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Urban Planning and Mega-Event Projects: Lessons from Expo 2010, Shanghai

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Abstract

With the capitalist transformation from Fordist-Keynesianism to neoliberalism, mega-events such as Olympic Games and World Exposition have increasingly been incorporated into urban development plan to boost urban renewal. Seeking the role of mega-event in urban transformation and its related effects have practical significance as mega-event movements have become a worldwide phenomenon. Although the profile of world fairs is reduced and does not have the international impacts that they used to have, Shanghai Expo 2010, the first Expo ever held in a developing country is pinned hope on as the “Turn to Save the World Expo” and is unusually ambitious to bring opportunities in urban transformation. While much attention has been paid to how mega-events can be used in tourism development in previous literature, this research links mega-event to urban development. Specifically, it reviews planning history before Expo 2010, addresses how a mega-event is integrated into city’s overall transformation strategy and what possible challenges a mega-event strategy may encounter related to the ultimate goal of urban transformation. It finds that political added value of mega-events empowers Shanghai to advance its urban agenda and the role of urban planner is vital to deliver a sustainable mega-event.

Keywords: mega-events, urban planning, urban renewal, Expo 2010, Shanghai

1. Mega-event projects, urban renewal, and urban planning

“The ‘urban’ has a specific meaning under the capitalist mode of production which cannot be carried over without a radical transformation of meaning (and of reality) into other social contexts” [1].

Mega-event projects have evolved different in the turn of the 1970s economic recession in capitalist society to build place competitiveness for economic growth [2–4]. Mega-events such

as Olympic Games and World Exposition have increasingly been incorporated into urban development plan to help urban transformation [5, 6]. Browsing the past events, their nature as sport events diminished, whereas their relation to cities is much fortified. This is largely attributed to the transition of Fordist-Keynesian policy to neoliberal economic strategy that entails a flexible way of capital accumulation [7]. A new urban spatial order is required to adapt to the changes such as the restructuring of urban form from monocentric city to polycentric mega-city region, the economic transition to service industry and leisure consumption, and the resulted decentralization of population from central (or inner) city to suburb. This is in line with the transition of urban renewal from slum-clearance and infrastructure-based strategy in the 1950s to place competitiveness building in the 1980s [8]. In neoliberal urbanism, megaprojects with symbolic and substantial power in economic growth are unmissable to catalyze urban agenda. The 2002 Manchester Commonwealth Games was vigorously linked with urban regeneration strategy [9]; the 1998 Lisbon Expo was designed to revitalize a rundown industrial harbourside and create a new urban center [10]; and the 2012 London Olympic Games reshaped east London to revive the dilapidated area [11]. Indeed, more and more cities launched mega-events. Under such circumstances, seeking the role of mega-event in urban transformation of those cities and its related effects will then have practical significance. The efforts made by Shanghai municipal government in the planning practice of the World Exposition 2010 provides an important lesson, not only because the effective delivery of the event realizes city vision but also because the issues it confronted are universe and thus noteworthy. Although the profile of world fairs is reduced and does not have the international impacts that they used to have [12], Shanghai Expo 2010, the first Expo ever held in a developing country, is pinned hope on as the “Turn to Save the World Expo” and is unusually ambitious to bring opportunities in urban transformation. The event was strategically integrated into the overall urban development agenda and facilitated the implementation of Shanghai master plan. By and large, Expo 2010 propelled Shanghai’s overall urban development almost 10 years ahead of schedule. While much attention has been paid to how mega-events can be used in tourism development in previous literature [13, 14], this paper, using Shanghai Expo as a case, focuses on the role of mega-events as strategic planning tools in urban transformation. Specifically, it reviews planning history before Expo 2010, addresses how a mega-event is integrated into city’s overall transformation strategy and what possible challenges a mega-event strategy may encounter related to the ultimate goal of urban transformation.

2. The evolving Shanghai master plans: planning history before Expo 2010

Master plan exemplifies the orientation of central government and the intervention of municipal government on urban spatial development. Regulated by political power, flagship projects or important events promote urban development in varied stage. This section reviews previous master plans of Shanghai before the launch of Expo 2010, unfolding a planning history to contextualize the event. Significance of a stable political environment for hosting mega-events is highlighted in evolution of plans. **Table 1** summarizes all the previous master plans of Shanghai and significant projects it launched.

Name of the plan	Year	Planning ideology and city positioning	Important urban projects
The Greater Shanghai Plan	1929–1937	“Locate World Port in Shanghai” Sun Yat-Sen proposed in 1922	Municipal buildings, libraries, museums and the first phase of Qiujiang Dock project
Metropolitan Plan of Great Shanghai	The first draft, 1946 The second draft, 1948 The third draft, 1949	Organic decentralization, express ways and regional planning; Shanghai is a port city, one of the largest industrial, commercial and financial centers in China—The third edition modified the first two draft	
Overall planning of Shanghai	1953	By using the method of socialist city transformation, reasonably distribute housing, factories, railways, transport and storage, so as to lower population density of central area; Socialist city	Taopu Industrial Zone, Pudong Park, Sino-Soviet Friendship Building
Shanghai Master Plan in “Second Five Year Plan”	1956–1967	Start suburban industrial areas and outer suburban satellite towns, to form a relatively independent but organic correlated city groups; to make Shanghai become one of the world’s most beautiful cities in production, culture, science and art	Industrial parks, 10 suburban industrial zones, and satellite towns
Master plan of Shanghai	1982–1995	One of economic, technological, cultural centers in China, an international port city	Pudong New Area, Nanpu, Yangpu Bridge, the Oriental Pearl, People’s Square
Master Plan of Shanghai Metro-Region	1999–2020	An international world city, economic, financial, trade and shipping	CBD, traffic hubs, historic and cultural cities, the 2010 Shanghai World Expo, Shanghai Disneyland Park

Source: Compiled by author.

