

## ARTICLE

# A mega-event approach to glurbanization: Insights from Expo 2010, Shanghai

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### ABSTRACT

This paper contributes to an in-depth understanding of how the mega-event contributes glurbanization of entrepreneurial city through a case study of Expo 2010 in Shanghai. It argues that spatial-related transformation is central to mega-event approach to glurbanization yet the soft power building is uncertain. It implies that the domestic impacts of mega-events are likely to be more profound than their global influences. This corresponds to the capitalist transformation from Fordist-Keynesianism to neoliberalism, in which mega-events such as Olympic Games and World Exposition have increasingly been incorporated into urban development plan to boost urban agenda. 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. With a well-developed framework of glurbanization entailed by entrepreneurial city, this research enriches glurbanization theory by a thorough examination of Shanghai Expo. It finds that Expo-led landscape reconfiguration, spatial restructuring, and new sources provision effectively transformed Shanghai, propelling glurbanization in diminutive spatial scale. Yet, it remains powerless to impress the world as the voice of domestic propaganda is limited in the Western mainstream media. In all, the Expo case well exemplifies the power of mega-event approach to advancing local agenda, especially in spatial transformation per se, as well as its constraints in (re)shaping a global discourse.

## 1. Introduction

Since 1970s, neoliberalism has ingrained itself rhetorically into the hosting of mega-events<sup>[1, 2]</sup>. In other words, mega-events have become vanguards of the global spread of neoliberalism and appeared as a significant impetus in the reconstruction and reposition-

ing of ascending economies. A striking feature of world neoliberalization is that competing cities are active to articulate the globe to secure its most advantageous insertion into the changing interscalar division of labour in world economy, viz., glurbanization. To scholars, in-depth understanding of neoliberalization should at best go beyond the extrinsically economic tsunami and conceive it a

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path-dependent process molded by particularities of local history and institutions<sup>[3]</sup>. In such sense, mega-events unavoidably involves participation of multiple levels of governments, often in the form of entrepreneurialist approach, and neopatrimonial forms of resource allocation<sup>[4]</sup>. Different from post-industrial cities in North America and Western Europe, the ongoing urban transformation of Shanghai did not inherit the regulatory landscape or the spatial organization of the Fordist city. As an advanced city in socialist market economy, Shanghai's urban landscape imprinted hybridity of planned and market economy. Shanghai Expo thus involves complex regime that combines rigid planned economic system and neoliberalized socialist market economy. This echoes the worldwide evidence that mega-events herald a mixed neoliberal turn in political-economic practice<sup>[5]</sup>. This paper proposes that the mega-events-led transformations in Shanghai Expo should be understood as part of a neoliberal spatial process committed to and an active ascending of locality to the global arena, configured by a global-local, social-spatial dynamism.

## 2. The conceptual Framework

### 2.1 Glurbanization under Entrepreneurial City

Glurbanization rests upon the premise that urban restructuring led by state rescaling and its concomitant interscalar strategies represents an advantageous process to reinforce city-region status and their global competitiveness building<sup>[6,7]</sup>. Glurbanization originated from the literature of urban entrepreneurialism. Urban entrepreneurialism has been prevailing since 1970s when the active, innovative role of local governments were well documented by a number of researchers in North America and Western Europe<sup>[8, 9-11]</sup>. The purpose of this entrepreneurial shift of local governance, as proclaimed by David Harvey<sup>[12]</sup>, was to address the widespread erosion of economic and fiscal base of large cities in the advanced capitalist economy. Unlike the earlier practices of managerialism that primarily concerned welfare provision to urban population, such an entrepreneurial stance strategically brought competitiveness building to the heartland of local governments' agenda and fundamentally transformed the trajectory of urban process. In a broad sense, the shift from urban managerialism to entrepreneurialism was associated with the recession-induced transformation of capitalist dynamics: dynamics transits from a Fordist-Keynesian regime to a regime of "flexible accumulation"<sup>[13-17]</sup> that revived localism<sup>[18]</sup> under technology innovation and new international division of labor. Though without an explicit definition

of urban entrepreneurialism, Harvey's work<sup>[12]</sup> generates significant insights into this study; first, urban entrepreneurialism should be examined at varied scales, from micro neighbourhoods, communities, to macro metropolis, nation state, and the like. Second, stance of central governments and the position of local government in urban hierarchy remain of tremendous importance to city competitive edge<sup>[19]</sup>. Third, urban "governance", involving extensive public-private partnership, means much more than urban "government". Indeed, under the entrepreneurial "governance" discourse, a defining feature for public government is its adventurous, outward-oriented posture, which substitutes its traditional gatekeeper stance, to foster local growth<sup>[20]</sup>. Such a speculative posture characterizes profit-making business firms and cities alike, viz. entrepreneurial firm and entrepreneurial city. The analogy entails the concept of city-level "glurbanisation" as one form of the more general phenomenon of firm-level "glocalisation"<sup>[21]</sup>.

