

Utilization Pattern of Olympic Parks and Its Application in Beijing

HE Yan^{1, 2}, CHEN Tian¹, ZHANG Meng³

(1. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China;

2. Graduate University of the Chinese Academy of Sciences, Beijing 100049, China; 3. Faculty of International Tourism,

Macau University of Science and Technology, Macau 999078, China)

Abstract: With great promotion of mega-events in both quantities and qualities in China, the research of Mega-events has been increased. As a global hallmark event, the Olympics, with their enormous scale, universal attraction for the media and tremendous political significance, have increasingly drawn attention from the researchers. It is obvious that Beijing has been greatly impacted by the 2008 Olympic Games as the host. The event aroused close attention of researchers, especially the problem how the Olympic stadiums and facilities can be utilized after Olympic Games. The paper employed 3 methods to conduct a survey, that is, sending questionnaires to tourists, interviewing with government officers, and collecting information about former Olympic Parks from Internet and literatures. The utilization of former Olympic Parks after Games was summarized and some experiences were refined. Besides, 3 main bodies including government, business operators and visitors which formed basic driving forces to influence the park's use were analyzed. At the same time, the paper believes that 3 topics affect the park's utilization involving 'prepare to use', 'how to use it' and 'how to manage it', and Beijing Olympic Park can also follow that thinking and reference in the further practices. Based on it, suggestions are given that Beijing Olympic Park can be planned spatially from 3 layers, the point, line and area, based on their function and infrastructure in the Games, and the area would be shaped as a new urban center with multi-functions while Mega-events and sport events are still the main content of the park.

Keywords: sustainable utilization; Olympic Park (Olympic Green); Beijing Olympic Park; Beijing

1 Introduction

The Olympic Games are the greatest global events which are famous for their spirit value reflected by the spectacular games. Nearly all peoples are fans of the Olympic Games and the host cities all attach great importance to the Games. The host has begun to make profits from the Games since Los Angeles Olympic Games in 1984, and the Olympic has become a characteristic economic phenomenon in the world. People gradually concern about such Olympic topics as evaluating its impacts on the host city, especially the effect of the Olympic economy. Undoubtedly, innumerable employment and business opportunity would be brought to the host by the Games, and it will become an active impetus to the urban development.

The giant ramifications of Olympic research brought us into a wide area about politics, economy, society and

environment. However, Olympic economy is always the main topic among these fields. The other two interrelated perspective areas are the Olympic tourism and the research on Mega-event heritages including Olympic Parks (sometimes be called Olympic Green). There has been discussed about the cost and economic impact of Olympic since 1973, and many researchers focused on the topic by many economic methods such as multi-districts model, general equilibrium model, multiplier model, *etc.* (Bramwell, 1997; Preuss, 2004; Leea and Taylorb, 2005; O'Brien, 2006; Getz, 2008). Generally, these studies concentrated on the prediction analysis or experience summarization, aiming at practical application. Leibold and Van Zyl (1994) studied the tourism market for Olympics, while actually such study was performed as early as 1988 (Pyo *et al.*, 1988). Subsequently, the connection between Olympics and tourism market has increasingly aroused the interests of the researchers, and

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Correspondence author: HE Yan. E-mail: hey.07b@igsnr.ac.cn

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the renewing of tourism and cities brought by Olympics and the impacts of Olympics on tourism also became the subjects for studies. However, the study on Olympic tourism is still inadequate compared to that on event tourism.

Mega-events made their way into China after the Asian Games in 1990 as the first, and the Olympic research has become more popular since the success in bidding for 2008 Olympics. However, because of the late start, it still falls behind international processes for its insufficient characteristic and inadequate theoretic research. After Dai and Bao (2003) firstly used the term 'event tourism', a number of scholars have made introduction and discussion on the theory of event and event tourism. Besides the impact on cities, tourism is the major component of the study on event. Dai (2008) conducted the case study of 1999 World Horticultural Exposition, which undoubtedly laid solid foundation to the study on the Olympics. Based on this, researchers conducted studies on the Olympics, including studies on the implication of foreign cases for Beijing (Zou and Peng, 2005), and the impacts of surrounding area by Olympics (Tu *et al.*, 2006; Qi, 2007; Liu, 2008).