Table 1. Previous master plans of Shanghai and important projects.

The 1929 Great Shanghai Plan (1929–1937) formulated by Kuomintang (KMT) officially turned Shanghai into an independent urban administrative division and incorporated the city into central-policy-making agenda. However, unstable political ambience because of the 1937 incident of August 13 aborted the plan. Reaching its historical peak, Shanghai stood on the threshold of an international metropolis in Far East countries of Eastern Hemisphere and became a foreign trade, economic, financial and cultural center in China. Thereafter, Shanghai fell with the outbreak of Sino-Japanese War in 1937, when it embargoed and deviated from the track of “international metropolis.” After the victory of Sino-Japanese War, Shanghai municipal government set out to the Metropolitan Plan of Great Shanghai (1946–1949), and explicitly claimed it a port city, a national industrial and commercial center. The three drafts for the Metropolitan Plan reveal Shanghai ambition but were not implemented. It introduced advanced ideas in urban planning from the West, such as “organic decentralization,” “express way” and “regional planning,” yet the development potential of Pudong is overlooked.

From 1949 to 1980, Shanghai experienced low ebb in urban development under the planned economy. Planned as a socialist city in overall plan (1953) and an endogenous industrial city in master plan during the “Second Five Year Plan” (1956–1967), Shanghai was the most important economic and industrial city, financially buttressing central state. Series of suburban industrial zones were approved under the guideline of “industrial hub” in China, with iconic projects such as the Sino-Soviet Friendship Building built under the ideology of socialist city. Most urban projects were promoted for industrial development. The 1959 plan even proposed to reduce new investment, maximize the use of city’s primitive accumulation, and achieve maximal output of the cities. In stark contrast is that other Asian cities such as Hong Kong, Tokyo and Singapore actively engaged in globalization, shaped entrepreneurial urban landscape and attracted foreign investment. Shanghai fell far behind in a planned economy.

The 1978 reform was remarkable to revive Shanghai master plan and spatial development. In the 1982 version of Shanghai master plan (1982–1995), entrepreneurial city strategy was advised: Shanghai was not only a national economic center, but also an international port city. Numerous flagship projects were launched and produced far-reaching impacts. The opening and development of Pudong was dazzling, with Lu Jiazui financial and trade zone justifiable as large-scale flagship development in Shanghai. An entrepreneurial urban image came into being through series of landmarks: the Oriental Pearl TV Tower, Jin Mao Building, and Shanghai World Financial Center are world known and became urban tourist attractions years later. Shanghai Bund, Nanjing Road Business Center, People’s Square, Shiliupu and other urban renewal programs were carried out to reshape central area. The city is catching up with world metropolis with varied significant urban events and flagship programs. Meanwhile, tax sharing preferential policy further enhanced the financial autonomy of Shanghai and enriched local developmental funds.

In Master Plan of Shanghai Metro-Region (1999–2020), world city and “Four Centers,” strategies were proposed under the central committee of the communist party. The plan aims to build Shanghai an international economic center, an aviation and shipping center, to enhance its role as a two-fan hub that opens to the world and connects the domestic. Shanghai has ascended to the fierce inter-city competition worldwide. Expo 2010 initiated by central state as a national project has transited to and integrated into Shanghai’s entrepreneurial strategies for local competitive edge. At the municipal level, Expo 2010 is not only part of a general promotion of central city to create a new urban center, but also designed to regenerate a declined industrial dockland along Huangpu riverside. Therefore, the interlinked-strategic components justify the 2010 World Fair not only a mega-event but also a large-scale flagship renewal development in Shanghai. The latest Shanghai Master Plan (2017–2035) envisaged a functional core area connecting Expo-Qiantan-Xuhui waterfront, serving its target to build Shanghai a cultural metropolis.

3. Transforming Shanghai via Expo 2010: planning context for mega-event led urban renewal

As a mega-event flagship project, Shanghai Expo is a dual strategy not only concretizing event function but also propelling urban transformation [15, 16]. For Shanghai municipal government, Expo’s urban-related impacts are far reaching to shape Shanghai’s track towards global

metropolis. This mega-event project is strategically incorporated into Shanghai's discourse of urban renewal which underscores the transition of manufacturing to service industries and dilapidated residence to luxury gated communities, so as to accumulate urban wealth at a faster rate. Manufacture industry plays an important role in Shanghai's economic growth and has occupied a great proportion of land in central city. The proportion of added value of secondary industry has accounted for more than 50% for a long time and had stabilized at 50% from 1999 to 2003. The concern is that in metropolises at apex of urban hierarchy such as New York, London, and Tokyo, ratio of secondary industry is much lower with a high proportion of tertiary industry.¹ Similar comparison of population density in central area also suggests that Shanghai has a higher density than Tokyo, and much higher than New York and London.² As policy makers in aspiring cities, particularly in Asian cities, are enthusiastically addicting to the race to the summit of "world-class" cities by intercity referencing and rivalry [17], they habitually juxtapose Shanghai and top global cities according to the quantitative index.

