

## Research on the strategy and development mode of urban construction under the goal of park city construction

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**Abstract:** As the new goal and orientation of 21st century landscape gardens, park city has fully demonstrated the new concept of green development of habitat environment, which is the harmonious symbiosis between man and nature. It also fully embodies the essence of the ecological civilization and people-oriented concept in the thought of socialism with Chinese characteristics for a new era. Based on the theory, this paper fully expounds the new concept of park urban human settlement construction, and takes urban horticulture, public garden, and urban and rural integration as the new directions of urban development in the future. Based on the analysis of the strategic significance and value of park city construction to ecological and urbanization problems, this paper makes a research on park city development practice strategy. In the development of urban and rural systems, the reconstruction of functional space, the construction of ecological green space network and the construction of urban culture, the content and path of park city construction are put forward. According to the configuration factors of park city, this paper makes a study of park urban development model, and realizes the transformation of urban ecological greening system design. A new concept of global urban park system is also put forward for the coordinated development of the "multi-level configuration" park system and the "green network garden" green ecological structure. As a new direction of urban green development, city park construction in China will usher in a new opportunity to open a new chapter of ecological civilization construction.

### 1. Concept and development direction of park city

At the beginning of 2018, general secretary visited the Tianfu new area and stressed that the new area should be planned and constructed to highlight the characteristics of the park city and take the long-term value of ecology into consideration. "Park city" instantly became the development concept of a new ideal city in the 21st century. This concept fully embodies the essence of ecological civilization and people-oriented concept, and takes urban and rural green space system, parkland community and urban green space system design as the basic content of urban and rural development and construction. Taking "human habitation -- park -- city" as the three basic elements to analyze and consider, through optimization and upgrading, the construction of a comprehensive park of the city style. Parks, communities and parks will be designed and arranged in an integrated way to optimize the urban and rural pattern, improve the urban landscape, meet the aspirations of citizens for a better life, promote the urban development and transformation in the new century, and realize the new concept of urban and rural living environment construction in the new era. The urban gardening, public gardens and urban-rural integration demonstrated by the park urban system are the new directions of urban development in the future.

"Garden city" concept first by British architectural planning, e. Howard, published in 1898 in the book < tomorrow's garden city >, which expounds the theory of garden city. The beginning of the 20th century Olmsted's initiative to protect resources and environment, to set up the city park system theory open systems, public garden, city garden, become the basic theory of park city. However, garden city is different from park city. Garden city is a new type of city that enables people to live in a good economic, natural and environmental environment. It is a city designed for health, life and industry. But the concept of park city is the 21st century new city idea, it not only

refers to the park, but present a basic prototype of city in the "natural". In the process of urban construction, it pays more attention to the ecological value of mountains, water, forests, fields and lakes, integrates the city and parks, and realizes the transformation from building parks in cities to building cities in parks. It puts more emphasis on openness and publicity, emphasizes human-centered, and is more suitable for the construction of urban ecological civilization.

## **2. Strategic significance of park city construction**

The promotion of the new park city concept can inspire people to rethink the problems brought by the urbanization process. Nowadays, the world's cities are facing such problems as ecological destruction, global warming, loss of species diversity and urban sprawl, which are seriously threatening the people's vision of a better life. The new strategic concept in the field of urban design in the new century, which seeks to solve the urban crisis, regain the ecological landscape, and actively respond to the urban heat island effect, will inspire people to re-recognize the key points of the urbanization process, put the design focus on green development and sustainable development, and provide the most basic guarantee for people's good life. China is in a new historical development period, facing how to solve the contradiction between urban development and natural environment, how to achieve the harmonious coexistence between man and nature in the new era of urban life, how to embark on the road of ecological civilization development, and put forward a new strategic concept in the field of urban design in the new century, which has extraordinary strategic significance.

"The vision of a city is that the whole city is like a big garden, and people will feel like being in a garden no matter where they go." this is the general secretary's vision of a beautiful city in the future. Park city to give people a sense of beauty, people stay in a city should experience the beauty of nature, the city, the beautiful streets. There is no doubt that the construction of park city will also include new facilities, implementation of new projects, renovation of old blocks, development of new scenic spots, construction and governance at the same time, providing a good opportunity to create a livable, unique, superior, ecological new city.

## **3. Research on practical strategies of park city development**

### **3.1 Coordinate urban and rural pattern to promote coordinated development of park city**

Park city construction should not only be limited to the construction of park city within the city, but should be the overall development of the city and the surrounding natural countryside. As a new model of urban development in the 21st century, park city should focus on building a suburban garden system that integrates urban gardens with green resources in the suburbs, and realize a highly harmonious and unified spatial system between the city and the suburbs. The interlaced urban and rural areas echo each other and become the basis for the green development of a beautiful and livable urban and rural living environment. Under the policy trend of rapid urbanization in China, many villages are further included in the category of suburb. Planning and design has a lot of creative possibilities, it should break the rendering of urban planning and design, such as "land fill in the blanks" passive situation, actively integrating the city and the surrounding natural environment, rural green space, build a fully functional, complete structure of public infrastructure, and finally construct a both to achieve the function and value of green ecological system, but also can provide citizens with comprehensive service function and carrier of the green space layout.