Among these researches, it is noteworthy that the so-called bottom effect would seemingly influence the sustainable development of the host city. And the sustainable use of facilities after the Olympics is the major challenge the host city faced. Each host city would pay a huge bill for stadiums and gymnasiums building, infrastructures setting as well as environment improvement. Nevertheless, with the particular purpose of the construction, the Olympic facilities and related industries had to struggle against the inertial lag of the function adjustment. It led to a lower utilization with no benefit and a big burden to managers. A few researchers studied on the use of Olympic Park after the Olympics, of which landscape architectures and their post-Olympic utilization are two major subjects (Shi, 2001). Besides the remarks and explanation in the planning of Beijing Olympic Park, domestic researches on the post-Olympic use of Olympic Park mainly concentrated on the summarization and references to existed overseas experiences.

There is no effective solution to this problem from the present researches and practices. Some functions were added or transformed in the Olympic Park involved some correlative industries such as meeting and exhibition, sports industry, cultural innovation industry, real

estate, construction as well as tourism, *etc.* According to the experiences of the existed cases, it is filled with realistic significance to discuss the sustainable use of Olympics heritage, especially to the Olympic Park from a tourism perspective. Because the Olympics are perceived as a mega-event, and the visitors to the Olympics will be the equivalent of tourists for events, the post Olympic Park's utilization and management are very important.

It will be a profound subject how to distribute and utilize such resources and organize as well as manage the Olympic Park by an appropriate manner in an effort to maximize the benefits of the Olympic Park. This article, with a case study of Beijing Olympic Park, performs a research on the sustainable use of Olympic Parks in order to consolidate the current resources and establish a sound self-supported tourist attraction and to realize the maximal utilization of the Olympic Park after the Games.

2 Methodology

2.1 Olympic Park

Olympic Park, where 44% of the competitions happened in 2008, is located at the northern end of the central axis of Beijing City. The area is about 11.59 km², including Olympic Common Domain (OCD), Olympic Forest Park, Olympic Village, the Main Press Center (MPC), and the National Stadium and so on. The park border upon the Fourth Ring Road of North Beijing, and several blocks are directly influenced (Fig. 1).

2.2 Methods

This paper employed 3 methods to conduct a survey, including sending questionnaires to tourists, and interviewing with government officers, and collecting information about former Olympic Parks from Internet and literatures.

More than 291 questionnaires were filled in by tourists in Beijing Olympic Park in 2009, and more than 90% questionnaires were filled face to face during the interview so they were creditable and effective. Besides demographic information, tourists were asked about their impression on the park and their ideas to the park's future. And interviews were carried between government officers and authors, for an example, the authors had cooperated with officers of Beijing Olympic Park

