

# Evolution of Urban Planning and City Development of Shanghai: The Past Three Eras and the Present

## 2

### 2.1 Shanghai's Past Three Eras of Urbanisation

Shanghai is strategically positioned at the T-shaped junction of two major economic belts in China: the Eastern coast and the Yangtze River Valley. This advantageous location spurred the formation and growth of Shanghai, which quickly developed into a major financial centre within a century after the early 1840s when it was a small town. To date, Shanghai has already experienced three eras of urbanisation, each stage exhibiting distinct characteristics in terms of population, industry, role in national and regional financial systems, urban expansion and so on. These complex and rich historical processes have left their mark on the city; each one morphing and transforming the urban fabric of Shanghai.

#### 2.1.1 Shanghai in Modern Times: From a Small Town to a Metropolis 1843–1949

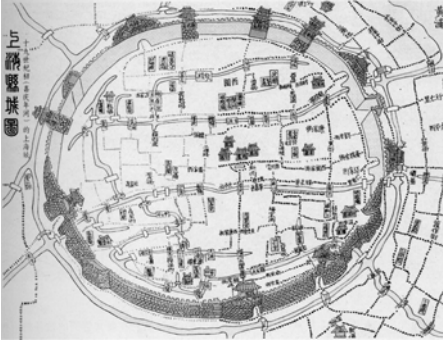
Shanghai's first era of urbanisation in modern times began in the 1840s with the forced establishment of the British Settlement and the French Concession in the area. By the 1920s–1930s (the so-called Golden Era of modern Shanghai), the city developed into the financial centre of the Far East.

When Shanghai opened up for development in 1843, the small town's territory was mainly made

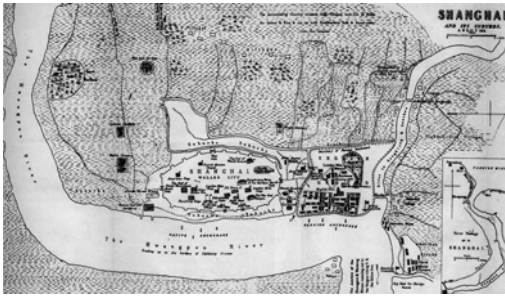
up of the area enclosed by its city walls and the wharf area along the Huangpu River. The town existing at that time is today's Lao-Cheng-Xiang or the traditional town, nearly 2 km<sup>2</sup> in size (Fig. 2.1). The first foreign settlements were planned north of this town along the river, with the intention to separate foreign settlements from Chinese areas. This separation formed the twin town structure of Shanghai half a century later (Figs. 2.2 and 2.3). When wars struck the areas around Shanghai,<sup>1</sup> an increasing number of Chinese fled to the foreign areas for protection and then settled there. The foreign settlement and concession continued to expand. Over time, modern Shanghai's development was based around the foreign settlement and concession; these areas eventually constitute the major part of the core of Shanghai city until today (Fig. 2.4).

Modern Shanghai's urbanisation process took place around the same time as major large cities in developed countries of the West. At the time, Shanghai's population, industry, scale of the city's economy and urban area were generally balanced and comparable to the then Western cities. Similarly, the problems faced by Western capitalist cities, such as slums, were also found in Shanghai. However, while the industrialisation of the West was stimulated by internal forces, Shanghai's first era of urbanisation took place

<sup>1</sup>There were many wars around Shanghai region in the 1850s and 1860s caused by rebellions such as Small Sword Society Rebellion (1853–1855) and Taiping Rebellion (1850–1864).



**Fig.2.1** Map of Shanghai Town of the early nineteenth century (Source: *The History of Shanghai Urban Planning* [1])



**Fig.2.2** Map of Shanghai 1853 (Source: Lanning and Couling [13])

under very special historical circumstances, mostly a result of external factors. This is the basic difference between the two.

