

Beijing: Beyond the Olympic City

Mega-event strategies have become part of a deliberate urban policy for cities around the world. There is a particular concern on how to combine the preparation of a mega-event with urban development processes that meet long-term demands. This paper examines how Beijing tried to use the Summer Olympic Games 2008 to fight its spatial and environmental problems, and create a new image for the city.

by Yawei Chen

Organising large-scale urban events such as the Olympics has become part of a deliberate urban strategy for many cities to promote local economic growth and brand the city on the world stage. Especially the Olympics, as the world's biggest 'mega event', offers host cities the possibility of 'fast track urban regeneration, a stimulus to economic growth, improved transportation and cultural facilities, and enhanced global recognition and prestige' (Chalkley & Essex, 1999). Originally, Olympic host cities emphasized the construction of gigantic sport facilities and urban infrastructure. Later, host cities paid more attention to a much broader urban regeneration and urban restructuring program by using the Olympic Games as a catalyst. Furthermore, the development of Olympic sites have been increasingly integrated into large-scale urban development plans or master plans for the host cities. These should guarantee that the Olympic sites will keep functioning as sports and recreational complexes, and continue to provide housing or tourist accommodations in the post-Olympic era.

While it is agreed that mega events may create catalyst effects in urban development processes, opinions differ on what exactly is left behind in a host city. Mega events may

spur local - and even regional - economic development by attracting mass investment, tourism and media attention for the host cities. On the other hand, host cities were often not able to cope with the developments after the Olympic circus had left town. Major international cities like Montreal, Sydney and Athens were faced with large public investments, cost overruns and the fact that many of the awe-inspiring buildings created or modified for the mega event fall into disuse (Mathieu, 2010).

Despite the challenges Olympic cities often face, not only world cities such as London, New York and Paris joined the race. Uprising cities in developing countries, such as Beijing and Rio de Janeiro, also succeeded in their bid to become an Olympic host city. Given both the positive and negative impact the Games may have on host cities, it is important to ask the question what kind of Olympic legacy cities expect, and what kind of strategies should host cities follow to realize that legacy. As the first Olympic host city in a developing country, Beijing faced mammoth challenges when it won the bid for hosting the 2008 Olympic Games. Beijing not only suffered from severe air pollution and severe traffic congestion, but from all the societal pains that an economic transition into a post-industry era can produce.

By examining the construction of the Olympic city in Beijing, the research behind this article aims to provide a better understanding of the effect of mega event strategies on host cities. The data used in this article has been collected in 2010 and 2012 during on-site fieldwork, interviews with involved professionals - such as planners, architects, economists, and municipal officials - who worked on the preparation of Beijing's Olympic Games as well as with companies that operated the venues. Hence, this article examines Beijing's motives of hosting the Olympic Games, the strategies used to construct the Olympic sites, and the visible and invisible impacts for the city in the short and longer term. The article concludes with some lessons to learned.

Beijing: the construction of an Olympic city

During the latter half of the 20th century, Beijing was extensively reconstructed to cope with urban growth. The most dramatic changes have taken place since the economic reform following the open-door policy implemented in the late 1970s. These included the increasing power of land and housing markets, heavy influence of global financial capital, and dramatic demographic changes caused by rural-urban migration. These factors have become driving forces behind the transformation of Beijing's urban form.

In the last two decades, developing Beijing as an international metropolis became a new driving force for the city's transformation. As one of the largest Chinese cities and its unique position as China's political and culture center, Beijing has good international linkages in multinational political affairs and business in the Asian-Pacific Region. Spatial concentration of resources by the Chinese state further facilitates cities like Beijing to catch up in the global capitalist system. However, due to lack of investment, the city was in need of high-quality office space, retail facilities and residential

estates that could accommodate the emerging service sectors and the demand of an emerging urban middle class. Furthermore, the existing infrastructure and service provision were not able to meet the standard that allows its 'capital information and ideas flow in and out of, and interact within, the global city' (Cook, 2006). As a result of this concern, in the early 1990s, Beijing concentrated its investment in developing major financial, trade, exhibition and other service functions in the city center, such as in the Central Business Street in Xicheng District and the Central Business District in the Chaoyang District. Land for industrial use in the city was reconfigured and reduced. Factories and workshops causing pollution and noise in the central district and residential areas became the main targets to be moved out so that vacated spaces could be used for developing tertiary industries or housing. However, still many factors hinder Beijing in becoming an international city, including the domination of traditional industry sectors, low comprehensive economic power, insufficient infrastructure, scarce water resources, and poor environmental quality (Zhou, 2002). Many regeneration initiatives faced strong opposition from local inhabitants and enterprises. But since the 1990s, hosting the Olympic Games became the new means to facilitate Beijing's development toward an international metropolis.

