ZHONGJIE LIN

Constructing Utopias

China's New Town Movement in the 21st Century

Constructing Utopias

China's New Town Movement in the 21st Century

ZHONGJIE LIN

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide. Oxford is a registered trade mark of
Oxford University Press in the UK and in certain other countries.

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America.

CIP data is on file at the Library of Congress

ISBN 9780197793299
ISBN 9780197793305 (pbk.)

DOI: 10.1093/9780197793336.001.0001

Printed by Integrated Books International, United States of America

The manufacturer's authorized representative in the EU for product safety is Oxford University Press
España S.A., Parque Empresarial San Fernando de Henares, Avenida de Castilla, 2 – 28830 Madrid
(www.oup.es/en).

Contents

1

Introduction

New Towns as a National Movement

> The technological utopia in question is a common feature not just of many science-fiction novels, but also of all kinds of projects concerned with space, be they those of architecture, urbanism or social planning.
>
> —Henri Lefebvre, *The Production of Space*, 1974

Introduction

I moved to Shanghai for college in 1990. A small-town boy from a southern province, I had since heard countless relatives and schoolmates echo this local adage: "Choose a bed in *Puxi* over a house in *Pudong*." Puxi, or West Shanghai, encompasses the city's historic districts centered around its colonial-era heart. Across the winding Huangpu River in the south and east is a rural expanse called Pudong, meaning East Shanghai. No bridges, only a couple of outdated tunnels, connected the two then. In contrast to its cosmopolitan sibling, Pudong was countryside, dotted with villages, farms, factories, and some workers' communities. Many of its roads were unpaved. For Shanghainese, the distinction between Puxi and Pudong was as clear as day and night.

During my decade in Shanghai, first as a student then an architect, I witnessed Pudong's dramatic transformation. In the wake of the 1989 political upheavals, China faced domestic challenges and international sanctions, potentially disrupting the country's modernization and economic reforms. In response, Deng Xiaoping, then China's *de facto* paramount leader, announced the pivotal national initiative of "Developing and Opening up Pudong" in 1990. This ambitious initiative established three anchor zones: Lujiazui as a financial center, Jinqiao for export-oriented manufacturing, and Waigaoqiao as a free trade zone. At the same time, construction

Constructing Utopias. Zhongjie Lin, Oxford University Press. © Oxford University Press (2025).
DOI: 10.1093/9780197793336.003.0001

of two large cable-stayed bridges commenced, connecting Pudong to Puxi. In few decades, a new global city rose in the east.

Today, Lujiazui's towering skyscrapers form a dazzling skyline, positioning Pudong not only as a formidable rival of the prosperous historic Puxi district but also as a potent symbol of the tremendous economic energy that has emanated from China. The new district epitomizes the nation's urban transformation, marked by territorial expansion, demographic shifts, and rapid wealth generation as China integrates into the global economy (see Figure 1.1).

Pudong's development offers a microcosm of China's broader urban transformation since urbanization accelerated in the 1990s. Master-planned new towns and districts have sprouted across the country, from the affluent east and south coasts to the mountainous west and black-soil northeastern plain. In 2005, a *Xinhua* report announced the central government's plan to build 20 new cities annually for 20 years.[1] In 2019, when the China Academy of Urban Planning and Design (CAUPD) concluded a three-year survey, it revealed that 3,845 new towns and new districts have been created nationwide, including 570 initiated by the central government, 1,991 by provincial

Figure 1.1 The demolition of old neighborhoods in Pudong, with skyscrapers of the new Lujiazui Financial District rising behind, 1996.
Photo by Mark Henley/Panos Pictures.

governments, and 1,284 by local governments.[2] These new towns average 37 km^2 and are planned to accommodate 110,000 residents each. If fully realized, they could house over 426 million people, nearly a third of China's current population.

Where will all the residents come from? Apart from developing new towns, existing cities have also experienced significant growth, with skyscrapers proliferating. This exponential expansion cannot be solely attributed to birth rates, given China's strict one-child policy, enforced from 1979 to 2015. The much slower population increase reported in the 2020 census suggests an imminent population decline.[3] Most governmental officials, planners, and economic analysts believe that the surge in demand for urban space is primarily driven by unprecedented rural-to-urban migration. By 2019, approximately 291 million rural workers—nearly the entire US population—had migrated to cities, often bringing their families, even though their *Hukou* (household registration) remained in the countryside.[4] This massive migration propelled China's urban population from less than 20% in 1980 to over 60% in 2020, averaging 14 million new urban residents annually for four decades (see Figure 1.2).[5]

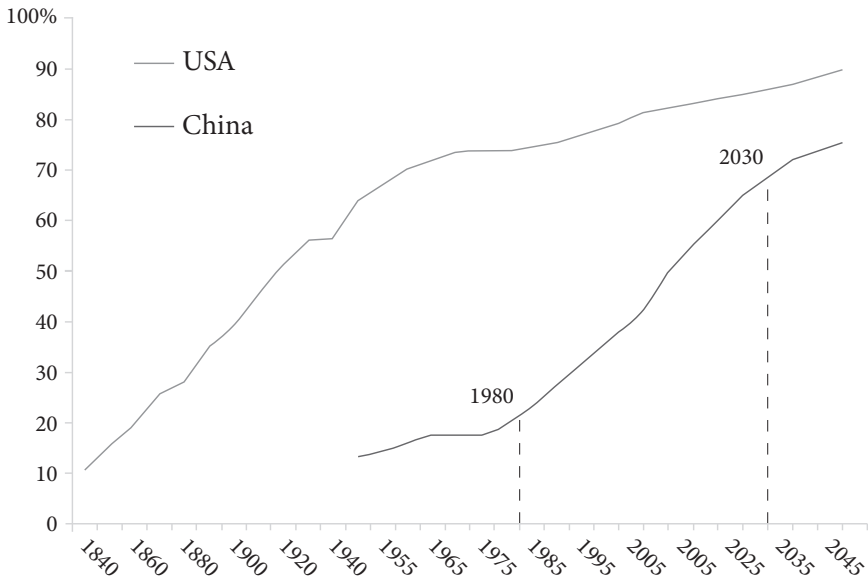

Figure 1.2 Comparison of the urbanization rates of China and the United States. Graphic by Yin Yihan.

Characterized cogently by economic geographer David Harvey as the "largest mass migration the world has ever seen," China's urbanization has proceeded in tandem with its rapid industrialization.[6] The former plays an instrumental part in the latter by supplying a massive labor force that has propelled China to the world's second largest economy and transformed it from an agrarian nation to a global manufacturing powerhouse and technological leader. China's economic transformation has, in turn, reshaped its social and demographic landscapes, creating a substantial and still growing urban middle class, estimated at 430 million by 2017.[7]

This fundamental urban transformation has resulted in an extended housing boom, lasting over three decades, and effectively stimulated domestic consumption and broader economic growth in a similar way as the housing boom in the post-World War II United States. China's urbanization has also seen global repercussions, evident in its massive export and surging international tourism, as well as increased demand for raw materials, like iron ore and oil, and advanced machinery, like aircraft. As economist and Nobel laureate Joseph Stiglitz predicted, China's urbanization has emerged as a primary driver of the global economy in the 21st century, alongside technological innovation in the United States. Some scholars even posit that cities themselves have become the most significant output of the Chinese economy since the millennium.[8]

Not only has China's urbanization reshaped domestic and global economies, but it has also exerted a significant environmental impact worldwide. Citing data from the National Minerals Information Center in 2014, billionaire philanthropist Bill Gates underscored the scale of China's construction boom: the country consumed 46% more cement in just three years (2011–13) than the United States did throughout the entire 20th century.[9] This massive volume of concrete, a typically nonrecyclable material, was used to build the world's largest highways and high-speed rail networks, along with countless airports, bridges, shopping malls, housing, and other urban infrastructure and developments. China also consumes over a third of the world's steel and a quarter of its aluminum.[10]

These statistics highlight the immense scale of China's construction industry, which has driven up energy consumption and carbon emissions. Studies indicate that buildings and infrastructure make up approximately 43% of China's total energy consumption throughout their lifespan.[11] Compounding this issue is the rapid growth of China's automotive sector. With 23.7 million new light vehicles sold in 2018 (compared to 17.3 million in

the United States the same year), China is the largest automobile market and manufacturer globally. Notably, Chinese vehicles tend to travel longer distances than their US counterparts, reflecting the expanding urban landscape.[12] As a result of its exponential growth in construction and transportation, China surpassed the United States as the world's largest carbon dioxide emitter in 2006 and currently produces nearly double the amount of greenhouse gases.[13]

One of the strategies China has advocated for curbing carbon emissions is, paradoxically, to construct more new towns. Since 2005, China has witnessed the proliferation of "eco-cities," "low-carbon cities," and "green cities" across the country. This has sparked a new wave of city-building initiatives, often dubbed China's "Green Leap Forward."[14] Many of these large-scale projects are built on greenfield sites and receive substantial government subsidies as part of the state's push for "ecological civilization."

China's economic rise, often compared to post-World War II Japan's economic miracle or the 1970s–80s success of the Four Asian Tigers, remains shrouded in mystery. Its rapid urbanization is a particularly enigmatic facet, with causes and consequences not yet fully understood. Like the blind men and the elephant, different perspectives offer incomplete understandings.

