

## Theoretical and Practical Research on Park City

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**Abstract:** As a production of industry, park is a place where citizens can live, work, transport and swim in a distance. With the improvement of urbanization level and the arrival of a new era, people's demands for life have been improved. Getting better is also becoming the main task of urban planning and construction management. "The stone of other mountains can be used to attack jade." Based on experience of essence of urban development and experience of urban construction at home and abroad, this paper aims to provide some lessons for the construction of park cities in China. Finally, it proposes countermeasures and suggestions for improving the construction of park cities in China from the aspects of material space construction, planning and design, and even the formulation of laws and regulations, the establishment of decision support platforms, and the implementation of incentive mechanisms.

### 1. Introduction

#### 1.1 The Proposal of Urban Park Theory

When it comes to park cities, people will naturally associate this concept with urban parks, but this is completely different concepts. From urban parks to park cities, the experience has changed dramatically and the connotation has changed.

City Park System originated in the United States Its definition is: a system consisting of parks (including open green spaces outside the park) and Parkway, which protects the urban ecosystem, induces urban development to be benign, and enhances urban comfort. As we all know, the emergence of landscape architecture is closely related to the prosperity and development of urbanization. As the founder of the American Park System, Frederick Law Olmsted designed and built the first modern park in 1851 - Central Park in New York. He advocated the protection of natural resources and the environment, the establishment of public gardens, urban open space systems, bringing villages into cities and gardening cities. At the same time, the publicization of the Royal Parks in the United Kingdom (such as Green Park, Hyde Park, etc.) became an important historical opportunity for the practice of its ideas. As Olmsted said, "Building a city park system is a necessity for the material and spiritual life of urban residents, not a luxury." The city gardening, urban-rural integration, and garden publicization demonstrated by the urban park system are also the development direction of the park city.

Under the guidance of this kind of thinking, multidisciplinary developments such as planning, landscape, ecology, etc., promote the Boston urban park system not only to become a sample of urban construction around the world, but also to guide the city to ecological and sustainable development. The improvement of the ecological environment in the new era has become more concerned about the planning of urban park systems. Today, the construction of eco-cities at home and abroad is booming. The green roads, green infrastructure and green networks that are widely built in cities are also a kind of continuation and development on the basis of urban park systems, and they are used to shape urban space and renovate the ecological environment. It has played an important role.

#### 1.2 Proposal of the Park City

Park city ideas accompanying park system theory are also evolving. This concept was first proposed in 1820 by the famous utopian socialist Robert Owen (1771-1858). In 1898, the British

urban planner Sir Howard experienced the destruction of the natural environment in the industrial cities of the United Kingdom and the United States, and the urban traffic caused by traffic congestion, environmental degradation and the influx of peasants into the big cities. Put forward the “garden city” theory, and hope that people can live in a new type of city that has both good social and economic development and a beautiful natural environment. The British Garden City Association clearly states the meaning of an idyllic city: an idyllic city is a city designed for health, life and industry. It is large enough to provide a rich social life, but should not exceed this level; there must be permanent agriculture around it. Surrounded by zones, the land of the city is owned by the public and is entrusted by a committee.

The concept of the park city concept also absorbs the essence of the new concept of world urban development. The New Urban Agenda of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) has focused on the sustainable development of cities for two consecutive years. The core content of 2016 is to advocate “the ecology and resilience of the city”. In 2017, the main topic is the city's rights. It points out that the core vision of a new type of urbanization is that everyone shares the city; people can freely choose their place of residence and participate in urban construction; at the same time, the city has attributes such as fairness, safety, health, convenience, resilience and sustainability. On the basis of ecology and resilience, it has increased the emphasis on human rights, especially pointing out the social attributes of urban development and sharing. The urban ecological resilience requirements and social public attributes have something in common with the essential characteristics of park cities. If Olmsted's park system theory constitutes the landscape form of the park city, Howard's “idyllic city” conceived in the early 20th century became the ideological origin of park city planning. The introduction of natural elements into the city through landscape architecture is not based on the purpose of urban beautification, but from the perspective of health and survival and economy. Parks in the form of landscape architecture have played an important role in relieving stress and restoring health in the highly stressed working and living conditions of industrialized society, and have become the “Eden Garden” of industrial society. At the turn of the century, the rise of landscape urbanism and eco-urbanism pays more attention to the integration of city and nature. The natural human culture and the ecologicalization of the city complement each other, and the park city is ready to come.