Motive and Strategies

As hosting the Olympic Games has many consequences, the promotion of Beijing's candidacy as a host to the Summer Olympic Games in 2008 allowed Beijing to aim at a wide set of goals. Besides the need for international prestige and projection of national strength and unity, China saw the Olympics as a development engine that could spur growth in Beijing and the surrounding area for years to come. It also expected the Olympics to become 'a valuable channel for the city to exchange and learn advanced

management and technological skills from Western countries' (Wei and Yu 2006). The games also provided an opportunity and rational justification for massive investment and drastic measures to improve the city's environment and infrastructure.

The Beijing Olympic Organizing Committee for the Olympic Games (BOCOG) led by its mayor, officials from the Beijing municipal government, the State Sports General Association of China, and the Chinese Olympic Committee set the tone for the event with the slogans 'People's Olympics', 'Green Olympics', and 'Technological Olympics', all focusing on the remaking of the city and the city's image beyond the Games. The main strategies that help realizing the three themes can be explained as follows:

Olympic Action Plan

In March 2002, BOCOG published a draft of its three-phase Beijing Olympic Action Plan (OAP) online. The pre-preparation phase - from December 2001 to June 2003 - would 'include consolidation of supervisory organizations, drafting and initial implementation of a comprehensive Olympic Action Plan, securing funds for facility construction, and the drafting of blueprints for major facilities'. The Development phase - from July 2003 to June 2006 - would be focused on massive facility construction. The Implementation and Operation Phase - from July 2006 to the opening of the 2008 Olympic Games - would include double-checks of facilities, test runs of the competitions, and final adjustments or last-minute preparations for the Games. Besides the strategic themes, objectives and overall plans, the OAP also provided detailed plans for construction: the distribution of new facilities throughout the city (including plans for post-Games use), as well as related improvement strategies on communication infrastructure, transportation issues, and environmental improvement. The final ver-

sion of the AOP was finalized in June 2002, which accommodated some suggestions from society.

Olympic venues and post-use consideration

The OAP set out a clear guidance for the objectives and implementation strategies by taking post-Olympic use into consideration. Beijing used a dual-track design process that forced architects to decipher between an Olympic design and a post-Olympic design, to allow for a smooth transition from Olympic facilities to public facilities (Cochran et al, 2011). Under the OAP plan, the Olympics would utilize 32 venues in Beijing. Only 12 would be newly-built venues, while the rest are either renovated or temporary structures. The locations of the venues used a 'decentralised clustering model', as is shown in figure 1. The Olympic Green in northern Beijing accommodates 14 venues, the Olympic village, the media village, as well as other press facilities and communication infrastructures. It is adjacent to the area where the previous 1990 Asian Games village was located. The rest of the Olympic facilities are located mostly in university campuses, and in the western and eastern communities. The choice of venue location had more

FIGURE 1 ► LOCATION OF OLYMPIC VENUES AND OLYMPIC GREEN



FIGURE BASED ON [HTTP://EN.BEIJING2008.CN/VENUES/](http://en.beijing2008.cn/venues/)

to do with the existing good condition of the area in terms of infrastructure, sport facilities, social environment and potential post-users of the venues. Although Beijing has an urgent need to regenerate the poorer areas in southern Beijing, the local municipality finally decided to locate most Olympic venues mainly in the northern part of Beijing, partly because it feared the amount of relocation tasks involved in such regeneration programs, as well as potential societal conflicts that international media tend to cover extensively.

Integration of urban restructuring and economic restructuring

The Olympic plan attempts to integrate the main ideas from the pre-existing Tenth Five-Year Plan as well as the major urban regeneration and infrastructure projects proposed in the Beijing Master Plan 2004-2020. Beijing used OAP to realize both its urban and economic restructuring strategy, as well as its environmental improvement measures and infrastructure development plan. During the preparation of the Olympics, about 200 polluting factories inside the fourth ring were moved out to Beijing's suburbs or even to neighboring provincial cities. Other factories either went through significant technical upgrading, or were obliged to reduce or cease production. Even Beijing's steel giant, the Shougang Group, moved all its Beijing-based production facilities to Caofeidian in Hebei Province by 2010 (see Figure 1 in the article by Ya Ping Wang, page 30). The spaces left behind were assigned to new functions such as office, residential, and retail. At the same time, various 'facelift' programs were carried out. They not only helped developing new commercial, cultural and sports centers, but also supported the regeneration of the old, dilapidated inner city and restoration of historical sites. Investments were particularly focused on developing the city's retail, tourism and culture-related facilities. Further-

more, a clear guidance to improve the environment of Beijing was mapped out. These included water quality improvement and control, adopting environmentally-friendly technologies and materials, and creating regional ecological systems (Borne 2003; Ness 2002; UNEP 2009; Zhang 2008).