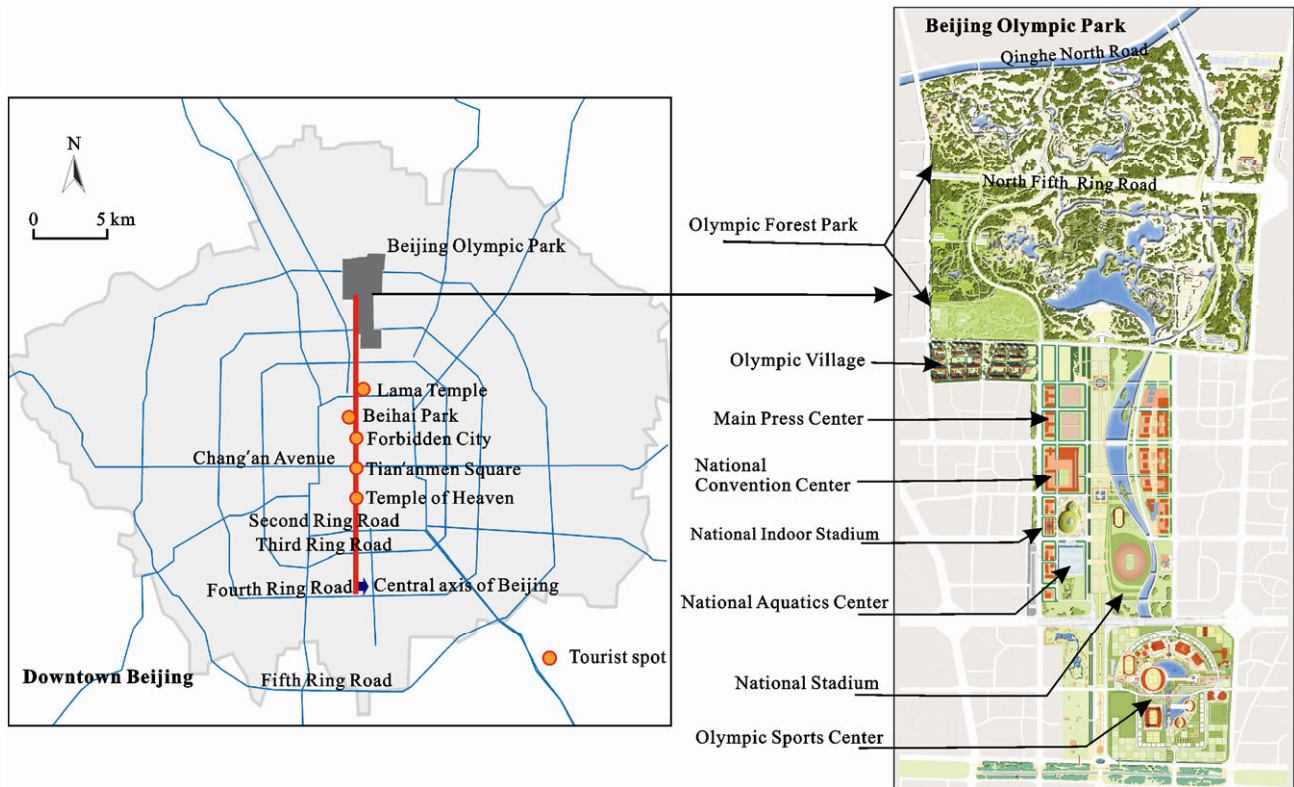


Fig. 1 Location sketch of Beijing Olympic Park

Administration Committee, and interviewed with business operators of the major gymnasium and stadium such as the Bird Nest and the Water Cube for many times to find out the working situation of parks after Games. Besides, Beijing Tourism Bureau had also given a great support to the research and provided some materials about other Olympic Parks.

Moreover, Web sites including each the Olympic Park and the Olympic city were visited to collect information about former Olympic Parks in 2008, and the information involved planning, investors, current status, characteristics and managers, *etc.*

3 Results

Several host cities were compared from planning, investors, current situation, characteristics and managers, and the Collection-Analogism-Induction method was employed to conduct the comparison.

As Table 1 shows, these Olympic Parks are different from each other, however, similar policies seem to bring a similar situation. Among these cities, Munich made the Olympic Park plan as a part of city plan and the city

extended greatly with the area's constructing. The park has become a new area of Munich, and some classical buildings such as Headquarters of BMW can be found there. An entire commercial system was introduced in Atlanta with less new infrastructures while more benefits. While Athens ran into debt with a passive efficiency, and many groups of stakeholders were quarrelling for the ownership of the stadiums. A similar situation occurred in Sydney before 2004, while after it transformed the orientation of the park from center of sport to the center of conference, exhibition and entertainment, the Olympic Park has attained a remarkable achievement since 2004.

Table 2 listed post-game utilization of some Olympic Parks. From it, we can know that most of the parks were open to the public and venues are rented to hold large games or events.

All of the Olympic Parks' uses after the Games were led by the government or business operators, while adjusted by market. On the other hand, ordinary visitors have their own opinions on the Olympic Parks after the Games.

After the Games, Beijing Olympic Park went into a spring of tourism development with large influx of tour-

Table 1 Utilization of Olympic Parks after Olympics in some host cities

City	Planning	Investor	Current situation	Characteristics	Manager
Athens	Too hurry finishing projects to consider their long-term use	Government	Most stadiums unused	No characteristic	No clear ownership with many disputes
Sydney	Elaborate planning	Government	Done well since transforming operation strategy	Conference, exhibition and entertainment	Government
Atlanta	Perfect consideration	Government	Great success due to commercial involvement	Predetermined manager and function	Company belonging to government
Munich	Part of city plan	Government	Great success and 2×10^9 tourists in 1972	Open area to citizens, lots of events	Multi-manager for different buildings
Beijing	Sufficient Planning	Build-Operate-Transfer	About 350×10^6 visitors in 6 months after Games	Multi-industry	Government and companies

Table 2 Functions of Olympic Parks after Olympics in some host cities

City	Function at present	City	Function at present
Seoul	Multi-function park filled with local culture Open-air Sculpture park (famous in the world) Exhibition for space- technology and dinosaur Vocal concert for hot stars	Sydney	Musicales and sports events Amusement park for children Leisure concourse Opening garden
Montreal	Trade center	Atlanta	Park in downtown Piazza filled with athletes' names
Munich	Playground for citizen Television station	Barcelona	Amusement park for children Artistic museum

ists who hoped to experience the Olympics. According to the survey, 63% of visitors go to park for tourism, 40% for enjoying the Olympic surrounding, and 12% for viewing the shows and performances in stadiums.