## **2. The Practice of Park City At Home and Abroad**

### **2.1 Boston: Emerald City**

The Boston Park ecosystem can be seen as a prototype of a park city. As early as 1878, Boston launched the famous “Emerald Necklace” campaign, connecting 25 km of park roads to major city parks such as Franklin Park, Arnold Park, Jamaica Park and Boston Park. Later, the Park Road (similar to the urban greenway) was connected to a network system in which wetlands, integrated parks, botanical gardens, and park green spaces were connected. In the 1990s, Boston began to build national parks. From the end of the 20th century to the 21st century, industrial civilization transformation began in the coastal areas of the city. The original port was transformed into a harbor park, and some islands were developed for protection. This activity was called the “sapphire necklace” action. Boston's stain park system is known as the city's “Emerald Necklace.” Karl Haglund called Boston “Emerald Metropolis”

### **2.2 Portland: City of Roses**

Portland, known as the “City of Roses”, is one of the most livable cities in the United States, and is also known as the “River City” for its numerous rivers and streams. After about half a century of development, Portland City has formed a unique and mature urban ecosystem. The first is to establish the “growth boundary” of the city, which limits the disorderly spread of the city and protects forests and farmland. Secondly, plans for green spaces, greenways, ecological corridors, cultural corridors and waters in urban areas have been promulgated. These plans connect the central city of Portland with the habitats of the urban fringe. Planning and designing the adjacent greenway,

rationality developing the tourism resources in the marginal area, and planning the extension of the cultural corridor to the inner edge of the city. Provide clear classification and regulations for open spaces, natural regional clusters, natural parks, ecological resources, greenways and regional trails, plan and establish regional trail systems, introduce people into the natural concept through the slow-moving system, and remove a lot of urban expressways and parking facilities to increase park and plaza land. At present, the Portland metropolitan area has more than 700 parks and 27 greenways. These parks and greenways form a continuous green space pattern, forming a green space network connecting the city and natural health, providing the public with plenty of outdoor leisure. Recreational space has become a model for open space in cities across the United States.

### **2.3 Singapore: Garden City**

Singapore, which enjoys the reputation of “garden city”, retains sufficient green space resources in limited land resources. The existing per capita public green space in Singapore is about 18m<sup>2</sup>, which is among the best in the world. In the vision of “City in the Garden”, 85% of families use park facilities within 400 meters of their homes.

Singapore implements three-dimensional greening. From regional parks, green belts, street neighborhood parks, to parking lots, highways, sidewalks, viaducts, and building facades, there are clear regulations on the location, area, standards, and responsible persons of greening. Planning the blueprint, and the usage order is fixed to ensure that the implementation is in place, so that the house and the greenery are set off against each other. Seam greening is a consistent greening concept. In Singapore, there are 44 parks covering more than 20 hectares, and more than 240 street parks with 0.2 hectares. On both sides of 264 roads, a large number of flowers and trees are planted. Singapore’s garden city, which is known as “penalty”, has a sound urban greening system and strict enforcement.

### **3. Domestic Construction of Park City**

The “ecological city” proposed at the 16th session of UNESCO in 1971, its development goal is to achieve harmony between people, society and nature. It includes harmony between people, harmony between man and nature, and harmony in natural systems content. China's exploration of park cities originated from Qian Xuesen's “landscape city”. Qian Xuesen is the first person in China's urban science research. He once proposed that the city is a famous and complex system, which has been widely recognized today. He also believes that the idea of a landscape city is an organic combination of Chinese and foreign cultures, a combination of urban gardens and urban forests. This view reflects the idea that the city is an organic integration of natural ecology and humanities.

