land use; and environmental and ecological considerations, including threats to food and water supplies and efforts to deal with sewage, diseases, and resource scarcity arising from conflict situations. These can culminate in humanitarian disasters. Urban conflict can be seen a series of dystopian convergences of urban terrorism, urban crime, and urban warfare. The convergence between crime and war is a dominant concern as it tears at the fabric of urban life and threatens stability and life itself. At the lower levels of conflict, endemic street crime and gangs instill fear and extract street taxes (see Sullivan 2013a, 235–36). At higher levels, urban terrorism and urban siege disrupt urban social and economic life; at the extreme, urban warfare threatens destruction of cities, or "urbicide" (Sullivan 2018b; Coward 2009).

## Global Cities, Global Slums

Saskia Sassen, the preeminent scholar of global cities, has discussed the rise of global slums (2011). In her assessment, global slums, like global cities, are emerging in some key urban spaces, including Mumbai, Nairobi, Johannesburg, and São Paulo. Not all cities are global cities, and not all slums are global slums. But, as Sassen argues, some residents of these areas are indeed positioning themselves to become global political actors. These actors include "ecological entrepreneurs" (*emprendedores ecológicos*), urban migrant workers who become the labor force for both their slum and its global city. This articulation is emerging throughout the Global South, mobilizing economic and political power. The resulting synergistic combination of city and slum provides reciprocal economic benefits. Manufacturing and services from the slum can augment labor and add value to the economic activity of the city.

Of course, in addition to legitimate (licit) economic flows, a corresponding series of illicit (black market) flows also arises, fueling global gangs. In addition, a gray area between the two exists, complicating analysis, law enforcement, and political power dynamics. As Sullivan and Elkus have observed, "global cities linking global economic circuits are also home to transnational criminals and global gangs" (Sullivan and Elkus 2009b). Gangs are no longer only the result of youthful rebellion and delinquency,

but they are often emerging markets and political actors—that is, social actors, social bandits, and networked sovereign agents in the global system (Sullivan and Elkus 2009b). For Chicago gang scholar John Hagedorn, contemporary, global gangs are institutionalized in social environments, are increasingly present in globalized urban spaces, and are social actors with identities forged in repression, gender constructions; most importantly for their integration into global illicit flows, they participate in "underground economies" (Sullivan and Elkus 2009b; Hagedorn 2007; Hagedorn 1999). The integration of gangs into illicit global flows has been described as "deviant globalization" (see Gilman, Goldhammer, and Weber 2011).

Before summarizing the rise of these global flows, it is important to review urban insecurity in Latin America.

# Urban Insecurity in Latin America

Urban violence and insecurity are an endemic concern throughout Latin America. While the region accounts for 8% of the global population, it is responsible for about 38% of global criminal deaths, or around 140,000 murders in 2017. In addition to having a high crime rate, Latin America is the most urbanized region in the developing world, with over three-quarters of the population living in cities (around twice the proportion of Asia and Africa), which brings about income inequality, unemployment among young men, and dislocated families. Lack of government capacity, corrupt and/or ineffective police, and the absence of a political voice make gangs and mafias a viable way to ensuring survival and gain power.

The distribution of crime and violence is uneven among Latin America's nations and cities, and it fluctuates over time, yet the problem persists. Cities in parts of Brazil (e.g., Rio de Janeiro) and Central America's Northern Triangle (e.g., San Salvador in El Salvador, Tegucigalpa and San Pedro Sula in Honduras, and Guatemala City in Guatemala, among others) are severely challenged by gang crime, with transnational criminal cartels and maras dominating the local underground. Colombia has seen narcotraffickers and Bacrim (bandas criminales emergentes) and cartels dominate Bogotá, Cali, and Medellín at various times (see Sullivan 2014a). Mexico has severe criminal (narco) problems in many of its large cities, including Mexico City (CDMX), Tijuana, Ciudad Juárez, Acapulco, and Veracruz. Indeed, Latin America is home to several "dangerous cities," cities with very high homicide rates that experience insecurity and are highly fragile; "in just seven Latin American countries—Brazil, Colombia, Honduras, El Salvador,

Guatemala, Mexico and Venezuela—violence has killed more people than the wars in Afghanistan, Iraq, Syria and Yemen combined" (Azam 2019). According to *Homicide Monitor*, assembled by Brazil's Igarapé Institute, 14 of the world's 20 most dangerous countries are in Latin America and the Caribbean, and over 130 large Latin American and Caribbean cities (with populations greater than 250,000) have very high homicide rates (that is, rates greater than 25 per 100,000). The cities with the highest homicide rates over the past five years were San Pedro Sula (Honduras), Ciudad Juárez (Mexico), Ananindeua (Brazil), and Caracas (Venezuela) (*Homicide Monitor* 2019).

## **Dimensions of Fragility and Dangerousness**

Danger and fragility are underlying factors in urban insecurity. As Sullivan described in 2010, some transnational gangs and criminal organizations are challenging states for freedom of action, market dominance, and political power.

A wide variety of criminal gangs are waging war among themselves and against the state. Rampant criminal violence enabled by corruption and weak state institutions has allowed some criminal enterprises to develop virtual or parallel states. These contested or "temporary autonomous" zones create what theorist John Robb calls "hollow states" with areas where the legitimacy of the state is severely challenged. These fragile, sometimes lawless zones (or criminal enclaves) cover territory ranging from individual neighborhoods, favelas, or colonias, to entire cities such as Ciudad Juaréz, to large segments of exurban terrain in Guatemala's Petén province and sparsely policed areas on the Atlantic Coast of Nicaragua. (Sullivan 2010a)

In San Pedro Sula, Honduras competing gangs dominate community life. The predominant gangs are the transnational gangs: Mara Salvatrucha (MS-13) and 18th Street (Barrio 18 or Dieciocho). These gangs also compete or align with a shifting array of local gangs (known as *pandillas*). In the dangerous mix of San Pedro Sula, competing gangs control interspersed local turf, often a few blocks in size, adjacent to their multiple rivals. The result is a bazaar of violence that forces residents intimidated by the gangs to flee in situations of forced displacement, becoming refugees and inter-

nally displaced persons. Those who stay are subject to extortion and violence (Crisis Group 2017). The smaller gangs include Los Vatos Locos, Los Olanchanos, Los Tercereño, and Casa Blanca. Casa Blanca is a splinter group comprised of former 18th Street members. Much of their territory is surrounded by MS-13 (Azam 2019).

## Venezuela, Brazil, and Mexico

The following section discusses the intersection of insecurity, crime, and gangs in Venezuela (Caracas), Brazil (Rio de Janeiro, São Paulo), and Mexico (Acapulco, Ciudad Juárez, and Tijuana).

#### Venezuela

The various measures of dangerousness employed to make these designations are controversial and contested, but nevertheless they are an indicator of concern and volatility. While "the exact numbers can be disputed, the violence is undeniable" (Woody 2016). In all cities with high homicide rates and high rates of criminal activity, the presence of organized crime and unconventional conflict plays a role in the resulting instability. In Caracas, for example, extreme civil criminal violence intersects with political instability, spillover from Colombia's civil war (and more recently criminal violence), economic instability, and corruption.

As Christopher Woody observed, "With gangs often in control of poor neighborhoods, weapons readily available, judges and police officials often on the take, and low rates of prosecution, the sense of insecurity has become widespread in the Venezuelan capital" (Woody 2016). The endemic violence reinforces the political and economic instability, fueling insecurity and eroding the perceived legitimacy and capacity of the state.

The structural factors contributing to extreme violence in Caracas are complex. According to Alejandro Velasco, the factors go beyond economic crisis, rising inequality and poverty, and the effects of impunity. Velasco sees poor governance and "administrative dysfunctionality" as a complicating factor. This dysfunctionality is manifested in political competition, with a conurbation possessing "five different mayors, a super-mayor, and then now a super-super-mayor, and all of them have very competing political interests, and all of them also control their own police force, so it creates questions of jurisdiction and all these other problems," according to Velasco (Woody 2016).

Impunity also complicates the situation. Consider, for example, the neighborhood known as Enero 23 (January 23), which the Council on Hemispheric Affairs describes as a "micro-state," where approximately 300 armed paramilitaries operate outside government control (Woody 2016). These paramilitares (i.e., violent nonstate actors [VNSAs]) exert de facto political and territorial control, frequently challenging the state and attacking police. In 2014, for example, at least 112 Caracas police officers were killed in engagements with criminal bands (Woody 2016). The net result is often characterized by institutional failure and an erosion of state legitimacy (Brands 2011). A negative feedback loop of mano dura-style crackdowns, often employing militias (in Venezuela these are known as colectivos), reinforces extrajudicial power and enhances the stature of thugs. This erodes state legitimacy and perpetuates conditions of insecurity and impunity (Brands 2011; Venezuela Investigative Unit 2018; see also Torres and Casey 2017). Political gridlock and increasing insecurity are the result, challenging Caraqueños (Caracas residents) in the capital and Maduro's regime, along with Chavista politics and the security of Venezuelans at large. Venezuela's criminal landscape includes the highest homicide rate in the region (81.4 per 100,000 for the entire nation), corruption and money laundering, illegal mining, fuel theft, and drug trafficking; it also includes a "Bolivarian Joint Criminal Enterprise, a 'trust-based multi-nation social and criminal network' that spans . . . all across the region and is aided by governments, including from [those of] Cuba, Nicaragua, Bolivia, Ecuador, Suriname, El Salvador, [and]in addition to the Revolutionary Armed Forces of Colombia (FARC) rebels." In addition, a range of other VNSAs are also involved, including the aforementioned colectivos, the Ejército de Liberación Nacional (ELN), the Fuerzas Armadas Revolucionarias de Colombia (FARC), and Hezbollah (Rendon 2019). The Center for Strategic and International Studies (CSIS) views Venezuela as a criminalized state that uses transnational organized crime as an instrument of state power (Rendon 2019; Farah and Yates 2019).

The nexus between militias, corruption, and power is a salient theme in understanding the relationship between criminal cartels, gangs, and the state throughout Latin America. Paul Rexton Kan, looking at the starting point of Venezuela's Bolivarian project, concluded that paramilitary militias played pivotal roles throughout Latin American politics. He found that the militia-corruption nexus was part of Latin America's repertoire of violence, influencing state objectives of "coup-proofing," controlling crime, and countering insurgencies (Kan 2019). When other state institutions fail or are unable to counter these threats to their governance, militias and util-

itarian alliances with criminal entities become an attractive option for corrupt or flailing state actors seeking to retain power. Of course, when states rely on these extrajudicial and extragovernmental means and use vigilantes and militias as a short-term fix, they often empower those militias, to their own long-term detriment.

#### Brazil

In Brazil, a neofeudal competition between the state, gangs (gangues or factions: facções), and militias (milícias) is being violently played out in the streets of that nation's favelas and in its prisons. The result is that gangs (i.e., VNSAs) are forging a parallel state that both challenges and coexists with the legitimate state. In Rio de Janeiro there are entire areas where VNSAs, which are essentially criminal armies, control territory and nearly all facets of community life. The "territorial gangs" arbitrate disputes, impose justice, and extract taxes from the residents of the favelas they control. The state is essentially absent as the gangs wage a continuous low-intensity, nonideological insurgency (Sullivan 2010a).

Gangs challenging the state in Brazil include the Comando Vermelho (CV) or Red Command, the Primeiro Comando da Capital (PCC) or First Capital Command, the Terceiro Comando (Third Command), the Terceiro Comando Puro (Pure Third Command), Amigos dos Amigos (ADA) or Friends of Friends, and the Comando Classe A (CCA) or Class A Command. These gangs operate both in prison—which in many respects acts as their base—and in the various favelas (slum communities) in Brazil's cities. The power of the PCC was demonstrated in May 2006 when they waged a campaign of violence in São Paulo to ward off state interference in their criminal enterprises. In that violent campaign, "150 people (a quarter of them police) were killed, 82 buses were torched, and 17 banks attacked. Prison rebellions raged at 74 out of 140 prisons. Schools, shopping centers, transport and commerce were stalled" (Sullivan 2012a).

This dynamic of striking out from a gang's prison base to the streets is a recurrent theme in Brazil (and elsewhere). Gangs often direct retaliation or campaigns of symbolic violence to influence political actors and public opinion. They more frequently employ instrumental violence in the form of targeted assassinations or hits by issuing a green light (the permission to kill known a *luz verde* among Latino gangs in the United States) to further their objectives or punish traitors or rivals (Sullivan 2013a; Kan 2016; Lessing 2016).

In January 2019, violent gang attacks included bombings and arson directed against transit and school buses, police stations, public buildings,

bridges, businesses, power lines, and banks, which rocked the Brazilian state of Ceará. These attacks, which involved at least 204 separate incidents, were described as "violent lobbying" by analyst Benjamin Lessing.<sup>2</sup> These attacks involved a coalition of gangs, including Brazil's two leading criminal groups, the PCC and Red Command, and their local rivals, Guardians of the State (Guardiões do Estado) and Family of the North (Família do Norte), both of which have also had ties to the PCC and Red Command. The groups established a truce and joined forces to conduct attacks against police and the civil infrastructure in Ceará The attacks have targeted police stations, banks, highway overpasses, businesses, and power transmission lines (Sullivan, Bunker, and da Cruz 2019). These bold attacks have become an integral part of Brazil's criminal landscape. The PCC, for example, has a legacy of criminal campaigns, including attacks on infrastructure and bold bank robberies. In one from April 2017, for example, they are suspected to be the group behind an assault on an armored car warehouse in Ciudad del Este, Paraguay. In that assault about 50 gangsters used automatic rifles, a .50 caliber rifle, grenades, dynamite, and anti-aircraft guns to seize over US\$8 million. One police officer and three gangsters were killed (Sullivan and Bunker 2017).

The violent prison facet of gang activity was highlighted in a massacre at Altamira Prison in July 2019. That riot and subsequent massacre left 58 dead, including 16 persons decapitated. The incident involved an assault by the Class A Command against the Red Command (Bunker, da Cruz, and Sullivan 2019). While this attack was extreme, it is part of a long history of extreme prison violence throughout Brazil, including outbreaks of violence and rioting in Rondônia (2002), Maranhão (2010), Pernambuco (2011), Rio de Janeiro (2014), and Roraima, Rio Grande do Norte, and Amazonas between 2017 and 2019. This Altamira assault was also the most violent outbreak of prison violence in Brazil since the Carandiru prison riot in 1992. In that incident 111 inmates were massacred, which led to the formation of Brazil's most powerful gang, the First Capital Command (Bunker, da Cruz, and Sullivan 2019; see Muggah, Taboada, and Tinoco 2019).

The situation in Brazil's favelas resembles an active insurgency—in this case "criminal insurgency"—where gangs compete "for an economic control of a given territory. Its political dimension is the use of violence to pursue it. These territories are then used as sanctuaries and serve as a base from which to manage criminal activities" (Vianna de Azeved 2018). Responding to Brazil's criminal excess and criminal insurgency is complex, and results are variable. As Robert Muggah, an analyst specializing in Brazil and urban conflict, has observed, in the first part of 2019,

Alagoas, Acre, Espírito Santo, Minas Gerais, Pernambuco, Rio Grande do Norte, Rio Grande do Sul, and Santa Catarina all saw murder rates fall by between 21 and 24 percent over the previous year. Massive states such as Bahia, Ceará, Paraná, and São Paulo registered declines of between 10 and 15 percent. Four states—Amapá, Pará, Tocantins, and Roraima—saw double-digit increases in lethal violence between 2017 and 2018. (Muggah 2019)

Gang violence exploded in Rio de Janeiro while decreasing in São Paulo. Rio's death rate (the combined total of police killings, gang murders, and random shootings) is extremely high: 39 deaths per 100,000, surpassing Brazil's average of 27 per 100,000. This rate is a significant increase from its 2015 low of 23.6 deaths per 100,000 just prior to the 2016 Olympics (Harris and Schipani 2019). Rio is home to a number of warring militias and gangs, including the Red Command, whereas the criminal landscape in São Paulo is dominated by one player—the PCC (Harris and Schipani 2019). The virulent potential of gang adaptation is seen in the recruitment of former FARC guerrillas into the First Capital Command in Brazil and Colombian Bacrim (notably the Urabeños [Clan del Golfo or Autodefensas Gaitanistas de Colombia, AGC]) in Colombia. The recruitment of battle-seasoned rebels into criminal gangs enhances their sophistication and paramilitary capabilities, and hence their potential lethality (Sullivan and Bunker 2017a).

The positive results in controlling violence in some regions can perhaps be attributed to improved cooperation and information-sharing among state and federal police, and enhanced public safety strategies. In São Paulo, the murder rate dropped from 52.5 per 100,000 in 1999 to 6.1 per 100,000 in 2018, a rate one-fifth as high as Brazil's national average. The reason for the drop remains unclear, with competing explanations ranging from falling unemployment, reductions in the violence-prone cohort of young men, to enhanced regulation of alcohol, strict firearms control, and the distinct possibility that a single gang—the PCC—gained control of the criminal market. That dominance of a single gang led to a *Pax Mafiosa* (Muggah and Szabó de Carvalho 2018).

Police reforms also played a role, but their impact has been mixed. Deploying targeted community-policing patrols to known crime hot spots is credited with some reductions in crime, as are a series of interventions (including regulating alcohol sales) in an operation known as Diadema to influence "criminogenic" factors. Nevertheless, "São Paulo's police are still involved in the killing of civilians at more than twice the rate of the

national average. In 2015, they were responsible for one in four homicides in the state" (Muggah and Szabó de Carvalho 2018). This high rate of police killings has a negative impact on police-community relations, diminishing public trust. Efforts to improve the nature of "police interventions" remain necessary to avoid the long-term corrosive effects on police legitimacy necessary to control crime and secure public trust.

### Mexico

At first glance, Mexico appears to be embroiled in a protracted drug war. The actual situation is more complex. This section examines urban conflict in light of Mexico's chronic insecurity. Criminal cartels and gangs are waging war against each other and the state in order to secure the freedom of action necessary to operate their criminal enterprises. This criminal activity is centered on drug trafficking, street-level narcotic sales (*narcomenudeo*), extortion, human smuggling, and a range of resource extraction activities, notably fuel theft. Cities are key battlefields in the struggle between the *narcos* and the state (Sullivan and Elkus 2008).

The main urban centers of conflict involve "plazas," the lucrative corridors for transshipment of drugs into the United States (often these plazas are border cities such as Tijuana or Ciudad Juárez or port cities such as Veracruz or Lazaro Cárdenas) (Sullivan and Elkus 2009a). Another key urban *plaza* is Acapulco. The border *plazas* are major nodes in transnational trade and are dominated by cross-border gangs. Each plaza is notionally run by a single cartel, but the plazas are often contested, bringing violence and barbaric murders including beheadings, dismemberments, and graphic displays of mayhem, including severed heads in ice coolers, corpses suspended from bridges, and bodies with narcomensajes (narco-messages) or cartel symbols carved into the victim's skin. Bold displays of severed body parts are part of the gruesome ritual of symbolic violence that accompanies the competition for raw market power. Narcomantas, banners proclaiming threats or justifying attacks against rival cartels or the state (especially corrupt police), often accompany the barbaric handiwork of the cartels' sicarios (hitmen).