### 2.1.2 The Shanghai of New China: A Primary Socialist Industrial City 1949–1990

The second era of urbanisation happened after New China (the People's Republic of China) was founded in 1949. As Shanghai bore a large part of the burden of rebuilding the country's economy, developing the manufacturing and industrial sectors was highly prioritised. Due to national and international circumstances during that historical period, the country had to sustain itself and develop in a self-sufficient manner. In response, Shanghai swiftly transformed from a financial centre into a comprehensive manufacturing hub. Under a highly centralised and planned economic system, the city developed to become China's

greatest manufacturing site, converting from a consumer city to a production city. For quite a long period, Shanghai contributed one-tenth to one-sixth of the total national revenue despite having only 1 % of the national population.<sup>2</sup>

Although China was influenced by the Soviet Union, causing the national proportion of light and heavy industrial manufacturing to be imbalanced, Shanghai maintained itself as a well-balanced comprehensive manufacturing centre. Apart from steel, textile, ship manufacturing, chemical and other major industries, Chinese people living during this era recall that most domestic goods such as bicycles, sewing machines, watches and radios were made in Shanghai. These were reliable products of an assured quality, and under the planned economy, demand for these goods always exceeded supply nationwide.

From 1949 to the late 1970s when the Cultural Revolution ended, Shanghai's population doubled from 6 million (in the early 1950s) to about 12 million (in 1982). Apart from natural growth, a large part of this growth was a result of the planned immigration of people to support the manufacturing industries. In terms of the physical environment, this era of urbanisation expanded the city through the construction of manufacturing districts at the fringes of the original city or modern Shanghai (Fig. 2.5). Strictly speaking, these manufacturing districts could not be considered urban areas – they were just large plots of factories with workers' living quarters built beside. However, the living quarters included amenities such as kindergartens, primary schools and healthcare facilities that were all provided by state-owned work units. During this socialist period in China, all forms of business and companies were state-owned and termed 'work units'. They had a strong socialist character, but did not truly form city-like urban areas. Important institutes such as universities and research

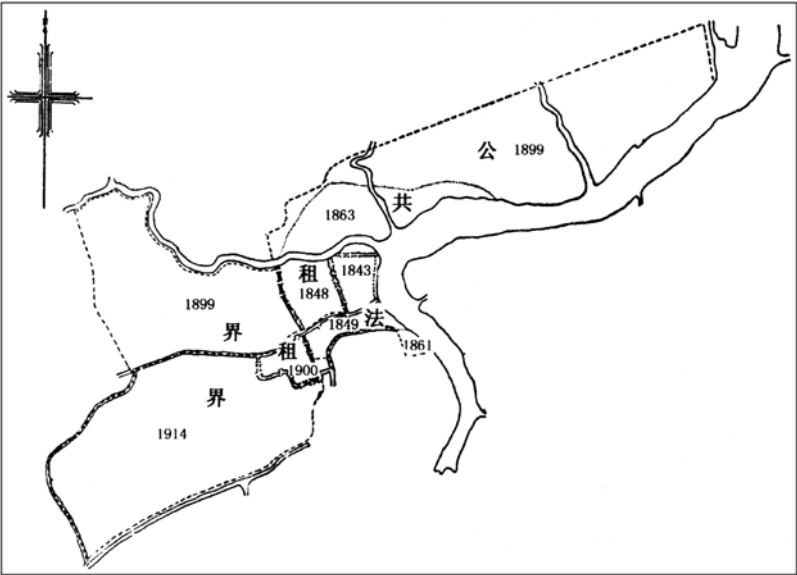
<sup>2</sup>Zhao Min (1993) Understanding the Metropolitan Shanghai. In: Zheng Shiling (ed) *The Research on Human Settlements in Shanghai*. Tongji University Press, Shanghai, pp. 19–50.



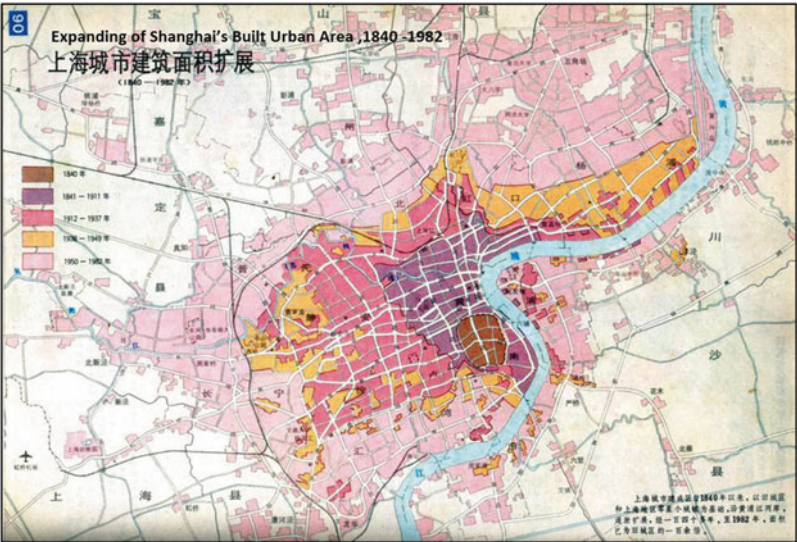
**Fig. 2.3** Map of Shanghai 1901 (Source: Shanghai History Museum)