In the narrative of Shanghai master plan (1999–2020), the site of Expo 2010 is considered a catalyst to optimize the structure of metropolis where socio-demography and industries are unevenly distributed. The change of site selection from Chuansha (now the Disneyland location) to Huangpu Riverside well captures the intention of Shanghai municipal government

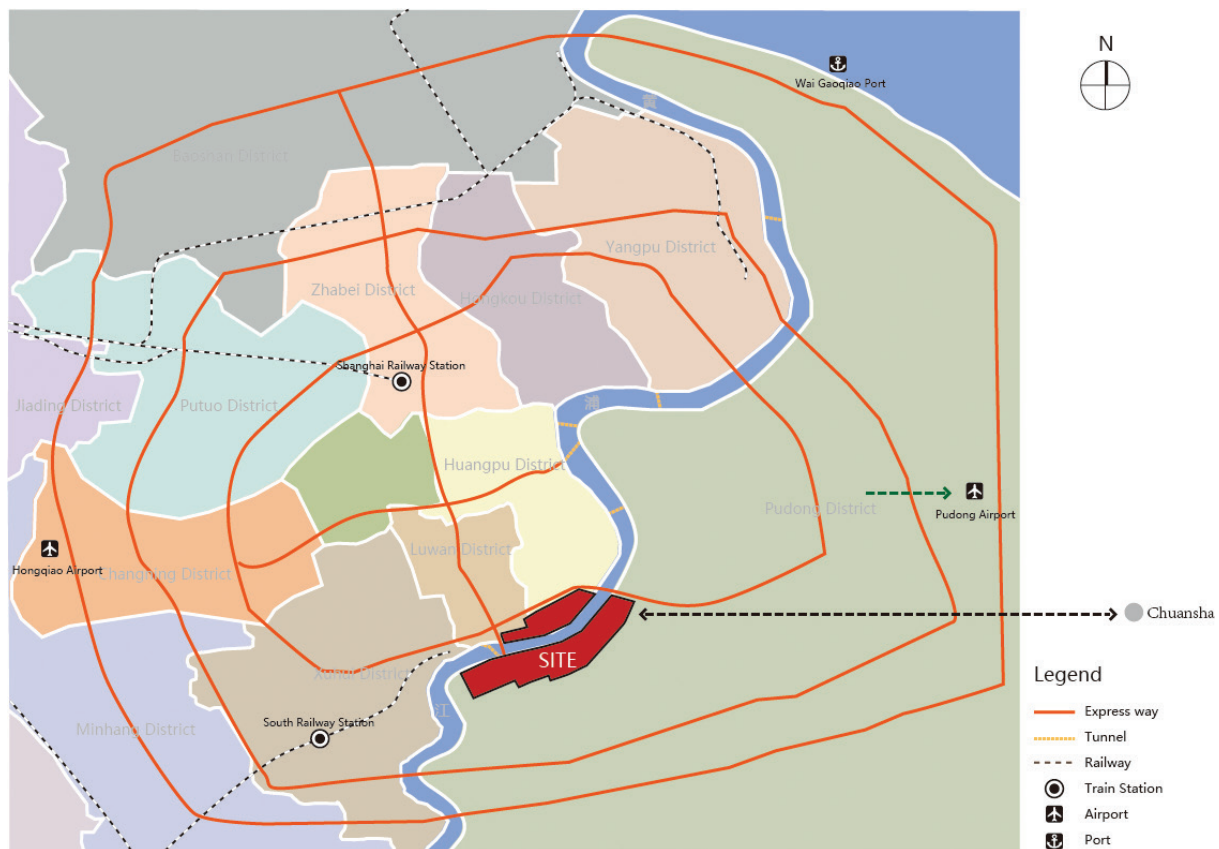


Figure 1. Site selection of shanghai Expo 2010: from Chuansha to Nanpu and Lupu. Source: Author.

¹Tertiary industrial proportion in New York is 86.7%, London 85%, and Tokyo 72.7%.

²Shanghai's population density in central area is 15,100 people/km, while in Tokyo, New York, and London, the number is 13,500, 10,300, and 9100.

(**Figure 1**). In the initial, Chuansha located in the suburb of Pudong was proposed to facilitate urban expansion. But the site on the edge of central area along the Huangpu Riverside was finally chosen because of its particular significance for urban renewal. Shanghai as the birthplace of China's modern industry has left fertile traditional industrial resources. The industrial dock with dense area of factories along the southern extension of Huangpu River was once intractable for local bureau, not only because it undermines entrepreneurial image hindering investment but also because it inlaid involute interests that postpone the relocation and demolition. The site of Expo 2010 was selected in between Nanpu and Lupu Bridge on the Huangpu riverside, which aimed to promote urban renewal in central area by event-led relocation. Apparently, the municipal government determined to strategize Expo site to unravel Shanghai's development dilemmas (**Figure 2**). A tiny part of the site is in Puxi, whereas the major part is in Pudong. The entire planned area is 6.68 km², with 5.28 km² construction area and 1.4 km² preserved residential areas. As informed by an interviewee,³ 26.2% of all the land use was residential housing, and 62% were industries and warehouses. The old industrial base not only represents the epitome of China's footprints to modernization, but also tracks the labyrinthian post-industrial trajectory of Shanghai.

4. Shanghai Expo 2010: a mega-event project in action

4.1. Transforming landscape and assisting shaping polycentric urban form

After Shanghai successfully won the bid for Expo in Monte Carlo, Monaco, the municipal government endowed the event with political merits and spared no effort to use Expo 2010 as an opportunity to beautify city image and build city competitiveness. In this case, the rundown industrial site with great potential because of its advantageous location in central city would largely boost Shanghai's world city pathway. Thus, we have grounds to believe that the Expo project is representative as an urban planning tool for urban transformation. Iconography of Expo site displays a transition of landscape from a messy waterfront industrial area to a modern well-designed urban space (**Figures 2 and 3**). It creates a distinctive urban fabric that an entrepreneurial landscape apt to capital accumulation takes shape in central Shanghai. Despite on the edge of inner expressway, the southern extension area of Huangpu River is hard to capture attention before the Expo project. The remarkable group of landmarks, carefully designed with distinctive architectural style and public spaces, are eye-catching and significant legacies assimilating World Fair cultural into the local context.