Significant swathes of Mexican territory are under the effective control of cartels, and much of the remaining territory is contested. Cartels co-opt and corrupt police and municipal officials and assassinate journalists and politicians. Ambushes and attacks on officials are commonplace. Mexico's most violent cities are Tijuana, Acapulco, Ciudad Victoria, and Ciudad Juárez. Tijuana is the most violent. All of these cities rank in the

top five most violent cities in the world, with Acapulco the second most violent. The third most violent is Caracas, Venezuela, followed by Victoria and Juárez (Martell 2019). Acapulco, once a tourist treasure on Mexico's Pacific Coast, is an example of the corrosive impact of cartel violence. Long gone are the days of Frank Sinatra and the Rat Pack at the luxury hotels catering to the global jet set. Now the city is dominated by hyperviolence and drug wars, with *narcos* vying for power and control across the state of Guerrero where Acapulco is located (Kyle 2015). In 2018, with Acapulco's murder rate at 103 per 100,000, the Mexican federal police and military (from SEDENA, the Army, and SEMAR, the Navy or *Marina*)<sup>3</sup> relieved Acapulco's local police amid concerns that they had been co-opted by the cartels (Bonello 2018). For a time, Acapulco was Mexico's murder capital—a distinction shared at times with Tijuana and Ciudad Juárez. Acapulco's time in the top position (essentially from 2012–2017) left the city and its sprawling colonias scarred.

The city is dominated by approximately 20 neighborhood gangs (such as 221 or Los Locos) that work for larger criminal cartels. The gang contractors fill specialist niches for the larger cartels (e.g., sicarios or assassins, kidnappers, thieves, etc.), collect street taxes for the cartels, and pay the cartels a tax themselves for the privilege of operating in the plaza. At various times the Acapulco plaza was dominated by the Beltran Leyva Organization, allied with the Sinaloa Cartel. Later the Zetas sought to displace Sinaloa, and a violent competition among pretenders characterized by fragmentation and competition brought new actors, such as the Independent Cartel of Acapulco, the South Pacific Cartel, and La Barredora. Drugs remained the centerpiece, but other criminal enterprises, such as kidnapping and extortion, were added to the mix. Legitimate businesses folded and violence spiraled out of control (Partlow 2017). This violent competition has damaged Acapulco and is now spreading to other beach towns, including Cancun and Playa del Carmen. The networked gangs seek new avenues for profit and new alliances for power (Partlow 2017).

For a while, Ciudad Juárez was Mexico's murder capital. In the early 2010s, this border city across the Rio Grande from El Paso, Texas, was characterized by violence, insecurity, and criminal impunity. During this time, the downtown was nearly deserted, businesses fled across the border to El Paso, and cross-border gangs (Barrio Azteca/Los Aztecas) (Sullivan 2013b) and the networked La Línea, a composite of gangsters, cartel *sicarios*, and corrupt police, fought for the Juárez Cartel (Sullivan and Logan 2011). The result of the brutal combat was a "feral" cityscape where violence and fear reigned. The cartel attacked both men and women; the city

is known for its legacy of femicide. In 2010, a surge of 45,000 troops and 5,000 federal police wasn't enough to stem the violent tide. At least 3,100 persons died that year, including over 30 police officers, 16 teenagers at a party, and 17 recovering drug addicts at a rehab center. The femicide also continued, a macabre backdrop to the continuing stream of "narcocides" (Sullivan and Rosales 2011). At its height, the violence in Juárez was surreal. As the late Charles Bowden, author of *Murder City: Ciudad Juárez and the Global Economy's New Killing Fields* (2010), noted:

There are five hundred to nine hundred street gangs now of armed, murderous, unschooled and unemployed young people. The drug industry is thriving—even the D.E.A. admits drugs have never been cheaper, of higher quality, or more widespread in the U.S. Nothing can immediately roll back the violence, because it is now part of the fabric of the city, a place where in two years twenty-five per cent of the houses have been abandoned, forty per cent of the business shuttered, at least a hundred thousand jobs lost, and where a hundred and four thousand people have fled. (Blake 2010)

For Ed Vulliamy, Ciudad Juárez is emblematic of a new raw capitalism, where ideology is replaced by profit and drugs are a means to a "postideological, postmoral, postpolitical world" (Vulliamy 2011). Commenting on the seemingly senseless and *causelessness* of the savage *narco* violence, Vuilliamy suggests that Ciudad Juárez is symptom of global neoliberalism run amok.

But this is not just a war between narco cartels. Juarez has imploded into a state of criminal anarchy—the cartels, acting like any corporation, have outsourced violence to gangs affiliated or unaffiliated with them, who compete for tenders with corrupt police officers. The army plays its own mercurial role. "Cartel war" does not explain the story my friend and Juarez journalist Sandra Rodriguez told me over dinner last month: about two children who killed their parents "because," they explained to her, "they could." The culture of impunity, she said, "goes from boys like that right to the top—the whole city is a criminal enterprise." (Vulliamy 2011)

The cartel wars, in Vulliamy's eyes, are a consequence of global economic flows, where banking and the global economy are bolstered by money laundering and criminal profits, and capitalists and political quislings rely

on these illicit flows to stay afloat. The drug barons and capos then become agents of the global economy (other perspectives on this theme are found in Radford and Trabulsi 2015; Grillo 2016). Vulliamy sums it up, claiming that "Juarez is not a breakdown of the social order. Juarez is the new order" (Radford and Trabulsi 2015; Grillo 2016).

Tijuana is Mexico's current "murder city." "Meth and murder" are at the core of its resurgent violence. This vibrant metropolis of 1.8 million on the US-Mexico border essentially forms a binational conurbation with its northern twin San Diego (with a population of 1.4 million). Not too long ago, Tijuana was heralding major reductions in violence. Now, as the battle for the Tijuana *plaza* heats up, murder is reaching unprecedented levels. In 2018, Tijuana became one of the deadliest cities in the world, with 140 killings per 100,000 people. A total of 2,518 people were killed. The death toll is almost seven times that of the 2012 tally (Linthicum 2019).

In past iterations of narco violence, Tijuana was the battleground for cartels vying to control the *plaza*'s trade north from Baja California into California's population centers, including Los Angeles and points north. Up to 905 of Tijuana's homicides are linked to this local competition. In the words of Tijuana's medical examiner, Jesus Escajadillo, "We are living through a civil war" (Linthicum 2019). The Tijuana plaza has changed hands over the years. As the once-dominant Arellano-Félix Cartel splintered, with factions making alliances with the Sinaloa Cartel and the Cartel de Jalisco Nueva Generación, Tijuana remained volatile (Gutiérrez González 2019). The battles for dominance in Tijuana include the traditional fight for cross-border plaza with a new added dimension competition for street-level sales, or *narcomenudeo* in the local drug market (Hendricks 2019).

The violence in Tijuana started to heat up after the capture of "El Chapo" Guzman, the Sinaloa cartel capo. With that power vacuum came fragmentation and competition for the criminal markets. This competition led to the erosion of internal discipline as the cartel hierarchy broke down. In the assessment of University of San Diego professor David Shirk, "When the bosses are fighting each other and the big powerful mafia-type organizations are at war, it's not clear who's in charge at the street level. So you see more low-level criminal actors running around and fighting each other, literally for street corners" (Hendricks 2019).

The preceding brief synopsis of urban narco conflict shows that criminal cartels and gangs have gained effective control of specific *plazas* and urban settings. These zones range from a few city blocks to significant segments of cities and entire states or subnational regions. Weak state capac-

ity, corruption, and impunity have essentially eroded perceptions of state legitimacy, leaving a vacuum of power in some urban slums. This situation favors a range of networked local and transnational criminal enterprises to forge new criminal, economic, and political opportunities. The process of exploiting these opportunities can be considered a form of competition in state-making or state-transition, as described by Tilly (1985). This competition for control characterized can be characterized as "criminal insurgency" (Sullivan 2012a).

## **Criminal Insurgencies**

The concept of "criminal insurgency," initially articulated by Sullivan, considers criminal enterprises (gangs and criminal cartels) seeking to gain autonomy and economic control over territory (the evolution of the conceptualization of criminal insurgency is recounted in Sullivan and Bunker 2011). Criminal insurgency occurs when criminal cartels and gangs challenge states (and substate polities) to gain control of the illicit economy. This contest for freedom of action yields a situation where criminal cartels and gangs "are waging a 'criminal insurgency' against the current configuration of states. As such, they are becoming political, as well as economic actors" (Sullivan 2012a). The criminal insurgents (gangs) dominating Rio de Janeiro's favelas—such as Complexo do Alemão and Complexo da Maré—control their enclaves and exercise parallel governance. They

even have "tribunals" where they "judge" varied types of crimes. Generally, they are very efficient in preventing petty crime within the *favelas* they rule. In these places the criminals are important players in the local economy. Their criminal activities bring about new jobs and illegal investments in these communities. They also strengthen their position and their rule by promoting social activities, festivals and entertainment in order to lure the youth into their ranks, as they need a constant inflow of recruits to enhance their businesses. By providing security, jobs, and community involvement they make possible their parallel governance. (Vianna de Azevedo 2018; see also Perlman 2010; Cano et al. 2012. The original note was Arias and Rodrigues 2006)

Criminal insurgencies vary by type and scope. In all cases, the criminal actors seek to create areas that lack state interference. These areas are

essentially criminal enclaves where extranational actors control the allocation and use of territory, authority, and rights.<sup>4</sup> The main varieties of criminal insurgency are:

- 1. *Local insurgencies*, where criminal actors exercise control over a single neighborhood or "failed community," where criminal bands dominate municipalities or portions of municipalities and states in a situation of "parallel governance."
- 2. Battles for the parallel state, where criminal cartels and associated gangs vie for control of the criminal economy and smuggling plazas for access to transnational economic flows. Here the cartels and gangs fight each other, with violence spilling over and eroding the legitimacy of the state.
- 3. Combating the state: where the gangs and cartels directly engage the state in violent competition to secure or sustain an independent range of action. In this situation, the criminals are active combatants against the state and its component organs.
- 4. The state implodes: where criminal insurgencies and their associated violence and corruption spiral out of control. This hypothetical situation represents the cumulative effect of unchecked violence and competition with the state where endemic corruption, lack of state capacity, and co-opted political officials lead to state failure and/or the rise of a narco-state. (These scenarios are described in Sullivan 2012a.)

Corruption is a core element of the criminal-state competition. Corruption has a corrosive effect on governance and erodes perceptions of state legitimacy. Arias has described the role of corruption in Rio's favelas, and Duran-Martinez looks at the intersection of police and the state in Cali, Medellín (Colombia), and Juárez, Culiacán, and Tijuana (Mexico) (see Arias 2009, 2017, 2019; Duran-Martinez 2017). In the local insurgency setting, corruption aims to sustain the balance between police and the gangs, enabling gangs to evade sanction for their activities. In the "battle for the parallel state," gangs seek to co-opt police and state officials to gain primacy over rivals, often employing corrupt police as criminal warriors. As the competition progresses to a situation of direct confrontation, "combating the state," corruption and co-option remain tools for exercising influence, but direct confrontation with the state is added to the mix. In the final potential, where "the state implodes" corruption becomes the main currency for sustaining and consolidating profits and power. Generally,

these options follow the schema articulated by Bailey and Taylor, where gangs and criminal cartels can evade, corrupt, or confront the state as the equilibrium between organized crime and the state progressively unravels (Bailey and Taylor 2009).

The state response to these criminal networks varies, depending on the relative resilience to state control and the strategies employed by the criminal cartels or gangs involved. "Transactional" networks often collude with the state and rely on corruption to ward off interference, while "territorial" networks that displace the state rely more on direct confrontation that elicits strong backlash from the state (Jones 2016).

Conditions characterized as criminal insurgency are seen in Mexico (Sullivan 2012a), El Salvador (Gómez Hecht 2017), and Brazil (Vianna de Azevedo 2018). As a result of these challenges, Brazil's military is actively supporting police in Rio de Janeiro through a series of Law and Order Assurance Operations (missões de Garantia de Lei e Ordem) (Sullivan and Bunker 2017b). In February 2018, federal intervention placed Brazil's military in control of operations to counter gangs (essentially counter-criminal insurgency) throughout the state of Rio de Janeiro per DECRETO Nº 9.288. This militarization is intended to stem a crisis of governance resulting from escalating violence and extreme insecurity in Rio's favelas. It is the first direct military control of state security since the end of the dictatorship in 1988 (Sullivan, da Cruz, and Bunker 2018).

The Brazilian "territorial gangs" (gangues territoriais) exert control over the economic, political, and social life of the communities where they operate (de Oliveira Pereira 2016). They provide social services and parallel governance, including informal social control and arbitration of disputes; they collect street taxes; and they suborn state actors through payoffs, coercion, and graft. The utilitarian provision of social goods and information operations in the form of targeted assassinations of journalists, civic leaders, mayors, judicial officials, and the police are hallmarks of the mechanisms of power these groups employ. The groups act not only as "criminal insurgents" but as "criminal netwarriors" as they forge global networks of alliances to exploit the global criminal political economy (Sullivan 2001). These criminal netwarriors are a type of gang known as "third-generation gangs" (Sullivan 2012a; for a discussion of narco-state potentials, see Sullivan and Bunker 2018). The tools of criminal insurgency include raw power and violence, as seen in brutal ambushes and assassination, military-type infantry operations using irregular forces (Sullivan and Elkus 2011b), grenade attacks, blockades (narcobloqueos), and the use of narco-armor (improvised infantry fighting vehicles) (Sullivan and Elkus 2011b), through social influences such as information operations (Sullivan 2010b), employing *narcocultura* and exploiting perceptions of social banditry.<sup>5</sup> As described by Sullivan,

Not only are the Mexican cartel wars violent, they are increasingly brutal. New weaponry (narco-tanques, improvised infantry fighting vehicles) [is] joining grenade attacks, beheadings, cartel information operations (including narcomensajes in the form of narcomantas, narcopintas, narcobloqueos, "corpse-messaging"—or leaving a message on a mutilated corpse—to shape the operational space. Kidnappings (levantons), and attacks on journalists, mayors, police, and civil society in general punctuate the cartel battles among rivals and internal usurpers of power. Narcocultura in the form of alternate belief systems such as the cult of Santa Muerte and Jesús Malverde and reinforced by narcocorridos support the narco worldview. Mass graves (narcofosas) and social cleansing (mass targeted murders within cartel zones of influence), as well as reports of narco-gladiators punctuate the violence. (Sullivan 2012a)

Cartel violence is often brutal. Sometimes it is instrumental, to eliminate interference, at other times it is symbolic, to project power. In all cases it erodes perceptions of security and the legitimacy of the state. At times, extreme methods are employed. In addition to the beheadings and dismemberments that punctuate the news, the cartels have at time embraced bombings, such as the July 2010 car bombing in Ciudad Juárez, where a simple car bomb was exploded in an ambush targeting police (Sullivan 2010c; Bunker and Sullivan 2013a). More recently, armed drones have been used to attack adversaries, as seen in a July 2018 incident where the residence of the Baja State public safety secretary was targeted by a weaponized drone in colonia Los Laureles in Tecate—a border city in the San Diego—Tijuana metropolitan area (Sullivan, Bunker, and Kuhn 2018).

Mexico's criminal cartels are not all centered on drug trafficking. While many cartels are engaged in fuel theft, a new variety of cartel that specializes in fuel theft, the Cártel Santa Rosa de Lima (CSRL), has emerged in Guanajuato. The CSRL is a criminal cartel type popularly known as *huachicoleros* ("fuel thieves"; *Huachicol* is also a term for an adulterated alcoholic beverage, so the term also evokes images of moonshiners stealing and then selling fuel under the moonlight (Calderón 2017). The CSRL is challenging the Cartel de Jalisco Nueva Generación (CJNG) for freedom to oper-

ate fuel-theft operations, and is expanding operations into other criminal enterprises, enhancing their conflict with the CJNG, which is their main rival. The CSRL uses custom tunnels for fuel theft (*buachitúneles*), essentially siphoning fuel pipelines via clandestine taps. These clandestine taps pose extreme explosion risks to surrounding structures and are found in both rural and urban settings. In addition to exploiting tunnels as a mode of diverting fuel, the CSRL has also used tunnels to evade capture by rivals and government forces, raising the potential for urban, underground-warfare-type operations (Sullivan and Bunker 2019). Let's now look at the typology of gangs involved in urban conflict.

## **Third-Generation Gangs**

Street gangs have a long history in urban settings throughout the world (see, for example, Frederic Thrasher's classic 1927 study of Chicago gangs, reprinted in 2000). Traditionally, these gangs were viewed as outlets for juvenile delinquency in cities and as recruiting grounds for organized crime. That is still true, but not all street gangs are the same. Some remain local, youth-oriented endeavors, others become involved in more sophisticated criminal enterprises. Others rise to such a level of sophistication and reach that they challenge states. The third-generation gang model (3 GEN Gangs) identifies three distinct gang generations. The gangs are positioned in these three generations in terms of three factors: politicization (scope for political activity, from limited to evolved), internationalization (geographic reach, from local to global), and sophistication (from less sophisticated to more sophisticated, with the ability to adapt and forge alliances a contributing factor). These gangs "generations" are depicted in table 9.1.

The 3 GEN Gangs model was first articulated by Sullivan in 1997 and expanded in a series of later publications. The importance of interaction with other criminal enterprises (such as mafias and criminal cartels) is a core element of the progress through generations. These generations can move in both directions along the continuum. Prison gangs like La Eme in Southern California and the Barrio Azteca in Texas also play an important role in gang evolution, as seen in the case of the PCC in Brazil (Sullivan 1997, 2000). The potential threats associated with third-generation gangs are discussed in Sullivan's 2008 paper, "Transnational Gangs: The Impact of Third Generation Gangs in Central America" (Sullivan 2008). The three generations of gangs can be summarized as follows:

limited	Politicization	evolved	
local	Internationalization	global	
1st Generation turf gang turf protection proto-netwarrior	2nd Generation drug gang market protection emerging netwarrior	3rd Generation mercenary gang power/financial acquisition netwarrior	
less sophisticated	Sophistication	more sophisticated	

TABLE 9.1. Three Generations of Gangs

Source: John P. Sullivan, "Third Generation Street Gangs: Turf, Cartels, and Net Warriors," Transitional Organized Crime 3, no. 3 (Autumn 1997).

- First-Generation Gangs (Turf Gangs)—traditional street gangs with a turf orientation. Operating at the lower end of the scale of extreme societal violence, they have loose leadership and focus their attention on turf protection and gang loyalty in their immediate area (often a few blocks or a neighborhood). When they engage in criminal enterprise, it is largely opportunistic and local in scope. Turf gangs are limited in political scope and sophistication.
- Second-Generation Gangs (Market Gangs)—gangs with a profit orientation; they are engaged in business. They are entrepreneurial and drug-centered. They protect their markets and use violence to control their competition. They have a broader, market-focused, sometimes overtly political agenda and operate in a broader spatial or geographic area. Their operations sometimes involve multistate and even international areas. Their centralized leadership tendencies and emphasis on market protection place them in the center of the range of politicization, internationalization, and sophistication.
- Third-Generation Gangs (Mercenary/Political Gangs)—these gangs have evolved political aims. They operate—or seek to operate—at the global end of the spectrum, using their sophistication for profit and power. They may engage in mercenary-type activities or co-opt political processes. Most third-generation gangs have been primarily mercenary in orientation, yet in some cases they have sought to further their own political and social objectives.

Transnational gangs usually fill a position somewhere between a second- or third-generation gangs. As gangs become more aligned with the third generation, they embrace network attributes, aligning with other criminal enterprises such as criminal cartels and mafias (see Sullivan and Elkus 2012). This network feature allows them to exploit global illicit financial flows and forge a space in the global criminal political economy. Maras, like MS-13 and 18th Street, are examples of third-generation gangs that coordinate operations and exert influence via transnational networks. Each individual clique (click) or gang may not have equal degrees of sophistication and reach, but the totality of the organizational network possesses these third-generation attributes (Sullivan and Logan 2010). An example of a networked alliance is seen in the links between Brazil's Primeiro Commando da Capital and the Italian 'Ndrangheta, a mafia from Calabria (Neves and Betancur 2019). These joint ventures allow each partner gang to expand its reach, gain new skills, and exploit new markets and avenues for power.

