

Research on the Transformation of Ecological Value of Park City: Taking the Construction Practice of Chengdu as an Example

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Abstract: Based on the current situation of the ecological value of Park City, this paper proposes a path of ecological value transformation of park city which is integrated with ecological environment value, social value and humanistic value, and puts forward some practical exploration and suggestions for future ecological value transformation. As the key path to implement "clean waters and green mountains are just as valuable as gold and silver.", ecological value transformation is the last mile to realize the national governance system in the field of ecological environment, which is of great significance to promote the development of economy and society. The construction of Park City has become the research foothold of ecological value transformation. Starting from the ecological value of Park City, this paper analyzes the relationship among ecological environment value, social value and human value in the ecological value composition, and puts forward the transformation path of ecological advance, space empowerment and scene construction, guided by the integration of modern human settlements concept and digital thinking, establish the mode of ecological value transformation.

1. Introduction

The coupling relationship between "city and ecological value" has been discussed in academia since the 1980s. The Symposium on Ecological Science held in Shanghai established the Urban Ecology Professional Committee. Huang Guangyu put forward the measurement standards of ecological cities, and Qian Xuesen proposed the idea of "landscape city" with Chinese characteristics, laying a foundation for integrating the concept of ecological value into urban construction. The academic circle has carried out a systematic exploration on the definition and connotation of urban ecological value.

With the rise of research on Park City, some scholars point out that the construction of Park City has become an important research foothold of ecological value transformation. Park City gathers the good expectations of all elements and multiple fields, and its value connotation is rich and full. As a model of urban development and ecological integration, Park City has been researched on its ecological value in the field of different disciplines. Shi Yungui and Liu Xiaojun emphasize the creation, transformation and practical path of Park City value from the perspective of governance

[1]; Fan Ying, Wu Xinyi, etc. start from the viewpoint of value system, analyze the specific content and transformation mode of basic value, leading value and organizational value in the value composition of Park City, and put forward the way to realize the corresponding value transformation [2]; Zhong Ting and Zhang Lei are committed to expounding the value transformation path of urban ecological zone in three aspects: quantity guarantee, space empowerment and system guarantee. The development of cities follows the trend from low to high [3]. As a kind of concept, Park City is related to many concepts such as "clean water and green mountains", "multi-governance", "people-centered theory". The research on value determination and transformation will help to promote the representation of high-level city forms [4, 5].

2. Analysis of Ecological Value of Park City

The academic community's understanding of ecological value mainly starts from the two aspects of ecosystem: the value in itself and its derived value. The latter rises to the multi-dimensional angle of culture, spirit and health, and emphasizes its dynamic role in urban development. The ecological value of Park City is embodied in the ecological value of ecosystem and its elements as the environment to human and other life phenomena, including its own value, social value and humanistic value.

Ecological environment value refers to the ecological value of the ecosystem and its elements as the environment to human and other life phenomena. According to the theory of urban value chain, the evolution of urban form tends to be advanced, that is, the urban form presents a process of continuous development from low level to high level. Recently, the development form of rural city, ecological city, green city, low-carbon city and other cities with the label of "green" has been discussed enthusiastically, which indicates that the urban form containing the ecological concept is advanced. In the high-level urban form, the importance of ecological environment value is being discovered.

Humanistic value is people-oriented, meaning that more attention is paid to the human nature of space thinking, the traditional single physical space construction, and the integration of human and material-based co-construction, in order to create the maximum embodiment of human survival, life, production of the value of the basic industry and achieve green ecological environmental benefits. Therefore, a series of activities such as leisure, entertainment and communication among people should be fully integrated into urban public space, highlighting the humanistic needs of ecological concept.

The social value in the ecological value of Park City is mainly reflected by the externality of green space. Green space cannot be directly transformed into economic value to realize the back feeding of maintenance costs, but its positive external effects are irreplaceable on promoting the improvement of the physical and mental health level of nearby residents, driving the flow of surrounding business people, and adding value to the surrounding land. The realization of these values is of great significance in promoting harmonious neighborhood relations and social stability and development.