At the city level, the Expo project helps shape the polycentric urban form. Master plan of Shanghai (1999–2020) proposed a “multi-axis, multi-layer and multi-core” overall urban layout. However, this strategy was yet to be effectively delivered, not only because the downtown area remains immature but also because infrastructure and transportation system connecting new towns and the central city are hysteretic. A mature and dynamic urban core is a solid base for a polycentric urban form and a sound transportation system connecting new towns and central city is a prerequisite guaranteeing polycentricity strategy delivery. In this regard,

³Interview with a senior urban planner involved in master plan of Expo Park, June, 2010, Shanghai.



Figure 2. The panorama of Expo site in 2004 and 2010. Source: photo taken in 2004, 2010.



Figure 3. Changing urban landscape in Expo site, April 2004, and April 2010. Source: Google Earth, 2004, 2010; edited by author.

Expo 2010 plays a large role in consolidating urban core and propelling rapid transit system construction in Shanghai (**Figure 4**). In the 1990s, Pudong New Area was a leaping development across Huangpu River. The Expo site further expands southward along the Huangpu River to squeeze out low value-added land in downtown edge, facilitating the formation of a multi-functional city center as part of Shanghai's polycentricity strategy. To this end, Expo 2010 is not only a short-term event but also a long-term urban vision.

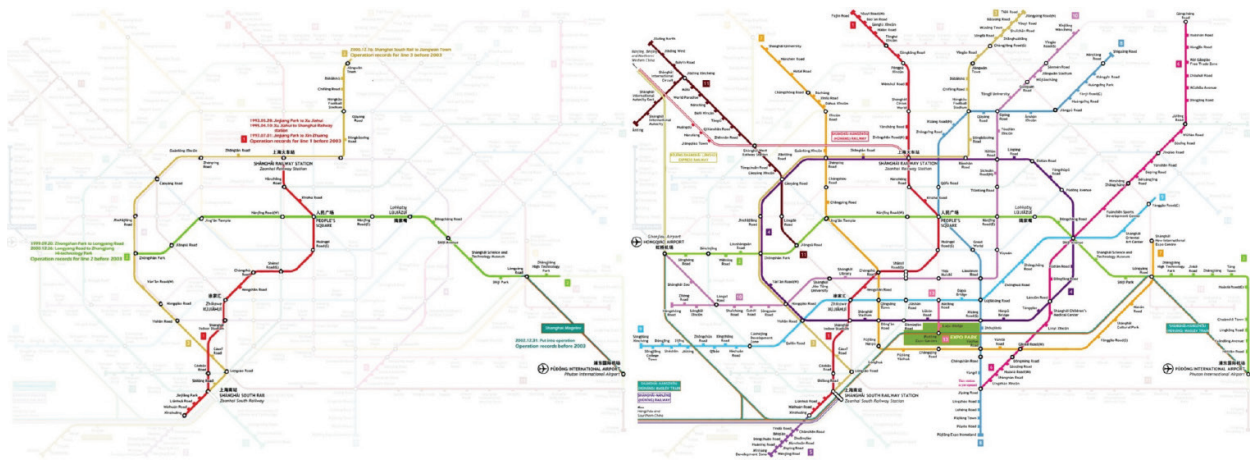


Figure 4. Shanghai Metro Network (2002, 2010); source: www.shmetro.com; edited by author.

Shanghai's metro system forms the initial “cross + ring” (“申”) structure by three metro lines (lines 1, 2 and 3) in 1993 and a maglev line in 2002. Almost in the same period, Shanghai successfully won the bid for Expo 2010, accelerating the metro network construction in the subsequent 8 years. A metro network for an international metropolis formed before Expo 2010 with total length of 410 km (at the end of June 30, 2010). Four lines and three extension lines operated beforehand. The shadows in **Table 2** indicate that more than half of the completed construction of metro lines was facilitated by Expo 2010. The rapid transit system promoted by Expo 2010 facilitates suburban new town development. Shanghai's new town was firstly proposed in 1959 to decentralize population and upgrade industries in central city. The “one city, nine towns” urban system in 1999 was designed to attract people to settle down in cultural-themed new towns. In the “Eleventh Five Year Plan,” Songjiang, Lingang and Jiading-Anting are three strategically superior new towns. Nevertheless, these new towns were unattractive as infrastructures and public transportations remained in shortage. The Expo 2010 catalyzes new town development through TOD model: metro line 9 operated to benefit Songjiang and line 11 promoted Jiading and Lingang. Line 11 (No. 21) extended southward in 2012, when the two stations in Lingang New Town opened to improve accessibility to central Shanghai.

4.2. Upgrading industries and decentralizing population

Expo 2010 greatly facilitates economic transition from manufacturing to service and leisure consumption in Shanghai. There are three layers of Shanghai's industrial space. The first layer, urban area within the inner expressway, aims at developing tertiary industry; the second layer, area between inner and outer expressway, is planned to develop high-tech, high value-added and nonpolluted industry and to improve existing industrial park; the third layer, area outside outer expressway, is planned to develop the primary and secondary industry. This “tertiary – secondary – primary” structure spans from central city to out suburb. The central city is entrusted the important task to “suppress the second industry and develop the third industry.” A major obstacle in the industrial adjustment is the large number of traditional manufacture industries that occupied large amount of land. The proportion of tertiary industry in the primary, secondary and tertiary industries in GDP has accounted for 50% since 1999 and almost unchanged until 2003 before Expo project was officially launched.