#### Third-Phase Cartels

Like gangs, criminal cartels also evolve and adapt over time. In a 1998 paper, Bunker and Sullivan examined the destabilizing potentials of cartels and identified three phases of cartel development. These phases were:

- First phase, Aggressive Competitor—The first-phase cartel form originated in Colombia during the 1980s and arose as an outcome of increasing cocaine demand. This cartel phase, characterized by the Medellín model, realized economies of scale not known to the individual cocaine entrepreneurs of the mid-1970s. This type of cartel was an aggressive competitor to the Westphalia state because of its propensity for extreme violence and willingness to directly challenge and confront the state.<sup>7</sup>
- Second phase, Subtly Co-opted—This form also originated in Colombia, in this case in Cali. Unlike their Medellín counterparts, the Cali cartel was shadowy organization devoid of an actual kingpin. Its organization was more distributed and network-like, rather than hierarchical. It possessed covert leadership clusters that are relatively difficult to identify and target. The Cali cartel was also more sophisticated in its criminal pursuits and generally exploited corruption, rather than using violence or overt political gambits to achieve its ends.

• Third phase, Criminal State Successor—Third-phase cartels have yet to fully emerge. If and when they do, they have the potential to pose a significant challenge to the modern nation-state and its institutions. A third-phase cartel is a consequence of unremitting corruption and co-optation of state institutions, acting as a state-making or transitional entity, essentially a "criminal state successor." While this potential has yet to emerge, warning signs of this potential include narco- or criminal-state evolution in Mexico and Latin America. Essentially, third-phase cartels rule criminal enclaves, acting as criminal warlords (Bunker and Sullivan 1998).

The third-phase cartel form and third-generation gangs are likely to coevolve and interact to challenge states and forge criminal enclaves where they can operate with impunity. An example of the early evolution of a criminal enclave is found in Ciudad del Este, at the confluence of Brazil, Paraguay, and Argentina. In that loosely governed region, a number of criminal gangs and mafias operate, including the PCC. Other gangsters in this region include Hezbollah, drug smugglers, Nigerian gangsters, and Asian mafias: Japanese yakuza, Tai Chen (Cantonese mafia), Fuk Ching, the Big Circle Boys, and the Flying Dragons (see Speetjens 2018; Bunker and Sullivan 1998).

# Conclusion: Urban Conflict and Criminal Insurgency

Urban conflict is a significant concern in cities across the globe. Essentially, urban conflict results from power struggles as a range of actors seek power. As the global political economy shifts, cities become venues for a range of criminal actors—gangs and cartels—to exploit global illicit flows.

In this chapter, we have seen how drug cartels and gangs are challenging state authority in Mexico and Central America. (This challenge is also seen in Venezuela, Colombia, and Brazil.) This power-counterpower struggle erodes state legitimacy and solvency and confers both economic and political power on the cartels and gangs. As part of this contest, the criminal enterprises seek to remove themselves from state control and act in the manner of "primitive rebels" to sustain a struggle that is essentially a "criminal insurgency." As part of this contest, the cartels provide utilitarian social goods, form narratives of power and rebellion, and act as "postmodern social bandits" to gain support and legitimacy within their own organizations and the geographic areas they control (Sullivan 2010b).

Narco-cities (narco-ciudades) are a type of criminal enclave that can emerge from crime wars and urban criminal conflict. They are urban areas—including small cities and neighborhoods within a mega-city—controlled (or contested) by criminal cartels or gangs engaged in drug trafficking and other criminal enterprises. Analyzing narco-cities requires an assessment of "geosocial" characteristics, including terrain, land usage, population density, social networks (including social network analysis of criminal and political actors), and financial flows and market conditions (black, gray, and legitimate). Gang and cartel technical, combat, and intelligence (halcones) capabilities must also be considered, including the use of cyberspace, information operations, and technical means. In addition, it is essential to identify the influence of corrosive factors that promote gangs/cartel influence. These include transportation and lines of communication, gang culture (narcocultura), and community composition.

"Narco-cities" take several different forms. As demonstrated in Mexico, they can be (1) "hyperviolent," in a type of feral, failed city, such as Ciudad Juárez during the height of the Sinaloa incursion; (2) "contested zones," which evolve as cartels begin to challenge political mechanisms and civil society to assert their power, as seen in the *narcobloqueos* in Monterrey; (3) "narco-controlled" cities, as in Culiacán; or home to (4) "hidden financial power" as seen in Mexico City (Sullivan 2014b).

Narco-cities are essentially fragile cities, what Richard J. Norton called "feral cities" (Norton 2003, 2010). In Norton's scheme there were three levels of ferality, green, yellow, and red, for cities at risk. Green connoted no risk, yellow marginal risk, and red a city becoming feral. In 2011, Bunker and Sullivan expanded this framework with two additional levels, purple and black. The purple level denotes a "fully feral" city and the black level denotes "beyond feral; criminal city" (Bunker and Sullivan 2011c). The purple feral city is one where state governance is absent and there is a lack of state "solvency" (i.e., state legitimacy and capacity) that is filled by a nonstate entity, such as a gang, cartel, or warlord (Sullivan 2013c). In Latin America, gangs and cartels are directly confronting states and forging areas of autonomy through criminal insurgencies and crime wars (Muggah and Sullivan 2018). The resulting criminal enclaves can exist as parallel states or fully autonomous zones (Sullivan 2019b). They raise salient humanitarian and security concerns for states and their populations, and also raise questions about access to public goods and control of the urban commons. For as Hardt and Negri assert, a cultural commons (and cities or at least metropolises certainly have the potential to create a cultural commons) are the result of a dynamic where labor and the means of future production yield value (Hardt and Negri 2011; Harvey 2013, 72, 73). The question in criminal enclaves is how that commons is achieved under gangster rule. This is similar to determining how a privileged few property owners manipulate the porous boundaries between the public good and the urban commons. Here gangsters have the potential to exploit a distinct house advantage, elevating the capitalist tendency "to destroy the city as a social, political, and livable commons" (Harvey 2013, 79, 80). The rise of criminal enclaves negates the potential for an urban commons by concentrating raw capitalist power in the hands of a small, predatory group of gangsters, minimizing the potential for participatory democracy and civil society network; in their place, predatory hyperviolence rules (Harvey 2013, 85–88).

To address the violent potential of fragile cities in conflict requires making the study and practice of urban security and urban strategy a priority (Sullivan and Elkus 2011c). Here both global cities and global slums must be considered as making potential beneficial contributions to the global spaces of places and flows (see Davis 2006; Sassen 2010/2011, 4–5; Castells 1996). This will require a real effort toward police reform to ensure the rule of law is promoted on a foundation of security and human rights, rigorous corruption control, and community development that leverages networked counterviolence approaches (see Sullivan 2010d) to community policing and community health with the goal of achieving sustainable development and access to the urban commons.

#### NOTES

- 1. "Shining light on Latin America's homicide epidemic." *The Economist*, 5 April 2018, https://www.economist.com/briefing/2018/04/05/shining-light-on-latin-americas-homicide-epidemic
- 2. Lessing has termed the use of instrumental violence to influence states "violent lobbying." See Benjamin Lessing, Tweet from @BigBigBLessing, 4 Jan 2019. https://twitter.com/BigBigBLessing/status/1081385085277036544
- 3. SEDENA is the Secretaría de la Defensa Nacional (National Defense Secretary), the home agency for Mexico's Army and Air Force; SEMAR is the Secretaría de Marina (Navy Secretary), home of the Marina (including naval infantry or marines).
- 4. The TAR (Territory, Authority, and Rights) formulation originates with Sassen.
- 5. The concept of social banditry originates in the seminal work of Eric Hobsbawm (1959, 1969, 2000). The dynamics of social banditry in Mexico's criminal insurgencies are analyzed in John P. Sullivan (2012b).
- 6. A collection of third-generation writings is found in Bunker and Sullivan 2013.
  - 7. The Westphalian state is a nation-state. The system of interstate relations

recognizing the sovereignty of individual nation-states was enacted in the Treaties of Westphalia in 1648. The Westphalian principles are the foundation of contemporary international law and relations among states.

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### The Emergence of a Global Urban Region

The Urban Corridor Automotive and Aeronautical Industries in the Central-Bajío Region, Mexico

Adrián Moreno Mata

Globalization has led to economic and territorial restructuring in Mexico. The neoliberal model was instituted in the early 1980s following the principles of the International Monetary Fund, the World Bank, and the US Treasury Department, which defined a series of economic policy lines to follow to receive financial assistance and alleviate external debt, reorient Mexico's economic development, and accelerate its incorporation into the capitalist stage of globalization. These recommendations were known as the "Washington Consensus," which included ten key policies: (1) fiscal control, (2) reorientation of public expenditure toward areas of economic promotion and income distribution, (3) tax reform, (4) release of interest rates, (5) exchange rate release, (6) trade opening, (7) release of foreign direct investment, (8) privatization of state-owned enterprises, (9) deregulation, and (10) property rights security (Sobrino 2012).

Mexico's trade opening took place quickly: in 1980, 70% of the country's imported products were regulated by import licenses; that number fell to 14% in 1988 and 4% in 2005. On the other hand, the weighted average customs tariff fell from 18% in 1980 to 6% in 1988 and 4% in 2005. In addition, total exports accounted for 14% of the country's GDP in 1980, increasing to 21% in 1988 and 33% in 2005. Collaterally, Mexico joined

the GATT in 1986, and in 1990 the country began diplomatic and governmental negotiations with the United States and Canada to formalize a trade agreement. These negotiations focused on six major areas: (1) market access, (2) trade rules, (3) services, (4) investment, (5) intellectual property, and (6) resolution of disputes (Sobrino 2012).

Mexico's integration into the globalization phase was accompanied by some weaknesses in regional production restructuring. Several studies indicate serious disparities in the pace of economic development in different regions of the country, and that economic development policies have failed to mitigate regional imbalances and inequalities. This translates into areas of marginalization and poverty, in contrast with regions strongly integrated into the domestic and international market and with high development (Delgadillo Macías et al. 2001; Meixueiro Nájera 2012). Similarly, Velasco y González (2004) finds that regional development inequalities have increased in Mexico during the period 1950–2003, and that in recent years the regional imbalances identified through the assessment of the regional sustainability—which includes indicators of economic development and competitiveness, but also equity, quality of life, and environmental sustainability-still tend to be greater. This has led some authors to question whether policies aimed at improving economic efficiency and territorial competitiveness have significantly boosted regional development in Mexico, but if, rather, they have activated local, microregional, and interand intraregional conflicts that can increase economic divergence and social inequalities between regions (Velasco and Heredia González 2004).

In this context, it is questionable whether Mexican regions and cities are prepared to face the joint challenge of urban competitiveness, innovation, sustainable development, and social inclusion. The evidence seems to suggest that they are not. According to IMCO data, between 2006 and 2010 the competitiveness of the main cities of the country remained practically stagnant due to "poorly designed" institutions (read inefficient local governments) and "no long-term metropolitan vision" (read lack of an integrated urban strategy) (IMCO 2010). Of 10 factors evaluated, 4 that are apparently crucial to competitiveness were generally negatively assessed: a legal system, sustainable environmental management, macroeconomics, and efficient and effective governance. Of the cities evaluated, only 10 showed a positive trend in these respects. On a scale of 0 to 100, the average rating of the Urban Competitiveness Report 2010 was 49.9, so this study identified a number of problems that limit the competitiveness of Mexican cities and promote the flight of investments and talent (IMCO 2010).

More recent studies indicate that, despite impressive population and economic growth, the speed of urbanization and the metropolitan expansion that characterizes Mexican cities have created significant challenges, so they fall below international standards in terms of productivity, growth, and well-being. The diagnosis presented by the Prosperity Index in the Mexican Republic recognizes that challenges of different types, magnitudes, and impacts persist in Mexican cities, and they invariably affect the prospects of moving toward the stage of prosperity (UN-Habitat, 2016). According to OECD data (2015), Mexican cities have not vet reported the expected increase in productivity that usually accompanies agglomeration processes. Between 2005 and 2010, except in three cases (the metropolitan areas of the Valley of Mexico, Culiacán, and Querétaro), labor productivity decreased in most metropolitan areas of Mexico. Even Mexico's most productive functional urban areas have below-average labor productivity levels for OECD metropolitan areas and face major challenges in reaching the levels of the best performers of similar size (OECD 2015, 6). For Kim and Zangerling (2016), this situation stems mainly from the effects of the global economic crisis, and to some extent from the structural barriers affecting the national economy as a whole. High levels of informality and low levels of investment, education, and innovation have prevented Mexico from realizing the full benefits of the urbanization process (Kim and Zangerling 2016). Other authors, however, consider a main factor to be the absence of clear guidelines regarding territorial and urban order by the different levels of government—federal, state, and municipal—and the slowness and incapacity of existing urban-planning instruments. Management deficiencies at all levels of government fail to produce a coordinated response that efficiently addresses these challenges (Cabrero and Orihuela 2012). Low levels of competitiveness, productivity, and social welfare in cities are considered to be due mainly to poor planning, management, and operation (ONU—Habitat 2015a).

In this sense, various investigations (Centro Mario Molina 2015, 2016; Gutiérrez Chaparro 2017; Moreno Mata 2018) agree that the urban model of Mexican cities (distant, dispersed, and disconnected) generates adverse effects on the economy, society, and the environment, such as inefficient interactions between different activities, low accessibility (greater distances and travel time between destinations, increased vehicular traffic, and increased use of private vehicles as the main means of transport), low density (geographic spread disproportionate to population growth), and serious environmental impacts (air pollution, land-use change, scarcity of natural resources, deforestation, etc.). Insufficiencies in management at

all levels of government hinder a coordinated response to address these challenges.

This chapter examines the relationships between the process of globalization and virtualization of the economy, the trends of localization processes—offshoring and territorial relocation (Larçon and Berrocal 2005), and the possible emergence of a global urban region made up of a group of cities located in the Centro Bajío Mexicano. The incipient development of the urban industrial corridor made up of the cities of Aguascalientes, León, Querétaro, and San Luis Potosí is considered as a case study. I pay particular attention to the various territorial implications of the development of the automotive and aeronautical industries in these cities. The main purpose of this work is to investigate whether the case study region has the necessary conditions to promote the development of an intermediate global urban region, based on a new paradigm of regional and urban planning informed by the strategy of territorial and urban competitiveness, the potential of the major cities in that region, the capacity of local urban and metropolitan planning systems, and the social responsibility of local actors (government, business, and society in general). In this regard, the work attempts to test three contrasting hypotheses:

- Given recent trends, could these cities in a short time approach—as a whole or individually—the classic model of global cities?
- 2. Although its present and future trajectory reflects an increasingly complex reality, could a new paradigm of the global city guide the emergence of global urban regions of intermediate type?<sup>1</sup>
- 3. Will the conditions and limits established by the global economic system, together with the territorial legal-administrative framework, the hegemonic power of the federal government, and the structural and cultural divergences of local governments, prevent the consolidation of this global urban region into an intermediate type of city?

The first part of the chapter discusses some theoretical approaches to globalization and its effects on the new urbanization and metropolitanization processes, which are transforming the contemporary metropolis and therefore the traditional concept of a global city. Regions have taken on a new role as articulators on the global, national, and local scales, and global urban regions of an intermediate type have emerged (Soja 2005).

The second part of the chapter deals with the territorial context, in which Mexico and the Central-Bajío region and its main urban economies are inserted into the global scale, the national scale is contracting, the spatiality of the state is rescaled and "glocalized," and the power of national states is declining in favor of cities as nodes in global flow, command centers of industrial production, and points of economic and territorial control that support the accumulation of capital (Brenner 2003). In particular, I examine the relationship between the process of globalization and virtualization of the economy; trends in localization, relocation, and territorial relocation processes; and the location of various automotive and aerospace companies in branches in various cities in the central-Bajío region.

The third part attempts to confront initial theoretical assumptions with results on the impact of urban-industrial expansion on competitiveness, productivity, governance, and urban sustainability. In the final section I present some reflections on the logistic role of urban territories in the new strategies of economic-industrial location, the probable impact of the relocation strategy of the automotive and aeronautical industries on local development trends, and the possible interaction of these processes with the emergence of a global urban region of intermediate type.

#### Theoretical and Conceptual Aspects

Although several decades have elapsed since the term *global city* was coined, its different definitions, interpretations, and analysis perspectives are still the subject of a permanent debate. In parallel with its conceptual evolution, a growing range of works has developed new ways to understand it, evaluate its effects, and identify its complex connections with different spheres of urban societies. Broader and multidimensional conceptual and analytical frameworks using more precise indicators are better able to reflect the complexity and the different realities in which the global city operates.

An important term in the conceptual evolution of the contemporary global city is that of global urban regions, which according to Soja (2005) have important links with the concept of the world city or global city, but are also distinguished by some characteristics. Soja notes the need to study factors that drive the emergence of global urban regions, taking a more specific look at the new urbanization processes that have been transforming modern metropolises since the 1970s. These are closely linked to several crucial processes: globalization, glocalization, scalar restructuring, and post-metropolitan transition (Soja 2005).

Another central concept in this discussion is that of second-tier cities, which are simply defined as medium-sized cities (Cardoso 2018); they do not play a dominant role in their countries or regions but are economically, culturally, and demographically significant, and they are still important urban regions, as is the case of Porto, Portugal; Bristol, England; and Antwerp, Belgium (Cardoso 2018; ESPON 2012). This renewed interest in studying second-tier cities is reflected in the growing amount of research on the subject, developed in various countries, that contributes relevant information on their spatial, socioeconomic, and cultural characteristics (Hodos 2011; OECD 2012; ESPON 2012; Cardoso and Meijers 2016, among others). These studies provide evidence of the tendency of these regions to organize around centers or nodes. Proximity to a nodal center (the medium-sized city) usually brings with it certain advantages (connectivity, accessibility, mobility, etc.), on both the urban scale and the regional scale.

By connecting on the global scale, urban regions of medium-sized cities can significantly increase their degree and area of influence, both absolute and relative. This can also modify the impact of globalization on the power and sovereignty of national or regional states, and modify the various territorial instances from a new economic and spatial configuration. In this new territorial configuration, between the exogenous forces (macro) and the endogenous forces (micro or local), these new urban regions of medium character (meso) appear, which play an increasingly important and strategic role as a hinge element in the processes (global and local) of urban-industrial restructuring. The concatenation of these various spatial scales then translates into urban-regional economies, which constitute distinctive social formations that significantly influence the processes of development and change, and eventually, can stimulate innovation and creativity.

This vision of intermediate global urban regions constitutes a conceptual turn in the analysis of the global city and the interpretation of its relationship with globalization, the new economy, and the new regionalism. This type of region has developed very important roles as nodes or interconnected networks, which are organized in a hierarchical structure but at the same time are complementary and horizontal. They are connected by intra- and interregional flows and links, and they have become more competitive than national markets, becoming the engines of the global economy (Soja 2005).

It is important to note that the emergence of this type of more dynamic and integrated urban region allows us to identify new aspects of theoretical and conceptual discussion about the processes of globalization, economic restructuring, and industrial relocation that are occurring practically everywhere on the planet. At the same time, their recognition opens opportunities for new forms of planning and management of the territory, allowing us to connect the local economic course with the scale of subregional, regional, and global development. This has fundamental implications regarding the alternative scenarios of long-term local and global development (Brenner 2003; Cardoso 2018).