Along the landscape city, the urban development model from the perspective of ecological landscape has experienced the evolution from garden city, forest city, and ecological city to ecological garden city to park city. In 1992, the Ministry of Construction launched the “Landscape Garden City” selection. The “Garden City” embodies the traditional aesthetic taste of China, while the “Garden City” has the European style.

In 2004, the National Afforestation Committee and the State Forestry Administration launched the “National Forest City” selection campaign, proposing the concept of “Let the forest enter the city and let the city embrace the forest”. The concept of the forest city means that China's urban greening needs to achieve three transformations: from focusing on visual effects to visual and ecological functions; From focusing on the increase in the area of greening construction land to improving the efficiency of land use efficiency; from the internal greening and beautification of the built-up area to the transformation of urban-rural urban forest ecosystem. The environmental protection department launched the “eco city” creation activity. In 2003, the State Environmental Protection Administration proposed to build “ecological provinces, ecological cities, and ecological counties” to promote the creation of ecological construction demonstration zones; In June 2013, the central government approved the “Eco-Building Demonstration Zone” to be officially renamed as “Ecological Civilization Construction Demonstration Zone”. The creation of the “Ecological

Garden City” was initiated by the Ministry of Housing and Urban-Rural Development in 2007. The declared city must be awarded the title of “National Garden City” and “China Habitat Environment Award”. It is a perfect combination of rationality and sensibility; it has the scientific factors of “ecological city” and the aesthetic feeling of “garden city”, which gives people a healthy living environment and aesthetic conception.

The park city is a new concept put forward in the new stage of urban development in the new era. It absorbs the essence of theoretical thoughts such as pastoral cities, resilient cities and new urbanism. The park city is based on the combination of nature and humanity, the coordination of economy and ecology, the coordination of planning and design and public participation on the basis of the landscape city. It has more humanistic meaning than the garden city, and has more natural flavor than the garden city. More development features.

At the beginning of 2018, General Secretary Xi Jinping pointed out that when visiting the Tianfu New District of Chengdu, the Tianfu New District must be well planned, especially to highlight the characteristics of the park city and take into account the ecological value. This is the first time that a park city has been formally proposed as a model of urban development. From the historical clues of urban planning and construction in China, the concept of park city conforms to the law of urban development and the endowment characteristics of Tianfu New District. It has its historical inevitability, logical relevance and practical necessity. Tianfu New District, as a national new district, is an important node for the construction of the “Belt and Road” and the development of the Yangtze River Economic Belt, and strives to build a new growth pole and build an inland open economic highland. What kind of new district to build is worth looking forward to and requires scientific planning and careful design. The main leaders of Chengdu pointed out that it is necessary to construct a global green space system in accordance with the concept of the park city, and form an ecological “green vein” that connects the forests and lakes in harmony with the mountains and rivers; It is necessary to shape the characteristics of the city, accelerate the development of landscape agriculture, protect and rebuild the forest land in western Sichuan, and develop the landscape of the earth.

Chengdu has beautiful mountains and rivers and excellent ecological conditions, and it has the foundation for building a park city. The construction of the park city in Tianfu New District should follow the new development concept, deeply grasp the new contradiction of urban development in the new era, and in the process of building economic growth poles and building new high grounds, “Two Mountains” (Jinshan Yinshan, Green Water Green Mountain) The theory and the “two birds” (cage for birds, phoenix nirvana) theory as a guide, In the planning and construction, according to the design concept of “look at the water and remembers the hometown”, Tianfu New District will become the latest practice and construction sample of the park city concept.