On the one hand, perceptions of China's urban development diverge sharply between domestic and international observers. While the unprecedented construction boom accompanying the world's largest migration wave astonishes and concerns people abroad, Chinese residents remain largely indifferent to the rapid urban transformation that has become commonplace. On the other hand, research on Chinese cities often presents polarized explanations. Some adhere to traditional urban planning theories, while others invoke the concept of China's exceptionalism, attributing the country's urban development to unique political and economic conditions. This fragmented and biased research landscape has left significant gaps in understanding. Despite numerous attempts to apply existing urban models and policy frameworks—from developmentalism to ecological urbanization—to Chinese new towns, none have effectively explained the patterns or predicted the trajectory of the country's urban development.

What is propelling China's massive urbanization? What are the physical attributes of the resulting new towns, and what social and economic impacts do they have? How do these new cities diverge from earlier attempts at garden cities, new towns, satellite cities, and industrial estates? And what insights can they offer the world as we grapple with the challenges of a

burgeoning urban population in the "century of cities"? Addressing these questions necessitates a comprehensive approach that examines new towns as a historical evolution, a product of global economic forces reshaping local communities, and an architectural manifestation of contemporary utopian ideals (see Figure 1.3).

New Towns in Historic Perspective

The mass development of new towns reflects China's dramatic shift from a socialist, agrarian economy to an urban, consumer-oriented society over the past few decades. This ongoing transformation remains a cornerstone of China's economic policies. Furthermore, it mirrors a broader trend of national developmentalism prevalent in East and Southeast Asia, characterized by a robust economic strategy coupled with a powerful, state-led construction industry. Before delving into the complexities of these new urban landscapes—including policy frameworks, planning strategies, architectural norms, and environmental impacts—it is crucial to address a fundamental question: What constitutes a "new town" in China? Surprisingly, the answer is not straightforward.

Many scholars acknowledge that China's new cities diverge significantly from the previous new town movements of Europe and America.[15] These Chinese developments are substantially larger in terms of territory and population and are driven by distinct political and economic motivations. In contrast to Western precedents like the post-war New Town Act in the UK and Title VII in the United States, China lacks a unified legal framework for new town development. Instead, China's new cities arise from diverse programs administered by various central and local government entities. Local projects compete for official recognition, creating a tiered system with varying levels of resources.

Further confounding foreign observers are planning initiatives and large-scale projects in China labeled with various terms such as "new district," "new area," "industrial park," "eco-city," "low-carbon city," as well as "high-tech district," "Special Economic Zone," and "collaborative zone." While all these designations aim to convey novelty and territorial expansion, they do not always imply greenfield development as often understood in Western concepts like Garden City and New Town. Instead, Chinese developments can be built over existing villages, towns, neighborhoods,

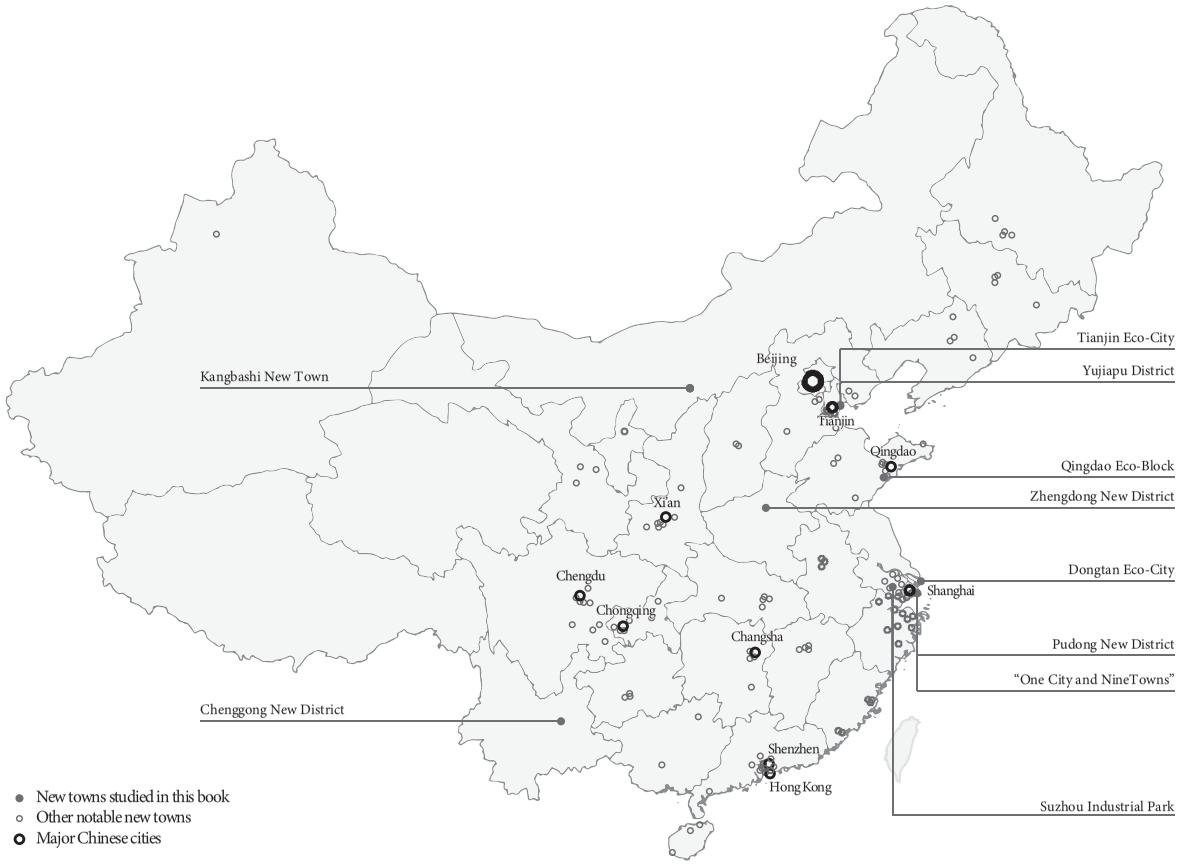

Figure 1.3 Locations of notable Chinese new towns.
Graphic by Yin Yihan.

or even entire counties. Consequently, some scholars characterize Chinese new towns as both new developments and "rebranding frenzies."[16]

Chinese new towns are often promoted as a radical departure from the city's past, which, in Shanghai's case, includes its colonial history, overcrowded housing, and degraded environment from the industrial era. These new towns assert their distinctiveness through features like skyscrapers and other modern metropolitan spectacles, symbols of the emergence of new power dynamics aligned with economic globalization.[17] At the heart of this "newness" is a fundamental concept of *tabula rasa*, the idea of a site as a blank canvas awaiting a new complete work. This approach dictates planning and construction in virtually all Chinese new towns. Consequently, large-scale demolition is an inherent part of the development process, leading to both disorder and controversy, as the city's physical landscape and social fabric undergo transformation as exemplified by the construction of Pudong New District.

The fascinating paradox of China's new town movement, coupled with various ambiguities surrounding its development, offers a unique opportunity for exploring novel phenomena in contemporary urbanization. This necessitates the expansion, or even a complete redefinition, of existing theoretical frameworks that have traditionally been dominated by a Eurocentric perspective.[18] At the same time, while Chinese new towns markedly differ from their Western counterparts in density, physical layout, financial model, and social outcomes, journalistic portrayals based on a simplistic "Chinese exceptionalism" narrative often provide superficial explanations, failing to capture the underlying socio-spatial dynamics driving contemporary urban transformations. To truly understand this large-scale urbanization movement with broad physical and social implications, a more nuanced approach is required, involving deliberate comparison, identification of key differentiators, and contextualization within China's unique socioeconomic landscape. Despite evolving scale, design, and functionality, contemporary new towns retain core planning concepts and ideological goals from their historic precedents. Lessons from past attempts provide hints for untangling the ongoing challenges that still hinder the fulfillment of these ambitious projects.

New town specialist Rachel Keeton defines a new town as a settlement "built from scratch as an autonomously administered town, built according to a master plan, and often based on a political decision."[19] This definition captures the general characteristics of new towns across

various contexts. However, a distinction exists with the historical concept of the New Town, often capitalized. This concept originated from Ebenezer Howard's 1898 Garden City vision, rooted in the Anglo-American progressive movement and its cooperative socialist ideals of the early 20th century.[20] While Howard's concept is specific and imbued with political motives tied to its historical context, Keeton's definition provides a more flexible framework. It acknowledges how the concept of the new town has adapted to contemporary society, accommodating diverse political agendas and geographic settings.

Ebenezer Howard's visionary concept of the Garden City offered a novel alternative to the prevailing urban and rural landscapes. Envisioned as a "third magnet," it aimed to draw residents and small businesses away from both the crowded city and the isolated countryside. This entirely new settlement sought to shield inhabitants from the social ills of rapid industrialization through strict population and density controls, carefully designated land uses, and shared ownership with collective management. Howard's idea materialized in the experimental Garden Cities of Letchworth and Welwyn, built outside London under his direct supervision. These early successes garnered official recognition and inspired post-World War II government resettlement initiatives, ultimately transforming the Garden City into a global planning model.