In this context, during the last two decades, cities have begun to play a new role in the global economy. In particular, metropolitan areas have emerged as global platforms for production, innovation, and exchange. Territories can no longer be considered as they were at the end of the 20th century, when they were studied in the context of a national (state-centric) economy, since the cities and metropolis are now the territories that define the course of the global economy. This gives rise to what Taylor (2013) calls the "city-centric approach." From this perspective, cities acquire a new meaning as privileged places where infrastructure, equipment, and connectivity are concentrated, places that provide opportunities, innovations, and a chance to develop creative abilities (Sobrino 2016; Florida 2002).

According to this approach, within the framework of globalization, the economic behavior of nations and cities is now subject to new factors: speed, scale, scope, intensity, flexibility, spatial-temporal understanding, and what Giddens (2009) calls the "paradox of the present and the future." Thus, the development of urbanization economies and the conversion of the city as a productive force (Garza 2012; Fritzche and Vio 2003; Sobrino 2012) leads to the adoption of more flexible forms of organization, production, and the deployment of industrial logistics; this imposes a new territorial logic and turns cities into places that specialize in flow logistics. The criteria for determining the locations and logistics of the companies are modified by incorporating three new principles: (1) the competitive advantages that regions and cities have, particularly metropolitan regions; (2) territorial specialization, and (3) the fragmentation of geographical space understood as an inseparable set of objects and systems of actions (Santos 1992). These factors in turn promote the functional and spatial separation of production and consumption: cities specialize in a single function in the central sphere of the globalized economy.

What distinguishes intermediate urban regions in countries like Mexico from the main urban centers traditionally considered global cities, such as Mexico City, Guadalajara, and Monterrey? How do these new urban regions relate to the processes of glocalization and scalar restructuring that take place in the country? Why is it essential to study the backgrounds,

emergence, and trends of intermediate urban regions in countries like Mexico. The following section attempts to answer these questions.

The Central-Bajío region (CBR) is made up of four federal entities in the country: Aguascalientes, Guanajuato, San Luis Potosí, and Querétaro. The antecedents of the current territorial conformation of this region are directly related to the development of various economic activities. From the beginning of the 16th century, an urban-regional system was formed that had as essential characteristics economic complementarity and subordination to the limits imposed by the environment and natural resources. Thus, mining areas were developed in Guanajuato, San Luis Potosí, and Zacatecas that interacted with agricultural areas, such as Bajío and Tierra Caliente (Muichoacán); livestock, as in Los Altos and Aguascalientes; and artisanal goods regions, such as in Tarasca (in Michoacán) or the center of Jalisco. Demographically, the consequence was a fairly balanced network of urban settlements, among which the cities of Guanajuato, Guadalajara, San Luis Potosí, and Zacatecas stood out slightly (INEGI 2000; Moreno Mata 2012; Medina Ortega 2015).

During the last two decades, the urban structure of the regional system has promoted the functional relationships that have been exploited in the new phase of intensified open competition between localities more than between states. This has influenced local and international capital location decisions, especially in the current phase, when the country's productive plant is highly linked to the global economic processes that occur in the main cities of the Central-Bajío region (CONAPO 2010, 2004; INEGI 2000). The commercial opening and economic globalization of the country have had an important effect on regional dynamics. The incorporation of Mexico into the globalization process between 1988 and 1994, when its turn to exporting began, and the consolidation of manufacturing exports as the most dynamic sector of the national economy between 1994 and 2000 caused substantial changes in population dynamics and the location of economic activities. Between 2000 and 2015, an important economic, social, and demographic expansion took place in the metropolitan areas of the Central-Bajío region, where productive investments had been directed, mainly in the manufacturing sector and in particular in the automotive branch (SE 2011; Moreno Mata 2018). The location characteristics s of these industrial centers have weighed the most in decisions to relocate by national and transnational companies.

Thus, along with other border and coastal regions, the Central-Bajío region has become one of the preferred spaces for economic development in Mexico (Boisier 1998). At the end of the 20th century and the

beginning of the 21st century, the federal government, in collaboration with the governments of the states that make up the region, promoted the construction, modernization, expansion, and maintenance of different projects related to road, rail, airport, port, and logistics infrastructure, so that companies of national and foreign origin could operate more efficiently in an increasingly globalized context, competitive and urbanized. From the 1990s, and in a short time, the region became one of the axes of the country's economic development policy, with a marked focus on trade openness (through the Free Trade Agreement with the United States and Canada, with Europe and with the Pacific Rim), based on the potential of the main cities of the region. It also became an important link between the northern and southern regions of Mexico (one more developed than the other) (Medina Ortega 2015). Three factors that drove the consolidation of this new economic model in the region were, first of all, its geographical location and modern communications and transport network, which allows it to easily serve the national and international markets for goods and services. Second, the creation of new industrial parks in several cities, driven by foreign direct investment (FDI), which began in the 1980s and increased in the late 1990s. The constant growth of the services sector complemented this model (Medina Ortega 2015). All these factors were fundamental to promote a dynamic productive structure and a solid territorial base, which allowed to attract foreign investments in the fields of metallurgy, automotive and electronics, and in commercial, hotel and tourism services, complemented by the processing of local raw materials, agricultural and livestock production, and food production, beverages, vegetable fats and oils, textiles, clothing and footwear. The states with the highest FDI collection in the manufacturing sector during the period 1999-2005 were Aguascalientes, Guanajuato, Jalisco, Querétaro, and San Luis Potosí (Medina Ortega 2015).

This economic and industrial boom is based mainly on foreign direct investment (FDI), which brings the Mexican economy in line with the regional-international division of labor, and the process of economic integration and industrial logistics. In the recent stage, numerous industrial parks have been installed in the area of influence of metropolitan areas such as Aguascalientes, Colima, Guadalajara, Guanajuato, León, Querétaro, San Luis Potosí, Tepic, and Zacatecas, thanks to the adaptability of its space and logistics to the new conditions of production, circulation, distribution, and consumption. These conditions are a product of the globalization process and, in particular, of the North American Free Trade Agreement.

# The Emergence of the Urban-Industrial Corridor in the Central-Bajío Region

The globalization of companies in the automotive sector has led in recent years to a clear territorial cutting strategy, with important effects on the transnational reorganization of production. This strategy, also called *glocal*ization (Basurto Álvarez 2013), strengthens relations between companies, industries, and countries and imposes regional schemes on global production networks, while integrating economic sectors on a planetary scale. It also results in a process of relocation of workplaces, the opening of new establishments, the transfer of some activities of the parent company to new regions, and the internal redistribution of employment and specialized activities according to the particularities of each new territory incorporated in this scheme (region-country-city). In this sense, there is a process of deterritorialization of the automotive industry: companies in this sector can expand their territory at the cost of total or partial deterritorialization of others. Through this strategy, the automotive sector, like other manufacturing branches of high international dynamism, has experienced a persistent development of favorable impact in the Asia-Pacific region and of important socioeconomic effects in other emerging areas, such as the economies of the American continent, including Mexico (Basurto Álvarez 2013). This process of relocation and restructuring of the automotive sector is expressed in three aspects: changes in the orientation of production, geographical relocation of the industry and changes in production methods, technology and forms of work organization. One more aspect that favors the relocation of the sector to countries such as Mexico are the advantages of location in areas with low wage costs (Mendoza 2010; Martínez Melgarejo 2014).

The automotive industry is considered one of the most dynamic and competitive worldwide; technological and organizational innovations in its production processes have been a constant and on many occasions have been transferred with great success to other productive activities, which makes it one of the industries with the greatest effects on the different economies of the spaces where it is located. In Mexico, the automotive industry has grown like no other industrial branch in recent years and has generated dynamic relationships with producing countries such as Germany, Korea, and Japan, which dispute the primacy of world leadership in the United States or the conquest of the new consumer markets for these products (Basurto Álvarez 2013). Based on a spatial model of industrial

conglomerates, during the 1990s the federal government of Mexico promoted the re-entry of global capital into the country, focused on the productive and territorial restructuring of some sectors of the economy such as the automotive industry. This policy affects the urban-regional economic structure and the territorial reorganization of productive activities.

Consequently, the automotive sector has become one of the engines of the Mexican economy and the most important currency generator. New and larger investments of the main companies in this sector arrive in the country, and it has become one of the most important and dynamic export platforms in the world (Ministry of Economy 2013).

The Central-West region contributes 16.8% of exports, with Jalisco at the helm with sales of 6.3%, Guanajuato with 3.6%, and Querétaro with 2.3%. The share of sales in the northern region is 21.3%, with NL at 6.1% and Coahuila with 2.4%. In the southern region, the percentage of sales is 15.4%, with Veracruz leading with 4.5% and Tabasco with 1.4% (MAAI 2017). Among the states with the highest concentration of companies in the automotive sector are the state of Mexico (7), Guanajuato (5), Coahuila (4), Aguascalientes (4), and San Luis Potosí (3). Overall, the highest concentration of factories and capacities is in the CBR. During 2013, this region produced around 924,400 light cars, including 462,000 in Aguascalientes, 333,000 in Guanajuato, and 127,000 in San Luis Potosí. In a retrospective analysis, in the period between 1993 and 2015, we observe a change process in the CBR derived from NAFTA in 1994 and the vigorous industrialization of the region and its respective demographic poles and economies; the axis was the significant development of the automotive and auto parts sectors. Currently, driven by the presence in various federal entities and cities of ten of the most important vehicle assemblers (heavy and light) in the world, such as General Motors, Ford, Chrysler, Volkswagen, Nissan, Honda, BMW, Toyota, Volvo, and Mercedes-Benz (Ministry of Economy 2012), the region that integrates the Centro y Bajío corridor groups numerous assemblers of motor vehicles in cities such as Aguascalientes, León, Querétaro, and San Luis Potosí (Moreno Codina 2015). This urban-industrial corridor offers several comparative advantages that attract foreign investment: specialized and highly skilled labor; important road, rail, and airport communication routes in good condition; logistics infrastructure—industrial and industrial parks with all services; and high quality of life, a growing middle class, and the presence of higher-level institutions of higher education and work that requires strong qualifications (OURCO 2010).

#### The Take-Off of the Aerospace Industry

The world aerospace industry generates more than \$US450 billion dollars annually and is a source of specialized jobs and activities closely linked to the development of new technologies. Thus, it triggers innovative activity and generates greater added value throughout its productive chain, especially to the extent that it participates in the design and manufacture of more complex aircraft parts and systems (Ministry of Economy 2011).

In recent years the aeronautical sector in the world has registered strong growth, driven among other factors by the growing demand for airplanes, mainly from low-cost aviation companies, and by the increase in the number of requests for the renewal of the aircraft fleet by Asian countries, mainly China, who is predicted to have strong demand for the next 20 years for both large and medium-sized aircraft (SE 2017). In Mexico, the aeronautical industry showed important growth in the period of 2006-12, reaching exports exceeding \$3 billion dollars. In the aerospace sector, a Promexico report on the main producing countries recorded in 2015 an amount of more \$582.6 billion (National Center for Aeronautical Technologies [NCAT] 2018). In fact, among the top 20 producers, Mexico ranks 14th, with \$3.8 billion. This means it could be considered, with significant growth possibilities due to the conditions that form the ecosystem of the Mexican industry, in the third position internationally as a destination for foreign direct investment, after the United States and the United Kingdom (NCAT 2018). The growing activity of the aeronautical sector in Mexico results from the following factors:

- Geographical location, it being close to the most important market, so production costs are reduced mainly for companies that operate in Europe.
- 2. The experience and level of competitiveness achieved in other sectors, such as automotive and electronics, which have produced a base of human capital, highly specialized personnel and companies that can focus on the aeronautical sector.
- 3. Various free trade agreements that allow access in preferential conditions in 43 international markets.

The presence of companies in the aviation industry in Mexico has increased, with currently 238 companies in the country—more than double the number in 2006, including leading companies in the manufacture of aircraft and parts, including Bombardier, Honeywell, Safran Group, Eaton

Aerospace, and Goodrich, among others. These companies are distributed in 17 states of the Mexican Republic: Baja California, Sonora, Chihuahua, Coahuila, Nuevo León, State of Mexico, Federal District, Guanajuato, Querétaro, Jalisco, Puebla, Guerrero, Aguascalientes, San Luís Potosí, Tamaulipas, Yucatán, and Zacatecas (Ministry of Economy 2011).

The aviation industry provides employment to more than 30,000 people, of whom 64.5% are concentrated in the states of Baja California, Chihuahua, and Querétaro. Seventy percent of the jobs are in small and medium-sized companies, while 23% are in large companies. Only 7% are in micro enterprises (ME 2011). The most important are located in the northwest, northeast, and central regions. Each of these regions specializes in certain phases of the production process of the aeronautical industry (see table 10.1).

#### The Aerospace Industry in the Central-Bajío Region

The aerospace industry in the Central-Bajío Region has developed in the last ten years, both nationally and internationally. The nucleus is mainly the city of Querétaro, but it is beginning to include other cities, such as León and San Luis Potosí. The basis for the development of this branch of the economy is the presence of important public and private universities—some of them highly specialized, such as the Aeronautical University of

TABLE 10.1. Mexico: Regional Distribution of Aerospace Industry Clusters, 2011

Region	States	Economic Specialization
Northwest	Baja California, Sonora, Chihuahua	Manufacture and/or assembly of electrical and electronic equipment for aircraft, engine parts, interior and seat assembly, control and navigation instruments, design and testing of electrical systems
Northeast	Nuevo León, Tamaulipas, Coahuila	Machining of parts, safety systems, heat treatment of metals, engineering services for the aeronautical and high-tech industry, connectors and harnesses
Central	Querétaro, Distrito Federal, San Luis Potosí, State of Mexico, Puebla, Guanajuato	Fuselage, landing gear, stabilizers, structures, insulators, electric harnesses, turbine components, turbomachinery design, repair of composite materials, maintenance services, light aircraft assembly

Source: SE, 2011.

Querétaro. Several research centers support innovation and technological development of international quality, and there are highly qualified personnel in the various technical and professional levels that this industry requires. The spatial confluence of these factors has opened significant growth possibilities due to the conditions of the ecosystem of Mexican industry. This is why it is in the third position internationally as a destination for direct foreign investment, after the United States and the United Kingdom.

Some of the companies that have been installed in Mexico have exceeded the expectations of their initial projects, so they have announced new investment projects, some for more complex activities and products, and even venturing into cutting-edge programs in the industry. Important investment projects were announced in 2009 and 2010, as well as the opening of industrial plants in the sector. An example of this was the inauguration in March 2010 of the facilities of the companies Messier Dowty and SNECMA, belonging to Grupo Safran in the state of Querétaro, whose investment was \$150 million.

Also, in October 2010, Bombardier Aerospace inaugurated a new plant in Querétaro, a project with an additional investment of \$255 million. Part of this project involved the planning and construction of the Aerospace Park, in the Polígono of the Intercontinental Airport of Querétaro, which made possible the collaboration of that company with the Constructivist Analytical University of Mexico (UNAQ), an institution specialized in training personnel highly qualified in the transfer of technology and tools for the design and manufacture of parts with carbon compounds, as well as programs that strengthen the education and training of other workers in this branch of activity. These actions have been important triggers for the arrival of new investments. Currently, in the metropolitan area of Querétaro, there are 44 companies in this sector, which generate 7,800 jobs in the production of landing gear, fuselage, harnesses, and precision machining. In sum, the favorable conditions of geographic location, access to communications and transport routes, availability of specialized research centers and human resources in the aerospace branch, and the continuity of government support through the Secretariat of Sustainable Development, have converted this city into the most important aerospace development center in the country. The effects of the success of the aerospace industry in the city of Querétaro are beginning to be seen in other cities in the Centro-Bajío region. Linked to the development of the automotive sector in León, Guanajuato, the Bajío Aerospace Cluster has been installed, and in San Luis Potosí, in accordance with the Strategic Program of the

Aerospace Industry 2010–20, the Ministry of Economy (ME), expects the aerospace industry to have exports of 12,267 million dollars by 2021, with an average annual growth of 14%.

## Intermediate Cities and the Economic Development of the Central-Bajío Region

From a national perspective, the economic and industrial expansion observed in the Central-Bajio Region during the last two decades can be understood, in general terms, as a macroeconomic transformation closely linked to the process of territorial restructuring of economic activities that has occurred in the country (Medina Ortega 2015), and that has been explained above. At this juncture, as established in the Strategic Agenda for the Central-Bajio Region Alliance, this region aims to become an articulating territory, with a close geographical link between its main cities and, at the same time, take advantage of this system of cities to generate a more balanced development between a developed north and an underdeveloped south in Mexico. It is very likely that this will become a reality by connecting the extensive road and communications network of the Centro-Bajío region with the infrastructure network that will integrate the Interoceanic Corridor of the Itsmo de Tehuantepec, soon to be realized, which will become an alternative and complementary connection to the Panama Canal.

It could be said that the various economic policies (commercial, industrial, and service-related), demographic, and urban-regional involved in this process have been implemented with a strong component of pragmatism, but also as part of a comprehensive, long-term vision. Strategic planning and governance from bottom to top have the final purpose of generating more efficient economic performance and greater competitiveness in each of the cities involved. The goal is to improve their positioning in the global environment, through improvements in equipment, infrastructure, and services, and strong urban marketing campaigns based on the dissemination of urban megaprojects. These include the construction of convention centers, public collective transport systems, large urban highways, hospital and health infrastructure, and the creation of new universities and research centers (Moreno Mata 2018).

From a regional and local perspective, this dynamic has promoted economic interrelations and social cohesion among the different federative entities that make up the RCB and the towns that make up the regional urban system. In July 2019, the states of Aguascalientes, Guanajuato, Jalisco, San Luis Potosí, and Querétaro were integrated into the Central-Bajío-West Alliance, as part of a regional development strategy focused on enhancing the industrial economic growth of these five states, based on the strengths and vocations of its main urban centers (Center for Economic Research and Teaching [CERT] 2019). The general development strategy seeks to position the Central-Bajío region globally, as one of the most attractive for foreign investment, strengthening it through a common platform that enhances the integration of investment, production, logistics, export, social development, and employment opportunities in the states that make up the region.

# Multidimensional Impacts of Economic-Industrial Development on RCB Cities

Under the proposed strategy, it seems that some of these objectives are beginning to be met. The Central-Bajío Region is currently home to 10% of the national population (CONAPO 2018). Its net migratory balance is positive; between 2010 and 2015, 110,424 people arrived in the region. The area generates 10.3% of the country's gross non-oil domestic product, surpassed only by the Metropolitan Area of Mexico City (MAMC). It occupies the second place of annual economic growth in the period 2010–2017, with an annual rate of 4.8% (CIDE 2019). The clusters with the highest total gross production are automotive, gas and oil production and transportation, food processing and distribution, and electronic commerce, chemicals, plastics, metal products, footwear, paper and packaging, and logistics (CIDE 2019).

In this way, urban competitiveness shows significant growth, which can be seen when analyzing the positions occupied by the four metropolitan areas indicated in the national and regional classifications. San Luis Potosí has a value of 93.42 (very high), which places it in second place in the national classification and first in the comparative analysis. It is followed by Querétaro with a value of 86.48 (moderately high) in the fourth national position. Next in the group is Aguascalientes, with a value of 73.70 (moderately high), eighth in the national hierarchy and third of the group, followed by León with a value of 34.20 (moderately low), which places it in the fourth and sixth places of the regional and national classifications. The average value of urban competitiveness of the cases studied was 71.96 (moderately high); only León was below that level.

The evaluation of the urban governance sphere, which integrates three

Position	MA León (MAL)	MA Querétaro (MAQ)	MA San Luis Potosí (MASLP)	MA Aguascalientes (MAA)	Average
National Ranking Oualification	20 (6)	4 (2)	2 (1)	8 (3)	—
	34.24	86.48	93.42	73.70	71.96

TABLE 10.2. Selected Metropolitan Areas. Urban Competitiveness, 2015

Source: Own elaboration based on Cabrero and Orihuela 2012; IMCO 2016.