Initially, "glocalisation" refers to the global localisation strategy pursued by Japanese firms in comparison with the globalisation strategies adopted by U.S. multinationals<sup>[22]</sup>. Then, it has been indiscriminately used to limn the politically mediated deterritorialisation and reterritorialisation<sup>[23-25]</sup>. Jessop and Sum problematise the usage of this term and coined "glurbanisation" to refer to entrepreneurial strategies. To them, the "glocalisation" concept, which simply refers to any form of global-local interaction, has lost its original accuracy, whereas "glurbanisation" can more precisely capture the multiscale articulation; first, studies of glurbanisation should replace the crude global-local dichotomy with multiplicity of scales. Second, glurbanisation highlights chronotropic governance that was neglected in glocalisation. Third, extra-economic issues should be incorporated in the analysis of entrepreneurial competition. Fourth, glurbanization concerns more with the problems raised by entrepreneurial activities, rather than the advantages. Thereafter, glurbanization under entrepreneurial city has been empirically researched worldwide such as in London, Guangzhou, and Australasian Cities<sup>[26-28]</sup>. Glurbanization can be understood as a process, a strategy, and an objective entrepreneurial city endeavors to achieve. It collapses the global and the local, opposes to the hierarchical design whereby the nation-state dictates how things work, and makes transformation possible both from below and above<sup>[7]</sup>. In this research, the entrepreneurship qualities proposed by Jessop are cited to help identify approaches to glurbanization (see Table 1 for a simplified version), including the reconfiguration of urban landscape, restructuring of urban space, provision of new sources, and reposition of urban hierarchy.

**Table 1.** Entrepreneurship at the firm and city levels and approaches to glurbanization

Schumpeter's entrepreneurial firm	Jessop and Sum's entrepreneurial city	Approaches to glurbanization
New good	New types of urban space	Landscape reconfiguration
New methods of production	New methods of space production	Space restructuring (for production and consumption)
New markets for sales	New markets of urban living	
New sources of materials	New sources of supply	New sources provision
New production organization	New urban position in urban hierarchy	Urban repositioning

Source: authors compiled from [21, pp. 2289-2290]

## 2.2 Mega-events, Urban Regeneration, and Spatial Transformation

Mega-events have evolved different in the turn of 1970s economic recession in capitalist society to build place competitiveness for economic growth<sup>[29-31]</sup>. Mega-events such as Olympic Games and World Exposition have increasingly been incorporated into urban development plan to help urban transformation<sup>[32, 33]</sup>. 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<sup>[34]</sup>. 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 1950s to place competitiveness building in 1980s<sup>[35]</sup>. 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<sup>[36]</sup>; the 1998 Lisbon Expo was designed to revitalize a rundown industrial harbourside and create a new urban center<sup>[37]</sup>; and the 2012 London Olympic Games reshaped east London to revive the dilapidated area<sup>[38]</sup>. 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 aforementioned review suggests that spatial-related transformation, in particular transformation intrinsic to urban regeneration to disentangle involuted interests such

as landscape reconfiguration and urban space restructuring, is central to mega-event approach to glurbanization whereas soft power building such as repositioning global hierarchy of host cities is uncertain. This implies that the domestic impacts of mega-events are likely to be more profound than their global influences.

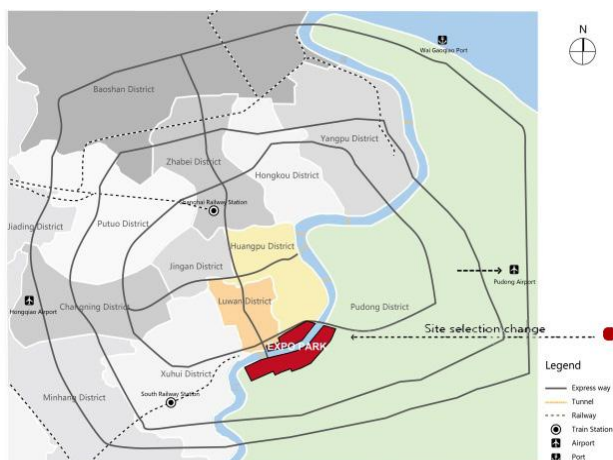
## 3. Research Methodology

Case study approach, more similar to the experimental isolation paradigm than to the randomized-assignment-to-treatments model, is applied in this research to clarify the obscure understanding towards mega-event approach to glurbanization<sup>[39]</sup>. 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<sup>[40]</sup>, 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 urban agenda ten years ahead of schedule. Thus, this paper goes beyond the event's impact on tourism<sup>[41, 42]</sup> and focuses on the linkage of mega-events with the urban. Specifically, it unfolds the local context and details the pathway and effects of Expo 2010 to Shanghai's glurbanization. The site of Expo 2010 was selected in between Nanpu and Lupu Bridge. As an old industrial base alongside the Huangpu River, it epitomized China's footprints to modernization and tracked the labyrinthian post-industrial trajectory of Shanghai. With event-led relocation, Shanghai municipal government determined to strategize Expo site to promote urban regeneration in central area and to disentangle the involuted interests that hinder its world city path.