To sum up, the essence of Park City construction is the process of urban value creation, transformation and realization. Ecological value, as the background and core of Park City value, scientifically and organically integrates the multiple value elements of the city through the research on the transformation of ecological value, and promotes the mutual integration of ecological environment value, humanistic value and social value, so as to realize the maximization and optimization of Park City value.

3. Transformation of Ecological Value of Park City

3.1. Value Transformation Path

In the value system structure of Park City, eco-environmental value, humanistic value and social value exist in the ecological value of Park City, and they are not independent of each other. They serve the ecological value and become an important realization path of its value transformation. The concept of ecological value transformation is shown in Figure 1 (drawn by the author).

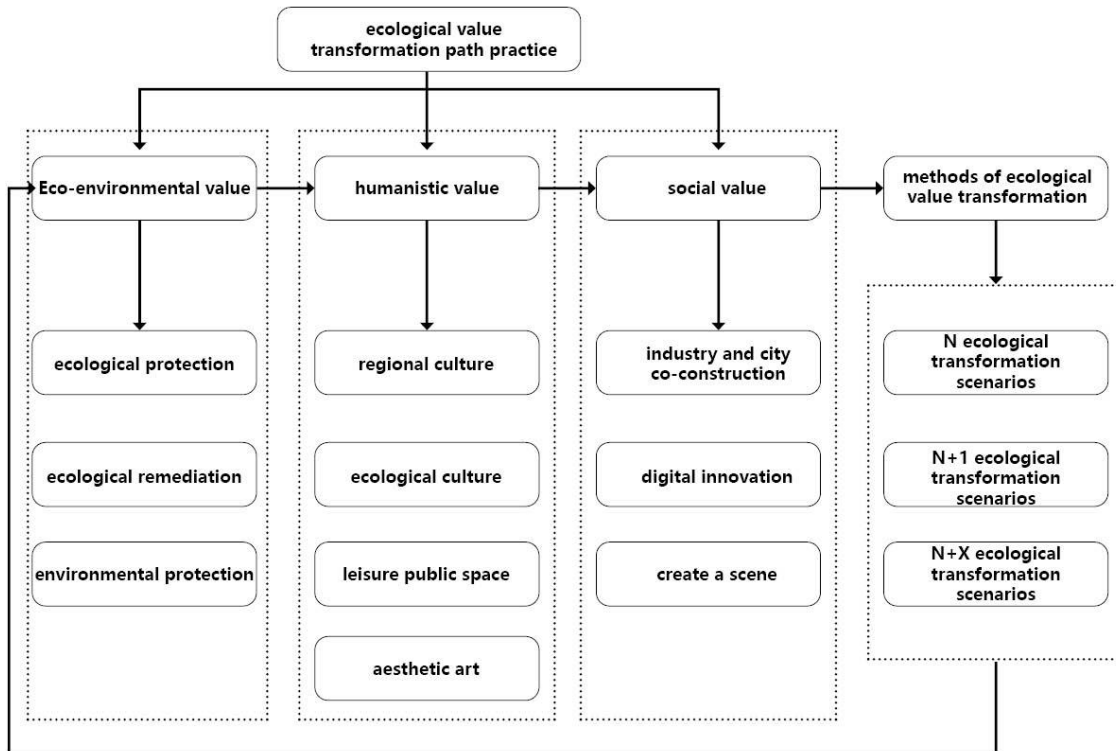


Figure 1: the concept of ecological value transformation

3.2. Practical Principles of Park City Ecological Value

3.2.1. In terms of Ecological Environment, we should stick to the Bottom Line of "Clean water and Green Mountains"

Park City complies with the developmental needs of the time. It is an urban ecological living environment of "poetic residence", a life community of mountains, rivers, forests, fields and lakes, and an ecological city model with a high degree of harmony and unity among people, city, environment and industry [6]. The production and increment of ecological value depend on the supply of ecological space. In order to prevent the abuse and occupation of regional green spaces, urban ecological areas should protect the scale of ecological space through legislation, ensure the basic scale with legal procedures, and bear the responsibility of effective supply. Furthermore, we should strengthen the restoration of the ecological base. On the basis of maintaining the original geomorphic characteristics of the area and following the original hydrological conditions, we should increase the ecological space such as wetlands and paddy fields, implement the water system connection project, restore and add tributary ditches to connect important rivers and lakes inside and outside the area, and build a water network pattern of "scattered lakes, moist wetlands and

staggered rivers and canals" in the ecological protection area.

3.2.2. In terms of Humanistic Values, Create a Scene of "Cultural People"

The construction of Park City humanistic scene should be consistent with the city context and humanistic spirit, so as to achieve the effect of "cultural people". On the one hand, we should create distinctive natural and cultural scenes: integrate and comprehensively develop and utilize the protected and potential historical and cultural resources in view of the urban functions and the distribution of cultural resources along the Greenway. In the construction of landscape features, we should highlight the characteristics of pastoral canals and lakes and wetlands in the ecological area around the city, extract the unique local style elements such as small towns and