*Note:* Urban competitiveness was estimated based on the IMCO classification (2016). The position and qualification indicated correspond to the national classification.

dimensions and five indicators, reveals contrasting results. In general, a low or weak level is observed, with an average value of 34.28. Of course, slight differences exist between metropolitan areas studied, but the parameters are very similar: Querétaro had the highest value (39.67), followed by San Luis Potosí (32.80), León (30.69), and Aguascalientes with the lowest value (29.40). These values range from low to very low or very weak, according to the proposed classification (see table 10.3). The results of the three subdimensions that make up the urban governance dimension also reveal low average values, in participation and accountability (48.69), in institutional capacity and municipal finance (54.04), and in urbanization governance (0.10), which stands out as the lowest value of urban governance indicators.

It is worth paying attention to the governance indicator of urbanization, which in the group of cities analyzed had an extremely low value of 0.00. This has several implications. On the one hand, the pace of physical growth in the four metropolitan areas exceeded the rate of population growth, reflecting an extremely expansive and speculative urban development. On the other hand, it indicates that this factor, the regulation of metropolitan expansion, is the weakest area of urban governance in all the cases studied. Last but not least, it means that the mechanisms of planning, management, and regulation of these spatial growth trends undermine urban sustainability, showing great inefficiency and inability control the pace of metropolitan growth that real estate developers and the dynamics of the land and housing markets have imposed over the last two decades (Mario Molina Center [MMC] 2015; Moreno Mata 2018).

Finally, the category of urban sustainability was incorporated into this comparative analysis, which was evaluated based on three dimensions and five indicators: (1) economic performance (productivity); (2) social performance (mobility and infrastructure, quality of life, and equity and social inclusion), and (3) environmental performance (air quality, waste management, and energy performance). The results reveal that the overall average

	-			
MAL	MAQ	MASLP	MAA	Average
30.69	39.67	32.80	29.40	34.28
35.32	65.83	48.57	45.21	48.69
35.32	65.83	48.57	45.21	48.69
56.75	53.18	49.82	43.00	54.04
98.41	94.50	100.00	91.68	96.64
16.77	50.64	22.09	24.80	27.78
55.08	14.39	27.37	14.66	38.05
0.00	0.00	0.00	0.00	0.10
0.00	0.00	0.00	0.00	0.10
	30.69 35.32 35.32 56.75 98.41 16.77 55.08 0.00	30.69 39.67 35.32 65.83 35.32 65.83 56.75 53.18 98.41 94.50 16.77 50.64 55.08 14.39 0.00 0.00	30.69 39.67 32.80 35.32 65.83 48.57 35.32 65.83 48.57 56.75 53.18 49.82 98.41 94.50 100.00 16.77 50.64 22.09 55.08 14.39 27.37 0.00 0.00 0.00	30.69 39.67 32.80 29.40 35.32 65.83 48.57 45.21 35.32 65.83 48.57 45.21 56.75 53.18 49.82 43.00 98.41 94.50 100.00 91.68 16.77 50.64 22.09 24.80 55.08 14.39 27.37 14.66 0.00 0.00 0.00 0.00

TABLE 10.3. Selected Metropolitan Areas. Comparative Analysis of Urban Governance by Subdimensions and Variables, 2015

Source: My own elaboration based on Mario Molina Center 2015; Cabrero and Orihuela 2012; UN-Habitat 2015.

of the selected cases was 62.69 on a 100-point scale. The classification of metropolitan areas places León in the first position, with a moderately low value of 59.95, followed closely by San Luis Potosí, which records a value of 59.30. Slightly removed are the cases of Querétaro and Aguascalientes with values of 57.81 and 53.53, respectively, both also moderately low (see table 10.4). The evaluation of the three dimensions of urban sustainability allows us to observe that on axis I, economic performance, the average was 51.99, considered a moderately low range. The highest value was recorded by Querétaro, with 65.12, above average (which was 51.99) and in a range considered moderately low. Next are León and San Luis Potosí, with very close values between them of 63.44 and 61.84, respectively, which can be considered a moderately low range. In the last position is Aguascalientes, with a value of 59.47, which is considered moderately low. Axis II, social performance, reveals a different classification, since Aguascalientes is located first, with a value of 67.86, moderately low. Then appear, in descending order, León, 67.27, and San Luis Potosí and Querétaro, with 66.15 and 66.06, respectively, all in a moderately low range. Finally, axis III, environmental performance, reflects the following positions of the metropolitan areas studied: first San Luis Potosí with a value of 56.11, which is considered moderately low; followed by León and Querétaro, with values of 49.16 and 42.27, respectively, which places them in a range of low environmental performance. The last place is occupied by Aguascalientes, with a very low value of 33.27.

<sup>&</sup>lt;sup>a</sup> Urban governance was estimated based on the methodology proposed by the Urban Prosperity Index prepared by UN–Habitat (2016).

	Analysis axes /					
Key	Variables	MAL	MAQ	MASLP	MAA	Average
Urban sustainability		59.95	57.81	59.30	73.70	62.69
Ι	Economic performance	63.44	65.12	61.84	59.47	62.46
1	Productivity	63.44	65.12	61.84	59.47	66.83
II	Social performance	67.27	66.06	66.15	67.86	66.83
2	Mobility and infrastructure	65.20	64.31	61.46	63.29	63.56
3	Quality of life	65.78	63.26	67.34	67.81	66.05
4	Equity and social inclusion	70.85	70.63	69.65	72.49	70.90
III	Environmental performance	49.16	42.27	49.92	33.27	53.39
5	Environmental sustainability	49.16	42.27	49.92	33.27	43.65

TABLE 10.4. Selected Metropolitan Areas. Urban Sustainability by Component, 2015

Source: Own elaboration based on Mario Molina Center 2015; Cabrero and Orihuela 2012; UN—Habitat 2015.

Note: Urban sustainability was estimated with the simple average between the three axes or dimensions that comprise it: economic performance, social performance, and environmental performance. To estimate the economic dimension, the indicator used was productivity. In the social sphere the indicators of infrastructure (services, mobility, and urban form), quality of life (education, health, habitability, security and protection, and accessibility to public spaces), equity, and social inclusion were used. The environmental dimension was evaluated based on the environmental sustainability indicator, which in turn incorporates the components of air quality, energy efficiency and waste management. Urban sustainability is subdivided into three categories.

- I. Economic Performance: Refers to the economic efficiency of cities, depending on their urban competitiveness, their economic structure, local development profile and potential for insertion in the global economy. The most significant variable for this component of economic sustainability is Productivity, although other studies use the wealth generated (gross production per inhabitant), the wage level (average salary of employed personnel), the economic structure (local specialization index) and the participation of modern industry in the economy (UN-Habitat 2016).
- **II. Social Performance:** It refers mainly to equity or inequity that the city offers to its inhabitants, in terms of the quality of life or well-being. The indicators included are urban mobility, transport infrastructure and drinking water, drainage and electricity services, as well as equipment in health, education and green spaces (UN-Habitat 2016).
- **III.** Environmental Performance: Expresses the impact of human activities and production processes on the environment. In this case, special importance is given to the assessment of scarcity, pollution and impacts associated with air quality, energy efficiency and water management (UN-Habitat 2016).

#### Synthesis of the Comparative Study

In general terms, the comparative study allows us to observe several categories of relevant data. If each case is analyzed in terms of the three categories of analysis (competitiveness, governance, and urban sustainability), the differences between the values are very marked: in the cases of San Luis Potosí, Querétaro, and Aguascalientes, the levels of urban competitiveness

Key	Position / Qualification	MAL	MAQ	MASLP	MAA	Average
A	Urban competitiveness	4	2	1	3	
	1	34.24	86.48	93.42	73.70	71.96
В	Urban sustainability	2	5	4	6	
	•	59.95	57.81	59.30	53.53	47.61
C	Urban governance	5	1	4	6	
		30.69	39.67	32.80	29.40	33.14
Differ	ences					
55	A vs B	33.64	28.67	34.12	20.17	24.35
	A vs C	3.55	46.81	60.62	44.30	38.82
	B vs C	29.26	18.14	26.50	24.13	14.47

TABLE 10.5. Selected Metropolitan Areas. Comparative Analysis by Dimensions: Competitiveness, Sustainability, Governance, 2015

Source: My own elaboration based on the data in tables 10.2 to 10.4.

are much higher than those of urban sustainability. In the case of León, the situation is reversed: urban sustainability levels are above urban competitiveness (see table 10.5).

Although in all cases the values of urban governance are in a range from moderately low to low (with an average of 34.28, frankly low), if the levels of urban competitiveness and sustainability are compared with those observed in urban governance, the differences are even stronger. In the case of San Luis Potosí, for instance, the difference between the values of competitiveness and governance is 60.62 points, and between sustainability and governance is 26.50. The same happens in the cases of Querétaro (with differences of 46.81 and 18.14 points, respectively) and Aguascalientes (with differences of 20.17 and 44.30). León presents very close values between competitiveness and governance (with a difference of 3.55 points, in favor of the former), although the divergence between urban sustainability and governance was 29.26 points, in favor of the former.

A first conclusion derived from this evaluation is that it confirms that the balance obtained regarding the trends, behavior, and synergy of the dimensions of competitiveness, governance, and sustainability is not very consistent. The values observed in each case are very different, and they depend more on other factors—some internal and others of an external nature, and the conditions that make each city different: a specific economic and social dynamic, local values, customs, and identities, as well as the creativity, potential, and weaknesses of each place.

#### **Final Reflections**

How to explain the economic-industrial growth model presented by the Central-Bajío Region in recent years? And how do we evaluate the scope and implications of this dynamism? The different spheres of government and the participating companies themselves point out that this exceptional growth is due to the competitive advantages offered by the region, but mainly it is the characteristics of its main cities, in terms of access to global markets, strategic geographic location, sources of qualified workers, access to supplies, and a legal framework that is compatible with its major business partners, which encourages foreign investment. All this makes it easier for their local economies to reach competitive positions on the national and regional levels. The arrival of companies in the automotive and aerospace sectors opens even more opportunities for this economic expansion, which far exceeds the macroeconomic trends of the country.

For a period of more than 20 years, the cities of Aguascalientes, León, San Luis Potosí, and Querétaro have maintained, and in some cases reinforced, their territorial primacy thanks to their ability to adapt their space and logistics to the new conditions of production, circulation, distribution, and consumption that have been introduced via the globalization process, and in particular since the creation of NAFTA (Moreno Codina 2015; Moreno Mata 2018; SEDATU 2014). The development of productive networks, poles of innovation and technological development, and access to information and public and private investments, within the framework of a partnership platform of regional cooperation and competition, favors the territorial positioning of these cities. The strategic economic sectors of agribusiness, metalworking and chemistry, leather footwear, manufacturing, services, commerce, education, health, and the financial sectors stand out, and more recently the automotive, auto parts, and aeronautical branches. For these cities, globalization has meant the possibility of positioning themselves in the center of global networks to obtain the benefits derived from the global flow of economic activities.

But what about the rest of the dimensions linked to regional and local development? At the regional level, recent studies reveal the great challenges facing the integration process of the Centro-Bajío region (CIDE 2019) that could work against the objective of creating a highly competitive region with high productivity rates and sustainable development based on efficiency, resource management, and environmental preservation, to be deployed with high levels of social welfare, security, and equipment and infrastructure for development. These challenges to regional development

are expressed in some indicators to which special attention should be paid: 4.7 people out of 100 inhabitants live in extreme poverty, 17.8% of the population has a significant educational lag, and the economic complexity index is still very low, 0.84 (CIDE 2019).

In the urban environment, the information obtained in the comparative study also allows us to observe strong inconsistencies in the classifications obtained from the three categories analyzed: competitiveness, governance, and sustainability. The classifications related to urban competitiveness place three of the cities located in the urban-industrial corridor Centro-Bajío in the first eight places of the national classification, and another in a range from 12th to 20th place nationally. This could be interpreted as an economic performance that is better than acceptable, but when the analysis of urban competitiveness expands beyond productivity and per capita income to consider other dimensions of economic and social progress, the advances indicated are not so clear. For example, performance in productivity, governance, and urban sustainability is weak. Governance has low or very low levels in all the cases studied, confirming that urban governance as based on the indicators used makes almost no contribution to the levels of competitiveness achieved during the last decade, and seems to contribute very little to the sustainability of the cities studied. From this evidence it could be deduced that, in reality, low levels of urban governance are mainly related to the poor performance of local governments, all of which in this case are of a metropolitan nature.

This factor is crucial in evaluating this dimension, especially if it is considered that by 2015 the metropolitan integration of the four selected cases involves 19 municipalities of the National Population Council and a population close to six million inhabitants (Conapo 2018; Moreno Mata 2017). If Mexico has no regulatory legal framework that allows it to order and regulate the demographic and spatial growth linked to this process, it presents a very important challenge in terms of metropolitan governance, in which the four cities analyzed have serious limitations that are beyond the scope of the pre-existing legal-administrative levels.

On the other hand, we must ask whether local governments—state, and municipal or urban—as facilitators of the economic conditions that favor the establishment of foreign investments in each of the main cities and federative entities that make up the Central-Bajío Region, have limited themselves to providing the general conditions for the production that industrial capital has demanded. Or are territorial policies that support the construction of a global urban region of intermediate character the most appropriate instrument to overcome the jurisdictional conditions

of the national state and establish, in the medium or long term, new conditions in the territorial organization of regional and urban governance. The history of Mexico offers us unfortunate evidence regarding this trend: all attempts made throughout the twentieth century to establish independent or autonomous regions have been violently silenced by the federal government (Cossío Villegas 1973).

Perhaps a less optimistic interpretation would be that the relocation of the automotive and aeronautical sectors in Mexico's Centro-Bajío has taken place as a basis for a process of global territorial restructuring. That is, as part of a spatial or territorial strategy of large transnational companies, which privilege the regional-global dimension in the insertion of local companies and productive activities (located in the main cities of the Centro-Bajío region) in an increasingly globalized economic system. The investment bias of the automotive and aeronautical industries would then be understood as based mainly on global capital decisions, and due in part to the conditions of site and position of the cities that the federative entities and cities that integrate it, regarding the economic axes that structure access to national, regional, and international markets.

Faced with this debate, the need arises to refocus the future development of the automotive and aerospace sectors in a specific territory on the basis of an imperative condition: that large exogenous companies in the automotive and aerospace sectors can play a strategic role in local development, as long as there is a convergence between their strategies and those of the local territory itself, understood as a true actor in the development process.

This condition can be met under two scenarios: (1) the large transnational companies installed in the region studied are integrated into the regional production system, adopting flexible production models, outsourcing functions, subcontracting, and establishing networks of endowed subsidiary plants of operational autonomy. This would approach the concept of endogenous development—or at least induced development—in which public land planning policies play a fundamental role. (2) The relocation decisions of these industries in the Central-Bajío Region respond to tactical planning according to business interests under an exogenous regional development project, with a temporary and eventually ephemeral time horizon. That is, it will last as long as profitability is expected: when the conditions of the global environment change in terms of competition, it is likely that it will lead to another place for its operation, so that its temporariness is acknowledged and its decentralization is functional to business strategies that are defined many kilometers away.

#### NOTES

- 1. According to Moreno Mata (2012), intermediate or intermediary cities (i-cities) are cities with a population between 50,000 and one million people that generally play a primary role in connecting important rural and urban areas to basic facilities and services. Because of their scale, intermediary cities can guarantee and provide basic housing needs to their citizenship more efficiently and cheaply than metropolitan areas. In this sense, they can become a link between the local and the global. Their crucial role in the achievement of an "inclusive, safe and resilient" urbanism, and in the development of more balanced and sustainable urban systems, means that intermediary cities need to become more prominent in the Urban Agenda and its implementation.
- 2. According to Tomadoni (2004), the term *glocalization* combines the words globalization and localization. This locution is a concept that tries to interrelate the global with the local as a business strategy and alternative development of our society. Glocalization is essentially an adaptation of global patterns to local conditions. At the business level this strategy consists of adapting a standard business concept to the particular conditions of where it is established. This also includes the manufacture of products, which always has to take into account local demand.

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#### **ELEVEN**

## Economy, Inequalities, and Cities

# Chinese Influence in Latin America Pablo Baisotti

In his pioneering work Social Fustice and the City (1973), geographer David Harvey stressed that urbanism and all phenomena related to the city are closely linked to capital, the dominant force in modern social life. The city, he said, is a surplus social product created from the mobilization, extraction, and geographical concentration of significant quantities of a surplus product. This is achieved when a large, sedentary, and highly productive population exists, along with certain technical and natural conditions and the availability of good communications networks and access to information (Harvey 1992, 219, 226, 249, 250). These characteristics have led to the emergence of interconnected, globalized cities that share various economic, political, cultural, and social similarities. Harvey divides these cities into seven groups: the supercity, informal city, global city, meta-polis, postmodern city, post-Fordist city, postmetropolis, and cities in globalization. Researchers Jordi Borja and Manuel Castells have gone on to maintain that these megacities are more than merely gigantic territorial agglomerations of human beings, but that they represent distinct functional nodes of the global economy that have the symbolic capacity and the necessary communicative power to create and diffuse dominant political, cultural, and scientific messages (see Braudel 1984; Castells 1989; Sassen 1984, 1991; Ascher 1995; Amendola 1997; Dematteis 1998; Soja 2000; Marcuse and

Van Kempen 2000; Borja and Castells 1997). Sociologist Saskia Sassen argued that global cities had emerged as leading examples of urban life and the world economy, as essential centers for the functioning and management of productive chains of financial and business services in the process of globalization. According to that author, traditional global cities such as New York, London, Tokyo, Paris, Frankfurt, Zurich, Amsterdam, Los Angeles, Sydney, Hong Kong, and Barcelona have recently been joined by others, such as Bangkok, Taipei, São Paulo, and Mexico City (Taylor and Walker, n.d.; Brown et al. 2010; Parnreiter 2010; Martínez Toro 2015, 221; Sassen 200,5 51; 2009, 23).

In Latin America during the 1990s, the State carried out deregulation processes, ceding power to the private market in urban development. According to McKinsey Global Institute (2011), by 2007 the 189 largest cities in Latin America generated \$US3.6 billion, a figure equal to the combined GDP of India and Poland (Jileta 2016, 7, 16; United Nations-Habitat, 2012; Cadena et al., n.d.). As a result, unplanned urbanization processes led to negative externalities that affected institutional frameworks, governance structures, and social, economic, and environmental dynamics (ECLAC/ONU-Habitat/Minurvi 2018, 39). Subsequent international events had a further impact on the continent, including the fall of the Soviet Union, world economic crises, and the disinterest of the United States in the American continents as a whole. On the other hand, China's intention to occupy different economic spaces through a foreign policy strategy known as "peaceful ascent" grew, progressively encouraging political and cultural ties at all levels.1 As the second decade of the 21st century has progressed, China has emerged as the promoter of the Silk Road initiative, which was later complemented by further plans to develop a maritime Silk Road for the 21st century (see KraneShares n.d.; Chi 2015, 55; Chin and He 2016).<sup>2</sup> The diffusion and acceptance of China's image as a cooperative and "supportive" country only helps to spread a bleached narrative that normalizes a dictatorship that violates human rights, according to sinologist Martin Hála (Cardenal 2018).