First-hand data have been obtained during several field trips to Shanghai since 2009 through interviews, observation and site reconnaissance. Method of triangulation is used in data collection to reduce the likelihood of misinterpretation<sup>[43]</sup>. Interviewing presents a major data collection method. Unstructured interviews are widely used throughout the whole study, and semi-structured interviews are conducted to get more detailed information. In semi-structured interview, questions are pre-considered based on specific targets. An interviews outline



is proposed before the field trip. Sixteen people include government officials, planners, scholars, and developers accepted interview request. Each of the interviews was specially prepared and rearranged according to the interviews outline. More interviewees (include the affected local habitants) were consulted by means of unstructured interviews. Participatory observation is applied to observe activities in Expo Park and Shanghai. Site reconnaissance is assumed to record the transformation of the city (landmarks, public space, city image, spatial restructuring) affected by the Expo project. Moreover, secondary data sources such as historical archives, statistical yearbooks, and official government reports related to Expo 2010 were accessed.



**Figure 1.** Site selection of Shanghai Expo 2010: from Chuansha to Nanpu and Lupu. Source: author

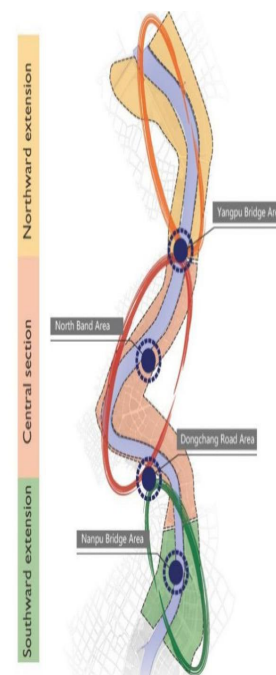
#### 4. Unfolding Local Context for Expo 2010

As a mega-event, Shanghai Expo is a dual strategy not only concretizing event function but also propelling urban transformation [44, 45]. Three major constraints impeding structural optimization of Shanghai before the host of Expo 2010.

##### 4.1 Southward Extension of Huangpu River: Bottleneck for Renewal and Polycentricity

Earlier initiated by municipal government, “Huangpu Riverside Project” aims to improve the comprehensive service quality along the waterfront line by replacing warehouses and old industrial factories to financial trade, eco-residence and cultural tourism. From north to south, the “Huangpu Riverside Project” has been divided into three sections that passes across several districts include Baoshan, Yangpu, Hongkou, Huangpu, Luwan, Xuhui and Pudong New Area. However, these districts have distinct humanity environment and exhibit a characteristic of

“strong centrality (the Bund area) with two weak wings (northern and southern extension)” (figure 2). There are numerous industrial units located in the southern extension of Huangpu River with many shanty houses, forming a mixed and low-quality land use that is facing with area decline. Indeed, the south wing of Huangpu Riverside is a scab for Shanghai’s urban expansion and polycentricity strategy. The opening and development of Pudong in 1990s was a leapfrog expansion across Huangpu River, and the eastward breakthrough gradually expanded to Nanpu and Yangpu Bridge within ten years. Population growth in Liuli and Sanlin Town gradually surrounded and oppressed manufacturers along the Huangpu River bank. Nevertheless, further expansion to the south has been blocked by large-scale manufacturing enterprises, and is forced to take low-quality and leaping development mode. The bank area in between Lupu and Nanpu Bridge with the key units of Jiangnan Shipyard and Pudong Steel Factory became low-value land in downtown edge that hinders polycentricity strategy of Shanghai to construct a strong and multi-functional city center. So, Expo becomes an opportunity for the municipal government to renew the south wing of Huangpu River.



**Figure 2.** Three sections of Huangpu Riverside Area  
Source: drawn by author, 2010

##### 4.2 Bottleneck for Economic and Industrial Transition

Manufacture industry occupies Shanghai’s industrial structure. Since the opening and development of Pudong New Area, proportion of added value of secondary indus-



try has accounted for nearly 50%, playing an irreplaceable role in urban economic growth. Based on statistics of the contribution rate of economic growth by three industries, it can be found that secondary and tertiary industries alternately contribute to economic growth, but the secondary industry contributes more in average. From 1999 to 2003, contribution rate of economic growth by secondary industry again surpassed tertiary industry. The effectiveness of industrial adjustment is questionable. The proportion of three industries in GDP, the tertiary industry has accounted for 50% since 1999, but didn't change much until 2003 (with ratio of 50.9%). Shanghai's tertiary industry or service economy has a long way to go compared to top world cities, New York (86.7%), London (85.0%) and Tokyo (72.7%). It needs impetus to speed up the stagnation of economic and industrial transition. Spatial adjustment might be an effective measure to catalyze the economic and industrial restructuring in coming years.