No.	Operation records
1	1995.04.10: Jinjiang Park to Shanghai Railway Station; 1997.07.01/2004.12.28/2007.12.29: Fujin Rd. to Xinzhuang
2	1999.10.20–2006.12.30: Zhangjiang Hi-tech Park to Song Hong Rd.; 2010.02.24/2010.03.16/2010.04.08: Xujing Dong to Pudong International Airport
3	2000.12.26/2006.12.18: Shanghai South Rail to North Jiangyang Rd.
4	2003.11.25: Xinzhuang to Minhang Development Zone
5	2005.12.31: “C” trial operation; 2007.12.29: link operations
6	2007.12.29: Gangcheng Rd. to South Lingyan Rd.
7	2007.12.29/2009.07.05: Shiguang Rd. to Pujiang Expo Home
8	2007.12.29/2009.12.31: Songjiang New Town to Middle Yanggao Rd.
9	2009.12.05: Shanghai University to Huamu Rd.
10	2009.12.31/2010.03.29: North Jiading to Jiangsu Rd. / Anting to Jiading New Town (branch)
11	2010.04.10: Xin Jiangwan Cheng to Hangzhong Rd.
12	2010.05.01–2010.10.31: Temporary open three stations

Shadow for Expo facilitated ones. Source: www.shmetro.com; edited by author.

Table 2. Operation records for Shanghai Metro until June 30, 2010.

Industrial relocation preparing Expo is crucial for economic and industrial upgrade in the southern extension of Huangpu River, a valuable piece of land. The Expo site is composed of Pudong and Puxi along the Huangpu River. The Puxi area mainly consisted of mix-use of residential housing and industries. Industrial units such as Jiangnan Shipyard, Qiuxin Shipyard, Nanshi Waterworks, Nanshi Power Station and Jianshe Machine Factory were located in the south of Gaoxiong-Bansongyuan Road, and housing-industrial mix land in the north. The Pudong area mainly consisted of industries and warehouse, including Shanghai Solvent Factory, the Third Shanghai Steel Factory, Shanghai Zhenghua Port Machinery Manufacturing Factory, Nanpu Ports Corporation, and Zhoujiadu Shipyard. Around 62% of the land were industries and warehouse, not only presenting an epitome of China’s footprints to modernization but also tracking record on a tough post-industrial trajectory of Shanghai. Transiting to a service economy, manufactures imprinting China’s modernization and rejuvenation shall be off the stage. In this regard, Expo 2010 did a favor to Shanghai municipal government, which resumed most of the land by the “effective mega-event weapon” in the negotiation of industrial relocation, and thus promoted the policy of “suppressing the second industry and developing the third industry.”

Industrial planning for post-Expo contributes furthermore to the economic transition. Expo site area on the Pudong side integrated three adjacent neighborhoods to build a “world-class civic center.” Headquarters economy, commerce and trade, creative industries and advanced services are prioritized industries in post-Expo development. By and large, spatial structure of five functional zones plus an outparcel was made in the legacy plan of Expo. Zones A and B are start-up areas merged to develop convention, exhibition and business. Zone C is Houtan expansion district reserved for retail, trade and office uses. Zone D and E, located in Puxi, are redeveloped to shape Shanghai into a cultural and eco-living metropolis [8]. Catalyzed

by Expo 2010, Shanghai has accomplished its economic transition. The contribution rate of economic growth by tertiary industry increased year by year after 2003 when Shanghai starts Expo preparation. Until 2009, the contribution rate and the proportion of economic growth by secondary industry decreased significantly, with remarkable increase in tertiary industries (Figures 5 and 6).

Expo 2010 also propelled population decentralization from over-densed central area to newly planned new towns. Before Expo, as infrastructures, transportations, industries and public facilities in suburb fell behind, central Shanghai was overly populated. Mega-events lead to massive social relocation as the Expo site locates in a population dense area. The effects are

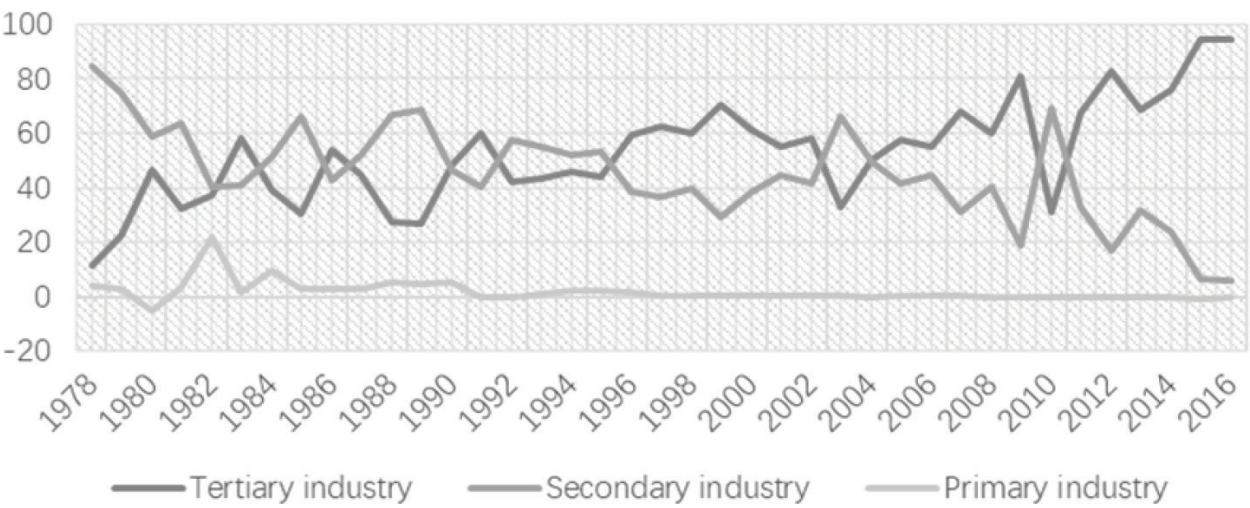


Figure 5. Contribution rate of economic growth by primary, secondary and tertiary industries in Shanghai, 1978–2016. Source: Shanghai Statistical Yearbook, edited by author.