In both the current "Chinese" phase of globalization and the previous period of globalization that began in the 1970s, the main cities of Latin America remained remote and disconnected; many governments saw them as occupying a marginal role with very little influence over the world's vital economic centers. However, the uninterrupted growth of many Latin American cities in the second half of the twentieth century seems to challenge some of these postulates that relegate the region to positions of little relevance on the world stage. The ATKearney Report (2014) mentions

that some Latin American megacities, such as São Paulo, Rio de Janeiro, and Bogotá, are destined to be the great global cities of tomorrow. In this report, a global city was not just one that had reached great levels of economic and human development, but that provided its citizens with a basic quality of life and retained the best talents, the largest companies, and capital, thus generating a profit. Another ATKearney Report (2018) highlighted five major areas for evaluating megacities: business, human capital, information exchange, cultural experience, and political participation. The report concluded that the Latin American cities of Belo Horizonte, Bogotá, Buenos Aires, Caracas, Guadalajara, Lima, Mexico City, Monterrey, Porto Alegre, Puebla, Recife, Rio de Janeiro, Salvador, Santiago, and São Paulo had the potential to become "global cities" (Kearney 2014, 2018; Sassen 2012, Arias, n.d.).

Chinese leaders consider the establishment of the One Belt One Road initiative to be the beginning of a new world order based on political communication, monetary linkage, entente among peoples, connectivity of facilities, and commercial fluidity that would certainly produce unparalleled growth, including that of many Latin American cities. Chinese president Xi Jinping stated at the Davos meeting of January 2017 that China should become the leader of a new phase of globalization based on South-South cooperation (Qinduo 2017). If it did, one of the first results would be a shift in world wealth from the economies of the Organisation for Economic Co-operation and Development (OECD) to the emerging economies (OECD/ECLAC/Caf 2015). It would be difficult for this economic restructuring to benefit the most neglected social classes in the American continent. Some researchers maintain that China is trying to replace the United States as the main importer of raw materials from the continent, and that the growing role in the region is reminiscent of the Cold War. However, although it is true that hegemonic disputes could expand, the situation is still far from leading to a conflict similar to that between Moscow and Washington, since China and the United States make use of free trade and the latter is interested in economic rather than ideological or political issues (Harris 2015, 156; Ruiz Marrero n.d.; de Esperanza 2019). This article examines the influence of this new attempt to advance globalization with Chinese characteristics in Latin America, highlighting its economic influence and social impact on the continent. The article seeks to address the following questions: Will China have the capacity to embrace an inclusive globalization that will allow it to fight poverty in Latin America? Could a relationship of mutual benefit be maintained for all the nations of the continent? What role will the largest cities in Latin America play in the Chinese plan to develop the 21st-century maritime Silk Road?

#### Latin American Seduction

Since the mid-1970s, a global neoliberal restructuring has led to a profound crisis of the welfare state. It was reinforced by the processes of globalization and sustained by new information and knowledge technologies that helped to concentrate power and wealth in the hands of tiny interest groups (Pírez 2018; Castells 1995; Harvey 1992). During the following decade, the Latin American metropolises were struck by deep economic and political crises, which years later opened the door for the massive arrival of capital and investments that accelerated the decentralization process. At present, the relatively prolonged phase of economic expansion associated with the export cycles of minerals and agricultural products is experiencing a frank decline (Cuervo n.d.). This phenomenon has gone hand in hand with strong urban growth on the continent. In 2015, nearly 80% of the Latin America and the Caribbean population was urban, and this figure climbed to 83% if South America alone was considered; the world average is around 54% (ECLAC/ONU-Habitat/Minurvi 2018). One consequence was the disproportionate growth of some megacities, such as Buenos Aires, Mexico City, Rio de Janeiro, São Paulo, Belo Horizonte, Bogotá, Lima, and Santiago, thereby expanding the economic spaces and networks in these cities that define social relations and the level of citizen well-being (Sassen 1998; 2001, 41; 2003, 36, 88; 2005; 2009, 210, 211).

The chaotic urbanization of Latin America, with high levels of spatial and urban concentration, was accompanied by inequalities in income and access to education, health, and other public and private services (Ilpes-ECLAC 2012; ECLAC 2012; Aroca and Atienza 2012, 2013, 2016, 234; Cuadrado-Roura and González-Catalán 2013). According to Henri Lefebvre, social space was in danger of being transformed, supplanted, or even destroyed through a superposition of successive, entangled layers of networks: roads, routes, railroads, telephone lines, etc. (Lefebvre 2013, 432). In the 1990s, income concentration indices in urban and rural areas were very similar in most countries of the region. However, beginning in around 2010, data showed growing income inequalities in urban areas, especially in Brazil, Chile, Colombia, El Salvador, and the Dominican Republic. The cases of Chile and Colombia are particularly extreme, with their cities producing the largest income inequalities. These existing gaps resulted in large differences in access to better jobs, wages, and social protection, to educational and recreational opportunities, and to decent housing (Prado and Kiss 2017, 73, 74; Segovia and Rico 2017, 49; OECD/ECLAC/Caf 2015). This last assertion is nothing new, since throughout its history Latin America has suffered successive neoliberal economic waves that hit the

neediest population hard. Can it be said that the economic interests of Chinese—and Latin American—private owners, companies, multinational corporations, and financial capitalists are any different from those of other parts of the world? Probably not. Economic crises, new cycles of commodification, the re-creation of colonial circuits, and the privatization of land are increasingly frequent and similar. According to Mexico's former ambassador to China, Jorge Guajardo, China seeks to install its overcapacity, whether in steel, cement, and other items, including financial services, in countries that do not have access to international financial markets. In this way very expensive financing is tied to Chinese infrastructure works, which creates bills to pay for Chinese engineering, Chinese materials, and Chinese labor. They abandon the infrastructure work, but the country pays for it, added Guajardo. In the event that countries—as expected—are unable to make the payments on time, they have to renegotiate with China from a weaker position, according to David Denoon (Lissardy, n/d). For former Argentine diplomat Roberto García Moritán, the relationship with China that many Latin American countries seek to strengthen their economies, with a range of intergovernmental ties, trade agreements, and megainfrastructure works, could become a problem (García Moritán 2018). Is a new system of dependence being recreated, in which Latin America again inserts itself as a producer of primary goods and its economies become progressively informal? (Frank 1967; Cardoso and Faletto 1979).

Today, the perception is growing in Latin America that the absence and inadequacy of infrastructure are holding back growth and reduction of poverty. The low level of infrastructure availability, quality, and accessibility, while it may enable a short-term fiscal adjustment, could also weaken the public economy of different Latin American countries (Calderón and Servén n.d.). Entities such as the China Development Bank and the Export-Import Bank of China are behind the development of large construction and infrastructure projects, especially in Brazil, that aim to facilitate and lower the costs of trade. In addition to promoting progress in infrastructure, Chinese direct investment in Latin America has expanded to other sectors in recent years, according to Samuel Ortiz, professor at the Autonomous University of Mexico's School of Economics. Those areas include financial services, trade, acquisition of real estate for rent and manufacturing activities—areas of recent investment that have entailed the merging or acquisition of Latin American companies by Chinese companies. This has not meant an increase in productive capital, nor has it had an impact on job creation (Barría n/d).

One of the most damaging results of this extremely intense investment

and infrastructure work that facilitates trade with China is the failure to comply with fundamental rights obligations on multiple projects, as demonstrated by the International Federation of Human Rights (FIDH). A report presented by the FIDH in October 2018 states that the human rights violations committed by Chinese companies are not isolated, but are part of a pattern of recurrent behavior characterized by disrespect for fundamental internationally recognized economic, social, and cultural rights. This conclusion was the result of an investigation of 18 mining, oil, and hydroelectric exploitation projects in five countries: Argentina, Brazil, Bolivia, Ecuador, and Peru. The human rights violations identified have to do with the flawed implementation of processes of environmental consultation with the population in general, specifically indigenous populations. Environmental protection and transparency are totally lacking. In addition, the right to land and territory, such as in the Mirados and San Carlos Panantza mining projects, has been repeatedly violated; Chinese state-owned companies have resorted to the irregular purchase of land and to filing civil lawsuits against families without land titles, leading to forced evictions and the involuntary displacement of indigenous families. This suggests that the appropriation of assets (including natural resources) encourages the Chinese exploitation of resources for its own profit, and that the maritime Silk Road to Latin America aims exclusively to expand infrastructure to modernize trade routes. For Castells (1983), the situation on the continent was related to populist politics and clientelism within the Latin American governments themselves. In fact, corruption is an endemic evil in Latin America, rooted in governments and their dependent bodies (see de Esperanza 2019; Roy 2009, 822; Harvey 2005, 3, 7, 70, 159, 160; Castells 1983).3

#### Cities Rich . . . in Inequalities

The inequalities of Latin America have been denounced by Pope Francis. He has asserted that the growth of informal work could exacerbate criminal attitudes: "It may be trafficking in persons for slave labour or prostitution, which are still sources of work pursued by people in order to survive today." During the First World Meeting of People's Movements in October 2014, he said that it was fundamental that people enjoy land, shelter, and work. He also recalled the plight of thousands of homeless people in cities that were "modern, proud and even vain." But their potential was enjoyed by very few, as Pope Francis pointed out at the Pontifical Council for the

Laity and then through a video message for the Conference: *The Ideas of the Expo-2015—Towards the Letter from Milan*. While many cities were flourishing, men and women also lived in an "anti-city"; they were noncitizens experiencing "nonrelationships"—they were discarded. He also made concrete proposals: address the structural causes of poverty, practice charity at all levels, and be custodians, not landowners (Pope Francis, October 2014; February, July 2015). The process of massive urbanization pushed many citizens to live in informal neighborhoods with substandard housing and urban services, as cities were unable to meet their basic needs. By 2015, about 100 million people in Latin America were living in such bad situations (Jaitman 2015, 50).

According to the Social Indicator and Statistics (table 11.1) provided by the East Asian and Latin American Cooperation Forum (ECLAC), all countries presenting data from 1990 to 2014 have considerably reduced the percentage of inhabitants in peripheral neighborhoods with an inadequate standard of living. Chile, El Salvador, Paraguay, and Venezuela, nations that have provided data since 2005, have the same percentage, while in Ecuador and Panama the problem has grown. Between 2005 and 2014, Latin America and the Caribbean show a decrease of 8% (from 29%

TABLE 11.1. Urban Population Living in Slums, Informal Settlements, or Inadequate Housing (percentage of urban population)

	1990	1995	2000	2005	2010	2014
Argentina	30.5	31.7	32.9	26.2	20.8	16.7
Bolivia	62.2	58.2	54.3	50.4	47.3	43.5
Brazil	36.7	34.1	31.5	29	26.9	22.3
Chile				9		9
Colombia	31.2	26.8	22.3	17.9	14.3	13.1
Costa Rica				10.9		5.5
Ecuador				21.5		36
El Salvador				28.9		28.9
Guatemala	58.6	53.3	48.1	42.9	38.7	38.7
Haiti	93.4	93.4	93.4	70.1	70.1	74.4
Honduras				34.9		27.5
Mexico	23.1	21.5	19.9	14.4		11.1
Nicaragua	89.1	74.5	60	45.5		45.5
Panama				23		25.8
Paraguay				17.6		17.6
Peru	66.4	56.3	46.2	36.1		34.2
Venezuela				32		32
Latin America and the Caribbean				29		21

Source: Eclac.

to 21%), with a high percentage of people still living in inadequate and unhealthy places.<sup>4</sup>

The economic changes in Latin America in recent decades have led to a new wave of urban design, with additional social, economic, and architectural modifications. New territorial structures of production, circulation, distribution, and consumption were generated, as well as new forms of socioterritorial fragmentation and social exclusion. The trends of change forged by quasi-Fordist capitalism—characteristic of peripheral industrialization—and a geography of consumption marked the new forms of social-spatial articulation (Cuervo 2003, 12, 18; Ciccolella 1998, 1, 7). Many large Latin American cities, such as Buenos Aires, Caracas, Mexico, Santiago, San Pablo, and Rio de Janeiro, have transformed from compact and homogeneous, loosely "European" urban models, to become extended cities with discontinuous, socially and spatially fragmented territories wherein wealth and poverty, backwardness and modernity coexist in the same place (Cuervo 2003, 20, 21; Ciccolella 1998, 5). In 2016, an ECLAC report adopted the goals of Agenda 2030 regarding issues of high priority for Latin America and the Caribbean, such as the reduction of inequality in all its dimensions, inclusive economic growth with decent work for all, sustainable cities, and the vital issue of climate change, among others. This represents a shift toward something radically opposed to neoliberal logic that is, Chinese economic logic. The introduction began by asserting that

The slow global economic growth, social inequalities and environmental degradation that are characteristic of our current reality present unprecedented challenges for the international community. In fact, we are facing a change of era: the option of continuing with the same patterns is no longer viable, which makes it necessary to transform the current development paradigm into one that takes us along the path of sustainable development, inclusive and with a long-term vision. (ECLAC 2019)

The sociologist and philosopher Zygmunt Bauman highlighted that the urban territory had become the battlefield of a continuous war for space wherein the impotent inhabitants of the "separated" areas were increasingly marginalized and reduced, trying to install new frontiers in their territories, which had been converted into ghettos (Bauman 1998, 20). Similarly, Ash Amin asserted that differences juxtaposed in spatial proximity generated political challenges, for example between the business community and the city's poor, or competitive demands from different classes and

social and ethnic groups for the city's cultural resources (Ash 2002, 397). Carlos De Mattos (2001) notes that regardless of their level of development, several Latin American cities came to perform an increasing number of global functions, while the masses began to exercise new social practices based on reciprocity, the assumption of equality, and collective solidarity (Toro 2015, 220; Quijano 1993, 154; De Mattos 2001).

The great challenges for Latin American cities are the fights against poverty, crime, and unemployment. According to ECLAC estimates for 2018, in six Latin American countries 10% or more of the population still lives in extreme poverty, while in three of them the figure is 20% or more. This represents an estimated 168 million people at the regional level (ECLAC 2018a, 27, 41; Cota Yañez 2001, 8). According to social and statistical indicators, ECLAC (table 11.2) indicates that a large part of the population in Latin America continues to live in poverty or extreme poverty.

Extreme poverty in Latin America, at the national level, remained between 11.2 % (2002) and 7.8% (2014), increasing again from 2015 to reach 10.2% in 2017, 1% less than in 2002. The differences between urban and rural areas are striking. While in the former the percentages ranged from 5.1% (2014) to 7.8% (2017), in the latter the percentages ranged from 18.6% (2014) to 25.1% (2002). Thus, in rural areas extreme poverty is three times as high as in urban areas. In relation to the previous table, it should be noted that a significant percentage of the population in Latin America lives on less than \$1.9 and \$3.2 per day (table 11.3).

In relation to the first group, those who live on \$1.9 per day have been decreasing; in 1999 the proportion was 13.6% and in 2015, 4.13%. Those who live on \$3.2 per day decreased from 27% in 1999 to 10.78% in 2015. Note the substantial reduction between 2005 and 2008 of more than 5.5%; the same period saw the largest percentage reduction in the first group,

TABLE 11.2. Population Living Below the Extreme Poverty and Poverty Lines, by Geographical Area (percentage of population in each geographical area)

		_							
Latin America	2002	2005	2008	2012	2013	2014	2015	2016	2017
Extreme poverty									
National	11.2	9.6	9.1	8.1	8.3	7.8	8.7	9.9	10.2
Total urban areas	7.3	6.1	5.5	5.2	5.5	5.1	6.1	7.3	7.8
Total rural areas	25.1	22	22.6	19.9	19.4	18.6	19	20.2	20.4
Poverty									
National	44.6	40.3	33.6	28.8	28.6	27.8	29	30.2	30.2
Total urban areas	39.6	35.7	28.3	23.9	24	23.6	25.1	26.4	26.3
Total rural areas	62.5	56.8	53.6	47.9	47	45.1	45.3	45.9	46.4

Source: Eclac.

TABLE 11.3. Population Living on Less than \$US1.9 and 3.2 per Day, 2011 PPP Values (World Bank) (percentage of total population)

Latin America and the Caribbean	1999	2002	2005	2008	2010	2011	2012	2013	2015
Population living on less than \$1.9 per day	13.6	11.83	9.88	6.91	6.01	5.64	4.72	4.57	4.13
	27	24.87	21.37	15.72	13.98	13.08	11.94	11.42	10.78

Source: Eclac.

TABLE 11.4. Unemployment Rate in Latin American and the Caribbean (average annual rate)

Year	Rate		
2000	11		
2001	11.1		
2002	11.4		
2003	11.4		
2004	10.4		
2005	10		
2006	9		
2007	8.5		
2008	7.8		
2009	9.1		
2010	8.4		
2011	7.7		
2012	7.2		
2013	7.1		
2014	6.9		
2015	7.3		
2016	8.9		
2017	9.3		

Source: Eclac.

from 9.88% to 6.91%, almost 3%.7 according to ECLAC's social and statistical indicators (table 11.4) Unemployment remained at 11.4% from 2000 to 2017, reaching a minimum of 6.9% in 2014. Between 2015 and 2017 it increased by 2% to 9.3%.8

Latin American and Caribbean territorial inequalities take two forms. The first is a large geographic concentration of the population, and the second is that the main economic activity takes place in a reduced number of locations within each country, usually the main metropolitan areas. A com-

parison with a selection of Organisation for Economic Co-operation and Development (OECD) countries shows that levels of spatial concentration in these territories are generally very high (ECLAC 2016a, 118, 120, 132, 133). At the beginning of the 21st century, there were 52 urban agglomerations in Latin America with between 1 million and approximately 18 million inhabitants. In 2010, the population of Latin America was about 80% urban, in cities with little connection to national and regional subeconomies, even though global involvements had been installed on the local level, and in turn the global was made up of a multiplicity of local areas (ECLAC 2014, 27). Several Latin American urban planners point out that in Latin America, polycentric urban systems were emerging without clear borders between the countryside and the city, as was the case in Mexico City, São Paulo, Santiago, and Buenos Aires (Davis 2006, 10). Many of these urban nuclei were transformed into a kind of city-region, defined as a great single or multicentric urban system with the typical structural features of neoliberalism: gigantism, disorder and dispersion, privatization, fragmentation, informalization and impoverishment, exclusion, conflict, violence, and pollution (Pradilla Cobos 2008, 154-58; Scott 2001). Linked to this phenomenon was a juxtaposition of architecture that destabilized the old features of urbanization, and many underused spaces appeared. Harvey asserted that the capitalist city looked replete with global financial centers and buildings of fabulous architecture and iconic meaning, which contrasted with the old industrial architecture and the proliferation of urban peripheries built for the working class and the immigrant population (Harvey 2014, 161).

One of the greatest challenges for Latin America and the Caribbean is low public and private investment in urban infrastructure, which has implications for economic competitiveness, access to employment, basic services, quality of life, and environmental protection, among other areas. While systematic efforts to attract private investment in infrastructure to Latin America and the Caribbean have paid off since the 1990s, the rate of cancellation of private investments has also showed an upward curve with high levels of contract renegotiation and considerable economic and political cost to governments. It is estimated that only 3% of regional GDP was spent on infrastructure in 2014, representing half of what is needed to meet social demands. In other regions of the world a similar or higher percentage of GDP is invested in infrastructure, and infrastructure investment per capita is allocated at a lower level than China invests within its own borders. Until 2018, the participation of Chinese companies in infrastructure development in Latin America and the Caribbean was concentrated mainly in design and construction of public or private projects. Their infrastructure

projects have massively targeted the energy sector and to a lesser extent the transport sector: in Brazil, 60.7%; in Colombia, 14.8%; in Jamaica, 13.7%; and in Mexico, 4.0%. No major Chinese investment was directed to sectors such as water, sanitation, and telecommunications, but these are essential for the improvement of cities in Latin America. The value of China's sales of development projects through these projects in the region increased from \$168 million in 2000 (2% of China's total sales) to \$16.4 billion in 2015 (10.6% of China's total sales). The countries with the highest percentages of infrastructure contracts are Venezuela (38.3%), Brazil (15.4%), Ecuador (12.9%), Mexico (6.6%), and Argentina (5.3%). About 15% of the amount China lends to Latin America is loans that include a clause linking them to raw materials (such as oil, for example), compensating the Chinese for the potential risk of default (ECLAC/ONU–Habitat/Minurvi, 2018), 47; ECLAC 2018a, 67–69).