#### 4.3 Over-dense Population in Central Area: Bottleneck for Suburbanization

Until the end of year 2001, Shanghai pioneers in China with 75.3% urbanization rate. International metropolises such as New York, Los Angeles or Chicago were undergoing suburbanization at similar stage in Shanghai. Nevertheless, spatial structure in Shanghai is yet to support suburbanization, as infrastructures, transportations, industries and public facilities in suburb fell behind. The result is a much higher density of population in central area than in suburb. Comparing furthermore the population density in central area with that in Tokyo, New York and London in the year 2004, socio-demographic structure remains unsatisfactory. in Shanghai is not as reasonable as these world cities. Both central area population density (1.51) and the proportion of central area population to suburb (2.82) in Shanghai are higher than Tokyo (1.35, 2.0) and much higher than New York (1.03, 0.73) and London (0.91, 0.65) (table 2). The over-dense population in central area and dispersed population in suburbs hardly support sustainable future development of the city.

**Table 2.** Population comparison in central area, Shanghai, Tokyo, New York (2004)

Location	Shanghai	Tokyo	New York	London
Population density in central area (10,000people/km <sup>2</sup> )	1.51	1.35	1.03	0.91
Population in central area / population outside central area	2.82	2.0	0.73	0.65
Geographical area of central area (km <sup>2</sup> )	630	617	786	319

Source: Tokyo Statistical Yearbook 2004, Vital Statistics of New York State 2004, Office for National Statistics 2004 (adopted ONS's definition of inner London), Shanghai Statistical Yearbook 2005

## 5. Shanghai Expo 2010: A Mega-event Approach to Glurbanization

### 5.1 Landscape Reconfiguration: Urban Beautification and Shaping a Polycentric Urban Form

News of bid winning from Monte Carlo, Monaco empowered Shanghai municipal government with political power. The derelict industrial area will be refreshed to tidy up Shanghai's world city pathway. As a strategic planning tool, Shanghai Expo is representative to clean up the messy waterfront site, replacing with modern well-designed urban space. A stylish entrepreneurial fabric favoring capital accumulation took shape on the edge of inner expressway. With remarkable group of landmarks, carefully designed with graceful architectural style and public spaces, it is eye-catching and leaves precious legacies assimilating World Fair cultural into the local.



**Figure 3.** The panorama of Expo site in 2004 and 2015  
Source: Xinhua News Agency

With the delivery of Expo project, a polycentric urban form comes out. In master plan of Shanghai (1999-2020), spatial layout of "multi-axis, multi-layer and multi-core" is proposed but insufficiently achieved. The reasons concealed are the intricate interests in downtown area which is ill-connected to suburbs. A strong urban core is a prerequisite for polycentricity for which Expo contributes. The effect would be the accomplishment of the rapid transit system construction in Shanghai metropolis. After Pudong New Area jumping across Huangpu River, the Expo site further expands southward along the River to squeeze out low value-added land in downtown edge, facilitate the formation of a multi-functional city center to buttress the polycentricity strategy.

Metro is the most important urban rapid transportation system in Shanghai. The earliest metro lines 1, 2 and 3 and the maglev line formed the initial "cross + ring" ("申") structure before 1993. After Shanghai obtained the opportunity of Expo, metro network construction gained speed

and accomplished 410km in 2010. Four lines and three extension lines operated beforehand, over half of which was facilitated by Expo 2010. The direct impacts are the facilitated development of suburban new towns which, first suggested in 1959, help to decentralize population and upgrade industries in central city. The catalytic role of Expo 2010 in new town development is complied through TOD model which improved accessibility to central Shanghai. Songjiang, Jiading-Anting and Lingang as three strategically superior new towns benefit from it, especially the first two.

**Table 3.** Operation records for Shanghai Metro until June 30, 2010; (shadow for Expo facilitated ones)

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.
5	2003.11.25: Xinzhuang to Minhang Development Zone
4	2005.12.31: "C" trial operation; 2007.12.29: link operations
6	2007.12.29: Gangcheng Rd. to South Lingyan Rd.
8	2007.12.29/2009.07.05: Shiguang Rd. to Pujiang Expo Home
9	2007.12.29/2009.12.31: Songjiang New Town to Middle Yanggao Rd.
7	2009.12.05: Shanghai University to Huamu Rd.
11	2009.12.31/2010.03.29: North Jiading to Jiangsu Rd. / Anting to Jiading New Town (branch)
10	2010.04.10: Xin Jiangwan Cheng to Hangzhong Rd.
13	2010.05.01-2010.10.31: Temporary open three stations