The public green space system structure of park city should be generally planned from the central urban area to the whole urban and rural area, so as to build the grid framework of park city and create the spatial form of "urban and rural integration". From the city center to the periphery, form layout of central park green space subsystem, ring road shelterbelt, isolation zone park ring, fringe group green space system, suburban park ring in turn. Each development group uses green corridors, green belts, green rings, green wedges and other structural green Spaces to optimize the

allocation and shape the urban-rural pattern of integration of landscape and city.

### **3.2 Reshape functional space and improve infrastructure system construction**

Integration of urban land use and functional uses of buildings. In other words, urban land use and structures should be planned and designed in an integrated way to accommodate a large number of activity schedules and possibilities within the limited space, so as to create numerous new sites full of interactivity, flexibility, high-tech content and at the same time full of art and activity atmosphere. Meet the basic living, work, shopping, leisure and entertainment at the same time can also according to the need to shape their own space, all uses and functions of land use and facilities, every quarter, every day can achieve full use of the integration. A very successful case design is The Lawn on D square in Boston, where local residents, laborers, participants and tourists can find their favorite place.

Build a region-wide park system, improve infrastructure construction, industrialize it and show new forms of infrastructure.

Due to the location fixity characteristics of conventional public facilities in the park will cause defects such as the limitations of use. A certain public land or public infrastructure will affect residents with different distances and different traffic conditions, resulting in unequal supply and unfair use. Therefore, in terms of spatial layout, it is necessary to make overall planning, base on the whole region, take care of regional balance, meet the needs of different users, and combine different levels and points. As far as possible, the industrialization of infrastructure should be evenly distributed in all directions. It should not only highlight the overall image, but also highlight the local characteristics of each block, so as to build a regional, functional, balanced and industrialized park system. As the main system of park city, the whole park system is the essential and basic work to promote the construction of park city. It is the basic requirement for the new form of infrastructure to change from a park with recreation functions to a park with compound functions and from a park with isolated places to a park with integrated industries.

### **3.3 Build an ecological green space network and shape a city pattern with integrated landscape**

In recent decades of reform and opening up, great achievements have been made in China's urbanization development and construction, but at the same time, a large number of ecological environmental damage and other problems have also occurred. Ecological construction has become the first task for the development of park cities. Many achievements have been made in the research of eco-city construction at home and abroad, such as the human-water harmony advocated by sponge city, zero waste proposed by recycling city, zero emission pursued by low-carbon city, rainwater collection and recycling. Greenway, green network and infrastructure, which are widely constructed in the city, are also a continuation and development in the city park system, and play an important role in the improvement of ecological environment problems and the shaping of urban space.

Protect and restore the green space texture of the whole region, and construct the urban ecological network pattern of "green blend of cities". We should respect the original ecological landscape, continue the pattern of river and river systems, repair areas damaged by ecological damage, protect the natural ecological fabric of mountains and rivers, strengthen the systematicness and continuity of ecological space, and form an ecological green space network system covering the whole region. To strengthen the protection of urban ecological security bases, mountain areas, forests, rivers and lakes with important ecological value, as well as nature reserves, water conservation areas and scenic spots. Strengthen the planning and control of ecological network to control the speed of urban development.



Fig.1 landscape pattern of lanzhou city (modified according to <the range rover map of jincheng> in the reign of emperor guangxu)

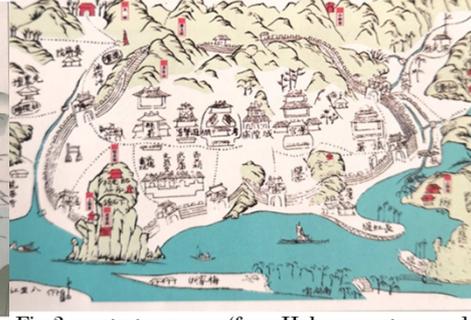


Fig. 2 county town map (from Hukou county records in the 13th year of Tongzhi reign of qing dynasty)

The creation of human settlements in Chinese cities combined with natural landscapes is not a temporary thing. The park city construction mode is the modern inheritance of the traditional Chinese garden building thought. By integrating the natural landscapes, cultural deposits, urban green pattern and artificial environment, the city realizes the integration and symbiosis with nature. Park city construction should be combined with urban ecological environment construction to create a beautiful ecological environment in line with The Times. It is necessary to attach importance to and strengthen the protection and restoration of natural ecosystems such as mountains, water, forests, fields, lakes and grasses in the city to maintain the diversity of urban species. It is everyone's duty to advocate the park city action and strive to create the overall spatial pattern of harmonious integration of landscape city.