In line with ECLAC's report, "Habitat III," the third United Nations Conference on Housing and Sustainable Urban Development was held in Quito in October 2016 and set out guidelines for the development of cities and human settlements over the next 20 years. National reports prepared by the countries of the region were analyzed to evaluate the changes and advances in urban development since 1996. Six regional challenges were highlighted (ECLAC/ONU-Habitat/Minurvi 2018, 11–13). In cities outside the global circuit, both social and spatial segmentations and decontextualization will deepen. As Pope Francis pointed out in the encyclical *Laudato Si* of 2015:

Cities, with their excessive and disorderly growth have become unhealthy to live in, [. . . with] urban chaos [, . . .] transport problems [, . . . and] visual and acoustic pollution. Many cities are large inefficient structures that waste energy and water excessively. [ . . . ] It is not proper for inhabitants of this planet to live more and more flooded with cement, asphalt, glass and metals, deprived of physical contact with nature. (L.S., 44)

Social fragmentation inevitably leads to negative consequences such as an increase in all types of violence (L.S., 46). According to Harvey, uncontrolled capital is willing to build a new geographical landscape, using surplus capital and labor, but such surpluses often result in massive unemployment and overaccumulation of capital (Pope Francis, *Carta Encíclica Laudato Si*'; Harvey 2014, 153). That there will be great positive transformations in the Latin American megacities caused by the establishment of

the 21st-century maritime Silk Road is improbable, at least in the short and medium term. Possibly many of these cities will in fact be included in a circuit of "alternative" globalization with diverse characteristics such as those postulated by Sassen or other intellectuals. It should also be considered that every great city struggles to assert the right of its inhabitants to be part of the same urban environment that is aggravating growing socioeconomic vulnerabilities and continuous territorial fragmentations (Sassen 2012; Parnreiter n.d.; Kraas 2007, 80; Miklos and Tomaz 2017, 561; Reid-Henry and Sending 2014, 438).

# Economy à la Carte

Let's go back a few years: the strategy of going global, launched by the Chinese government at the beginning of the 21st century, had among other objectives the goal of modifying the terms of exchange. China began to sell its industrial products at better prices while acquiring raw materials in increasing volumes. Chinese trade has accounted for around 70% of Latin American imports in recent years. Oil, for example, was used as a means of payment in exchange for financing and direct investments, as well as iron and copper, which were acquired through direct investments and imports in general. To these are added investment funds with Chinese participation for the lease of land, avoiding the limits on the purchase of land by foreigners. All this resulted led directly to the repression of the continent's economies (da Rocha and Freitas-Bielschowsky 2018, 24, 25). In November 2004, Chinese president Hu-Jintao toured several Latin American countries to assess their market economy status. His objectives to gain support had been achieved in Argentina, Brazil, Chile, Peru, Venezuela, Antigua and Barbuda, and Guyana. The insertion in Latin American economies was based on strategic bilateral agreements (Argentina and Brazil) and free trade agreements (Chile and Peru). The East Asian and Latin American Cooperation Forum was also created in 1999, bringing together countries from these regions on the socioeconomic, political, and scientific-technical axes (Cesarín 2010, 14). Although ECLAC's publications (2015, 2017) recognize the links, challenges, and opportunities offered by the relationship between China and Latin America, the results are not very encouraging. The Chinese White Paper (2008, updated in 2016) largely deals with the economic relations between China and Latin America. One year later, in 2009 Beijing joined the Inter-American Development Bank with a donation of \$350 million. Proposals to strengthen political and economic cooperation were also put forward in 2012 by Chinese prime minister Wen Jiabao. In 2014, Chinese president Xi Jinping presented the ambitious China-Celac cooperation framework for 2015–2019, known as "1+3+6," at the first Latin American and Caribbean–China summit (ECLAC 2015, 2016b; de Esperanza 2019). At that first summit, however, nothing was mentioned about the extension of the Silk Road initiative to the Americas. If some large Latin American cities are included in the Silk Road, we can foresee that the dynamics created will not produce sufficient economic resources to generate substantial profits; rather, it will reduce them to a merely consumerist role.

In November 2016, President Xi undertook a tour of several South American countries, including Ecuador, Peru, and Chile, encouraging Latin American countries to join the Silk Road initiative. A document on Chinese policy for Latin America and the Caribbean was released that month. Free trade agreements with these three countries were also signed and approved, laying the groundwork for greater cooperation. One of these agreements concerned the scientific city of Yachay in Ecuador (Zepp-Larouche n.d.). At the Silk Road Forum, held in May 2017 in Beijing, the Chinese government signed 270 political, infrastructure-building, trade, investment, and cultural exchange projects with 68 countries and international organizations (KraneShares n.d., 8; Shen 2016; Wijeratne, Yau, Wong, Rathbone, Ling and Lau). 10 The Argentine and Chinese presidents, for example, agreed on a development strategy in Argentina that would result in expanded collaboration on infrastructure, energy, agriculture, mining, and manufacturing, plus the implementation of existing cooperation projects, such as those on hydropower and railways. Progress so far has been insufficient (Bousquet 2017; Executive Intelligence Review). To reaffirm the provisions of the forum, a joint press conference was held in Panama City in September of that year between Panamanian vice president Isabel Saint Malo de Alvarado and Chinese foreign minister Wang Yi. The latter said that Latin America had always been seen from a long-term strategic position (Wijeratne et al. n.d., 24; Fasslabend 2015, 297; Yi n.d.). This is the opposite of what has been demonstrated in recent years, unless China considers that Latin America's strategic position to be that of a producer of primary products.

According to Professor John Friedmann, the international division of labor among the different cities of the world has produced points of accumulation of world capital, with well-defined internal economic and social structures. The cities, then, were articulated into production and the world, with markets locating themselves in diverse hierarchies (Friedmann 1986).

Between 2001 and 2008, the Latin American economy registered growth driven by a favorable external scenario of high commodity prices and strong improvements in trade. This period coincided with China's entry into the World Trade Organization. After the fall in regional output in 2009, in the context of the global economic crisis, activity expanded again between 2010 and 2011, supported by high Chinese economic growth and expansionary monetary policies in some industrialized countries. This boom did not last long: from 2012 onward, there was a marked economic slowdown, as evidenced by economic growth in 2014 of 1.1% (ECLAC 2015, 16, 18). The Latin American economies, basically exporters of primary goods, were affected by the international context and by the exhaustion of the cycle of raw materials (ECLAC 2017).<sup>11</sup> Between 2015 and 2016, primary products accounted for more than 70% of the value of exports from the region to China, while imports from China to Latin America accounted for 91% of all low, medium, and high-tech manufactured products (OECD/ECLAC/ Caf 2016, 17, 24). 12 In other words, trade between Latin America and the Caribbean and China basically translates into the exchange of raw materials for manufactured goods. This is reflected in the high percentage of workers in informal areas of the economy, who almost always have very few guaranteed labor rights and low pay, as can be seen in the table below (table 11.5) with data provided as a percentage by ECLAC.

TABLE 11.5. Urban Employed in Low-Productivity Areas (informal sector) of the Labor Market, by Sex (percentage of total urban employed population)

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	Both sexes	Men	Women
2001	46.6	43.3	51.6
2002	48.2	44.9	52.8
2003	48.3	45	53.1
2004	46.8	43.2	51.9
2005	46.5	42.8	51.6
2006	46.3	42.3	51.6
2007	45.8	42	51
2008	45.6	42	50.4
2009	45.9	42.5	50.5
2010	45.9	42.4	50.6
2011	44.9	42.2	48.7
2012	44.5	41.7	48.2
2013	44.3	41.6	47.9
2014	44.1	41.6	47.4
2015	44.5	42.1	47.6
2016	45.1	43	47.9
2017	45.9	43.7	48.7

Source: Eclac.

These percentages show the enormous number of Latin Americans who constitute the informal sector of the economy, the majority occupying "flexible" jobs with minimal social guarantees and meager wages. Taking both sexes into account, the percentage rose from 44.1% (2014) to a peak of 48.3%, almost half of the active Latin American population. But the numbers are more striking if one considers the division between the sexes. The percentage among men ranges from 41.6% between 2013 and 2014, to 45% in 2003. From 2015 to 2017, there is an increase of just over 2% compared to 2014. In the case of women, however, this percentage is higher. In the 17 years considered in the table, more than half had female percentages exceeding 50% (from 2001 to 2010), reaching a limit of 53.1% in 2003 and a floor of 47.4% in 2014.<sup>13</sup>

It is interesting to note the relationship between urbanization in China, developed in tandem with the emergence of large infrastructure projects, and the subsequent consequences for the world economy, especially Latin America. Chile, for example, grew thanks to high copper prices, as did Argentina and Brazil, thanks to China's growing demand for raw materials. But in turn, this type of trade fostered processes of deindustrialization. China's impact on Brazilian industry led to an increase in Chinese imports, displacing domestic production, which was not offset by an increase in Brazilian exports to China. Chinese urbanization, then, indirectly confirmed Latin America's position as a producer of raw materials and played a fundamental role in the absorption of capital surpluses at increasingly large geographical scales. The result—again—was positive for few, as can be seen in the growing impoverishment of the continent's populations (Jilberto and Hogenboom 2010; Jenkins 2015, 58; Harvey 2008, 24, 29, 30, 37, 2012, 19, 65; Gallagher and Porzecanski 2008, 198; Cypher and Wilson 2015, 11).

From 2005 to 2016, the Latin American countries that received the most Chinese loans—and that possess significant hydrocarbon deposits—were Venezuela (44%), Brazil (26%), Ecuador (12%), and Argentina (11%) (ECLAC 2018a, 22, 41). Chinese banks, for example, direct more than half of their total loans to the region in the infrastructure sector, almost a third to hydrocarbon extraction and energy distribution and generation, and the rest to trade finance, budget support, and other mixed projects. One of these lending mechanisms is subject to the delivery of oil. By 2018 Chinese loans accounted for about half of the total financing on the continent. This type of financial instrumentation allowed China to obtain better returns in riskier markets, guaranteeing lower risk premiums, since the borrowing country that wants to export its products to China will do so through the payment of its debt. In four years, more than \$74 billion in loans were

distributed, mainly to Venezuela (six loans since 2008, for a total amount of \$44 billion). The country's debt amounts to \$70 billion, the product of the contribution of industrial technology, computer equipment, vehicles, and even housing construction, which are paid for by the country's oil production. Brazil in 1993 signed a strategic partnership and received a \$10 billion loan in 2009. By 2017 China had announced investments in Brazil of \$123.9 billion. Ecuador has received four loans since 2009, of \$5 billion each. Currently, Chinese investment in Ecuador amounts to almost \$14 billion, and in return Chinese companies had privileges in granting concessions. China has invested almost \$786 million in Bolivia, more than any other country in the world, which places Bolivia eighth on the list of Latin American nations in which China has invested in terms of total investment, around \$8 billion. China is also Chile's foremost trading partner, and Peru, Uruguay, and Mexico's second. It is Argentina's third-largest export destination and second-largest importer. It also ranks third in the significance of its trade relationship with Cuba (ECLAC 2018a, 22, 23; Amaya n.d.). Many of the reasons why investment and trade relations between China and most Latin American countries have grown in recent decades have to do with the growing disinterest of the United States in the region. Chinese investment, moreover, is not tempered or disturbed by the nature of the Latin American government, or by ideology as in the case of Venezuela. In fact, on the basis of "South-South contact," this political neutrality has translated into massive Chinese investment in the continent and the growth in Chinese influence on the critical sectors of many Latin American economies (de Esperanza n.d.). As previously mentioned, many Chinese companies bet on a growth in positive attitudes toward mergers and acquisitions in the face of uncertainty in the main Latin American states and partners, demonstrating a growing disinterest in formal regulations and environmental protection (Abdenur 2017, 192, 193).

Proximity to polluting facilities, such as industrial plants or landfills, reduces property prices and attracts the poorest people. Companies also have incentives to locate their polluting facilities where land prices are lower. In some cases, sites previously occupied by industrial facilities have been converted, in a planned manner or through irregular occupation, into residential areas, without adequately resolving the environmental liabilities. These situations are constantly repeated in large, unequal societies, where services for a small high-income group are produced by private companies, while the public sector provides or subsidizes lowerquality services for most of the population. This exacerbates environmental problems such as congestion and pollution. In Latin America and the

Caribbean, these problems are related to the insufficiency of critical basic services (public transport and waste treatment). Between 2011 and 2016, several Chinese companies were awarded construction contracts for nearly \$40 billion in the region. Contracts were mostly in the energy (66%) and transport (16%) sectors. Of the total contracts, 40% were for large hydropower projects. In 2017, China was the largest investor in the region with a portfolio of around \$18 billion. Brazil was the main recipient of investments in the energy and agricultural sectors. Mining continues to be the most attractive sector for the development of new investment projects in the region, accounting for 27% of the total amount of investments announced between 2004 and October 2017. Chinese mining investments were mostly in small-scale projects spread across the continent, except in Peru and Brazil, where significant investments were made. The concentration of Chinese foreign direct investment in the mining and hydrocarbon sectors is a factor in growing socioenvironmental conflict. As far as oil is concerned, it should be noted that in all Latin American countries except Mexico and Bolivia there is a Chinese presence through companies that export oil and gas. Recent years have seen diversifications: metals and fossil fuels, which had represented 42% and 18% of Chinese investment, respectively, between 2004 and 2010, fell to 20% and 6% between 2011 and 2017. The decreases were offset by increased investment in sectors such as telecommunications, real estate, food, and renewable energy. The latter increased from 1% of total investment in 2005 to 18% of investment in the region in 2016, representing \$13 billion.

For all the above reasons, and despite common interests and potential spaces for cooperation, the relationship between China and Latin America and the Caribbean continues to be North-South. China's presence has been growing in the region in infrastructure projects and exploitation of natural resources, and although it perceives itself as a developing economy, its relations with other developing economies tend to develop in accord with the center-periphery model. On the other hand, Chinese policy does not respond to the same motivations in all the different subregions of Latin America and the Caribbean. While China is interested in access to natural resources, this is not the main determinant of its presence in the Caribbean and Central America. In countries such as Jamaica and Nicaragua, China invests in transport infrastructure to use these nations as offshore platforms for its own trade interests. The weakening of multilateralism in Latin America and the acceptance of mega-agreements may reduce the negotiating power of developing countries. China's performance in this scenario has direct consequences on the environment in the countries of the region—and the world. By reinforcing China's specialization in Latin America's primary goods, its exports to Latin America increased the use of the most polluting production processes (ECLAC 2015, 63; 2016a; 2018b, 40; 2018a, 23, 53, 54, 57, 58).

Harvey argued that attempts were being made to capture the potential of knowledge-based economies through initiatives that supported decentralization and the deregulation of economic and political power, as in the special economic zones in China and India. In Latin America, on the other hand, an attempt is being made to locate projects in regions where transport times and costs make it possible to reduce the price of the means of production (including raw materials), as well as labor and market access. For Harvey, the frenetic rate of growth leads to excessive sprawl in regions or cities through infrastructure works, but in the rest of the territory, misery and social tensions continue. This contradiction was inevitable: either capital moved, leaving behind a trail of devastation and devaluation—something already seen on the continent—or it remained, drowning in surpluses without finding profitable investment opportunities. This is what is known as "creative destruction," which only benefits a few. The long-term economic sustainability of Latin America, in short, runs the risk of increasing dependence on China's exports (Harvey 2014, 146, 151, 154, 157; Ortiz 2012, 188). As can be seen historically, such dependence had—and still has—very pernicious results.

### Conclusions

Structural adjustment policies hit Latin America hard. Hand in hand with the globalized economy promoted by First World countries and international organizations, state enterprises and national investments gave way to the ruthless demands of foreign capital. Without wishing for it and without caring about it, the economies in big Latin American cities were shaping a new style of society, and subsequently transforming the very face of the city. As De Mattos (2002) stated, the Latin American metropolis imposed itself as part of a worldwide network of competing cities. Although Latin American cities remained peripheral actors relative to the globalization of other regions, they still represent some of the most important human agglomerations in the world; they have consistently played the role of consumers of goods, services, and finance, however, rather than that of producer. This is the new style of globalization that China—through the Silk Road initiative—seeks to impose, with an initial double consequence for

Latin American cities. First, a state of perennial external dependence is consolidated, and second, their cultural, architectural, and social identity is eroded due to the brutal establishment of foreign preferences and symbols alien to their spirit. Overwhelming uniformity, the daughter of capitalism. Harvey (1996) considered this situation to be an authoritarian one imposed on the less favored. For Beck (2001) and Touraine (2011), the establishment of these economic models provoked crises and dissatisfaction, falling not only on the inhabitants of the metropolises, but also on the economically lagging countries, that is, those of the Third World.

Latin America must find sustainability models that do not dilute its identity or subject it to selfish foreign capital. Fortunately, in recent years and as Harvey requested, iron alliances have begun to be imposed against existing and past globalizations, which still enjoy much influence and behave like imperialist loopholes that glorify revenue. The English geographer also asserted that urbanization was a phenomenon related to the division of society into classes, and as an indissoluble part of its identity it benefited very few and functioned as a vehicle for the absorption of capital surpluses at ever-increasing geographic scales. These results can be seen in the largest Latin American cities, as for example in the obscene social and economic divisions in which new oligarchies deepen the state of fragmentation and consequently their economic, social, and cultural disconnection and distance from the rest of their territory (De Mattos 2002; Beck 2001; Harvey 1996, n.d.; 2013 21; 2008, 21, 27; Touraine 2011; Torres-Tovar 2015). Politics and the economy must promote balanced development, to avoid the excessive growth of the cities and consequently the loss of identity, and second to break the unidirectional export of raw materials. This would mean fighting against the economic monopoly imposed from abroad, which to a great extent reduces its interest to the mere exchange of primary goods for manufactured goods. As Rhys Jenkins (2010) pointed out, China's growth condemns Latin America to the role of primary producer.

In conclusion, the Silk Road initiative is an illusion for Latin America, although for many politicians and analysts its establishment would seem to be the solution to the problems—at least the economic problems—that face the continent. The ingenuity—or malice—of many of these Latin American politicians who praise the Chinese proposal as the answer to all economic and partly social problems is striking. While Chinese investments can diminish or resolve capital crises, in the long run they represent a new colonial-type dependence, albeit disguised by the slogan "South-South cooperation." The winners are the large economic conglomerates (both state-owned and privately owned), agriculture, and large-scale agro-

industries. Industrial workers, wage earners in general, and local companies in the manufacturing sector who cannot withstand Chinese competition are losing out. The continent should aim to be self-sufficient and revaluate its identity without external impositions such as the logic of the global city, which although it provides a connection to the world, ignores the geographical territory within its limits. Even worse, it forgets its citizens, the majority of whom have been discarded from society, as Pope Francis has repeatedly stated. Today, in these global cities or megalopolises, many inhabitants do not have access to the dignity of basic services such as education or healthcare.

It is necessary to design policies that can be implemented with the institutional capacities already available in the countries or those that can be developed in the short term, such as increasing the productivity of existing companies through technological diffusion, providing access to financing, and supporting smaller companies and training. The impulse to forge ahead with a new form of globalization with Chinese characteristics is a contradiction for Latin America, because in its acceleration toward connection with the global world, it produces disengagement of economies that do not have a global reach or are not connected globally, like most Latin American regions. Allowing the manipulation of national economies would circumscribe Latin American global cities, turning them into mere meccas of consumption, especially of manufactured goods. In spite of their different degrees of development, the various Latin American countries would then return to the unidirectional logic of their role as suppliers of primary goods. The result will inevitably be to increase inequality and a galloping exacerbation of poverty (Jenkins 2010, 834, 836; ECLAC 2016b; Pope Francis, November 2014, September 2015).