Source: www.shmetro.com; edited by author

## 5.2 Spatial Restructuring: Upgrading Industries, Decentralizing Population, and Enhancing Cultural Value

Expo 2010 benefitted economic transition from manufacturing to service and leisure consumption in Shanghai in three spatial layers: (1) urban area in inner expressway targeting tertiary industry; (2) area between inner and outer expressway planned for high-tech, high value-added and non-polluted industry; (3) area outside outer expressway encompassing three types of industries. The "tertiary – secondary – hybrid" structure spreads from the city center to outskirts. City center is entrusted to "suppress the secondary industry and develop the tertiary industry". Yet, the great many rundown manufactories hindered the formation. The proportion of tertiary industry in all, though has reached 50% of total GDP since 1999, had almost un-

changed until 2003 before the event launched. Relocation of industries prepares Expo for economic and industrial upgrading. Sewed up Pudong and Puxi, Expo was the last valuable piece of land in downtown area. Both Puxi and Pudong area are occupied by mix-use of residential housing, industries and warehouses, which accounted 62% of total land. They recorded China's footprints to modernization as well imprinted a tough post-industrial trajectory of Shanghai. The Expo did a favor to pull manufacturing off the stage in city center and resume land through the "effective mega-event weapon" in the negotiation of industrial restructuring. Post-Expo industrial planning contributes furthermore to the economic transition. Three adjacent neighborhoods in Pudong are integrated to build a "world-class civic center", which prioritized headquarters economy, commerce and trade, creative industries and advanced services. The legacy plan of Expo encompassed five functional zones from A to E. While Zone A and B are start up zones for convention, exhibition and business, Zone C is Houtan expansion district reserved for retail, trade and offices. Zone D and E in Puxi are fostering Shanghai to be a cultural and eco-living metropolis<sup>[35]</sup>. The effects are obscure: the contribution rate of economic growth by tertiary industry increased significantly.

Population decentralization represents another beneficiary impacts brought about by Expo 2010. Central Shanghai was once overly populated for which the Expo event helps for defibering. Social displacements are unavoidable as over 18,000 households were facing relocation. People who were affected most were those low-income group. Such a massive social relocation was supported by a quality urban planning and design. High-standard residences are maintained after field survey conducted during 2003 and 2004. For the theme "Better City, Better Life", a planning approach of "add, subtract, multiply and divide (+ – × ÷)" is adopted to community rehabilitation. The demolition is mild, respect local social network to cater safety, employment for low income, entertainment, equality, justice and fraternity. This gained support from neighborhoods and establish a good image of local government.







**Figure 4.** Pujiang Expo Home and Sanlin Expo Home;  
Source: shanghai.gov.cn; edited by author

In a pro-growth society, engaging politics with cultural system is not easy even though “cultural value” has explained the importance of culture to politicians. Expo 2010 enhanced cultural value in two aspects: preserving visible cultural heritage and promoting invisible local culture. In Shanghai, Xintiandi is a well-known example exemplifying the power of cultural heritage in leisure

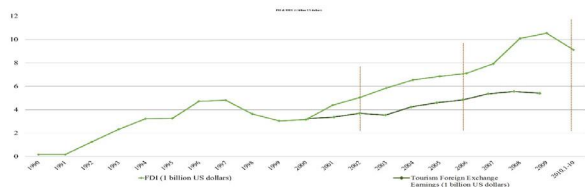
consumption and capital accumulation, and later is widely imitated. As intangible and non-renewable resources, urban cultural heritages are irreplaceable assets to buttress urban competitiveness building. In Expo Park, 20,000 square meters of historic buildings are preserved and more than 400,000 square meters old industrial architectures are reconstructed. The urban best and practice area (UBPA) in sub-district E, involving considerable reutilization of industrial heritage, is now a model for human-scale street regeneration. Shanghai, the birthplace of modern industry in China, accommodated great many industrial legacies. The big-span and high interior skeleton are invaluable for creative and art industries. Similar practices can be found in New York and Ruhr. As a world renowned mega-event, Expo 2010’s promotional effects cannot be underestimated. A well-illustrated example would be the Huangpu-based Sanmin Culture which was diffused through public forums initiated by Expo.

### **5.3 New Sources Provision: Bringing Fund, Human Capital, and Technologies**

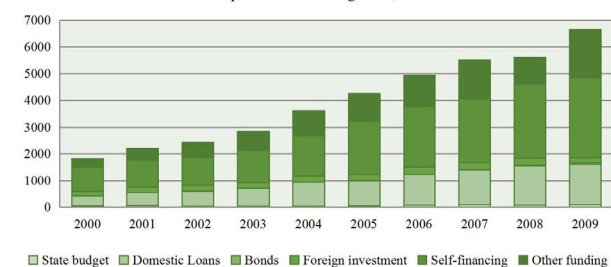
Expo 2010 contributes to new sources provision mainly in three aspects: funds, human capital, and technologies. Government funding support and inward investment attraction comprised two main sources of fund facilitated by Expo 2010. Though central government did not directly finance the event, its preferential policy and commitments prioritize the event in gaining funds from public domain. Funds for Expo include 7.15 billion RMB from the government (around 40% of total budget), 8 billion RMB bonds approved by central government to issue propped up by land banding and repaid by future development (around 44% of total budget), and 2.85 billion RMB supplemented by diverse finance channels. A considerable amount of fund gained from contracts signed with banks<sup>i</sup> and private firms. In April 2004, Industrial and Commercial Bank of China, Pudong Development Bank and Shanghai Bank provided a total loan of 5.5 billion RMB to Shanghai Expo Land Holding Co. Ltd. Han Zheng, the Mayor of Shanghai when the event held, officially stated that planning, management, and operation of Expo are open process calling for private capital to join. The Expo 2010 also facilitated inward investment attraction. After the low ebb from late nineties to early 21st century, Shanghai’s FDI has been on the rise since bid winning and entrained a small climax from 2006 to 2008 during the official large-scale publicity of the event (figure 7). Prominent increase of foreign investment can be found from January to October during the host year 2010: 1) the signed contracted foreign capital surpassed 12.68 billion U.S. dollars (increasing 15.93% over 2009 in the same period) in which