### 3.4 Multiple symbiosis, pay attention to the construction of park city culture

The construction of park city needs not only the international vision, but also the regional culture. Culture is the soul of a city. On the basis of creating a beautiful urban environment and learning from the experience of ecological and green development of international cities, we pay more attention to the construction of urban culture, fully highlight the cultural and humanistic deposits, build a park city with humanistic ideas, and integrate historical and cultural landscape into all aspects of park city construction. Every landscape element in every city should be promoted to reflect its unique cultural characteristics, and strive to build a smart park city with international standards and traditional regional culture.

## 4. Research on park city development model

Park city is a new era of urban and rural residential environment construction concept and the ideal city construction pattern, the idea needs to be functional and infrastructure construction, ecological basement structure construction and cultural construction as the configuration of urban and rural development construction elements, the relationship between "human settlements-park-city" three optimization of harmony as the important content of urban development pattern research park, realizing the change of urban ecological greening system design: From the focus on pure visual effect to visual functions and cultural construction and ecological balance of change; From paying attention to the green construction land area increase to improve the land space utilization efficiency and the function use fusion change; From the focus on the construction of the internal landscaping to the establishment of a region-wide urban and rural integration of the ecological green network system transformation.

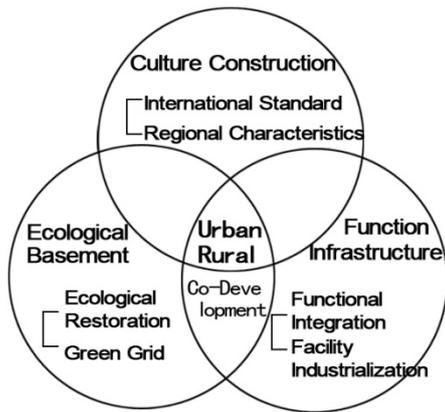


Fig.3 schematic diagram of the integrated structural development of urban and rural parks (drawn by the author)

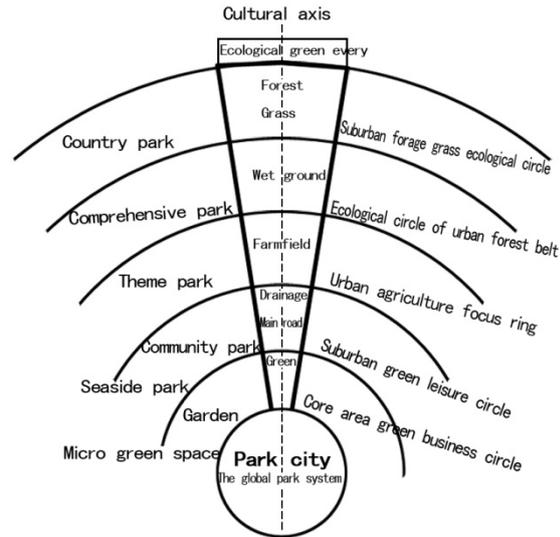


Fig.4 research on park city development model (drawn by the author)

The construction of the whole park system needs to build a "multi-level configuration" of the park system and the "green network garden" of the green ecological structure of the coordinated development. The park system of "multi-level configuration" is suggested to form a multi-level park system of "country park -- comprehensive park -- theme park -- coastal park -- community park -- recreation park -- micro green space" on the whole. The green ecological structure system suggests the formation of a multi-level green space circle structure, from the central city to the periphery of a comprehensive coverage, form the urban and rural green ecological layout structure with interlocking circles of "core area green business development circle -- suburban green leisure circle -- urban agriculture centralized development circle -- ecological construction circle of urban forest belt -- suburban forage grass ecological conservation circle" successively. Then relying on the ecological green barrier along the main road and the water system development, the central city will be organically linked with each circle, and finally form a whole ecological whole area park system layout.

## 5. Conclusion

Building park city on the basis of established urban development is a very huge systematic project. Its goal is not only to establish a single park or green space, but also to create a beautiful urban environment in which the city and nature blend and coexist. It combines the human settlement of natural landscape and integrates cultural deposits, urban green pattern and artificial environment. The whole city should be built like a park, and the city landscape should be integrated. The meaning of the park is richer and more diversified than that of the park. It is an all-round improvement of the level of urban development, ecological construction, environmental protection, cultural construction, urban management and other aspects.

The park city is built with a large system including city, community and country. City construction should take full account of the multi-level and multi-dimensional characteristics of the park system, and put forward targeted layout strategies in accordance with different spatial scales and functional Spaces, take culture as the soul, perfect the infrastructure construction, construct the whole region, the function, the equalization, the industrialization park system. The smooth construction of park city cannot be achieved without the close cooperation of multiple departments and layers, such as planning, gardens, forestry, transportation, etc., and also needs the strong support and promotion of the government. Moreover, it needs the concerted efforts of communities and ordinary people to establish multi-directional coping strategies. Under the new ideas and requirements of park city construction, China's urban development will open a new chapter, and strive to create a new ecological livable and coordinated development of human settlements.

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