villages, temple gardens, forest yards, pavilions, bridges and ferries, and create a unique carrier of scenery and facilities. We are supposed to shape the human feelings of the airport industrial zone and implant regional cultural characteristics. On the other hand, a digital ecological community should be created: relying on the Greenway, we can build a characteristic digital community of "comprehensive service + tourist service + characteristic theme", form important service and recreation nodes in the urban ecological area around the concept of facility embedding, function integration and scene introduction, and improve the governance function and sociality of the community; Around the ecological zone, flagship projects will drive the independent incubation of Greenway IP, the building of cultural, creative and artistic brands and the integration of sharing economy, form multiple characteristic areas, improve service functions, realize the symbiosis and integration of high-grade commercial service scenes and parks, and improve livable conditions.

3.2.3. In terms of Social Value, Realize the People's Expectation of "a Better Life"

The construction and development of Park City should take improving people's sense of happiness, security and gain as the starting point. Park City is not an isolated recreational place, but an important part of people's daily production and life. The embodiment of social value depends on the creation of compound space, which takes green ecology as the basis and provides a space that can meet the all-round needs of "ecology, production and life". The compound space is compatible, coordinated, protected and utilized. The ecological land and the surrounding construction units are considered to be a coupling whole, which serves as a functional complex integrating the functions of ecological protection, tourism and leisure, social and cultural activities, business activities and urban landscape display. Building a compound space naturally becomes one of the ways to realize people's expectations for a better life in the park city.

4. Practice of Ecological Value Transformation of Park City

4.1. Consolidating the Value Foundation of Ecological Environment

As the ecological environment which provides the basic living conditions of biology, it is the basis of ecological value transformation. In terms of ecological protection, taking Tianfu Greenway as an example, we should adhere to the construction principle of ecological conservation, highlight the "stock" of ecological resources and improve the quality of ecological resources, and accelerate the formation of urban ecological layout with blue and green interweaving and water-city co-prosperity (Fig. 2). In terms of ecological restoration, Jincheng Lake attaches great importance to the ecological restoration of waterfront, and uses nature to do its best to restore the ecological landscape of the combination of blue and green (Fig. 3). On the basis of protection, Qinglong Lake Wetland Park, Zhonghe Wetland Park and Yushi Wetland Park all fully retain the integrity texture of the ponds, lakes, farmland and forest in the site, and insist on taking the base protection as the

core of the design (Fig. 4).