the tertiary industrial sector has absorbed 10.432 billion U.S. dollars (accounting for 82.3% of the total contracted foreign capital); 2) the actual FDI was 9.12 billion U.S. dollars (increasing 4.00% over 2009 in the same period). Expo 2010 plays a great role in inward investment attraction: 20 foreign-funded projects were signed in Oct. 14th with 1.23 billion U.S. dollars investment; 292 regional headquarters of MNCs were identified, 208 foreign investment enterprises and 315 foreign-funded R&D centers were approved at the end of September 2010. Shanghai kept to be a dynamic foreign funded city in mainland China. The fixed asset investment kept increasing and went astonishingly high in 2009 approaching the Expo feast (figure 8). Self-financing was the main contributor yet the state budget was limited, imprinting the asymmetric pathway of economic decentralization and political centralization in central-local relations.



**Figure 5.** FDI and TFEE (1 billion US dollars)  
Source: <http://www.stats-sh.gov.cn>; author edited



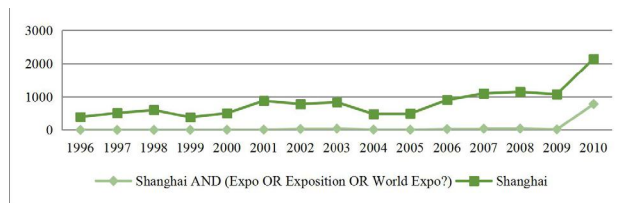
**Figure 6.** Fixed asset investment  
Source: <http://www.stats-sh.gov.cn>; author edited

The contribution of Expo 2010 to human capital attraction revealed in infrastructural industry, third-party service industry and Expo-related jobs. A statistical report from ChinaHR illustrated a 43% increase of employment index before Expo over the year 2009. Construction of Expo Park necessitates a new round of human capital upgrading. More than 70% of relational industrial firms anticipated professional architects, designers and engineers. The ability to pay more guaranteed the attraction of qualified employees and enriched human resource supply in Shanghai. Tourism industry initiated by Expo imposed demand on human capital in service sector. High-qualified human capital familiar with international practices, adapted to

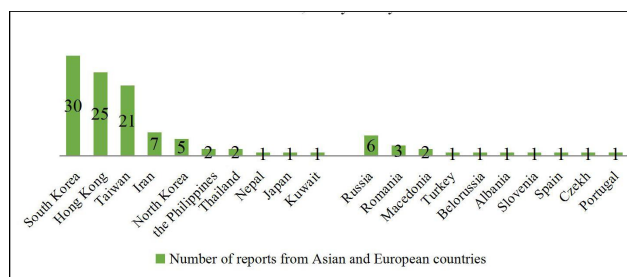
cultural diversity and excellent in language is favored by transnational corporations, e.g. Eastern Airlines, Shanghai No.1 Department Store, and Shanghai First Foot Chain Development Co. LTD. The event also offered many short-term positions of service-sector jobs, such as the safety inspector, interpreter, Expo VIP supervisor, receptionist, Expo hotline officer etc. More than ten thousand jobs are generated and ease the employment tension in job market. All these recruitments are competitive to play a role in post-Expo service industrial upgrading.