institutes also took the form of a production site or work unit and its accompanying living quarter. Every facility required for daily life was wholly provided by state-run work units. Portions of Shanghai built during this time were similar to other industrial cities that China developed in the 1950s–1960s, such as Daqing. The planned economic model, together

with the rationing system for daily provisions, the Household Registration System or *Hukou* in Chinese and the system of distributing and assigning jobs – these forces distinctively shaped that era, as well as the city areas built during that time. However, this wave of expansion did not have a great impact on Shanghai's overall urban spatial framework. Despite



**Fig. 2.4** Diagram of expanding process of Shanghai settlements (Source: *A History of Shanghai Architecture 1840–1949*, Second Edition, 2008)



**Fig. 2.5** Expanding of Shanghai’s built urban area from 1840 to 1982 (Source: Shanghai Planning and Land Resources Administration Bureau)

greatly increasing population, manufacturing and production levels, the real urban area did not experience significant physical growth. Instead, key areas in the central part of the city

already developed during Shanghai’s modern era grew in intensity of use. For example, Nanjing Road during this time became a national famous shopping street, attracting



thousands of visitors from all countries, forcing it to cope with overcrowding on a daily basis.

At the early stage of the China Reform and Opening, from 1978 to 1990, development in the Pearl River Delta region centred on the new city of Shenzhen, which became the test-bed for the nation's reform and opening ideas, while Shanghai took the back seat in China's economic reform plan at that period. At Shanghai during the ten some years, since new economic sectors had taken over the old manufacturing sectors, the new and old economic systems experienced much friction. Although Shanghai's economic growth had always been strong, its rate of growth was lagging behind that of the Pearl River region at that time, so Shanghai's economic importance in the country fell. Consequently, during this period, there was no significant change in the urban framework of Shanghai.

As for physical urban development, contrary to Shanghai's contribution to the country, the Shanghainese quality of life kept falling. Up till the early 1990s, Shanghai's average living space per capita, green space per capita, public transport situation and other key indexes of living conditions ranked among the country's worst. It was also during this prolonged period of declining living conditions that Linong<sup>3</sup> areas and other historical areas became extremely densely populated, giving such places a slum image.

### 2.1.3 Rebuilding a World-Class City 1991–2010

China's open door policy forms the backdrop of Shanghai's third era of urbanisation, which took place in line with the larger context of China's urbanisation in this period. In 1991, Shanghai's urban development entered an era of great change. This is according to the Chinese central government's strategy and policy that 'with the development and opening of Shanghai Pudong as the spur, the cities along the Yangtze River will

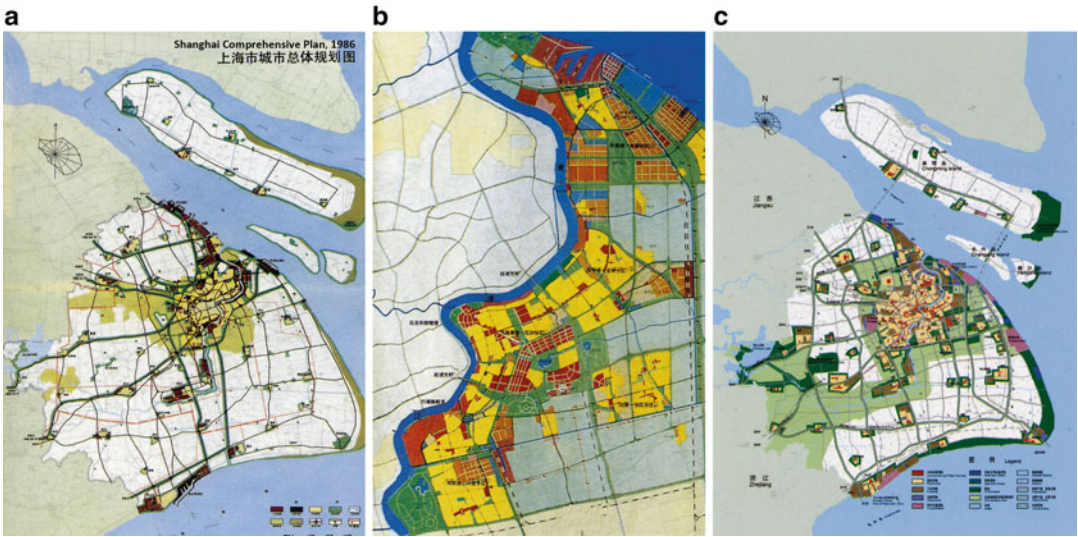
be further opened up, in order to shape Shanghai as one of the international economic, finance, and trade centres and thus bring along new leaps of regional economy in the Yangtze River Delta and the whole Yangtze River Valley',<sup>4</sup> which led to the development and opening of Shanghai Pudong and its official launch in 1991.