The UK pioneered the world's first nationwide new town program. The Garden City concept was enshrined in law through the 1946 New Town Act, becoming a cornerstone of the government's postwar reconstruction plans. This ambitious undertaking aimed to reorganize both cities and the economy on a national scale. Twenty-seven new towns were established across the UK, primarily around major industrial centers like London and Glasgow. While economic stimulus was a factor, the Labor Party government's primary objectives were social: rehousing the population, diversifying employment, and reducing social inequality. These objectives resonated across Europe, sparking a wave of new town initiatives in diverse political contexts during the postwar decades. The Netherlands built numerous *groeikernen* (growth centers) like Zoetermeer and Spijkenisse. In Sweden, the government launched the ABC-stad (*Arbete-Bostad-Centrum*, meaning labor-housing-center) program, resulting in such well-known new town projects as Vällingby and Rinkeby. France's ambitious urbanization programs in the 1950s–70s, including the Grand Ensemble and the Priority Urbanization Zones, led to many satellite towns like Toulouse Le Mirail and

Cergy-Pontoise. Even a divided Germany saw new towns emerge on both sides of the Iron Curtain, such as Gropiusstadt in West Berlin and Marzahn in East Berlin.[21]

The path of new town development in the United States diverged from its European counterpart. The Regional Planning Association of America (RPAA), founded in 1923, played a key role. Combining Ebenezer Howard's Garden City concepts with emerging sociological research, the RPAA advocated for organized decentralization at a regional scale. The Great Depression and Franklin D. Roosevelt's New Deal provided an opportunity for large-scale, centrally planned developments. Rexford Guy Tugwell, head of the Federal Resettlement Administration, launched the "Greenbelt Towns" program in 1935 with public funds. While his ambition was to create a national network of hundreds of projects, only three Greenbelt Towns were built: Greenbelt in Maryland, Greendale in Wisconsin, and Greenhills in Ohio. None of these communities fully realized the vision of self-containment.[22]

Post-war America witnessed renewed interest in developing new towns, but these efforts were largely overshadowed by other initiatives focused on inner-city renewal and suburban expansion fueled by federal legislation including the Housing Acts of 1949 and 1954 and the Highway Act of 1956. While Title VII of the Housing Act provided limited federal support for new towns, administered by the Department of Housing and Urban Development (HUD), only 12 bedroom communities were created, with The Woodlands, Texas, being one of the largest. Private ventures emerged to fill the gap. Inspired by the New Town concept and its social aspirations, visionary entrepreneurs initiated town-sized developments like Reston and Columbia, both built in the Washington, DC metropolitan area during the 1960s.[23]

The Soviet Union emerged as the unexpected frontrunner in new town construction during the Cold War. In the mid-1950s, under Nikita Khrushchev, the country underwent a radical economic shift. The aim was to not only rival the West in ideologies but also to surpass it in efficiency and innovation in housing and quality of life. This effort was primarily achieved through the creation of *Sotsgorod* (socialist cities), designed with distinct qualities that set them apart from the struggling Western cities. By the mid-1960s, the USSR had notably constructed some 900 to 1000 *novy gorod* (new towns), based on a somewhat ambiguous definition, and these new towns represented over 60% of the country's urban areas and housed

some 30 million people. While some of them evolved into *sputnik*, or satellite towns, orbiting major cities like Moscow and Leningrad, a larger number were strategically planned by the State Planning Committee to serve as hubs for industrial development on the frontiers, with over half constructed in Siberia.[24] These industrial new towns were often designed as linear cities, adhering to the principles advocated by the influential "disurbanists" such as N. A. Miliutin.[25] As they were constructed, these towns became instantly recognizable by prefabricated and mass-produced apartment blocks. This pattern of new town development quickly spread throughout the socialist bloc, including China.

Challenging the Western-centric view, scholars like Rosemary Wakeman demonstrate that the concept of the New Town wasn't solely a Western invention. Her 2016 book *Practicing Utopia* expands the classic narrative on garden cities and new towns to include examples of numerous developing nations, such as Iran, India, Pakistan, Ghana, Poland, during the peak period of postwar new town movements (1945–73). A key takeaway is the link between new town development and industrialization, reflecting evolving economic power. This characteristic also became evident in East Asia in the next stage of new town development.[26]

Japan's remarkable post-World War II recovery saw its major cities explode in population, prompting the development of new towns on their outskirts, such as Senri New Town in Osaka and Tama New Town in Tokyo. Similarly, the rise of the "Four Asian Tigers" since the 1960s led to the establishment of the Jurong Town Corporation in Singapore in 1968, the creation of Tsuen Wan New Town and Sha Tin New Town in Hong Kong in the 1970s, the building of Hsinchu Science Park in Taiwan in 1979, and the development of five new towns around Seoul, South Korea in the 1980s. These projects transcended mere urban planning, shaping distinctive architectural styles and public spaces that reflected each nation's pursuit of modernity and unique identity.[27] Furthermore, new town development aligned with international capital flow and the concentration of export-oriented manufacturing, a trend that continues to drive urban growth in the Asia-Pacific region.

From the 1950s to the 1970s, despite its isolation from much of the world, China constructed numerous satellite towns around industrial centers like Shanghai. This confirms the correlation between new town development and industrialization. Inspired by the Soviet Disurbanist school's planning concepts, these satellite towns prioritized industrial production and aimed

to lessen economic dependence on central cities. Some, echoing Howard's Garden City concept, even incorporated greenbelts to prevent urban sprawl. These industrial towns became the foundation for China's later metropolitan expansions, exemplified by Shanghai's "One City and Nine Towns" plan launched in 2001.[28]

New Towns with Chinese Characteristics

While the unique circumstances in China have led to significant distinctions in its current new towns compared to historic movements or contemporary counterparts in other regions, they share several core principles. The primary characteristic of a new town—one that sets it apart from both super-scale residential neighborhoods and designated industrial zones—is its status as a self-contained socioeconomic entity. This means that a new town is not only sizable enough to function as an independent administrative district but also possesses economic diversity to generate jobs, meet a wide range of housing demands, and offer essential social services without reliance on an existing city. Many Chinese economic zones or development districts established in the 1980s were primarily industrial estates dedicated to attracting foreign direct investments (FDI) to boost manufacturing. Despite their considerable size and inclusion of workers' housing, they do not meet the other criteria of a "new town." Fueled by economic reforms in land policies and tax structures, however, these zones leveraged the real estate boom for a transformation in the 1990s. They shifted their focus toward residential and commercial development, ultimately evolving into true new towns or districts.

Like the classic new towns, contemporary Chinese developments have been shaped by the master planning tool. This involves conceptualizing an entire environment from scratch, using a blueprint to rationalize land uses, design a complete mobility network, regulate building practices, and allocate recreational grounds and open spaces. Guided by a vision of the future city's economic operations and social relationships, this process is referred to as "comprehensive planning" in China's planning framework—a term aptly reflecting its scope and significance.

Although Howard lacked formal training as a planner or architect, he recognized the critical importance of a well-designed physical environment to realize his vision of a revolutionary economic model and

an equitable society. He meticulously outlined the layout of the Garden City and its components, specifying such details as street widths, and illustrating its spatial arrangement with diagrams. To bring his concept to life, Howard enlisted architects Raymond Unwin and Barry Parker to develop Letchworth and Welwyn. These architects skillfully translated Howard's ideas, blending popular building styles and landscapes with an updated version of English picturesque aesthetics.

Architects continued to play a crucial role in shaping new towns, especially during the postwar reconstruction era dominated by modernism. The *Congrès internationaux d'architecture moderne* (CIAM) exerted a profound influence on this period, promoting a utopian belief that a properly designed physical environment, attuned to the epoch, could transform individual behavior and social relations and deliver economic success and civic order. Architects and planners were actively involved in creating new town programs, shaping their physical forms and social components, and often acting as advocates of these projects. Noted examples included Le Corbusier's plan for Chandigarh in India; Georges Candilis, Alexis Josic, and Shadrach Woods' design of Le Mirail in Toulouse, France; and Oscar Niemeyer and Lucio Costa's Brasilia, Brazil's new federal capital. Some new town builders, like Constantinos Doxiadis in Greece and Victor Gruen and James Rouse in the United States, achieved international renown. Supported by organizations such as the United Nations, these planning elites engaged in trans-territorial commissions to create new towns or rebuild cities, leaving behind a significant legacy of planning theories and utopian ideas.[29]

The master planning approach and the *tabula rasa* mindset that once dominated Western town development began to lose traction in the 1970s due to evolving ideologies, increased environmental awareness, and shifts within the planning profession. However, in China, the concept of physical determinism remains prevalent and continues to guide new town developments. Emphasis is placed on physical plan, architectural design, and urban landscape, with drawings, models, and visualizations widely employed to communicate project objectives and promote the envisioned future of these cities. However, while architects and planners still play a significant role, commissions for new city planning are largely dominated by large state-owned planning institutes, such as the CAUPD and Tongji University.[30] The professional planners working for these organization no longer function as the mastermind behind city development. Instead, they typically respond to predetermined programs and sites dictated by technical and

political considerations. These considerations range from population projections to architectural styles and are all aimed at meeting the demands of local authorities for rapid and monumental urban development.

Contemporary Chinese new towns share certain development methods with postwar Western new towns. Both are government-initiated projects prioritizing industry, driven by financial incentives, and developed through physical planning. However, their scales and driving forces differ significantly. When Howard conceived the Garden City, he described the forces drawing migration as "attractions," emphasizing the city's potential to restore people to the land.[31] Mid-century new towns were also built on the belief in their "attractions," promoting a middle-class lifestyle powered by technology and automobiles. In contrast, Chinese new towns are not merely responses to demographic shifts but are directly influenced by deliberate policy directives and social engineering tactics. They aim to organize migration and industrial clustering, representing nationwide political campaigns reflective of legacies from the previous socialist planning system. Since the 1990s, this approach has been geared toward mobilizing a workforce under new state directives to restructure the urban economy around infrastructure and real estate.