In the survey to Beijing Olympic Parks, 65% of residents considered that the government should continue to increase investment in the region, and try to nurture a core area of regional industrial center. However, tourists generally agreed that Beijing Olympic Park should add performances, entertainment and leisure facilities, and out of simple architectural tour. About 88% of the visitors believed that the park should still retain the Olympic theme and develop sports events and other Mega-events to undertake the leading function of Beijing sports and festivals; while 24% of the visitors believed that the park should be built as a cultural park. A small number of tourists thought it should be a nonprofit cultural center. Only 7% of the visitors considered the park as an ordinary city park. Despite the visitors had different understanding of the Beijing Olympic Park, they still had more senses of identity on retaining the Olympic features, taking as a center functions of sports and entertainment, culture, exhibition in Beijing, *etc.*

4 Discussion

4.1 Conditions of success management

Based on the comparisons to the utilization of previously Olympic Parks (Table 1 and Table 2), the factors determining the success in post-game operation are concluded as follows. 1) Comprehensive pre-game design. The stadiums should be subject to transformation for other uses besides holding sports, in prevention of waste or losses after games, so careful pre-game design is essential to make such transformation possible and convenient. 2) Definite ownership and specialized operation. Commercialized operation is an instrumental for adjusting the function of the parks, alleviating the pressure on governments for maintenance, and making full use of heritage resources of Olympics. So to nail down a clear ownership is important to avoid dissension and improve the efficiency of the companies. 3) Multiple operations to optimize the use of the venues. Sydney, Munich and Barcelona all designed the Olympic Parks for multiple uses, and opened them to the public in order to maximize the use. 4) Taking the demand from local residents into account. Based on the original function, Olympic

Parks can hold cultural, sport activities and exhibitions, which is aimed to satisfy the need of the residents and to sustain the use of the parks.

4.2 Impact factors

Three main bodies were found to impact the Olympic Parks, namely planners, managers and visitors including communities and tourists. The bodies exert influence on the long-term use of the parks in different periods. The linkage concerning the interest and interaction pattern of them are shown as follows (Fig. 2).

According to Urban Regime Theory, government, business operators and visitors constitute the 3 main bodies of urban spatial development, and form their basic driving forces to influence urban space, which are behalf of government power, market power and social force. Government power manages public goods and pursuits public interests, moreover, government controls planning, which decides the role of the heritage of the city and the direction of heritage development. Market power takes business operators as promoters, and makes Heritage festival achieve profitability. Social force, the residents including various community organizations, is regulators of government and industry, as well as end-users of the products. In the market, the government power, market power and social force play a joint action to determine the ultimate direction of urban spatial development. Such a joint interpretation of heritage militates at different time and different places to the final results of heritage. Because of this phased change of leader, there is a cycle of 3 forces to form a special model of the associated follow-up utilization of the park.

4.3 Manner of utilization

According to Table 2 and Fig. 2, previous Olympic Parks all diversified in their functions, elements featuring art, daily life and business can all be reflected from the parks. In general, there are 3 major forms of use (Fig. 3). 1) The typical building as landmark. Olympic stadiums built with large investment are always models for architecture, not only because of their heritage connotation, but also due to their highly valuable for sightseeing. The venues will be the new symbols for the cities, as well as must-see scenic spots for visitors. 2) Original function. Former functions of the gymnasiums and stadiums will be maintained to satisfy the residents' need for physical exercises; parks will always be maintained and open to public to exert their original function; in addition, such mega-event as trade fairs, exhibitions can also be held in most venues. 3) Transforming original function. Every city can design new attractions according to their own demands, which is the most prevalent and flexible form.