Shanghai's population has risen to 23 million in 2011, almost doubling in the past 30 years, while the built area of the city increased from 1,000 to 2,860 km<sup>2</sup>. Under the *Hukou* system of socialist China, rights to education, health care and other public services in a city were only available to those who had been registered in the locality. However, of the 23 million people live in Shanghai today, only 13.4 million are registered in the *Hukou* system. That is a little increase compared to 30 years ago, when 12 million were registered as such in Shanghai. Hence, about 10 million people today do not enjoy the same privileges as registered Shanghai residents. As such, Shanghai's third era of urbanisation is characterised by a spatial and physical transformation of the city, happening before the urbanisation of the population – a complete reversal of the second era.

In the 1990s, two crucial policies provided the great driving force for the rapid urbanisation of the entire country. The first policy modified the allocation of central and local government tax revenue, changing the role of central government from distribution of the production plan to large-scale (macro-economic) planning and allocating construction funds to the local governments. This gave more financial and autonomous decision-making power to local governments, creating the conditions for city-initiated development of infrastructure and city-oriented management and operation for various cities. The second major change was the implementation of land leasing and housing reform in the 1990s. Converting the previous socialist welfare housing system into a real estate market model contributed to the extraordinary speed of urban development. In the 1980s, where Shanghai's highly challenging

<sup>3</sup>Linong is a well-developed urban housing typology at Shanghai in China's modern history. Refer to Chap. 3 Case Study 03 for more details on this typology.

<sup>4</sup>Cited from *The Comprehensive Plan of Shanghai 1999–2020*.



**Fig. 2.6** Shanghai Comprehensive Plans published in the 1980s and 1990s. (a) Shanghai Comprehensive Plan, 1986; (b) The Comprehensive Plan of Pudong New District,

1991; (c) Shanghai Comprehensive Plan 1999–2020, 1999 (Source: Shanghai Planning and Land Resources Administration Bureau)

housing problem almost wholly relied on government funding, it was now replaced by the rapid development of the real estate market. The government now had an adequate budget for the construction of urban infrastructure. The enormous force of real estate development swept across the city and tackled issues of urban renewal in older areas of the city as well.

Shanghai thus underwent a fundamental change within the 10-year span of the 1990s. The rapid momentum of Shanghai's growth since Pudong Development began in 1991 has continued into the twenty-first century, with the Shanghai World EXPO in 2010, continuing to attract global attention. On the one hand, this change brought about a rapid improvement in basic urban infrastructure and a substantial improvement in the living conditions of the public. Shanghai's living space per capita rose from 6.9 m<sup>2</sup> in 1992 to 13.1 m<sup>2</sup> in 2002. On the other hand, such rapid development has also raised questions and criticism of various aspects of the city's history, culture and social problems.

*The Comprehensive Plan of Pudong New District* published in 1991 expanded and almost doubled Shanghai's urban territory across the Huangpu River. Crossing the river with several bridges and tunnels and plans for Lujiazui Central Business District (CBD), Huamu Civic Centre, manufacturing and industrial zones, Century Avenue, major iconic public buildings and a series of building initiatives signalled Pudong Development in full force. A new Pudong presented itself before everyone at the turn of the century, after 10 years of rapid development under the slogan 'A new look every year, an astonishing change every three years'. This was also the most evident symbol of Shanghai's success in the 1990s (Figs. 2.6, 2.7, and 2.8).