Technology has greatly remolded our city since industrial revolution. As a product born industrial revolution of Great British, World Exposition is a significant media for technology improvement. “Expos and technology 1851-2000” in appendix I lists the technologies launched and popularized in the previous Expos over the past centuries (Roche, 2000). Almost every session of Expo gave birth to a new type of technology that would rewrite urban progress agenda, e.g. the birth of telephone in 1876 Philadelphia Expo, mass production cars in 1915 San Francisco Expo, the promotion of English phrase of “IT” in 2000 Hannover Expo. Shanghai Expo 2010, the first one labeled with eco-low-carbon idea, tried to adopt many new technologies for energy saving. It fostered and encouraged intelligent green technology as innovative source of supply for Shanghai’s future urban development. There are five technology highlights in the creation of Expo Park: the construction energy saving, new energy automobile, 4G communication, RFID (radio frequency identification), and intelligent transportation. Moreover, a series of eco-friendly technology such as integration of solar buildings, semiconductor lighting, water (ground) source heat pump, natural ventilation were applied in area of “four pavilions along the central axis”. In UBPA, the “Shanghai Eco-Home” saved more than 60% energy and reduced 140 tons of annual carbon dioxide emissions. The new energy automobile (include hybrid, pure electric and fuel cell vehicles) achieved “zero emission” of transportation in the Expo Park. In order to guarantee traffic operation, several fixed and mobile hydrogen refueling stations and maintenance bases for fuel cell vehicles were constructed. The Expo Park also used TD-LTE technology, a pioneer attempt worldwide, to complete the coverage of 4G communication test network by Shanghai Mobile. The RFID technology was used in the organization and management of Expo Park to improve the efficiency of passenger traffic. The intelligent transportation can ensure a timely update of traffic information, which is an effective measure for traffic efficiency during peak hours. The R&D investment of new technology for Expo Park is more than 0.7 billion RMB from central and the municipal government.

## 5.4 Urban repositioning: An eye catching mega-event in question



**Figure 7.** Media coverage from 1996-2010  
Source: WNC; analyzed by author



**Figure 8.** Number of reports from Asian and European countries  
Source: WNC, 2002-2010; analyzed by author

## 6. Conclusion

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<sup>[46]</sup>. In the Expo 2010, the legacy of central-planned economy and land ownership impact on the mega-event strategy. On 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 ] Makarychev, A.,A. Yatsyk. Brands, cities and (post-) politics: A comparative analysis of urban strategies for the Universiade 2013 and the World Football Cup 2018 in Russia[J]. *European Urban and Regional Studies*, 2015, 22(2): p. 143-160.
- [ 2 ] Trubina, E. Manipulating neoliberal rhetoric: clientelism in the run-up to international summits in Russia[J]. *European Urban and Regional Studies*, 2015, 22(2): p. 128-142.
- [ 3 ] Ribeiro, L.C.d.Q.,O.A.d. Santos Junior. Neoliberalization and mega-events: The transition of Rio de Janeiro's hybrid urban order[J]. *Journal of Urban Affairs*, 2017, 39(7): p. 909-923.
- [ 4 ] Müller, M.,J. Pickles. Global games, local rules: Mega-events in the post-socialist world[J]. *European Urban and Regional Studies*, 2015, 22(2): p. 121-127.