This state-driven urbanization movement bears considerable resemblance to China's past political campaigns. As journalist Jody Rosen observes, the government's social engineering efforts to revitalize ghost towns like Kangbashi in Ordos, Inner Mongolia, echo the forced migration of urban youths to rural areas under the Mao Zedong regime: "A half-century ago, in Mao's Cultural Revolution, China exiled privileged urban youths 'down to the countryside,' forcibly turning city dwellers into rustics. In Ordos today, peasants have been deployed to activate the city that has claimed their old pastoral homesteads."[32] This state-mobilized urbanization, often at the expense of rural communities, highlights the enduring legacy of top-down, central planning system in China.

Central to China's urban–rural divide is the Hukou system, a household registration policy implemented in 1958. This system rigidly categorizes citizens into "urban" or "rural" residents, with far-reaching consequences for their access to resources and opportunities. Urban residents enjoy a privileged status, with rights to public services, education, healthcare, and employment opportunities within their municipality. In contrast, rural peasants are relegated to a second-class status, with limited rights beyond collective land ownership.[33] This stark dichotomy created two "mutually

isolated, but nevertheless hierarchically integrated, societies."[34] The state-controlled urban economy further exacerbated this inequality, limiting mobility and opportunities for rural populations.

The development of Special Economic Zones (SEZs) in the 1980s necessitated some relaxation of the rigid Hukou policies, introducing Temporary Resident Permits for migrant workers. Subsequent economic reforms in the 1990s transformed coastal cities into export-oriented manufacturing hubs and prosperous real estate markets, fueling a steady influx of migrant labor for blue-collar jobs in factories and on construction sites. Despite these changes, the fundamental divide created by the Hukou system persisted. While a small percentage of rural workers managed to obtain urban Hukou, the majority remained part of the "floating population," which comprised over 20% of the national population by 2019.[35] This dual social structure was reflected in urban spatial patterns, with migrants often concentrated in isolated inner-city neighborhoods, informal settlements like "villages-in-the-city," or peripheral rental properties (Sidebar Essay 1.1).

Sidebar Essay 1.1 Hukou

While many countries maintain some form of household registration system, none has had as profound a socioeconomic impact as China's Hukou system. Hukou has been a primary driver of the stark urban–rural divide in China and has significantly shaped the country's urbanization trajectory.

This rigid system was introduced under Mao's regime in 1958 as a new form of population registration. Categorizing the nation's population into rural and urban residents based primarily on birthplaces, the Hukou system was a dual-pronged strategy. On one hand, it aimed to safeguard agricultural production, a cornerstone of the world's most populous nation's survival, by restricting the free movement of peasants. On the other, it sought to maintain social stability in cities with limited industrial capacity and employment opportunities. Given China's weak and uneven industrial sector in the mid-20th century, mass migration was seen as a threat to both rural and urban areas. The Hukou system was thus established to control internal migration and preserve a perceived social equilibrium. The notorious One-Child policy, implemented later for similar demographic concerns, further restricted population movement.

What sets Hukou apart from registration systems in other countries is its deeply discriminatory nature. It effectively creates two distinct social strata within China. Rural residents are tethered to their farmland with limited access to healthcare, housing, and education. Unlike urban dwellers, they are ineligible for benefits such as unemployment insurance and pensions. Migration is

continued

continued

severely restricted. Not only are rural residents discouraged from moving to cities, but local municipalities also impose their own barriers, making it difficult for residents of small towns to move to large cities.

Since the 1980s, the rigid constraints of the Hukou system have gradually eased due to localized adaptations, primarily driven by the burgeoning urban labor demand. The influx of rural migrants accelerated significantly after China's World Trade Organization accession in 2001. According to the latest census, the rural migrant population in cities surged from 155 million in 2010 to 376 million in 2020, constituting 26.6% of the total population.[a] This massive low-wage workforce, often deprived of social benefits and labor protections, has been instrumental in China's manufacturing competitiveness. Moreover, migrant workers constitute the majority of the construction workforce, significantly contributing to China's rapid urbanization.

Despite recent relaxations in migration restrictions, rural migrants and former peasants continue to face significant discrimination. Local governments have implemented measures, such as temporary residential permits, to manage the influx of migrant workers and, in some cases, allow homeownership. However, these policies have done little to elevate their social status. Migrant workers remain second-class citizens with limited access to social programs. For instance, children of migrant workers without urban Hukou are often denied enrollment in public schools, forcing parents to leave their children behind in rural areas. This has resulted in millions of "split families" and "left-behind children."

The hukou system has undergone reform since the 2014 National New-type Urbanization Plan, which aimed to accelerate urbanization, stimulate economic growth, and promote "shared prosperity." However, these changes have been largely superficial, with minimal progress in reducing the socioeconomic disparities between urban and rural residents. In fact, the gap has widened as critical issues, such as land and property rights, unrestricted migration, and equitable social welfare remain largely unaddressed.[b] Despite growing calls for abolishing the system, particularly amid China's aging population and shrinking labor force, the government remains cautious due to concerns over political stability and resource allocation. While further modifications to the Hukou system are likely, its fundamental role in maintaining the urban–rural divide is expected to persist.

[a] Kam Wing Chan, "Internal Migration in China: Integrating Migration with Urbanization Policies and Hukou Reform," *KNOMAD Policy Brief* 16 (Nov. 2021), 1–9, accessed December 24, 2024, https://documents1.worldbank.org/curated/en/099602108162412425/pdf/IDU1d58697991d4e1140131b82117feee15cb1e7.pdf.

[b] Priyanaka Juneja, "China's Hukou System: An Interview with Fei-ling Wang," *The Diploma*, July 14, 2017. https://thediplomat.com/2017/07/chinas-hukou-system/#:~:text=The%20hukou%20system%20is%20a,about%20residents%20in%20each%20region.

The effort of understanding China's urbanization is complicated by two distinct methods of counting urban population: one based on de jure residents with urban Hukou, and the other on de facto residents residing in the city. The discrepancy between these figures tends to increase with a city's size and economic attractiveness. Shenzhen, a prime example of China's urbanization success, illustrates this disparity. In the 2020 census, its de facto population was 17.56 million, but only 5.85 million, or 33.3%, held urban Hukou.[36] Nationally, if only registered urban residents are counted, China's urbanization rate was 44.38% in 2020. However, including the floating population raises the rate to 60.60%.[37] The government often emphasizes the latter figure as a social achievement. Local authorities may also exploit this statistical ambiguity to justify proposals for oversized new towns and excessive infrastructure spending.[38]

Scholars and journalists often attribute China's rampant new town movement to the massive rural-to-urban migration. However, this perspective is misleading, as it confuses the cause and outcome in this dynamic. New towns are not merely a response to migration trends; they are a cornerstone of the national economic strategy to accelerate urbanization. This misconception often leads to the belief that new towns are primarily built to house migrants. In reality, most new towns are designed as middle-class enclaves with housing prices beyond the reach of most migrant workers. Hukou requirements and income tax regulations further restrict migrant access to these developments.

A key driver of China's new town development is its unique land financing system. Unlike many other countries, China's local governments rely heavily on land sales for revenue. They acquire land cheaply from rural collectives, convert it to urban use, and then sell it to developers at a significant margin. Although China still maintains public ownership of all urban land, the 1988 revision of the Constitution legalized the separation of land-use rights from land ownership, permitting local governments to grant developers long-term leases, typically 70 years for residential developments and 40 years for commercial and mix-use developments. This system allows the government to control land supply and use it as a tool for economic development and urbanization. Land sales contribute substantially to local government revenue, exceeding US$1 trillion in 2019 and accounting for over a quarter of their total income. This revenue is crucial for funding major infrastructure and civic projects. Local government spending, which constitutes a

quarter of China's GDP, is a significant driver of the world's second-largest economy.[39]

This land-financing system creates a risky economic loop. Local governments' pursuit of revenue through land sale incentivizes them to prioritize urban expansion, often by developing new towns on rural or undervalued land. To fund infrastructure in these new urban areas, governments often borrow heavily, increasing their debt burdens and prompting them to pursue short-term economic gains, which drives up land prices. Roaring land prices, in turn, encourage developers to prioritize profit-maximizing projects, like large-scale, high-density housing and commercial developments. These revenue- and profit-driven decisions often result in oversupply and a lack of affordable housing options, exacerbating social and economic challenges within these urban areas.

The Hukou system and the land-financing model, both unique to China, significantly shape its new town development. These factors contribute to distinct spatial characteristics, including gated residential areas, uniform high-rise buildings, monumental infrastructure, car-centric street layouts, internalized public spaces, and sprawling urban landscapes. These features reflect profound social transformation and contribute to growing economic disparities, social segregation, and environmental challenges. A notable manifestation is the prevalence of "ghost towns"—not aging locales but newly constructed towns struggling to attract residents. This highlights the disconnect between demographic trend and space production, and between economic motives and socio-environmental objectives in this rapid urbanization.

New Towns as Spatial Fixes

Beyond the traditional definition of new towns, Chinese new towns offer a valuable lens into the intersection of state-led space production and neoliberal globalization. Their forms, programs, functions, and outcomes provide a unique opportunity to explore an evolving urban frontier.