Figure 2: Real views of Guixi ecological park

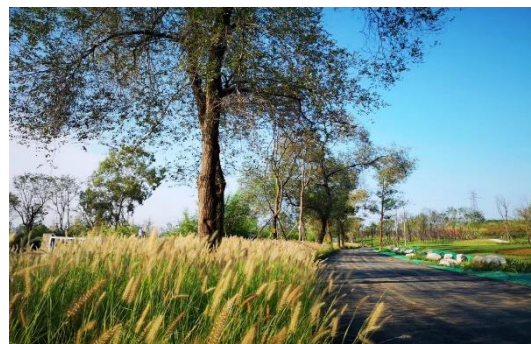


Figure 3: Real views of Jincheng Lake Park



Figure 4: Actual views of Yushi Wetland Park

4.2. Integrating the System of Humanistic Value

The humanistic value of Park City is also reflected in buildings and structures. The buildings with regional characteristics have become a unique and distinctive existence in the park city, which provides a place with great aesthetic and life interest for the residents. In terms of regional culture, Pangu Jade Garden opens up the present by taking advantage of the ancient times, expresses the classical culture through pure modern methods and inherits the historical poetic meaning (Fig. 5). In the Art Museum of Chengdu Zhangdaqian, back garden and ancient times are new, realizing the ideal of thousands of literati and the inheritance of Chinese traditional literati garden creation idea (Fig. 6).



Figure 5: Real views of Pangu Jade Garden



Figure 6: Rendering of Daqian Art Museum

In terms of ecological culture, the urban leisure tourism district of Jiang'an River takes the opportunity of organic renewal of the old city, focusing on building a large-scale urban waterfront leisure landscape belt integrating culture, leisure, ecology and tourism. On the basis of keeping the ecological background, the city quality should be improved, and the space creativity should be led by Cultural Renaissance to realize the innovative expression of Sichuan water cultural space (Fig. 7).

In the aspect of public space for leisure, the iron image culture tour ring integrates public space and urban environment, unifies leisure experience and aesthetic perception, and forms a multi-functional ecological scene of life scene in the air Greenway; it promotes the self hematopoietic function of Greenway and stimulates the developmental vitality of surrounding industries. The barrier free air Greenway connects the urban and municipal supporting facilities system such as industrial parks, community centers, vegetable markets, cultural centers and commercial blocks, and performs a perfect urban comprehensive service function, which will further promote the Greenway to play the driving role of multi-value transformation and help the city realize the "ecological value transformation".

In terms of aesthetic art, Jiangjia Art Garden has a wonderful idea. Based on the urban tradition of creating scenery according to water in Chengdu and the ancient landscape construction technique of alienating the artistic conception of Sichuan, it skillfully integrates Eastern landscape and Western Art (Fig. 8).



Figure 7: Plan of jiangnanhe urban leisure and tourism block

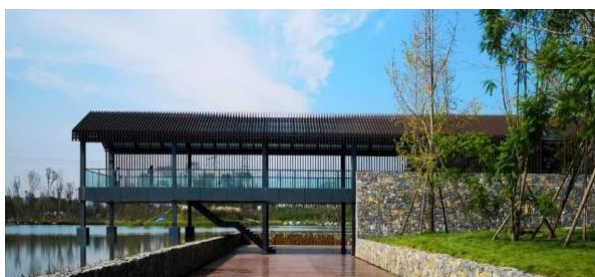


Figure 8: Rendering of Jiangjia art garden

4.3. Promoting Social Value sharing

The social value of Park City emphasizes the good social atmosphere, convenient travel conditions, superior public service quality, universal ecological ethics consciousness and the green development mode and lifestyle of the whole society. It is a highly harmonious complex system of man and man, man and nature, man and city [7].

In terms of industry-city co-construction, through the systematic construction of blocks, parks and communities, Jiang'an River urban leisure tourism block has built an urban cultural tourism ecological industry cluster with commercial consumption, industrial agglomeration and ecological integration.

In terms of scene creation, Tiexiang cultural tourism ring, as the first community-level urban air Greenway in China, creates multiple connections and promotes the transformation from ecological value to multiple values. By creating a variety of scenes, building up landscape highlights, implanting smart catalysts and operating commercial formats, we are committed to becoming a model of a full-time dynamic new economy.