Grand projects and place promotion

The creation of a new urban image is a key concern embedded in the mega-event strategy. When Beijing lost its bid to host the 2000 Olympic Games in 1993, the leadership changed from focusing on the 'Chineseness' of Beijing to stressing the 'look' of Beijing as an international and contemporary city (Li et al, 2007). Besides the 'Bird's Nest' (Figure 2) by Swiss architects Herzog and De Meuron, several other monumental buildings were constructed during the same period, including the CCTV project by Dutch architect Rem Koolhaas, the National Grand Theatre by the French Paul Andreu, and the new airport terminal by the UK's Norman Foster. Beijing was thus 'branded' by the world's design elite, attracting global capital into Beijing. Following these mega projects, Beijing also saw a construction boom: new office buildings, residential projects, hotels and other retail facilities provided the city with a diverse, more internationally oriented image.

Financial scheme

Hosting the Olympics requires huge investments in facilities, infrastructure and organization. According to the 2001 budget forecast, the total investment on venues and non-sports infrastructure would be \$14 billion, of which only 13 percent would be spent on sports and the Olympic Village. Within the non-BOCOG budget, 60 percent was devoted to environmental improvements, and the rest to infrastructure and transportation improvements (Hashmi et al, 2008). In the view of a number of other studies, the real cost of hosting the Olympic Games had

FIGURE 2 ► GRAND PROJECTS: BEIJING NATIONAL STADIUM THE “BIRD NEST” AND BEIJING NATIONAL AQUATICS CENTRE THE WATER CUBE



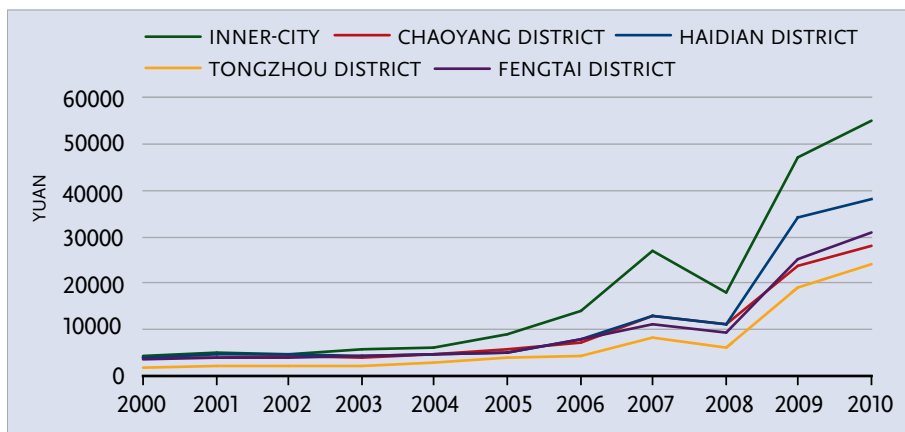
SOURCE: AUTHOR, 2012

actually reached the amount of \$44 billion, if all the related beautification, preservation and relocation projects were taken into account. In different scenarios, it is clear that a large proportion of the investment was allocated to infrastructure improvements and urban restructuring projects that are expected to create long term impacts.

BOCOG involved the private sector and attracted private investments through sponsorship and broadcast rights. Furthermore, BOT (Building, Operation and Transfer) model and several PPP (Public-Private Partnership) models were used in the construction of venues and infrastructure development. Among the twelve newly built venues, about 26 percent of the investment came from local government, and about 11 percent from national government, with the rest either coming from the owner of the venue or from private investors (50%) or donations from Chinese nationals based overseas (about 13%) (Lin 2009).