A critical question regarding the narrative of China's new town movement concerns the interplay between global socioeconomic transformations and rapid domestic urbanization. Departing from the homogeneous, industrial satellite cities built during the Mao regime, contemporary new towns are

an outgrowth of China's epochal economic and political reforms initiated by Deng Xiaoping after the Cultural Revolution. Deng's pathbreaking "Reforms," which continued for several decades until recent reversals, were essentially neoliberal overhauls aimed at introducing market-based economic mechanisms into the socialist political framework. The simultaneous "Opening-up" policy was intended to embrace the new worldwide economic system. These policies represented China's active responses to the global trends of neoliberalization and globalization that emerged in the 1970s. Therefore, China's urbanization must be understood within this broader landscape of economic deregulation, global trade, capital accumulation, and political pragmatism.[40]

The convergence of socioeconomic transformation and technological advancement has spurred a new wave of urban growth and restructuring globally. This ongoing metropolitan expansion differs significantly from the suburban sprawl model prevalent in the mid-20th century. The cityscapes resulting from the new middle-class economies also stand apart from conventional images of single-family homes on well-manicured lawns or modernist towers in downtowns. While urbanization in the neoliberal era can serve as a catalyst for economic prosperity and wealth accumulation, it also has the potential to exacerbate social disparities across broader territories. Chinese new towns exemplify these trends, representing a product of neoliberal globalization and raising pertinent questions about the role of planning and design in post-metropolitan development, particularly in navigating the evolving urban–rural and center–periphery relations.

The neoliberal reforms in China began in the countryside, where Deng and his political allies dismantled the socialist commune system in 1978. This allowed agricultural land to be redistributed to individual farmers, motivating them to increase productivity. Simultaneously, the government promoted the development of bottom-up Township and Village Enterprises (TVEs) to absorb surplus local labor. These reforms successfully revitalized the rural economy and reduced poverty rates.

While early urban reforms were limited to the SEZs, the 1990s witnessed a significant shift toward economic deregulation and marketization in urban areas. This included reforms to land, revenue, and labor policies. At the same time, many Township and Village Enterprises (TVEs) faced increasing challenges, leading to their decline or acquisition by urban corporations and

foreign multinational companies.[41] This trend compelled more rural residents to migrate to cities and the burgeoning factory towns surrounding them.

Since its economic reforms, China's urbanization has become a defining characteristic of its unique brand of neoliberalism. This approach marries market mechanism with strong state control, exemplifying the developmentalist paradigm prevalent in East and Southeast Asia.[42] Local governments play a pivotal role, controlling land conversion, urban planning, resident relocation, infrastructure development, and economic activities, such as business recruitment, financing, marketing, and price regulation. They also engage in intense competition for capital, resources, policy advantages, branding opportunities, and residents.

Despite the decentralization of economic power, the central government maintains a strong grip through top-down policies and resource allocation. State-owned enterprises (SOEs) and quasi-SOEs also wield considerable influence, often monopolizing key sectors. This interventionist approach has fueled a sustained construction boom and inflated property prices for decades, creating a market dynamic distinct from Western economies. Economic achievements are then used to propagate an ideological narrative of success, fostering emulation and replication. This framework has effectively created a larger and more potent "growth machine" than ever seen in history.[43]

While the spatial and socioeconomic impacts of China's urbanization are well-documented, critical discussions from the perspective of urban planning and development remain limited. This field bridges the spatial and social domains and plays a pivotal role within the "growth machine." As David Harvey argues, urbanization has historically served as a key mechanism for absorbing surplus capital and labor through a "spatial fix."[44] This involves channeling capital into physical outputs like buildings, infrastructure, or entire towns. Space production not only absorbs surpluses but also creates fixed capital that facilitates further economic growth and spatial transformations.[45]

China's new towns, as a cornerstone of its development strategy, play the role as "spatial fixes." They absorb surplus capital and labor, addressing overaccumulation from international trade and monopolies while stimulating territorial expansion. However, this geographical transformation exacerbates wealth and power inequalities. These massive projects, undertaken to dismantle the previous socialist system, have led to the rise of a new elite class

while dispossessing the working class and urban migrants of their "right to the city."

Chinese new towns often feature a standardized layout characterized by wide avenues, expansive green spaces, towering buildings, shopping malls, and gated residential neighborhoods. This prioritization of "economy of scale" and "economy of speed" creates a sense of uniformity.[46] Architect Rem Koolhaas coined the term "generic city" to describe these new urban landscapes in Southeast Asia and China's coastal regions in the late 20th century: "It is nothing but a reflection of present need and present ability. It is the city without history. It is big enough for everybody. It is easy, it does not need maintenance. If it gets too small it just expands. If it gets old it just self-destructs and renews. It is equally exciting—or unexciting—everywhere. It can produce a new identity every Monday morning."[47] The generic city embodies the characteristics of contemporary cityscapes: uniformity, immense scale, and a detachment from local context, all reflective of the globalized economy.

While the generic city concept captures the surface features of Chinese new towns, it lacks nuance in exploring the complex interplay between local politics and globalization. Political geographer Edward Soja's theory of the "postmetropolis" offers a more comprehensive lens. Drawing from the Los Angeles School of urbanism, Soja observes the active regional expansion and reorganization of modern metropolises. He proposes the term "cityscape" to describe these larger, more intricate physical configurations that transcend traditional urban–rural boundaries.[48] Soja argues that globalization is driving the "decentering" and "recentering" of modern metropolises, creating constellations of "spatial fragments, functional pieces, and social segments." This emerging form of postmetropolis is exemplified by the recent growth of the Los Angeles region, characterized by its evolving polycentric and kaleidoscopic socio-spatial structure distinctive from both traditional industrial metropolis and recent urban sprawl.[49]

China's new towns embody many characteristics of the postmetropolis. As key drivers of regionalization, they form a network with existing urban centers, reinforcing each other. Unlike 20th-century models like Garden Cities and suburbs, which aimed to draw population and businesses away from downtowns, postmetropolitan new towns benefit from the identity and economic prospects of the center city while contributing to its overall urban vision. Soja terms this relationship "critical thirding," where new

towns emerge from a complex interplay of decentralization and recentralization, sprawl and urban intensification, homogeneity and heterogeneity, and integration and disintegration. The resulting composite urban form, which Soja calls an "exopolis," can be seen as a "city turned inside-out."[50] This is evident in the reurbanization of suburbs and the rise of "Outer City," as seen in Los Angeles. Notably, Chinese new towns share greater morphological and sociological similarities with such outer cities like Irvine and Pomona than with typical American suburban subdivisions. Intensive urbanization transforms suburbs and rural areas into outer cities, blurring boundaries between urban cores and peripheries. This simultaneous interplay of deterritorialization and reterritorialization creates new towns that are globally connected yet locally disconnected, both physically and socially, contributing to their "generic" urban landscapes.

Urban Modeling

Soja's postmetropolis theory delves beyond the surface uniformity of new urban forms to explore the intricate social relations underlying them. Drawing on Henri Lefebvre's theory, Soja argues that urbanization solidifies these social relations into tangible and symbolic spatial configurations. This materialization and contextualization are not merely geographic layouts but dynamic and contested spaces filled with "movement and change, tensions and conflict, politics and ideology, passions and desires."[51]

Particularly, Soja's analysis of the postmetropolis draws heavily on Henri Lefebvre's *The Production of Space* (1974).[52] To understand the complex social relations embedded within the process of space production, Lefebvre established a conceptual triad of fundamental elements: "perceived space," "conceived space," and "lived space."[53] Soja translates this triad into three corresponding perspectives: Firstspace, Secondspace, and Thirdspace. Through Secondspace, Soja emphasizes the role of spatial imaginations in shaping the space production process, highlighting the impact of utopian aspirations, representational power, and ideology. He argues that urban imageries and utopian speculations significantly influence both conceived and lived spaces, creating a dynamic production process within an "active arena of development and change, conflict and resistance."[54]

The history of urbanization is filled with utopian ideas and experiments. Ernst Bloch's concept of utopia as an "anticipatory illumination" offers

a unique perspective on contemporary utopianism. He posits that utopia functions as a bridge between the present reality and its potential transcendence; hence it is capable of inspiring productive reimagination.[55] In the development of Chinese new towns, the imagined spaces hold equal weight to the built ones. They inherit the utopian spirit of mid-20th century modernism and Western New Town movements while incorporating the specificities of China's state capitalism and global ambitions.

Similar to how postwar industrial development, population boom, and technological advancement fueled the technocratic ambitions of mid-century modernism in Europe and the United States, China's sustained economic growth and insatiable demand for space have fostered unwavering optimism about territorial expansion and urban spectacles. This state-led campaign of urbanization is bolstered by the political rhetoric of "catching up" with the West. Overseen by an elitist government, China's flagship new towns effectively function as laboratories for a grand utopian project. A fascination with the ideal city model permeates nearly all major new town initiatives. From the establishment of the Shenzhen Special Economic Zone from 1980 onward, these new cities have been portrayed as *tabula rasa*, a place with no history and awaiting a perfect work of art. This technocratic blueprint, co-plotted by central and local governments, planning agencies, and technocrats, promotes a developmental goal that envisions a globally reconditioned urban future. Official media actively promotes new city imageries, portraying them as havens of social harmony, global competitiveness, and environmental sustainability. A prominent example is the discourse of "ecological civilization," which has led to the creation of numerous eco-cities, low-carbon cities, and green cities across China.