In terms of digital innovation, Sadi cooperated with China Telecom in the scheme design of Xinhua Square 5g + smart Park / block to explore the integration of rich digital scenes into street and park space. Through the innovative creation of public service scenes, we will repair and improve the functional quality of community ecology, flexibly implant accessible, participatory and recreational activity nodes, integrate green ecology into living space in a rich and diversified form, create a community life circle "suitable for living, working, traveling, learning and raising", and enhance the sense of acquisition, happiness and security of residents' daily life, and enhance the social expression of the ecological value of Park City as a whole.

5. Thoughts on the Transformation of Ecological Value in the Future

Ecological value transformation is the core mechanism of green development and the core power of the transformation of the time. Innovation mechanism should adapt to the needs of transformation and implement the concept of green development. The idea of Park City emphasizes the ecological capital value and social capital value of natural system, underlines the dynamic effect of activating natural system on urban development, finds out the necessity, urgency and direction of civilization transformation from the perspective of human civilization development history, and clarifies the development direction for the future development of the city. Park City construction should further comply with the situation, condense energy and release the power.

In the construction of Park City, Chengdu, as the practice place of new development concepts and the first demonstration area of Park City, should highlight the characteristics of Park City, construct scientific and reasonable spatial layout, strive to create a number of industrial projects and space carriers that accurately match urban construction and are compatible with urban functions, and promote the overall improvement of urban industry, function, quality and charm, displaying the

comprehensive form of the great beautiful city with high harmony and unity in the environment of adult city.

In the future, the model of bottom line protection and ecological restoration will be promoted in terms of protecting ecological value, and the whole area demonstration effect will be formed; in terms of optimizing the humanistic value, combining with regional characteristics, we can create the human - feeling production and city unit; in terms of social value promotion, the overall situation is led by digital and intelligent thinking, and digital landscape community is built, the level of space service is improved, and livable conditions are improved, thus improving the urban governance capacity (Fig. 9).

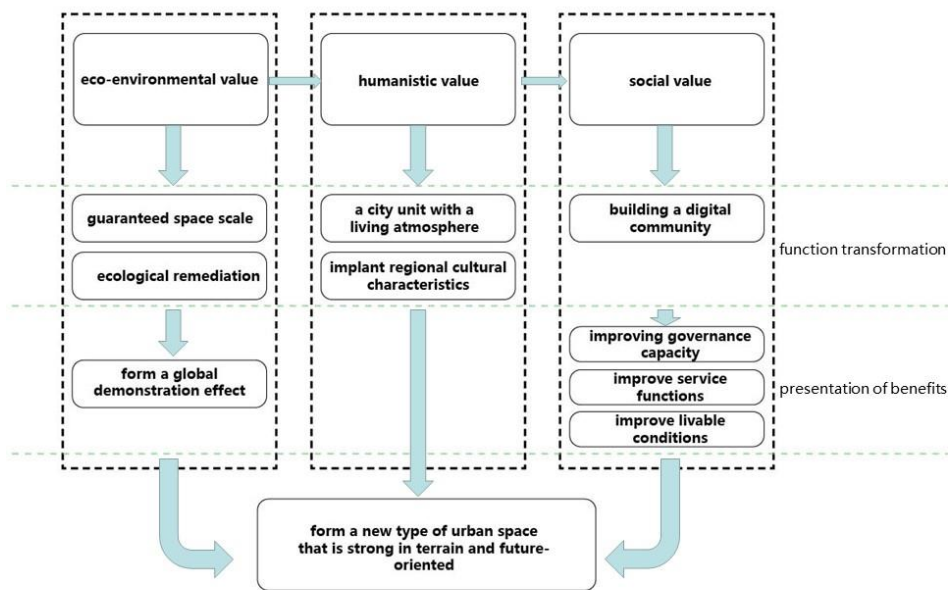


Figure 9: transformation of three values

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