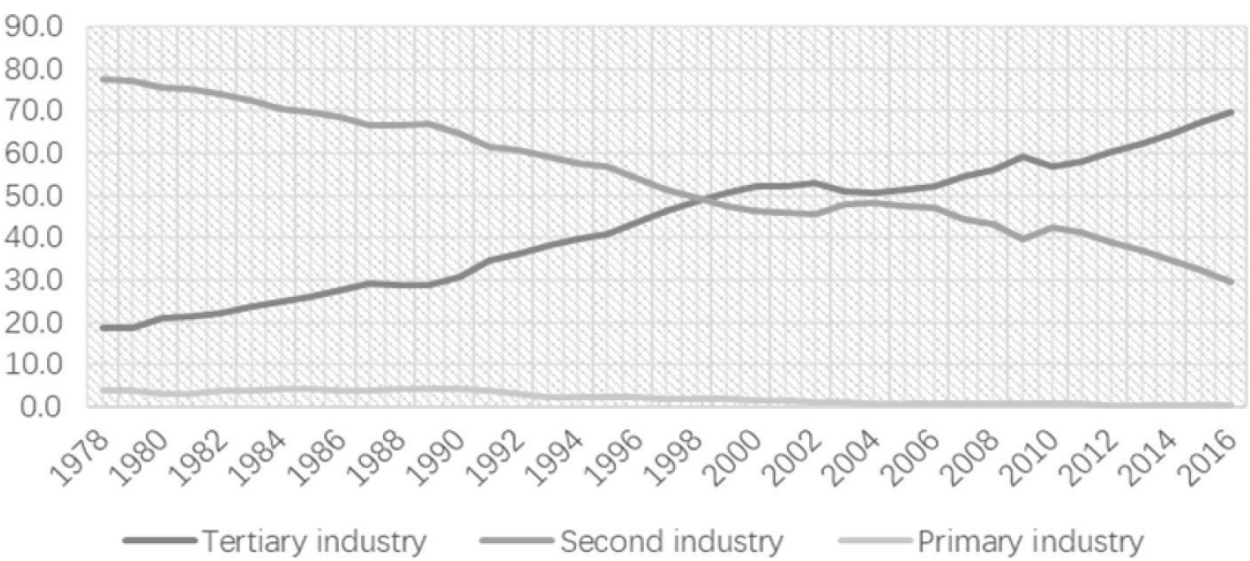


Figure 6. Proportion of primary, secondary and tertiary industries in GDP of Shanghai, 1978–2016. Source: Shanghai Statistical Yearbook, edited by author.

a double-edged sword. On the one hand, it assists population decentralization that sustains new town development and props up the polycentricity strategy of the metropolis. On the other hand, it was criticized to cause large-scale social displacements. More than 18,000 households (about 47,900 people) need to relocate, most of which are low-income groups. The direct impacts were slow growth rates in Jing'an (-28.87), Luwan (-22.21) and Huangpu (-18.05) from 2003 to 2010. However, population did not evenly decentralize. Minhang (168.07%), Songjiang (138.98%) and Jiading (122.06) with better accessibility than other new towns have experienced the highest growth rate.

Leading to such a massive social relocation, urban planners attempt to minimize the potential negative impacts. They made effort to maintain the high-quality residential districts and to create better community environment for those who reside in poor living condition. The original land use for Expo Park is 6.68 km², in which 1.4 km² are residential districts⁴ built from the 1970s to the 2000s. "After field survey from 2003 to 2004, we decided to preserve the existing residential areas and got approval from the municipal government for the 'Construction Coordination Area of Expo' with total area of 1.4km²," Expo's chief planner said. Preservation is merely the first step for the theme "Better City, Better Life," following which the "add, subtract, multiply and divide (+ - × ÷)" planning and design methods are applied to community rehabilitation. The "Construction Coordination Area of Expo" is moderately demolished, reconstructed, and maintained (functional replacement), to achieve renewal targets of safety, employment for low income, entertainment, equality, justice and fraternity. Preserving those residential districts, 15,000 households and the involved social networks were maintained. This gained support from neighborhoods and established a good image of local government.

4.3. A project under an omnipotent government

The main coordinator, Shanghai Expo Coordination Bureau (SECB), was set up in 30th Oct, 2003 under the leadership of Shanghai Expo Organization Committee and Executive Committee. As a platform, SECB coordinates various stakeholders including all levels of the government, developers that are led by or cooperating with the government, enterprises required disclaiming the lands, and communities affected by the Expo project. This set up resembles those *ad hoc* administrative committees, which are on behalf of the public government but are more entrepreneurial in terms of management, in development zones or national new areas [18]. The developer, Shanghai Expo Land Holding Co. Ltd. (SELHC), was set up with 9.4 billion RMB registered capital, respectively from the Shanghai Municipal Land Reserve Center with 3 billion RMB and the Shanghai Expo Land Reserve Center (SELRC) with 6.4 billion RMB under the guidelines of the Shanghai Municipal Government. It is responsible for land development financing, industrial and residential relocation, and infrastructure construction in Expo area. In 2009, SELHC and SELRC were incorporated into SECB, addressing post-Expo development issues.