Despite their top-down planning origins, these technological utopias permeate citizens' everyday lives. They offer visions of ideal spatial conditions and futuristic experiences, catering to the social aspirations of the growing middle class. For this emerging class in China, new towns represent a new environment suggestive of wealth, life quality, and social mobility often associated with advanced societies. They are primary consumers of cultural markers of Western lifestyles, actively supporting the development of "themed towns," "eco-cities," and "smart cities" that have proliferated across the country in recent decades. While distinct from American suburbia, China's new towns often attempt to replicate key elements: automobility, green environment, and the ideals of domesticity and exclusivity.

Figure 1.4 A visitor viewing the large city model in the City Planning Museum of Songjiang New Town.
Photo by author, 2012.

City imageries play a critical role in shaping and promoting China's urban utopia. The state invests heavily in architectural icons like those showcased during the 2008 Beijing Olympics and the 2010 Shanghai World's Fair, aiming to project an image of a prosperous modern nation. Local authorities also seek eye-catching landmarks like sumptuous museums and opera houses, or high-end brands like Central Business Districts, which are not tied to immediate demands but rather paint a rosy picture of their city's future trajectory.

A unique and highly popular venue for producing and promoting city images in China is the "city planning exhibition hall." These museum-like spaces, first established in Shanghai in 2000 and now ubiquitous in major cities and many new towns, showcase planning models, photos, artist's renderings, and multimedia displays to create immersive experiences within a fictionalized space of the new city.[56] Beyond simply showcasing completed projects, these exhibition halls aim to promote future development and cultivate civic pride among residents and potential consumers of the cityscape (see Figure 1.4).

China's approach to utopian urbanism is characterized by a unique practice of "modeling," distinguishing it from earlier Western mass urbanizations. Chinese governments promoted and disseminated their ideal cities less through political discourse or social narratives than through large-scale

urban experiments followed by iterative processes of simulation and adaptation. This longstanding practice of "modeling" has been a hallmark of socialist governance since the Mao era, exemplified by prominent cases like Daqing (model of socialist industrialization) and Dazhai (model of People's Commune). China's neoliberal transformation has largely been driven by pragmatic, outcome-oriented applications of Western models, as evidenced by Deng Xiaoping's famous slogans, including "Cross the river by feeling the stones!" and "It doesn't matter whether the cat is black or white; as long as it can catch mice, it is a good cat." This often results in a hybridized paradigm, where different elements, capitalist and socialist, Chinese and Western, local and imported, are selectively mixed and repackaged into new models. These models are tested in limited localities and, upon success, promoted nationwide through state propaganda and formalized policies.

Implementing policy based on urban modeling and demonstration projects offers several practical advantages. Starting with a trial allows for bypassing complex ideological debates and facilitates a smoother transition from testing to full-scale application. Additionally, as scholars have noted, "the general public understands models, especially working ones, better than concepts."[57] While theories and ideas can be nebulous, a model provides a tangible form, demonstrates potential outcomes, and can be adapted to incorporate other ideas. In urban development, a built example often holds greater influence, as lessons learned from early experiments can be applied and improved upon in future projects, contributing to the ongoing evolution of the model.

Contemporary China has witnessed successive waves of urban modeling. As architectural critic Jeffrey Kipnis notes, Chinese cities are being planned "not as individualized organizations; rather each is a variation on a limited number of prototypes."[58] In this new town movement, the modeling practice began with the four SEZs established along the southern coast, representing initial steps toward economic reforms that incorporated many aspects of the capitalist system. These zones functioned as true urban laboratories, resembling classic utopian experiments. They were initially isolated by physical borders shielding them from the rest of the country. Once their success was proven, the central government packaged their experiences into new policy directives, disseminating them to other municipalities. Coastal cities were the first recipients, followed by inland ones. Mayors and party officials eagerly visited these model cities, taking home a kind of "guidebook"—from

governmental structures to building forms—that they could imitate when developing their own new towns.

As the new town movement proceeded in the 1990s, a wide range of Western planning models were introduced through various initiatives. They were adapted to different city contexts, resulting in localized variations. The new demonstration projects provided comprehensive new town examples, with proven success in economic performance and urban landscapes. Modeling functioned as an effective tool for disseminating the cutting-edge practice across diverse geographical and economic conditions in China. However, this approach also carries the risk of rigidity. The success of a new town often hinges on the degree to which the idealized spatial model can be adapted to the local context and translated into tangible economic development opportunities.

Chinese new towns diverge from the traditional definition of utopia. They serve as economic instruments, political propaganda tools, and speculative ventures, lacking the overt social idealism and avant-garde spirit of classic utopian projects. However, they reflect the evolution of the utopian concept in the context of 21st-century globalization characterized by productive reimagining of social space. The planning of these new towns exposes longstanding utopian aspirations. As state-sanctioned model projects, they adhere to modernist principles, inheriting its physical determinism, mass production method, and rigid policy design.

Like classic utopias, China's ambitious urbanization movement embodies the duality of utopia and dystopia. The inherent conflict between an ideal urban model and the complex realities and processes of urbanization impacts these new town developments, leading to numerous social contradictions beneath the veneer of a perfect society. In its pursuit of modernization, the state displaced countless villages and communities, forced mass migration, and erased historical traces of cities, neighborhoods, and homes. Aggressive financial policies, relentless urbanization agendas, and an obsession with urban spectacles have also resulted in numerous "ghost towns" and insurmountable debt for local municipalities. Policy hurdles and skyrocketing housing prices further segregate and constrain rural migrants and low-income residents in these new cities, leading to disillusionment in social life. These new towns become a concentrated microcosm of the social contradictions arising from the contemporary practice of space production, where the pursuit of utopian ideals often produces dystopian realities.

Framework of the Book

China's massive urbanization movement has generated a vast number of interpretations in the social sciences. Applying a single, predefined theory for the entirety of this phenomenon risks oversimplification. Given its multifaceted and evolving nature, a more effective approach to examining the new town movement and China's changing urban landscape lies in tracing the country's unique process of urban modeling. This can be achieved by selecting specific prototype examples that embody key factors within these processes, highlighting crucial moments of formation, transformation, and adaptation. This study focuses on the planning and shaping of these emerging urban landscapes, using analyses of plans, processes, and outcomes of space production to examine China's transforming social environment and urban growth.

Understanding China's contemporary cityscape requires a fresh historical perspective. While new towns may seem radically different from their predecessors, they are neither entirely "beyond history" nor necessarily "new" in the urban models they evoke.[59] To grasp their physical environments and societal impacts, one must move beyond traditional morphological and metaphorical classifications, as well as rigid formulas of political critique. This necessitates engaging in reciprocal comparisons of historical examples with contemporary circumstances.

Investigations of utopian urbanism often focus solely on its idealized spatial form or its rigid political underpinnings. However, as David Harvey argues, a "utopianism of process" differs significantly from a "utopianism of spatial form."[60] This study aims to bridge these physical and political domains, examining China's urbanization as a dynamic social process that generates complex spatial configurations. Such a process involves a multitude of local and translocal actors, including planners, architects, government officials, developers, investors, foreign organizations, residents, migrants, and the state itself—each with their own set of material pursuits and social visions.

This book delves into the production of a series of "model new towns" within the country's ongoing urbanization movement. While these examples are documented in a loose chronological order, they often overlap in their evolution and share common planning strategies or development challenges, informed by the constant tension between the aspiration for economic liberalization and the rigidly centralized political power. Each case

study represents a noteworthy experiment in China's journey searching for new urbanization paradigms. Architecture and urban form are examined as the primary mediums reflecting these social dynamics and transformations. Built upon a new understanding of utopian urbanism, this book engages with recent scholarships interrogating the unique characteristics of East Asian urbanization.

While the concept of the "21st-century Chinese new town movement" lacks a universally accepted definition within academic circles, this study proposes the early 1990s as its start. This time marked a turning point in China, with the confluence of internal and external forces triggering a surge of urbanization. Domestically, the challenges facing struggling rural communes and aging SOEs demanded fundamental economic reforms. The global political landscape also shifted significantly following the 1989 Tiananmen Square protests and the 1991 collapse of the Soviet Union, creating new opportunities and pressures for China's development.

In response, the Chinese government launched its urbanization campaign, loosening land control and privatizing urban industries. Housing marketization reforms further fueled its growth machine. Landmark legislation provided the legal framework for these massive changes: the 1988 constitutional revision separated land-use right from land ownership; the 1990 Urban Planning Law created the national framework for planning and development; and the 1994 tax system overhaul divided central and local revenues. These reforms collectively shifted the national economic focus toward cities, establishing the financial foundation for land-based urbanization and a booming urban housing market. The emerging municipal autonomy empowered local governments to negotiate with the central administration, expand urban territories, and initiate large-scale development projects for revenue and economic competitiveness.

Unlike previous historical accounts, this study treats the early SEZs of the 1980s as precursors to contemporary new towns. Before the 1990s, these zones functioned primarily as industrial estates and lacked defining characteristics of the new town. Until the key policy changes a decade later, these town-sized developments remained isolated experiments rather than a coordinated urbanization movement.