## **4. Summary and Recommendations**

### **4.1 Accelerate the Transformation of Urban Park Construction to Ecological Park**

China should combine the existing ecological environment and ecological conditions in the construction of urban parks to maximize the savings of existing funds. China must also implement the construction concept of “harmony between man and nature” to ensure the smooth development of urban parks in China. In addition to the lack of funds, the main problems in the construction of urban parks lack a stable ecological environment. China needs to repair and expand the artificially damaged ecological environment to ensure that the urban ecological environment can be quickly restored. The main goal of urban park construction is to carry out the construction of theme parks represented by forest parks, zoos and ecological parks, to ensure that the ecological environment of the city can fully play its role, and the construction of urban parks needs to increase the proportion of the overall ecological environment coverage of the city. Create a good living atmosphere for urban residents.

## **4.2 Coordinating the Integration of Urban Park and Urban Construction**

China must not only focus on urban construction, but also implement park construction. The two plans for unified planning and key planning, injecting urban culture into the construction of urban parks, injecting fresh souls into China's urban parks, and being able to have flesh and blood for the city resident services.

The construction of urban parks needs to integrate urban development and urban construction, and rationally analyze the layout of urban park construction to ensure that urban parks can develop better from point to line and from line to surface. In the construction of urban parks, China needs to integrate the city's culture into every layout of urban parks, ensuring the perfect integration of urban park culture and urban park layout. When urban residents enjoy the park, they can experience the city's history and culture, human culture, entertainment culture and heritage culture, so that urban residents can absorb traditional cultural knowledge and make urban parks become characteristic regional buildings.

## **4.3 Improve the Human Development Level of Urban Park Design**

On the one hand, the construction of urban parks should learn to innovate, and formulate different urban park construction systems according to different urban cultures to ensure that each city can quickly integrate local urban culture and meet the needs of urban residents to the greatest extent, for urban residents and The exchange of nature creates a bridge of mutual communication. The construction of urban parks also needs to fully integrate the intimacy, participation and accessibility of urban residents and ecological parks, making urban park construction more humanized and diversified, making urban residents faster and better. Incorporate into the urban ecological environment, fully understand the beauty of nature. On the other hand, China needs to build a tourism brand into a city park, improve the humanistic care ability of urban parks, and ensure that urban park construction will better serve urban residents.

## **4.4 The Purpose of Building a Park City is to Build a Community of Destiny**

The park city reflects the integration of naturalism and idealism, and the city is promoted from the concept of the early regional community to the concept of the community of destiny. The emergence of the city is firstly the existence of a regional community. It is a spatial agglomeration of geographical elements and economic and social elements, and is a fusion of production, city, people, residence and industry.

At present, many new urban new districts have proposed the development concept of the integration of the city's people, which is the case. However, most cities lack micro-level considerations in actual planning and construction, that is, co-ordination of housing and industry. Second, the city is a community of interests. The city is a market economy that develops to a certain stage and is nurtured and prospered under the support of industrialization. People go with money, and money moves with profit. The flow of capital and population as a representation of resource allocation is the result of the role of market mechanisms. Tiebout's foot voting theory accurately portrays the interaction between urban economic development and public service provision. It also reveals that the city as a community of interests is the glue of capital and population. Once again, the city is not only the center of wealth, but also the place where interests gather, as well as poetry and distance. A city with connotation must also be a place of poetic habitation, a promised place to pursue dreams and realize dreams. Therefore, the city must also be a value community, a sacred place based on cultural identity and value recognition of economic interests. Then, the city is increasingly becoming a community of life. Kotkin said that the city is a place of sacredness, prosperity and security. The connotation of security has expanded to ecological security today. Industrialization and urbanization have made the city's ecological environment no longer safe. A livable city must be a complex ecosystem of natural ecology and human symbiosis. It is a living community of natural ecological elements (mountain forest lakes and lakes), living systems (birds, fish and grass beasts) and human beings. Finally, the city will be a community of destiny that integrates geography, interests, values, and life. Park city is such a community of destiny: economic

prosperity, rich humanities, social harmony, ecological balance, co-construction and sharing of common prosperity of human settlements.

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