Spatial, Economic and Social Impacts

The Olympic Games have caused a massive overhaul of the city's urban fabric and infrastructure, including: 22 new stadiums, 15 renovated facilities, two new Ring Roads, 142 miles of new infrastructure, eight new subway lines, 252 new star-rated hotels, 40 km of cleaned rivers, one million new trees and 83 km of planted greenbelt. Beijing has seen positive developments in the creation of new urban sub-centers, improved transportation systems, a greener environment, and improved sports and cultural facilities for local residential communities. Hosting the Olympic Games offered Beijing a legitimate reason to carry out some really ambitious environmental and infrastructure projects which may have been planned for a long time, but would have been severely delayed or cancelled without the Games. Moreover, the 2008 Games also left an important environmental legacy for the city of Beijing in areas such as energy efficiency and the development of renewable

FIGURE 3 ► DEVELOPMENT OF COMMERCIAL HOUSING PRICES BEIJING (2000-2010)**NOTES**

1. Inner-city includes Xicheng District, Dongcheng District, Xuanwu District, Chongwen District;
2. Chaoyang District: located in the north east of Beijing; home to the majority of Beijing's many foreign embassies, CBD and the Olympic Green;
3. Haidian District: located in the west of Beijing and where most universities are located;
4. Tongzhou District: suburban district to the east of Beijing.

energy, water, and waste treatment capacities (Zhang, 2008). Although the Olympic plan also took into account the post-use of the Olympic venues by locating most of the venues in university campus or residential communities, post-use of the stadiums in Beijing remains a difficult task. The main Olympic venues are mostly visited by tourists, yet sports events are only held there occasionally. Furthermore, the selection of strategies missed the opportunity to address the gentrification process that the city is facing. Since all efforts and investments concentrated on the development of Olympic-related areas and facilities in the north, the gap between northern and southern Beijing has intensified.

According to an auditing report from the Chinese Government, the Games have left BOCOG with a small profit of US \$170 million, resulting from sales of broadcasting rights, souvenirs and tickets, assets sales and sponsorship, while the main expenditure

re items involved temporary facilities, sports and communication equipment, accommodation and medical services (China Audit Bureau, 2009). Nevertheless, this result has not taken into account the major investments in environmental and infrastructure projects or other urban redevelopment projects related to the Olympic Games. Nor has the result taken into account all the losses sustained by factories and construction sites in Beijing and five neighboring provinces that were obliged to suspend their production line to keep the pollution level low. In the short term, Beijing has seen a mixed picture in economic growth. The Games stimulated the construction industry, hotel and retail sector, and the development of the real estate market and housing development. The temporary jobs created by the booming of these sectors created millions of jobs for the local citizens and migrants from rural areas. Related to the Olympic Games, housing for 16,000 athletes was designed from the start as luxury apartments sold out well ahead of the Olympics at

prices ranging from \$3,000-\$4,500 per square meter, high even in the booming Beijing market (Gluckman n.d.). In the post-1998 real estate boom, housing prices in Beijing rose between 400 and 1,000 percent between 2001 and 2008. Contrary to expectation, the tourism market actually shrank in Beijing during the Games due to tighter political restrictions and security measures, leaving the newly-built 780 hotels in Beijing with a high vacancy rate. The tourism industry only started to recover two years after the Games were over. In total, Beijing has doubled its GDP per capita from 2001 to 2008. In the long term, the economic restructuring measures has allowed Beijing's tertiary sector to grow steadily, from 61 to 78 percent of Beijing's total GDP. The sectors that grew strongest are in the high-tech, financial, culture, and service industries. Given all the above factors, it is clear that the economic impact of the Games on Beijing and its region is still developing. Its full economic impact should therefore be assessed again in the future, tracing it back over a longer period of time.

As was already mentioned, BOCOG invited societal groups to discuss OAP for improvement. It organized various programs to encourage Chinese citizens to get involved in sports activities and facilitate their involvement in the Olympic Games. By the end of 2005, more than 5,000 sports facilities were created in residential communities along major roads and villages, with financial input surpassing 662 million Yuan (US\$83 million) from the profits of the local sports lottery (Liu 2006). What remains a controversy is the fate of the affected communities. BOCOG claims only several thousand people were affected by the Olympic project. The Centre on Housing Rights and Evictions (COHRE), on the other hand, estimates that a total of 1.5 million people were displaced. COHRE not only includes the relocation derived from projects for the principal Olympic venues, but also the affected households

due to city 'beautification' project for Olympic tourism, urban facilities related to the Olympic Games, and improvements to the city's general infrastructure. Today, the real number of migration or displacement is still unknown.

Conclusion

As the first city in a developing country to host the Olympic Games, Beijing's conspicuous construction of an Olympic city showcased China's strong capabilities to improve its urban environment and brand Beijing as an international metropolis. Beijing is no longer only 'ancient and wise', but also 'new, innovative and high-tech, valuing harmony, unity and the environment' (Hagan 2008: 79). The Beijing case also shows the difficulties that cities face in balancing economic, social, as well as environmental development. For example, the Games stimulated the growth of the real estate market and the increase in housing prices, but also creates serious affordability problems in the city after the event.