The rapid development of Shanghai in the 1990s brought it back to the forefront of China's leading cities. Its urban patterns, urban planning and development practices, appropriate or otherwise, have inevitably become a role model for other cities throughout China. Pudong's



**Fig. 2.7** The image of Shanghai Pudong Lujiazui CBD in 2003 (Source: Shanghai Planning and Land Resources Administration Bureau)



**Fig. 2.8** The image of Shanghai central area in 2003 (Source: Shanghai Planning and Land Resources Administration Bureau)

Lujiazui CBD and Century Avenue, Nanjing Road Pedestrian Commercial Street, Shanghai Xintiandi urban redevelopment project, large green spaces and parks, metros, municipal

libraries, grand theatres and other building initiatives in Shanghai have been emulated by other cities, but the consequences are undoubtedly an issue worth investigating.

## 2.2 Shanghai Today: Transitioning to the New Century and Its Challenges

### 2.2.1 Urbanising Suburbs and Re-urbanising the Central City

Shanghai entered a new era of transformational development after the year 2000. *The Comprehensive Plan of Shanghai 1999–2020* already visibly reflects the intention to transform in two areas. Firstly, there were plans for the urbanisation of the suburbs outside the Central City, and secondly, the Central City was aiming to achieve world city standards with systematic urban conservation and urban renewal initiatives in place to improve the quality of the city of Shanghai. In 2001, Shanghai embarked on a search for new planning ideas for suburb urbanisation and waterfront redevelopment in the Central City through international design competitions. This signalled the beginning of a new era, just like the initial development of Pudong's Lujiazui CBD and Century Avenue through international design competitions held a decade ago.

Simply referred to as the *1-9-6-6 Plan*, the *Shanghai Comprehensive Plan 1999–2020* clearly divided Shanghai full territory's city–town system into four hierarchies – 1 Central City, 9 satellite cities, about 60 central towns and about 600 central villages, covering all administrative areas. Apart from the Central City or the City of Shanghai, this opened up a new topic for research on the implementation of a suitable development model for the new cities, central towns and central villages. From 2001 to 2005, Shanghai had undertaken what is widely referred to as '1 (new) City and 9 (new) Town' experimental projects, an initiative by Shanghai Municipality to explore models for urbanising its suburbs. However, various external and internal factors, especially the hype of the media, misled the attention of the general public and professionals to focus on issues of 'style', rather than the originally substantive issue of finding an appropriate urban pattern. Based on such experience, realising the physical

construction and developing supporting industries, while simultaneously providing a comprehensive set of facilities for urban life for the public in new areas of urban expansion, is a huge challenge for Shanghai. Post-war European new towns had also seldom been able to achieve this simultaneous development, but given the size of the urbanising population in Shanghai and other Chinese cities, this is a pressing problem that must find an effective solution.

The re-urbanising strategy of central Shanghai (the Central City) is also evident. With Shanghai stepping into the twenty-first century, the Central City has embarked on its overall waterfront redevelopment plan (which led to the location of the 2010 EXPO site to be on the banks of the Huangpu River), historical conservation programme, creative industry-led adaptive reuse of old industrial spaces and a series of initiatives to develop relevant 'software' needed, from basic infrastructure to city administration, in preparation for the 2010 Shanghai EXPO. These key initiatives will shape Shanghai's future and also lead to new discussions about planning and design.

The urbanisation of suburbs and the urban renewal of the Central City are closely interlinked and interdependent. The Central City needs to improve in quality for the development of the tertiary industry, and the outskirts need to promote a transition from a traditional agriculture-based economic model to a modern industrial one. The successful formation of the new city or town will rely on the new industry, carrying out intensive development for more efficient use of land, so that more land is left for modern agriculture and environmental protection. The *Shanghai Comprehensive Plan 1999–2020* reflects the strategic thinking of the transformation of Shanghai's economy, urban system, overall resource and space management. Generally, these strategies are indeed very appropriate for Shanghai.