The following chapter offers a brief prehistory with Shenzhen as one of the cases. Shenzhen pioneered China's political experiment facilitating concurrent land development and industrialization under a quasi-capitalist system within a segregated territory. Discussion of Shenzhen joins three other brief

retrospectives: the 1930 Plan for Greater Shanghai, the unrealized vision for a new capital in Beijing in 1949, and Daqing, China's most well-known oil town built in the 1960s. The chapter documents the intermittent yet persistent attempts of building new towns in China. Despite their varying political contexts and stakeholders, each project reveals contradictions in adopting Western planning ideas while seeking a distinct Chinese identity. Notably, urban modeling permeated all these projects, albeit with different themes and urban forms reflective of specific stages in modernization. This remains an important legacy for contemporary projects.

Chapter Three delves into the story of Suzhou Industrial Park (SIP), a pioneering new town that has been developing for three decades. The "Suzhou model" emerged from emulation of a "Singaporean model." As a key partner in this joint venture, Singapore has played a crucial role by exporting its planning concepts, governance systems, and technology and management know-how. The chapter highlights a sophisticated approach to city building, interwoven with economic development strategies, to shape the SIP as a modern, entrepreneurial, and livable city. This remains the most impactful and widely disseminated aspect of the model. The chapter also sheds a new light on the lesser-known initiative: the ambitious "Software Transfer" program. This program aimed to install a new "operating system" within the city, seeking to gradually transform the local bureaucracy into a transparent and efficient governing entity while maintaining its authoritarian power.

Chapter Four explores the phenomenon of "themed towns," exemplified by Shanghai's "One City and Nine Towns" program, launched in 2001. This controversial initiative, which transplanted iconic Western townscapes onto new satellite towns, exposed the tensions of cultural mismatch and social alienation that have plagued many Chinese new towns. Moving beyond simplistic critiques of "copycat city" or "architectural mimicry," the chapter engages in a deeper analysis of this practice of simulation in urban design and development, comparing it to similar impulses in the West, such as the New Urbanism movement and Disneyfication. The comparison reveals a shared utopian "presumption of spatial order as a vehicle for controlling history and social process."[61] By reevaluating the long-standing debates on urban imagery and place making and studying how residents have readapted these themed towns, these case studies offer new insights into the cultural dilemmas posed by themed developments worldwide.

Responding to environmental externalities resulting from industrialization and urbanization, Chinese national and local governments launched

ambitious eco-city programs under the propagandas of "Ecological Civilization" and "Green Economy." Chapter Five analyzes and compares top-down and bottom-up models of eco-city building through three demonstration projects in China's recent "Green Leap Forward": Dongtan Eco-city, Tianjin Eco-city, and Qingdao EcoBlock. It examines the strengths and weaknesses of each approach, focusing on the relationship between ecological planning and economic policy to evaluate whether numerous attempts and substantial investments have yielded a viable solution for sustainable urban development. It addresses how the sustainable development goals can be better integrated within a neoliberal urban framework to achieve not only economic success but environmental and social resilience.

Misunderstandings of city-building dynamics have led to numerous underpopulated new towns across China. Driven by the aspiration to create new urban centers, these projects often teeter on the brink of becoming dystopian places. The final chapter delves into the new town projects in Ordos, Zhengzhou, Kunming, and the ambitious Yujiapu Financial District in Tianjin. It investigates the planning misconceptions and economic miscalculations that caused these "ghost towns" and the resulting social and environmental dilemmas. While scholars and journalists often attribute China's ghost town crisis to economic bubbles and flawed financial policies, this chapter proposes a nuanced perspective. It emphasizes the critical role of urban planning and design, arguing that ghost towns represent a fundamental issue of urbanism that hinders cities' long-term vitality. These examples highlight the urgent need for alternative paradigms of urbanization.

These model new towns serve as showcases for cutting-edge urban design and construction technology. Envisioned as exemplars of China's success in urbanization and economic reforms, they collectively reveal deeper socioeconomic issues concerning the 21st-century cities. Each chapter of this account delves into a fundamental question confronting new towns: economic viability (SIP), cultural integration (themed towns), environmental sustainability (eco-cities), and socio-spatial dynamics (ghost towns). A unifying theme ties them together: the reciprocal relationship between urban development and social transformation, examined through the lenses of urbanism and utopianism.

These chapters trace the theoretical origins of contemporary urban planning concepts, analyzing their practical implementation within local

political and social contexts. Drawing on extensive archival materials, site visits, and interviews, they document the reactions of residents and professionals to these large-scale initiatives. As blueprints are translated into streets, squares, and buildings, new towns represent not only the grand visions of various creators—central and local governments, technocrats, developers, and architects—but also the struggles of residents, migrant workers, and local organizations in negotiating their economic security, social identity, and rights to the city. Caught between utopian ideals and dystopian realities, these model new towns serve as both aspirational constructs of 21st-century urban society and isolated enclaves marked by social inequities.

After more than a century of evolution, a new wave of new town development has spread worldwide, particularly in developing regions with high population density.[62] China's 21st-century new town movement has not only reshaped the nation's urban landscapes but also significantly impacted the global geo-spatial environment. This book's thematic structure facilitates comparisons between different types of urbanization initiatives within China and with their global counterparts. Africa, the Middle East, and India, among others, have seen various influences of China's economic and political power through its ambitious programs like the Belt and Road Initiative. Through a comprehensive examination of China's new town movement, this volume sheds a new light on urbanization patterns in the global south, exploring solutions for accommodating the earth's burgeoning urban population and addressing the environmental challenges facing cities worldwide.

Notes

1. Jean-Pierre Langellier and Brice Pedroletti, "China to Build First Eco-City," *The Guardian*, May 7, 2006, accessed Apr. 22, 2024, www.theguardian.com/world/2006/may/05/outlook.development.
2. China Academy of Urban Planning and Design, "'Quanguo xincheng xinqu guihua jianshe guanli baipishu' zhuyao faxiang yu zongyao jielun" [Primary Findings and Important Conclusions of the "White Paper for the Construction and Management of New Towns and New Districts in the Whole Country"], *Urban Planning China*, Nov. 6, 2019, accessed Nov. 12, 2020, https://mp.weixin.qq.com/s/pfWK6K4owKIE198lHoRwew.
3. The 2020 national census reported a population growth of 5.38% during 2010–2020, but there has been widespread suspicion that the actual number might be lower, or even negative. Two months after the publication of the census, the national government announced a new policy that permits and encourages a third child for each family. National Bureau of Statistics of China, "Main Data of the Seventh National Population Census," May 11, 2021, accessed Nov. 25, 2021, http://www.stats.gov.cn/english/PressRelease/202105/t20210510_1817185.html.

4. China Labour Bulletin, "Migrant workers and their children," *China Labour Bulletin*, May 11, 2020, accessed Nov. 13, 2020, https://clb.org.hk/content/migrant-workers-and-their-children.
5. A 2009 World Bank report estimated 17.7 million annual population increase in China's cities; a 2014 national survey recorded the number of annual rural-to-urban migrants at 16 million, and that urbanization reached 54.8% countrywide. The World Bank, "Sino-Singapore Tianjin Eco-City: A Case Study of an Emerging Eco-City in China" (Technical Assistance (TA) Report), Nov. 2009, p.1; National Bureau of Statistics of China, "Statistical Communique of the People's Republic of China on the 2013 National Economic and Social Development," Feb. 24, 2014, accessed Nov. 20, 2020. https://www.stats.gov.cn/english/PressRelease/201402/t20140224_515103.html.
6. David Harvey, *A Brief History of Neoliberalism* (New York: Oxford University Press, 2005), 127.
7. Salvatore Babones, "China's Middle Class is Pulling up the Ladder behind Itself," *Foreign Policy*, Feb. 1, 2018, accessed Nov. 13, 2020, https://foreignpolicy.com/2018/02/01/chinas-middle-class-is-pulling-up-the-ladder-behind-itself/.
8. Max D. Woodworth and Jeremy L. Wallace, "Seeing Ghosts: Parsing China's 'Ghost City' Controversy," *Urban Geography* 38, no. 8 (2017): 1279.
9. Bill Gates, "A Stunning Statistic about China and Concrete," Gates Notes, June 25, 2014, accessed Nov. 28, 2020, https://www.gatesnotes.com/about-bill-gates/concrete-in-china.
10. "The New Colonialists; to Come," *The Economist* 386, no. 8571 (Mar. 15, 2008): 13.
11. Zhang Yan, He Chen-Qi, Tang Bao-Jun, and Wei Yi-Ming, "China's Energy Consumption in the Building Sector: A Life Cycle Approach," *Energy and Buildings* 94 (2015): 240–251.
12. According to research conducted by Liu Huan et al., light vehicles in China travel an average of 18,900 km annually, slightly more than the average US light vehicle, which travels 18,400 km per year. Cited in Wendell Cox, "Average Chinese Car Travels as Much as American Car," *New Geography*, Sep. 23, 2019, accessed Nov. 28, 2020, https://www.newgeography.com/content/006420-average-chinese-car-travels-much-american-car#:~:text=China%20is%20now%20the%20largest,the%20invention%20of%20the%20automobile.
13. James Miles, "Building the Dream," *The Economist* 411, no. 8883 (Apr. 19, 2014): 3.
14. Lin Zhongjie, "When Green was the New Black: What Went Wrong with China's Eco-City Movement?" in *Letters to the Leaders of China: Kongjian Yu and the Future of the Chinese City*, ed. Michael Sorkin (New York: Terreform, 2018), 190–201.
15. Michelle Bonino, Francesca Governa, Maria Paola Repellino, Angelo Sampieri, eds., *The City after Chinese New Towns: Space and Imaginaries from Contemporary Urban China* (Basel: Birkhauser, 2019); Rachel Keeton, *Rising in the East: Contemporary New Town in Asia* (Rotterdam: International New Town Institute, 2011).
16. Wu Fulong, "Gated and Packaged Suburbia: Packaging and Branding Chinese Suburban Residential Development," *Cities* 27 (2010): 385–396.
17. Jennifer Robinson, "The Urban Now: Theorising Cities beyond the New," *European Journal of Cultural Studies* 16, no. 6 (2013): 663.
18. Bonino et al., ibid.
19. Keeton, 14.
20. Encyclopedia Britannica defines the New Town strictly as a movement that originated from the context of postwar reconstruction in the UK. It states, "New town, a form of urban planning designed to relocate populations away from large cities by grouping homes, hospitals, industry and cultural, recreational, and shopping centres to form entirely new, relatively autonomous communities." "New Town, Urbanology," *Encyclopedia Britannica*, July 20, 1998, accessed Dec. 19, 2020, https://www.britannica.com/topic/new-urbanology.
21. Keeton, 24–25; Rosemary Wakeman, *Practicing Utopia: An Intellectual History of the New Town Movement* (Chicago and London: University of Chicago Press, 2016), 2. The French government launched the Grand Ensemble program in the 1950s and Priority Urbanization Zones (PUZ) in the 1960s to decentralize industrial cities, but not all of these large-scale projects could be considered new towns.
22. David Myhra, "Rexford Guy Tugwell: Initiator of America's Greenbelt New Towns, 1935 to 1936," *Journal of the American Institute of Planners* 40, no. 3 (1974): 176–188.
23. Ann Forsyth, "Planning Lessons from Three U.S. New Towns of the 1960s and 1970s: Irvine, Columbia, and The Woodlands," *Journal of the American Planning Association* 68 (4): 387–415.
24. Wakeman, 176–177.