Although the impact analysis shows ambiguity or even conflicting results, it is clear that the Olympic Games have helped Beijing to realize some really ambitious environmental and infrastructure projects. These projects may have been delayed substantially without the pressures that the Games create for its main stakeholders. Furthermore, the case shows how the Games can be used as a stepping stone for economic restructuring. Host cities have the opportunity to introduce new urban functions, and create new city images during the preparation for the Games through global media attention. For Beijing, the Olympics fuelled the city's transition towards an international metropolis.

The times of Olympic host cities are generally toughest in the post-event era. With regard to urban development strategies, we have seen a clear intention to combine the

preparation of the mega event with Beijing's long-term development. Beijing has incorporated post-use consideration in the plans and designs of Olympic venues and facilities, if only by locating most of the Olympic venues next to the university campus or residential communities. Private investments were secured through BOT contracts, PPP arrangements, or individual donations. Nevertheless, Beijing will still have many difficulties in coping with the maintenance costs of Olympic venues in the coming years. A major lesson for future host cities

is to address and prepare an overall post-use strategy well before the event – a strategy that should not only focus on planning and design, but also on financing and management issues in the post-Olympic period.

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REFERENCES

- Borne, Y. (2003) *The environment impacts of the Olympic Games* - looking forward to the Olympic Games 2008 in Beijing, China, master thesis, Lund University.
- Chalkley, B. & Essex, S. (1999) *Urban development through hosting international events: a history of the Olympic Games, Planning Perspectives*, 14, pp. 369 – 394.
- China Audit Bureau (2009) *Tracking audit of Beijing Olympic Games' finance and construction costs of venues*, no. 40. Retrieved 04-10-2012, from <http://www.audit.gov.cn/n1057/n1072/n1282/1831561.html>
- Cook, I. (2006) *Beijing as an "internationalized metropolis"*, in: Wu, F. (ed), *Globalization and the Chinese city*, Routledge Contemporary China Series, UK: Abingdon, pp. 63-84
- Cochran, J., Davis, C. & Banfe, P. (2011) *Olympic legacy: Will Beijing be added to the list?* The 2011 Barcelona European Academic Conference, Barcelona, Spain, 2011, Retrieved 04-10-2012, from <http://conferences.cluteonline.com/index.php/IAC/2011SP/paper/view/579/586>
- Gluckman, R. (n.d.). *After the Olympics*. Retrieved 04-10-2012, from <http://www.gluckman.com/Beijing%20Olympics%20Legacy.html>
- Hashmi, S., Fida, B. and Alhayky, A. (2008) *Economic impact studies of Beijing 2008 Olympic Games*, n: China-USA Business Review, 7(5), PP.27-35
- Hagan, C. (2008) *One world, one dream? Image building and brand China in the 2008 Beijing Olympics* [Master Thesis], University of Oregon
- Li, L., Dray-Novey, A. & Kong, H. (2007). *Beijing: From Imperial Capital to Olympic City*. New York, United States: Palgrave Macmillan.
- Lin, X. (2009) *Survey on the post-use of Beijing Olympic Games venue*, August 06, 2009, Guangming Daily.
- Liu, W. (2006) *Regulation helps Beijingers keep fit*, March 01, 2006, China Daily
- Mathieu, E. (2010) *Games legacy: a herd of white elephants*, retrieved 30-01-2010, The Star, from <http://www.thestar.com/business/article/757961>
- Ness, A. (2002) *Blue Skies for the Beijing Olympics*, in: The China Business Review, March-April, pp. 48-54
- UNEP (2009) *Beijing 2008 Olympic Games: an environmental review*, retrieved 01-05-2011, from <http://www.unep.org/downloads/BeijingReport.pdf>
- Wei, Y. and Yu, D. (2006) *State policy and the globalization of Beijing: emerging themes*, in: Habitat International, 30, 377-395
- Zhang, A. (2008) *China after the Olympics: lessons from Beijing*, Greenpeace East Asia, from <http://www.greenpeace.org/raw/content/eastasia/press/reports/green.pdf> (accessed
- Zhou, Y. (2002). *The Prospect of International Cities in China*. In Logan, J.R. (Ed.), *The New Chinese City: Globalization and Market Reform*. Oxford: Blackwell Press, pp.59-73.