- [ 5 ] Cope, B. Euro 2012 in Poland: recalibrations of statehood in Eastern Europe[J]. *European Urban and Regional Studies*, 2015, 22(2): p. 161-175.
- [ 6 ] Matusitz, J. Glurbanization theory: An analysis of global cities[J]. *International Review of Sociology*, 2010, 20(1): p. 1-14.
- [ 7 ] Matusitz, J. Collapsing the Global and the Local through Interscalar Strategies: A Glurbanization Perspective[J]. *Planning Theory*, 2010, 9(1): p. 6-27.
- [ 8 ] Blunkett, D.,K. Jackson. Democracy in crisis: the town halls respond[M]. 1987, London.
- [ 9 ] Rees, G.,J. Lambert. Cities in crisis[J]. Edward Arnold, London, 1985.
- [10] Judd, D.,R.L. Ready. Entrepreneurial cities and the new politics of economic development[J]. *Reagan and the cities*, 1986: p. 209-247.
- [11] Peterson, P.E. City limits[M]. 1981: University of Chicago Press.
- [12] Harvey, D. From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism[J]. *Geografiska Annaler. Series B. Human Geography*, 1989: p. 3-17.
- [13] Gertler, M.S. The limits of flexibility: comments on the post-Fordist vision of production and its geography[J]. *Transactions of the Institute of British Geographers*, 1988: p. 419-432.
- [14] Sayer, A. Postfordism in question[J]. *International journal of urban and regional research*, 1989, 13(4): p. 666-695.
- [15] Schoenberger, E. From Fordism to flexible accumulation: technology, competitive strategies, and international location[J]. *Environment and Planning D abstract*, 1988, 6(3): p. 245-262.
- [16] Swyngedouw, E. The socio-spatial implications of innovations in industrial organisation[J]. Working Paper, Johns Hopkins European Center for Regional Planning and Research, 1986.
- [17] Scott, A.J. New industrial spaces: Flexible production organization and regional development in North America and Western Europe[M]. 1988, London: Pion Ltd.
- [18] Eisenschitz, A.,J. Gough. The politics of local economic policy: The problems and possibilities of local initiative[M]. 1993, Basingstoke: MacMillan.
- [19] Noyelle, T.J. The economic transformation of American cities[M]. Vol. 19. 1984: Rowman & Littlefield Pub Incorporated.
- [20] Hall, T.,P. Hubbard. The entrepreneurial city: new urban politics, new urban geographies?[J]. *Progress in human geography*, 1996, 20(2): p. 153-174.
- [21] Jessop, B.,N.-L. Sum. An entrepreneurial city in action: Hong Kong's emerging strategies in and for (Inter) urban competition[J]. *Urban Studies*, 2000, 37(12): p. 2287-2313.
- [22] Van Tulder, R.,W. Ruigrok, The logic of international restructuring. 1995, London: Routledge.
- [23] Swyngedouw, E., Neither global nor local: 'glocalization' and the politics of scale, in *Spaces of globalization: Reasserting the power of the local*, K. Cox, Editor. 1997, Guilford Press: New York. p. 137-166.
- [24] Brenner, N. Globalisation as reterritorialisation: the re-scaling of urban governance in the European Union[J]. *Urban studies*, 1999, 36(3): p. 431-451.
- [25] Brenner, N. Global cities, glocal states: global city formation and state territorial restructuring in contemporary Europe[J]. *Review of International Political Economy*, 1998, 5(1): p. 1-37.
- [26] Wetzstein, S. Economic Competitiveness, 'Glurbanisation' and 'Soft' Spatial Interventions: Insights from Four Australasian Cities[J]. *Industrial transition. New global - local patterns of production, work, and innovation*, 2012: p. 213-232.
- [27] Bercht, A.L. Glurbanization of the Chinese megacity Guangzhou—image-building and city development through entrepreneurial governance[J]. *Geographica Helvetica*, 2013, 68(2): p. 129-138.
- [28] Hodson, M.,S. Marvin. Understanding the role of the national exemplar in constructing 'strategic glurbanization'[J]. *International Journal of Urban and Regional Research*, 2007, 31(2): p. 303-325.
- [29] Essex, S.,B. Chalkley. Mega-sporting events in urban and regional policy: a history of the Winter Olympics[J]. *Planning Perspectives*, 2004, 19(2): p. 201-204.
- [30] Hubbard, P.,T. Hall, The entrepreneurial city and the new urban politics, in *The Entrepreneurial City: Geographies of Politics, Regime and Representation*, T. Hall and P. Hubbard, Editors. 1998, John Wiley & Sons: Chichester, UK.
- [31] Swyngedouw, E., F. Moulaert, A. Rodriguez. Neo-liberal Urbanization in Europe: Large-Scale Urban Development Projects and the New Urban Policy[J]. *Antipode*, 2002, 34(3): p. 542-577.
- [32] Essex, S.,B. Chalkley. Urban development through hosting international events: a history of the Olympic Games[J]. *Planning Perspectives*, 1999, 14: p. 369-394.
- [33] Essex, S.,B. Chalkley. Olympic Games: catalyst of urban change[J]. *Leisure Studies*, 1998, 17(3): p. 187-206.
- [34] Harvey, D. From Managerialism to Entrepreneurialism - the Transformation in Urban Governance in Late Capitalism[J]. *Geografiska Annaler Series B-Human Geography*, 1989, 71(1): p. 3-17.



- [35] Deng, Y., S.W. Poon, E.H.W. Chan. Planning mega-event built legacies – A case of Expo 2010[J]. Habitat International, 2016, 53: p. 163-177.
- [36] Carlsen, J.,A. Millan. The links between mega events and urban renewal: the case of the Manchester 2002 Commonwealth Games[J]. Journal of Sport Tourism, 2002, 7(3): p. 4-5.
- [37] Carriere, J.-P.,C. Demaziere. Urban Planning and Flagship Development Projects: Lessons from EXPO 98, Lisbon[J]. Planning Practice & Research, 2002, 17(1): p. 69-79.
- [38] Imrie, R., L. Lees, M. Raco. Regenerating London : governance, sustainability and community in a global city[M]. 2009, Milton Park, Abingdon, Oxon ; New York, NY: Routledge. xiii, 353 p.
- [39] Yin, R.K. Case study research and applications: Design and methods[M]. 2017: Sage publications.
- [40] Hall,C. Michael. Urban entrepreneurship, corporate interests and sports mega - events: the thin policies of competitiveness within the hard outcomes of neo-liberalism[J]. Sociological Review, 2006, 54(s2): p. 59-70.
- [41] Hall, C.M. Hallmark tourist events : impacts, management, and planning[M]. 1992, London: Belhaven Press.
- [42] Syme, G.J., B.J. Shaw, D.M. Fenton, W.S. Mueller. The Planning and evaluation of hallmark events[M]. 1989, England: Avebury ; Brookfield, Vt.
- [43] Denzin, N.K.,Y.S. Lincoln. Handbook of qualitative research[M]. 1994, Thousand Oaks, Calif.: Sage Publications.
- [44] 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): p. 107-115.
- [45] Chan, R.C.K.,L. Li. Entrepreneurial city and the restructuring of urban space in Shanghai Expo[J]. Urban Geography, 2017, 38(5): p. 666-686.
- [46] Wu, F., J. Xu, A.G.-O. Yeh. Urban Development in Post-reform China: State, Market, and Space[M]. 2007, London; New York: Routledge.

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