25. N. A. Miliutin, *Sotsgorod: the Problem of Building Socialist Cities*, trans. Arthur Sprague (Cambridge: MIT Press, 1974).
26. Peter G. Rowe, "New Towns in East and Southeast Asia," in *New Towns for the Twenty-First Century*, eds. Richard Peiser and Ann Forsyth (Philadelphia: University of Pennsylvania Press, 2021), 119–151.
27. Peter G. Rowe, *East Asian Modern: Shaping the Contemporary City* (London: Reaktion Books, 2005).
28. Harry den Hartog ed., *Shanghai New Towns: Searching for Community and Identity in a Sprawling Metropolis* (Rotterdam: 010 Publishers, 2010), 14–22.
29. Wakeman, 12–13.
30. CAUPD has been responsible for the comprehensive plan of most large cities in China. Tongji University has prepared the master plan for more than half of the country's new cities. Interview with Li Xiangning, Dean of Tongji University College of Architecture and Urban Planning, June 2023.
31. Ebenezer Howard, *Garden Cities of To-Morrow* (Cambridge, MA: MIT Press, 1965), 44–45.
32. Jody Rosen, "The Colossal Strangeness of China's Most Excellent Tourist City," *New York Times*, Mar. 6, 2015, accessed Nov. 26, 2019, https://www.nytimes.com/2015/03/06/t-magazine/ordos-china-tourist-city.html.
33. John Logan and Susan Fainstein compare the impact of *Hukou* on China's urban migrants to the conditions of undocumented immigrants in the United States and Europe but admit that it remains a distinctively Chinese phenomenon in that it differentiates the native urban population based on legal status. John R. Logan and Susan S. Fainstein, "Introduction: Urban China in Comparative Perspective," in *Urban China in Transition*, ed. John R. Logan (New York: Blackwell Publishing Ltd., 2008), 19.
34. Mary Ann O'Donnell, Winnie Wong, and Jonathan Bach, "Experiments, Exceptions, and Extensions," in *Learning from Shenzhen: China's Post-Mao Experiment from Special Zone to Model City*, eds. Mary O'Donnell et al. (Chicago: University of Chicago Press, 2017), 5.
35. China Labour Bulletin, ibid.
36. "Nianmo changzhu renkou" [Year-end Permanent Residents], *Statistics of Shenzhen*, Dec. 31, 2019, accessed Feb. 1, 2021, http://tjj.sz.gov.cn/ztzl/zt/sjfb/nmczrk/index.html. Unofficial statistics indicate that the real population in Shenzhen may have reached 25 million, if the unregistered "floating populations" are also included. Shenzhen Ke, "Shenzhen renkou zhenxiang" [Truth about Population of Shenzhen], Qianzhan.com, No. 17, 2020, accessed Feb. 1, 2021, https://xw.qianzhan.com/analyst/detail/329/201117-926de289.html.
37. Sun Dan, "Guojia tongji ju: 2019 nian zhongguo chengzhenhualü tupu 60%, huji chengzhenhualü 44.38%" [National Statistics Bureau: China's Urbanization Surpasses 60%, Urbanization with Hukou 44.38%], *Economy Daily*, Feb 28, 2020, accessed Dec. 15, 2020, http://www.ce.cn/xwzx/gnsz/gdxw/202002/28/t20200228_34360903.shtml.
38. Kam Wing Chan, "Misconceptions and Complexities in the Study of China's Cities: Definitions, Statistics, and Implications," *Eurasian Geography and Economics* 48, no. 4 (2007): 396.
39. Áine Doris, "Chinese Cities' $1 Trillion-a-Year Piggy Bank," *Chicago Booth Review*, November 28, 2022, accessed May 4, 2024. www.chicagobooth.edu/review/chinese-cities-trillion-year-piggy-bank.
40. Harvey, ibid.
41. James Kai-sing Kung and Yi-min Lin, "The Decline of Township-and-Village Enterprises in China's Economic Transition," *World Development* 35, no.4 (2007): 569–584.
42. Harvey, 120.
43. Wu Fulong, *Planning for Growth: Urban and Regional Planning in China* (London and New York: Routledge, 2015).
44. David Harvey, *Rebel Cities: From the Right to the City to the Urban Revolution* (London and New York: Verso, 2012), 22 and 42.
45. Harvey argues that, in the era of neoliberalization, capital circulates globally through the process of production, commerce, merchanting, and finance, and shifts rapidly from one location to another, often with considerable volatility. It leads to capital accumulation on a world scale to maintain its problematic temporal trajectory through continuous geographical adjustments and reconfigurations. This process stimulates massive investments in the immobile assets—prominently, the infrastructures of urbanization. David Harvey, "Globalization and the 'Spatial Fix'," *Geographische Revue* 2 (2001): 23–30.

46. Liu Heng, "After the Pearl River Delta: Exporting the PRD—A View from the Ground," *Architectural Design* 78, no. 5 (2008), 78–81.
47. Rem Koolhaas, "The Generic City," in *S, M, L, XL*, eds. O.M.A., Rem Koolhaas, and Bruce Mau (New York: Monacelli Press, 1995), 1239–1264.
48. Edward W. Soja, *Postmetropolis: Critical Studies of Cities and Regions* (Oxford: Blackwell Publisher, 2000), 16.
49. Soja, 235–237. Soja was influenced by another urbanist, Manuel Castells, for his studies of megacity, postmetropolis, and globalization.
50. Soja, 250.
51. Soja, 9–10.
52. Henri Lefebvre, *The Production of Space*, trans. Donald Nicholson-Smith (Oxford, UK: Wiley-Blackwell, 1992).
53. "Perceived spaces" (or the spatial practice) directly involve the production and reproduction of the concrete forms and specific patterning of urbanism as a way of life. "Conceived spaces" (or the representation of spaces) refer to the "conceptualized or mental spaces of scientists, planners, urbanists, technocratic subdividers, and social engineers" who play a dominant role in space production through abstract ordering. In contrast, "lived spaces" relate to the representational spaces of inhabitants and users as well as artists and writers who "describe" it. Criticizing traditional discourses dominated by oppositions and antagonisms, Lefebvre insists that analysis of social spatiality must engage all three elements simultaneously, although they are autonomous processes with incoherence among them and even within themselves. Lefebvre, 33, 38–39.
54. Edward W. Soja, *Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places* (Oxford: Blackwell Publishers, 1996), 67.
55. Ernst Bloch, *The Utopian Function of Art and Literature, Selected Essays*, trans. Jack Zipes and Frank Mecklenburg (Cambridge, MA: MIT Press, 1987), 41.
56. Zhou Rong, "Leaving Utopian China," *Architectural Design* 78, no. 5 (Sep./Oct. 2008): 36–39.
57. Todd Saunders, "Ecology and Community Design: Lessons from Northern European Ecological Communities," in *Eco-city Dimensions: Healthy Communities, Healthy Planet*, ed. Mark Roseland (Gabriola Island, BC: New Society Publishers, 1997), 119.
58. Jeffrey Kipnis, "BEjiING 'n SeOUL by a Wise Cracker," in *Anywise*, ed. Cynthia C. Davidson (Cambridge, MA: MIT Press, 1996), 170.
59. Jini Kim Watson, *The New Asian City: Three-Dimensional Fictions of Space and Urban Form* (Minneapolis: University of Minnesota Press, 2011), 2.
60. David Harvey, "The New Urbanism and the Communitarian Trap: On Social Problems and the False Hope of Design," in *Sprawl and Suburbia: A Harvard Design Magazine Reader*, ed. William S. Saunders (Minneapolis: University of Minnesota Press, 2005), 25.
61. Harvey, ibid., 22.
62. Peiser and Forsyth, 3.