4.4 Users' demand

The demands vary from person to person, so more attention should be paid to different visitors. Actually, planners and managers of the Olympic Parks are mainly faced with two groups of visitors: tourists and local residents. They concern for itinerary and function, respectively. Tourists are more sensitive to the itinerary than residents, featuring ring roads and diverse transportation means. While residents pay more attention to the diversity of function and convenience for use of the parks, in comparison to the short-time sightseeing and

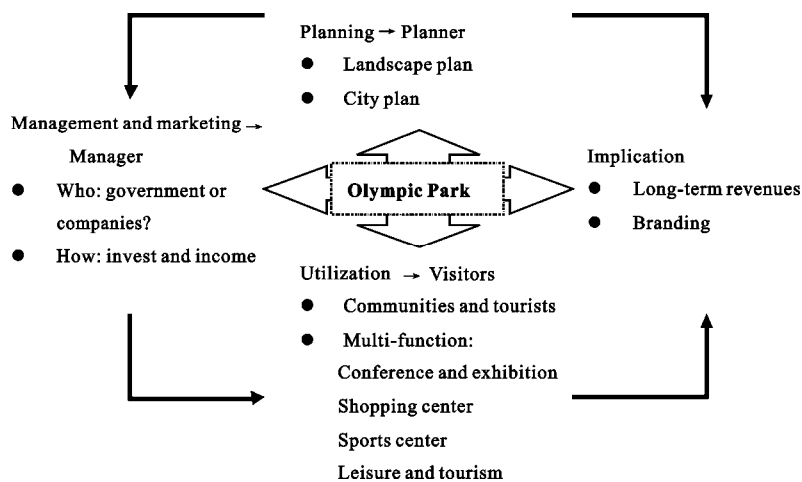


Fig. 2 Main bodies impacting Olympic Parks

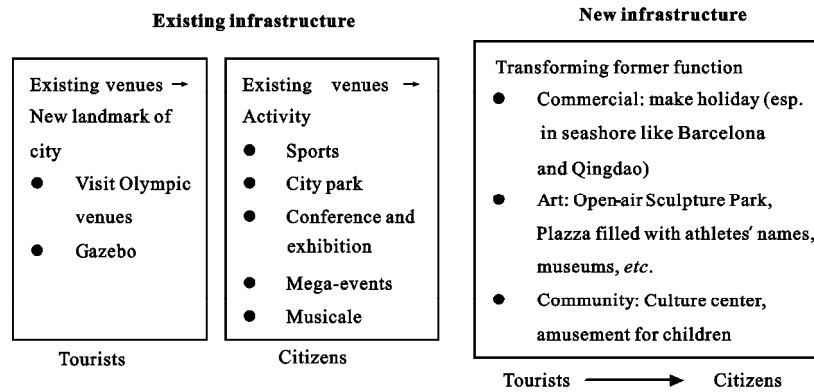


Fig. 3 Products of Olympic Parks after Olympics in former host cities

staying of tourists. As a result, in the location and distribution of various facilities, it is of great significance to emphasize the disparities in perspectives between the two groups.

4.5 Development pattern

When a problem emerges like how to deal with the Olympic Park or World Cup stadium, it may be another 3 questions to be thought as 'what should be done in the seedtime' (i.e. prepare to use), 'How to use the facilities', and 'how to manage it'. Figure 4 can help us to understand the mode.

5 Implication for Beijing

Beijing had just held 2008 Olympic Games successfully, and prior to that, the government had made a point of making sound preparations for the Games. A giant expenditure paled Athens and the $\text{US\$}15 \times 10^9$ expenditure of Olympics had buried Athens into 10-year debt while $\text{US\$}17 \times 10^9$ direct investment had been used by Beijing Olympic Research Center. In the investment, the facilities and stadiums just cost 32.72×10^9 yuan (RMB) and

a large part of the outlay cost on the traffic infrastructure. However, compared to other cities, Beijing has more stadiums, larger Olympic Park with more investment in exertion, among which the National Stadium with more than 100 training fields are still costly, so it is really a difficult problem to use them after the Games. Beijing Olympic Park, at the north end of traditional axis of Beijing, hosts a forest park and the Olympic Common Domain (OCD). Concentrating the main new buildings and a majority of investment, the OCD, where the Bird Nest, the Water Cube and the National Indoor Stadium are, is open to the public after the Games from Monday to Sunday.