### 2.2.2 Achievements and Problems from the Near Past

In the two decades between the start of Pudong Development in 1991 and Shanghai EXPO in



2010, the unprecedented rapid and large-scale urbanisation which Shanghai underwent has many valuable learning points. Firstly, this kind of strong top-down, controlled and planned urbanisation avoided many of the problems associated with autonomous rapid urbanisation, such as a lack of basic infrastructure, large number of squatter settlements, poor environmental quality, extreme contrast in the quality of different areas of the city and so on, which are common in other developing countries. Secondly, government authority and the economic power it has have been reasonably utilised to drive the development of basic infrastructure, ensuring it is well in place first, so as to guarantee a basic standard for the public environment. This has been difficult to achieve in many countries.

At the same time, China's current urbanisation phase has its own set of problems. The most prominent one among them is the issue of land use efficiency. Before the 1980s, Shanghai's urban land per capita was far below 100 m<sup>2</sup>, which is quite low compared with normal conditions; it has now risen above 120 m<sup>2</sup>. Given Shanghai's population size and land resources available, exceeding the suitable per capita index means that much land resources are being wasted. Not counting the Yangtze River area and Chongming Island, Shanghai's land area is about 5,000 km<sup>2</sup>. Its current built-up area already exceeds half, and such a fact demands great attention. Hong Kong's land area is 1,100 km<sup>2</sup>, but due to its topography and other geographical limitations, the built area only covers 25 %. Singapore's land area is only 700 km<sup>2</sup>, but planning restrictions have limited the built area to one-third of that. These two cities are comparable to Shanghai in terms of their economy, but their land use efficiency is starkly higher. Shanghai's inefficient land use leads to the second serious problem – ecological and environmental sustainability. In the 1990s, there had been a plan to divide the overall Shanghai land into thirds – one-third for urban development, one-third for agriculture and one-third for eco-land and forests. Today, this is already impossible. The third problem is about culture, including both historical and humanism concerns. In the past decade,

conservation of registered historical areas and historical buildings has made much progress, enhancing the general awareness of the city's historical and cultural value and need for protection. However, there is still insufficient awareness about the loss of an urban spatial scale. This is due to the disproportionately large scale of urban developments and spaces built in recent years, resulting in the loss of a human scale and a sense of humanity about the city.

### 2.2.3 A Time-Limited Transition with Rapid and Slow Changes

Shanghai's urbanisation ratio has reached near 90 %, and population increased to 23 million in 2012. Meanwhile, the land resources for city expansion allowed by the master plan have been almost used up; key infrastructure networks of highways, railway and metro lines and the city–town system have been settled mostly. The overall framework of Shanghai full territory has almost fixed. As other average Chinese cities need 15–20 more years to complete the urbanisation, Shanghai has a time window to refine it in terms of city's function, efficiency and people's life quality. There is no much room for the city's large-scale physical changes; actions in next steps for (re)urbanisation must be shifted to a new path.

Greater challenges lie in Shanghai's transitional development today – there is an inherent contradiction between the rapid pace of urban development and the other changes that must take place slowly. On the one hand, the physical construction and changes in urban fabric and image of the city happen quickly. On the other hand, the corresponding non-physical systems, laws and city administration patterns change gradually and are not always able to match the pace of physical change. In fact, the evolution of Shanghai's city governance and operation including the updates of urban planning and administrative regulations can already be considered fast. For example, China's first urban planning law *The People's Republic of China Urban Planning Law* was only first implemented

in 1990. Shanghai followed quickly with the *Shanghai Urban Planning Ordinance* in 1995, *Shanghai Urban Planning Administrative and Technical Code* in 1994, *Shanghai Historical Building Conservation Code* in 1991 and other important codes. Shanghai's comprehensive plan has also undergone three major revisions in 1986, 1991 and 1999 and is currently preparing for the next revision. Yet in this age where urban development is advancing so swiftly, improvements in city governing and administrative systems still cannot match actual development and construction speeds.

While Shanghai develops to become a global financial centre, strengthening its competitiveness, it must also solve issues like redeveloping the old parts of the city, improving the quality of life for average income Shanghai citizens, increasing education and healthcare resources and other areas that are the city's debts due to historical reasons. Without economic growth, it will be nearly impossible to tackle these issues. The challenge of this transitional stage is how to balance these various aspects. In seeking long-term development, Shanghai's position as a global financial centre must be secured, and in order to do so, it must continually attract and retain a large pool of human capital. Depending on the longest bridge, tallest tower, grandest event and so on will no longer work enough as needed. In this sense, Shanghai has reached a new juncture.

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