Land banking is the key mechanism operated by SELHC, a government-affiliated agent invested by Shanghai Real Estate Group and Shanghai Chengtou. Municipal government used land banking to resume the scattered land, benefit the preparation of Shanghai Expo

⁴The term "residential district" is used as the pre-transformed, fragmental and unorganized "communities" built in different period are lacking of social characteristics and hardly called as communities.

and help recover the relocation cost via redevelopment. Land banking for Expo 2010 generally includes three stages: land requisition by purchase, land reservation, and land provision. Apart from the Expo site of 5.28 km², land banking area also includes the three relocation sites in Changxing, Luoqing and Pujiang. The major work at the first stage is relocation of residents and enterprise. In the stage of land reservation, the initial infrastructural construction was accomplished by SELHC. The purpose is to take the advantage of land banking system to integrate infrastructural plan of Expo site into post-Expo redevelopment. The project was implemented by one construction company to avoid “one affair managed by different departments or superiors.” Land reservation also relieves fiscal burden of government by transferring the cost to the enterprise that relies on land value to make profit; the investment of infrastructure is bundled together with land value increment contributed by the improvement of infrastructures. In the whole process, SECB and Shanghai Municipal Bureau of Planning and Land Resources took charge of planning and management (including planning, approval and adjustment). In the third stage, land provision in the secondary land market would probably last for more than 20 years. The use right of land for World Fair is “borrowing” rather than “renting” by SECB. Then, SECB “lent” the land to the exhibitors from 2007 to 2010. After the event, the SELRC resumed and leased the land for future development.

The government-affiliated agents played important yet special role in development the Expo site area. On one hand, the SELRC and SELHC, operating as enterprises, were independently responsible for land banking and development to integrate land resources and make profit. SECB was the sole investor in land development and should earn profits to recover the pre-event cost. In the industrial relocation, all the relocation agreements were signed by the SELRC and relocated units or their higher-level authorities. The highest-level enterprises—units under the central ministry, religious units, and military—were directly relocated by SELRC. To settle the Jiangnan Shipyard and Pudong Steel Factory, the two largest SOEs, SELRC specially reserved two relocation sites in Changxing Island and Luoqing, Baoshan District to facilitate the restructuring. In residential resettlement, SELRC set the relocation of two sites in Pujiang Town of Minhang and Sanlin Town of Pudong (**Figures 7 and 8**) to accommodate the moved residents. In line with the new “One City, Nine Towns” urban system plan, SELRC also authorized relevant agency to assess the value of each household to make monetary compensation. SELHC also accomplished the initial infrastructural construction so that the land could be leased in a much higher price in the secondary land market in post-event redevelopment. On the other



Figure 7. Pujiang Expo Home. Source: www.expo2010.cn/; edited by author.



Figure 8. Sanlin Expo Home. Source: shanghai.gov.cn; edited by author.

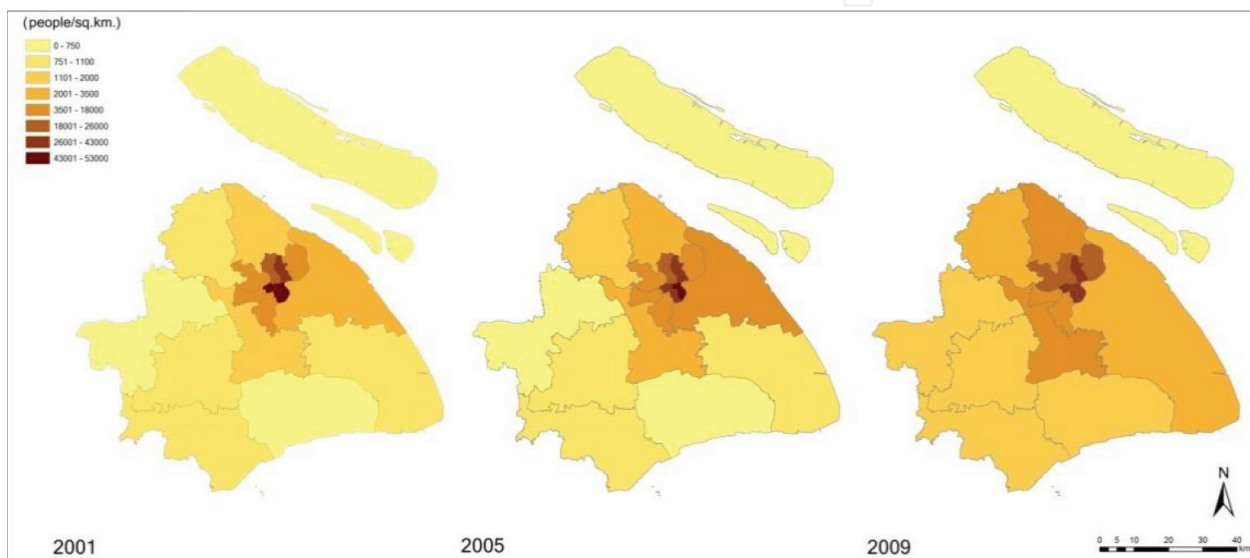


Figure 9. Population density in Shanghai Municipality (2001, 2005, 2009). Source: Shanghai Yearbook, analyzed by author.

hand, SECB was on behalf of the governments to coordinate various stakeholders. It actively sought and attracted private and international capital to sponsor Expo 2010, cooperated with the major planning and design consultant—Shanghai Urban Planning and Design Research Institute—to organize bids and designs in the Expo site area, and managed the negotiation with the original occupants to relocate. Any amendment of the plan or relocation rules should be reviewed and approved by SECB. SECB also provided the nonprofit public infrastructures and facilities to optimize the resumed land and supervised the whole construction process in accordance with the detailed regulatory plan (**Figure 9**).