5.1 Prepare to use

The government emended the new urban planning to welcome the Olympic Games and considered the probably extent in the northern area which the park would be built in 2002. In a small scale, an elementary orientation of each stadium had been studied out before the Games. For an example, a new aquatic entertainment gymnasium could be born in the Water Cube. Moreover, citizen participation had been considered in the plan, and the

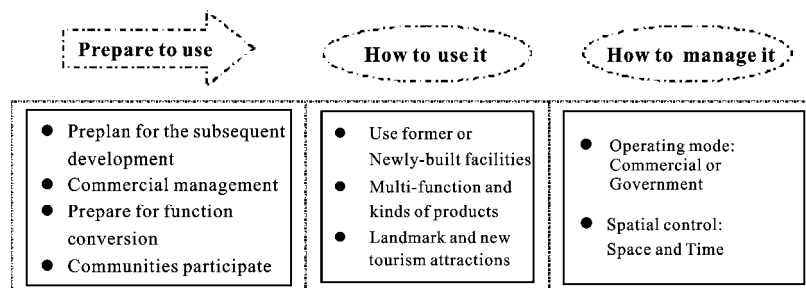


Fig. 4 Pattern to subsequent use of event heritages area

originally planed stadium location had to change to protect some heritages in the Olympic Park. So the preparation tasks were partly done before the Games' open.

5.2 How to use it

It may be an easiest ratiocination droved by scholars, stadium managers as well as land agent that the Olympic area will become a new function area in Beijing.

Beijing Olympic Park is located between downtown and green-defend area, two traffic arteries thrill through the park and the net of urban subway connects the park directly. Moreover, several large blocks are distributed around the park, and there is enough threshold of population to afford the area development. And the most important is the park's location, which stands in the north vertex of the traditional axis line in Beijing including the Asia Games' village built in the 1990s. So, it is possible to establish a new service industry functional zone at this area for its convenient traffic, predominant location and enough supporters. As a rallying point in the north of the city along the axis, Beijing Olympic Park will become a new center in the north of Beijing.

As a spatial conception, the Olympic Park will become a definitely community with special characteristic which is advocated by government. Under the cluster action of people and traffic, the area acts on its vicinages which will become golden blocks for housing and leisure.

As we known, various industries would make the park more active, so it would be a brightening way to integrate industries such as sports, conference and exhibiting, entertainment, culture, leisure and shopping in the park, and provide a multi-activities concourse for visitors. And this area will be oriented by Olympic tourism, in company with the development of business exhibition and leisurely entertainment. Majority of the visitors believed that the park should still retain the Olympic theme and develop sports events and other Mega-events to undertake the leading function of sports in Beijing, and should develop more festivals sports and entertainment, culture, and exhibition.

It is worth mentioning that Beijing Olympic Park lies on Beijing traditional tourist axis which is a famous one-day-tour route including the Imperial Palace, Temple of Heaven and Beihai Park, so the route can be extended from the Imperial Palace to the Olympic Park. This change break the traditional tourist routes of Beijing, and the Olympic Park goes into a tourist itinerary

as an important point. The survey for tourists in the Olympic Park found that 75% of the tourists would go to Olympic Park, Tian'anmen Square, Forbidden City and North Sea one by one, which are all located in Beijing traditional tourist axis. Among the China International Travel Service Limited's 15 hot tourist lines in Beijing, there are 9 lines including the Olympic Park.

Moreover, as a vertex in Beijing traditional tourist axis, the Olympic Park will become another important consumption place in the axis like Beihai Park. After the core's visiting, tourists could come here to go shopping and enjoy performs in the park in the afternoon.

5.3 How to manage it

5.3.1 Managers

Four situations usually appear in the former Olympic parks' management, including totally government control, corporations (which belong to the government) control, multi-bodies manager (corporations) and government control, and totally corporation control. Go without saying that completely commercial management is the most energy mode while the non-benefit things are easy to be ignored, and the park may be embodied with a large number real estate being occupied for sale. So the companies will still answer for each part of the park but government should afford a whole plan and control.

5.3.2 Spatial control

On the condition of management manner mentioned above, it can be realized to separately manage to each function district of the park by multi-managers under the master control of government. The function diversification is beneficial to increase attraction of Beijing Olympic Park, and at the same time, several function zones should be distinguished to realize the management and spatial control especially in the starting use of the park. It can be exploited and arranged on different stages, and relevant infrastructure would be set up accordingly. In this paper, it can be divided into 3 layers, the point, line and area to integrate spatial planning, based on their function and infrastructure in the Games (Fig. 5).