#### NOTES

- 1. After initial enthusiasm and rhetorical support for the Cuban revolution, China's participation in some Latin American countries was limited by geographical distance, U.S. influence, and most local communist parties' preference for the Soviet model. Beginning in the 1980s, China began to weave economic ties—that had features of neoliberalism—with several Latin American countries as a result of the liberalization of their markets. See Strauss 2012, 141, 142.
- 2. This planetary initiative is intended to cover 68 countries plus China and various international organizations; the aggregate population of 4.5 billion inhabitants represents 62% of world GDP. To this end, the China Development Bank and Export-Import Bank of China have issued more than \$200 billion in loans to finance OBOR projects, while the three large state banks, the Bank of China, the Industrial and Commercial Bank of China, and the China Construction Bank, have

provided a total of \$527 billion in loans and capital investments for 1,012 OBOR-related projects.

- 3. This giant initiative had its antecedents in 1999 when the Chinese government began to promote Chinese investments abroad with its policy of "going abroad" and "go west," initiated in the framework of the 2000 initiative. "La cara amarga del desembarco chino en América Latina." https://elpais.com/economia/2018/10/13/actualidad/1539463551\_536479.html
- 4. ECLAC, "Social Indicators and Statistics. Housing. Urban Population Living in Slums, Informal Settlements or Inadequate Housing." https://ECLACstat-prod.ECLAC.org/ECLACstat/tabulador/ConsultaIntegrada.asp?idIndicador=224&idioma=i
- 5. This inequality is heterogeneous among the countries of the region: Chile, Mexico, and Venezuela have seen improvements in the Gini coefficient, although these have been very modest in recent times. Bolivia, the Dominican Republic, Ecuador, El Salvador, Peru, and Uruguay have shown significant progress. In contrast, in Costa Rica, Nicaragua, and Paraguay there have been setbacks.
- 6. ECLAC, "Social Indicators and Statistics. Population Living Below the Extreme Poverty and Poverty Lines, by Geographical Area (percentage of population in each geographical area of Latin America)." https://ECLACstat-prod.ECLAC.org/ECLACstat/tabulador/ConsultaIntegrada.asp?idIndicador=3328&idioma=i
- 7. ECLAC, "Social Indicators and Statistics. Population Living on Less than 1.9 and 3.2 Dollars per Day, 2011 PPP Values (World Bank) (percentage of total population)." https://ECLACstat-prod.ECLAC.org/ECLACstat/tabulador/ConsultaIntegrada.asp?idIndicador=160&idioma=i
- 8. ECLAC, "Social Indicators and Statistics. Unemployment Rate in Latin America and the Caribbean (average annual rate)." https://ECLACstat-prod.ECLAC.org/ECLACstat/tabulador/ConsultaIntegrada.asp?idIndicador=127&idioma=i
- 9. (1) The main challenge of urban management is to improve the quality of life, close inequality gaps, and achieve sustainability in their cities. (2) An increase in the negative externalities, mainly environmental, of large urban centers that affect economic growth, productivity, and quality of life. (3) New patterns of production, distribution, and consumption in urban economies hinder economic inclusion and universal access to the benefits of urban development. (4) Inequalities, social and spatial segregation, and citizen security are central challenges for a regional urban agenda. (5) Increased vulnerabilities caused by climate change with unequal socioterritorial impacts. (6) Institutional weaknesses in the management of sustainable urban development and the materialization of the right to the city.
- 10. The three pillars of this initiative are expanding the global economy for developing countries through investment in infrastructure and new trade routes; creating interdependence between China and other countries and regions through networks of global alliances; and fostering an Asian alliance as part of a new "neighborhood diplomacy."
- 11. Most Chinese investments in Latin America sought mainly natural resource sectors such as iron, steel, and oil in Brazil, oil in Venezuela, copper in Chile, and oil and copper in Peru. In some countries, such as Chile, there have also been investments in the international marketing sector.
- 12. "Will China's New Silk Road Reach Latin America?" https://www.marketviews.com/latam/will-chinas-new-silk-road-reach-latin- america/

13. ECLAC, "Social Indicators and Statistics. Employment. Urban Employed in Low-Productivity Areas (Informal Sector) of the Labour Market, by Sex (percentage of total urban employed population, Latin America weighted average)." https://ECLACstat-prod.ECLAC.org/ECLACstat/tabulador/ConsultaIntegrada.asp?idIndicador=252&idioma=i

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# **General Conclusions**

## Pablo Baisotti

## Changes

Today an experienced traveler could not help but recognize the evolution of many Third World cities in terms of expansion, urbanization, and increasing "globality" over a period, not of 50 years, but of 10 years. This volume gives an account of some of these changes. We've attempted to broaden the debate by presenting research on cities in Asia (especially China) and Latin America. This book studies cities that are in transformation, partly as a result of the dynamics of globalization, which have fostered multiculturalism, new social dynamics, and new mechanisms of social aggregation, as well as inequalities and a range of new types of political and economic operations. The negative effects of globalization have manifested themselves rapidly, causing spatial segregation and strengthening socioeconomic and cultural structures that left aside certain groups (Scott and Storper 2014, 7). Thus, the extraordinary increase in urban growth in Third World cities has been marked by marginality, crime, increased poverty, ethnic conflicts, and ecological problems, all of which have become commonplace (McKinsey 2012, quoted by Storper and Scott 2016, 4).

The contributors to this volume bring together many of these elements. John Sullivan shows how urban conflicts are a major concern in Latin American cities (as well as in the rest of the world), where a range of criminal agents—gangs and cartels—exploit illicit economic flows. Drug

cartels and gangs challenge the authority of the state in Mexico and Central America, eroding its legitimacy and solvency. As part of this contest, the cartels provide utilitarian social goods to gain support and legitimacy within their own organizations and among the populations of the geographical areas they control. This is how drug cities emerged, including territories in small cities and neighborhoods within megacities. "Narcocultures" have been nurtured in Mexico and elsewhere, characterized by great violence, urban areas under disputed political and civil control, and "hidden" financial power. Hence, the arguments in *New Global Cities in Latin America and Asia* revolve not only around the material progress of Third World cities, but around the growing social difficulties these metropolises experience.

The analyses confront, explicitly and implicitly, some of the central questions of the traditional urban conception, which considers only global cities within a limited "elitist" system based on economic success and international connections. New Global Cities in Latin America and Asia seeks a new way to analyze Latin American and Asian cities to advance the discussion of how global transformations have influenced this conception. In her analysis, Liangni Sally Liu asked whether Singapore's condition as a globalized city with a multiracial and multicultural population facilitated the creation of special contact zones so that expatriates would have opportunities for encounters and heterosexual relationships with both locals and other expatriates from similar or different cultures. Liu shows the existence of gender inequality in the social construction of Singapore's expatriate heterosexuality, intertwined with factors such as class, ethnicity, and race. The multiracial and multicultural social context in this country produced complex social experiences at the intersection of race, ethnicity, class, and gender in the construction of expatriate heterosexuality.

A central issue in this book is the "global" representation of the Third World city through a novel analysis of multiple diverse phenomena—positive and negative. Harvey repeatedly stressed that the different crises should be taken into account, not so much in relation to the transformation of physical spaces, but in relation to changes in modes of thought and understanding of the dominant institutions and ideologies, in alliances and political processes and subjectivities, and in technologies and forms of organization and social relations, among other areas. He also defended the right of inhabitants to equality and the use of urban spaces so often swallowed up by a capitalism without borders (1996, 2002, 2005, 2009, 2010, 2013, 2014).

In their examination of economic readjustments in "peripheral" cities,

Ulysses Girolimo and Patricio Feldman concluded that cities were readjusting to challenges in intercity competition to shape innovative environments where the right goods and services could be developed for insertion into the new global economy. The authors saw that these issues raised challenges for peripheral cities as they try to join the global economy while addressing social, economic, and structural urban problems. They suggested that the development of an alternative model faced several challenges: first, the modernization of the city in relation to the intensive use of technologies to resolve urban social problems; second, the democratization of the city project, taking into account local interests and strengthening the debate on the use of new technologies that contribute to the development of all social sectors; third, the design of regulations for the austerity platforms (Srnicek 2018) necessary within the new urban context; and finally, the promotion of innovative environments for the development of strategies, such as informationalism, that are capable of localizing and territorializing global processes.

This book has also shown that Third World cities often have similar characteristics regarding their "global" economic scope. The book thus has implications for each country and also at the regional and even global level, since the authors question global and local social issues that influence populations at the micro and macro levels. This balance between local and national economic orientation appears in the study by Miguel Ángel Hidalgo Martínez, who analyzed the cities of Querétaro, Mexico, and Chongqing, China, finding that both are growing in international opening, in "globalization," but with differences in their relations to their respective national governments. In Mexico, the interlocking economies of states and municipalities in the federal system function with a flexible regulatory approach; in China, administrative territories are managed by the central government in a vertical and more centralized relationship. Both emerging economic territories are successful, but they reflect two different political approaches. In China's centralized and hierarchical administrative system, industrial parks and zones are the product of state strategies to rationalize the management and handling of resources in favor of its state enterprises. In the Mexican case, the state government acts primarily as an intermediary between the private groups that manage industrial parks and manufacturing industries.

Adrian Moreno Mata's analysis of the urban automotive and aeronautical corridor in Mexico's Central-Bajio Region explores the economic and industrial growth in this Mexican region in recent years. The author says that the phenomenal economic advance was due to the competitive advance.

tages the region offers, the participation of different spheres of government, the companies themselves, access to world markets, the strategic geographical location, skilled labor, and an adequate legal framework for foreign investment. Over the last 20 years, the Mexican cities of Aguascalientes, León, San Luis Potosí, and Querétaro have adapted their logistics to the new conditions of production, circulation, distribution, and consumption introduced as part of the globalization process, in particular since the creation of the North American Free Trade Agreement (Moreno Codina 2015; Moreno Mata 2018; SEDATU 2014). Moreno Mata highlights the development of productive networks, sites of innovation and technological development, access to information, and public and private investment in the framework of a platform of association, cooperation, and regional competition that favors territorial positioning through the development of strategic economic sectors.

The article by Nadia Nora Urriola Canchari deals with economic progress and social issues in Peru since the 1990s. She highlights improvements in economic growth, with increased imports of durable capital goods. She also notes reductions in public investment linked to the privatization of public enterprises and the adjustment of fiscal policies related to the orientation of the Washington Consensus. While the economic policy had a positive impact on citizens, the author points out that a new industrial strategy should be considered based on the availability of natural resources, the expansion of the domestic market through infrastructure, and a new financial scheme for the Peruvian capital market.

# **New Concepts**

Saskia Sassen considered the "global" concept as applied to cities such as New York, London, and Tokyo. To enter this select group, one had to have a network economy in which important activities such as finance, specialized services, telecommunications, and transnational connections were developed (1991). In this way, these cities became the leaders of a world urban network, as the luminaries in the new relations between the world economy and urban life. The network economy allowed industries to develop cross-border relationships and to propose specialized divisions of labor within cities to serve global businesses and markets (Sassen 2005). This volume highlights multiple ways to review, synthesize, and expand ideas about cities and regions within the framework of urban theory. Allen Scott painted a possible "global" scenario

for city-regions emerging in the 21st century that are unprecedented in size, complexity, and density of population. Some city-regions are as big as a small country; they have materialized around the world largely through global networks of trade and interaction. But city-regions are fraught with serious social and economic problems. New Global Cities in Latin America and Asia found that cities of the Global South had similar "global" characteristics and were of growing international interest. The articles are largely consistent with contemporary postcolonial views as expressed by authors such as Said (1978), Spivak (2008), and Comaroff and Comaroff (2012), who pointed out certain intellectual legacies based on ethnocentric prejudice that were repeated over time (quoted by Storper and Scott 2016, 1).

Several chapters, including those by Raffaele Pernice and Gang Hong, dealt with this issue in detail. Pernice showed that in the process of rapid urbanization, China encountered several problems and contradictions typical of countries striving to rapidly modernize their economies, urban environment, and cultural characteristics. These included the conflict between industrial development and the need to protect ecosystems and natural environments, and the need to protect social harmony, which is increasingly threatened by a capitalist model of unbridled economic growth. The author highlighted the city of Suzhou as a model for many other cities in China, which seemed to show the coexistence of two cities in one, separated in terms of scale and form. Architectural practices of imitation, the acceptance of foreign models and schemes (such as giant corporate buildings), and the conflict between economic considerations and ecological responsibility created conflicts in urban development in Suzhou, in which, as in other parts of China, local history and the cultural and social specificity of the place were abandoned in pursuit of economic growth. China, as Pernice argued, was in a postgrowth condition, with postindustrial characteristics reflected in its declining population, slow economic growth, resource depletion, and environmental concerns. Hong provided another example from China, exploring the complexities and nuances of urban geographies while raising related ethical questions. The study revolved around the island of Dongzhou in Hengyang and examined issues related to the specific spatial dimensions of the island. The "absolute" urban space of the island, a geographical entity with fixed boundaries and stable identity, was increasingly compromised as the island evolved into an urban space with constantly changing environments. Boundaries between the city and the rest of the world were blurred, imposing new internal and external social dynamics under the powerful influence of a new demographic relationship

between the traditional city and the expanded urban fabric (Brenner and Schmid 2014; Sampson 2012; Amendola 2000).

Ananya Roy considered that the study of the metropolises has been based exclusively on European and American cities: Paris, London, Vienna, New York, Chicago, and Los Angeles, which have been considered the definitive standard of the modern and postmodern condition. Cities in the Third World were seen as backward, as attempting to mimic a modernity typical of the First World (2009). First and Third World cities were also differentiated on the basis of cultural representations. Today, however, cities such as Beijing, Mexico City, Buenos Aires, Santiago, Bogotá, and New Delhi have cultural developments of increasing complexity.

Thus, research on global cities is constantly growing and being debated. Recently, theorists have questioned precepts of development and underdevelopment, arguing that urban theories based on Europe and North America were not applicable to the cities of the Global South (Robinson 2006, 2011; Edensor and Jayne 2012; Myers 2014; Ong and Roy 2011; Sheppard, Leitner, and Maringanti 2013; Patel 2014, quoted by Storper and Scott 2016, 1). Accordingly, the various articles in the book identified new variables for considering new features of "globality." The essay by Brian Roberts, José Tomás Videla, and Marcela Allué Nualart detailed the complex interactions of secondary metropolitan cities, taking as an example the area of Santiago de Chile and the Central Region of Chile. These cities with emerging economies face significant challenges in managing development and economic growth compared to the central areas of metropolitan cities, of which they are satellites. In national urban policies in most Latin American countries secondary metropolitan cities rarely receive much emphasis, because it is impossible to integrate the multiple levels of government needed to implement policies to support endogenous and exogenous development through a systemic rather than a hierarchical urban approach. The article demonstrates the need for regional and national urban development policies to give greater autonomy to secondary metropolitan cities so they can achieve equity in the distribution of resources, and become more competitive and autonomous vis-à-vis central metropolitan cities. This would give secondary metropolitan cities easier access to the markets, capital, and resources necessary to provide essential urban services, through more sustainable, balanced, and equitable development.

Other major contradictions in many Latin America cities that seek to globalize are analyzed in the article by Pablo Baisotti. The author points out that hand in hand with the globalized economy promoted by First World countries and international organizations, large Latin American cit-

ies have shaped a new style of society. As stated by De Mattos (2002), the Latin American metropolis has become part of a global network of cities, although as a peripheral actor playing the role of consumer of goods, services, and finance. Into this context China, through the Silk Road initiative, has tried to impose a new style of globalization in Latin America. The result has been the consolidation of perennial dependence and social and economic divisions, deepening the state of fragmentation and, consequently, the territorial disconnection of the "global" city with the rest of the country's territory (De Mattos 2002; Beck 2001; Harvey 1996, n.d., 2013, 21; 2008, 21, 27; Touraine 2011; Torres-Tovar 2015). Baisotti argues that the large cities of Latin America should depend more on their own economic capacities and cultural wealth to reevaluate their identities and avoid external impositions (although this is almost a chimera). The frenetic desire of certain Latin American cities to transform themselves into successful economic centers is very risky, since it encourages connection with other networks of global cities but disconnects them from the rest of their own territory, causing great social liabilities.

In conclusion, this book addresses some of the dilemmas facing many of the growing cities in Latin America and Asia. Certain features allow these cities to be newly characterized as "global," and the key goal of this book was to analyze these features. Some are positive characteristics related to economic, financial, and "global network" growth, but these features are often outweighed by negative features, notably the increase in crime—at all levels—and growing social inequalities. Assessing the weight of both factors is important to understanding that the positive "global" factor in these cities is far different from those of traditional global cities such as New York, London, and Tokyo, even though certain cities and regions have made great advances, such as Santiago de Chile, the Central-Bajío region, Querétaro, and Singapore. Cosmopolitanism, new social relations, population heterogeneity, and changes in consumption varied in the megacities analyzed—Suzhou, Singapore, Lima, and Querétaro, for example.

The core of the analysis sought to understand the different types of globality and how they were perceived and confronted. Similar in many respects to some African cities, cities in Latin America and Asia have more negative characteristics than other global cities. Latin America faces an increase in crime (drug trafficking and armed groups), and Asia has faced an increase in social inequalities (which also occurred in Latin America). The articles highlight the marked difference between the "modern" city and the "traditional" one, which often occupy the same territory. The book confronts the traditional urban studies narrative, expanding it to take into

account more than the economic and financial factors that are the accepted hallmarks that define a global city. According to Harvey (2014), we need to consider crises in relation to changes in how we perceive dominant institutions and ideologies, alliances and political processes, and new technologies and social relations. Latin America and Asia have undergone a gigantic drive toward urbanization in the last decades, and a complex network of economic, social, and ecological connections has evolved via a sociospatial transformation that involved cities and even entire territories (Brenner and Schmid 2016). The "global cities" studied on these continents had more "global" characteristics in the sociocultural field than in the economic-financial field, producing more conflicts that governments were unable to resolve, producing more negative than positive global characteristics, such as the poverty, inequality, and criminality already mentioned.

### Limitations and Future Research

Several factors limited the scope of this research, suggesting the need for future research on the relationship between emerging Third World cities and features of "globality" in different realms (social relations, economy, openness, international networks, etc.). Some of these issues were explored here for particular cities, but it would be convenient to expand the research to other cities on these continents in the future. For example it would be important in future research to include cities such as New Delhi, Shanghai, Guangzhou, Seoul, or Ulaanbaatar in Asia, and Havana, Bogotá, Montevideo, or Mexico City for Latin America. In addition to these limits in the selection of cases, a new factor that has recently emerged is the COVID-19 pandemic, which will undoubtedly have repercussions for social and economic relations in most of the world's cities. Will the "global" cities, or those with features of globality, be able to manage it successfully? How will the megacities of the Third World respond? Will they have sufficient resources to prevent widening inequality and poverty? This challenge will be fundamental for cities in Latin America and Asia if they are to develop a positive "globality." The examples presented show some features of the traditional positive definition of a global city, although unfortunately it is the negative characteristics of this "globality" that are most prevalent, and it is difficult to know if they will be able to face them successfully in the near future. Future research should re-examine the social and economic consequences of the pandemic for these cases, which are likely to be long-lasting.

This book emphasizes that the study of globalism should not, as the

literature of the Global North has done for years, focus only on the cities of the First World and exclude the cities of the Third World. In this way, we wish to help rethink the theory of "global cities" not only as a successful and desirable model, but as acknowledging the reality of mixed and variable characteristics among the large cities of the world.

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