5. Conclusions

Globalization and neoliberalization co-contribute to the transformation of urban order from traditional manufacture to financial and service economy, from labor intensive activity to cultural and leisure consumption, and from monocentric city to polycentric mega-city

region. Such transformation of urban space enables city to better adapt to capital accumulation in post-Fordism era. However, implementation of the urban transformation strategy is not easy as it is a huge project which requires policy packages, fund resources, manpower, and may involve a series of interest issues and power struggles. Thus, though mega-events seem attractive, strategy integration is a challenge and has to overcome difficulties. For how to integrate mega-events into urban transformation, Shanghai Expo at least has following implications for urban planning. Site selection for the event is the primary and key step to determine in what way and to what extent the event can contribute to the urban transformation. In the case of Shanghai, site selection of the Expo 2010 aims to revitalize the rundown riverside area to strengthen a polycentric urban form. The subsequent industrial and residential relocations would never accomplish without the opportunity of Expo 2010. The Shanghai case shows that the Expo 2010 promoted urban transformation by assisting polycentricity strategy by facilitating the transition to a leisure consumption and service economy and by fostering population decentralization from central city. Expo 2010 accelerated government's objectives in a number of ways: the mature of rapid transit system in central city, the retreat of manufactures and the decentralization of low-income population, all enable the municipal government to build a polycentric urban system supported by new towns.

To implement such a large-scale project, Shanghai encountered numerous challenges. Problems are observed in Expo 2010 as market economy in Shanghai is immature and decentralization is asymmetric [19]. In the Expo 2010, the legacy of central-planned economy and land ownership impact on the mega-event strategy. On the one hand, government managed to force most of the enterprises and residents to move without much negotiation since the land is ultimately owned by government. On the other hand, state-owned enterprises with political capital hinder negotiation for them to surrender land ownership. Thus, political added value of mega-events did Shanghai municipal government a great favor to accomplish all the relocation. In all, mega-event project is effective to transform cities. While mega-events are often criticized to be unsustainable as they lead to massive social relocation and redundant infrastructure construction, these issues are not unsolvable. What urban planners need to concern is how to best utilize the advantages of mega-event strategy and to make it in consistent with the city's overall development objective.

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References

- [1] Harvey D. The urban process under capitalism: a framework for analysis. In: MJ Dear, AJ Scott, editors. *Urbanization and Urban Planning in Capitalist Society*. London: Methuen, 1981
- [2] Essex S, Chalkley B. Mega-sporting events in urban and regional policy: A history of the Winter Olympics. *Planning Perspectives*. 2004;**19**(2):201-204
- [3] Hubbard P, Hall T. The entrepreneurial city and the new urban politics. In: Hall T, Hubbard P, editors. *The Entrepreneurial City: Geographies of Politics, Regime and Representation*. Chichester, UK: John Wiley & Sons; 1998
- [4] Swyngedouw E, Moulaert F, Rodriguez A. Neoliberal urbanization in Europe: Large-scale urban development projects and the new urban policy. *Antipode*. 2002;**34**(3):542-577
- [5] Essex S, Chalkley B. Urban development through hosting international events: A history of the Olympic games. *Planning Perspectives*. 1999;**14**:369-394
- [6] Essex S, Chalkley B. Olympic games: Catalyst of urban change. *Leisure Studies*. 1998;**17**(3):187-206
- [7] Harvey D. From managerialism to entrepreneurialism—The transformation in urban governance in late capitalism. *Geografiska Annaler Series B-Human Geography*. 1989;**71**(1):3-17
- [8] Deng Y, Poon SW, Chan EHW. Planning mega-event built legacies—A case of Expo 2010. *Habitat International*. 2016;**53**:163-177
- [9] Carlsen J, Millan A. The links between mega events and urban renewal: The case of the Manchester 2002 commonwealth games. *Journal of Sport Tourism*. 2002;**7**(3):4-5
- [10] Carriere J-P, Demaziere C. Urban planning and flagship development projects: Lessons from EXPO 98, Lisbon. *Planning Practice & Research*. 2002;**17**(1):69-79
- [11] Imrie R, Lees L, Raco M. *Regenerating London : Governance, Sustainability and Community in a Global City*. Vol. xiii. Milton Park, Abingdon, Oxon; New York, NY: Routledge; 2009. 353 p
- [12] Hall CM. Urban entrepreneurship, corporate interests and sports mega-events: The thin policies of competitiveness within the hard outcomes of neoliberalism [J]. *The Sociological Review*. 2006;**54**(s2):59-70

- [13] Hall CM. *Hallmark Tourist Events : Impacts, Management, and Planning*. London: Belhaven Press; 1992
- [14] Syme GJ, Shaw BJ, Fenton DM, Mueller WS. *The Planning and Evaluation of Hallmark Events*. England: Avebury; Brookfield, Vt.; 1989
- [15] Deng Y. Conceptualizing mega-event flagships—A case study of China pavilion of Expo 2010 shanghai China [J]. *Frontiers of Architectural Research*. 2013;**2**(1):107-115
- [16] Chan RCK, Li L. Entrepreneurial city and the restructuring of urban space in Shanghai Expo. *Urban Geography*. 2017;**38**(5):666-686
- [17] Ong A. Worlding cities: Or the art of being global. In: Roy A, Ong A, editors. *Worlding Cities: Asian Experiments and the Art of Being Global*. Oxford: Wiley-Blackwell; 2011. pp. 1-26
- [18] Li L. State rescaling and national new area development in China: The case of Chongqing Liangjiang. *Habitat International*. 2015;**50**:80-89
- [19] Wu F, Xu J, Yeh AG-O. *Urban Development in Post-Reform China: State, Market, and Space*. London; New York: Routledge; 2007