First, take the stadiums as a point feature in the park. Because various points are independently operated entities, different shapes and different capacity of stadium determine their differentiated characteristics in operation and target market, which make them complement each other. So the point can frequently active park atmosphere and rich in park tourism products.

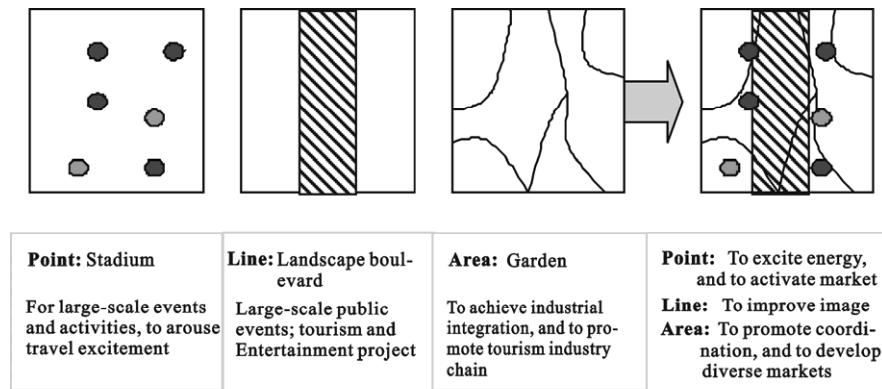


Fig. 5 Beijing Olympic Park tourism development concept map

Secondly, the Park Boulevard will be the main trunk line. With its open space to public Mega-events as the focal point, the line will increase tourism and entertainment projects, and maintain parks popularity and visibility.

Thirdly, the garden can be taken as an area, the space can interact with the great business district: east to integrate with its tourist facilities closely; west to combine with scientifically research institutes to promote the development of green industry; south to push-down the technology and business travel with Jianxiang Business Park; and north to develop eco-leisure tourism. And the Olympic Park would integrate the tourism spatial development by the four tourism industry linkage finally.

6 Conclusions

Anyhow, all host cities were striving to get rid of the passive effects of Olympic Games by kinds of strategies, and tried to make best use of the Olympic heritages. The Olympic Park is usually exploited as tourism resources by the host city and its multi-functions are advanced based on present facilities and new buildings.

Therefore, the diversified functions and products can both satisfy local residents and tourists and that provide conditions to afford the sustainable development of the park. At the same time, planners and managers as well as visitors (including tourists and local residents) promote the Olympic Park to be more marketable and multifunctional, and make it an attraction of the city. In this process, planners exert a rational orientation in planning and deploying facilities in order to achieve the least repetitive consumption. Managers struggle to realize the maximum profits of the park by clear property owner-

ship and definite responsibility. Visitors stimulate the improvement of the park on humanism by kinds of subtle requirement.

To realize the sustainable utilization of the Olympic Park, this three questions affect the park's utilization involved 'prepare to use', 'how to use it' and 'how to manage it', and Beijing Olympic Park can also follow that thinking and reference in the further practices. Beijing Olympic Park possesses of enough potential visitors, favorable location and abundant tourist resources, which lay a foundation for the successful development of the park. However, the park should be controlled by government and managed by companies according to different function zones, and then the characteristic can be shaped in the park.

Beijing Olympic Park has been in sound operation currently since the end of the Games. The central part of the Olympic Park is free for the masses while admission to stadiums is charged. During the first National Day vacation after the Games, this area has become the most popular place for tourism and it attracted more than 2.42×10^6 visitors in 7 days. At present, the post-Olympic tourism has become fashionable and the Olympic Park has become an important part in the tourism destination of Beijing. In the future, various relevant activities will be opened to the masses, which will be performed by different owners through market, and the commercial contents may be filled in the stadiums such as water amusement facilities and super market for tourism.

However, problems still exist. To some stadiums, they are so expensive that many events have to give up renting them and they are vacancy inevitably. Actually, there are still many areas worth further studies about Olympic

Parks, such as, the particular planning of tourism environment in Olympic Park, the associated strategy of tourism resources around the park, the status change in the regional tourism, and the awareness of tourists and residents to the park, and so on. To Beijing Olympic Park, studies in greater depth could be conducted not only in the subsequent utilization of the stadiums but also in the development of the peripheral area and whole area of Beijing. The research can be used not only in the Olympics but also in other Mega-events just like the Asia Games and World Cup as well as World's Fair.

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