Research on the Application of Composite Ecological Green Ring Construction Strategy in Old City Renewal

Jing Tang, Qiuwan Zhang*
North China University of Technology, No. 5, Jinyuanzhuang Road, Shijingshan District, Beijing, China

Abstract
In order to beautify the living environment of urban blocks and improve the quality of urban landscape space design, this paper analyzes the current landscape status of old city blocks based on the research of landscape environment problems in the renewal of old urban areas, and finds that the landscape of old city blocks has the characteristics of fine landscape space, closed landscape, and poor environmental quality of public landscape space. Dig deep into the importance of building a network and ring landscape system in the process of old city renewal, that is, to meet the spiritual needs of residents around the renewal area, improve the level of art and culture of the entire city, and create a better living environment. The strategy of improving the spatial environment of the neighborhood by building a composite ecological green ring is proposed, which provides interactive space places and infrastructure for urban residents to communicate and communicate, so as to achieve the effect of "scenery and its use, and green ring people's walking". To meet the pursuit of green and healthy living environment of modern people, it also connects the urban historical context in the old city, and at the same time injects new vitality into the neighborhood life, creating favorable environmental and spatial conditions for the better development of the city and the better life of the people.

Keywords
Old City Renewal; Ecological Green Ring; Functional Composite; Urban Landscape Space Design; Human Settlements.

1. Introduction
Based on the background of high urban population density and serious environmental pollution problems in the current era, in order to better solve the problems in the human settlement environment in the process of renewal and development of old urban areas, we should be committed to building a green and healthy living environment system. The composite ecological green ring is to reuse the existing spare landscape space in the block, regenerate some public activity spaces with better landscape environment quality between the blocks, and connect the ecological ring with a systematic and structured structure. At the same time, the landscape nodes at different levels of the entire landscape ring system are connected and connected with each other, and cooperate with the texture and structure of the old city to build a flowing and composite green grid. It has shaped an all-aged, inclusive and safe public space environment, made the urban block life mode more rich in people's participation and sense of people, and the landscape nodes on the green ring can also become a material space for residents to interact, further reshaping the community public life and neighborhood relations.
2. Organization of the Text

2.1. Existing Problems in the Landscape Space of the Old City

2.1.1. The Road Landscape Space is Chaotic

Through the survey, it is found that most of the old urban areas have too narrow a spatial scale, so there will be chaotic travel order and unreasonable use of road space in daily life. Secondly, the problem of occupying roads in the use of roads is serious, shared bicycles are often stacked on roads, and there are often cases of residents drying clothes over lanes in some residential areas, which seriously affects the road landscape.

2.1.2. The Quality of the Landscape Environment is Not Good

There are some negative factors in the old urban environment, such as the disorderly parking of non-motor vehicles, the lack of planning and management of garbage cans, etc., and there is no reasonable design planning for the neighborhood landscape. The street landscape sketches have fallen into disrepair, the landscape planting has no ornamental significance, the landscape environment has not been effectively managed and maintained in the later stage, and the quality is poor.

2.2. Research on the Construction Strategy of Composite Ecological Green Ring

Promote the design and development of landscape space in the renewal of the old city, by reshaping the "green space" of the renewal lot, building a network of block space into a ring landscape system, to pursue a "beautiful" environment, insert "beautiful" elements, create a "beautiful" atmosphere, and implement the neighborhood interest, block charm and neighborhood flavor into the base landscape space design. The "behavioral space" in the block is integrated with each other to coexist a new green ecological block, and the quality of the street landscape environment is improved.

In the research on the specific working method of constructing the landscape space ring system of the old city renewal block, it is carried out through three aspects:

1) Create a chronic greenway, connect the landscape path, and connect the landscape node space.
2) Create a functional composite space, enrich the node space, and meet the needs of diversified activities.
3) Promote the penetration of the street landscape, open up the landscape corridor, and maximize the landscape benefit.

3. Slow-moving Trails

The city's slow-moving greenway is a very important part of the urban planning and construction process today, and it is a key component of the city's internal ecological environment. At the same time, slow walking paths are also the core points of urban ecological landscape construction, in order to better promote the ecological environment of the old city and the systematic renewal of the landscape construction and development, the landscape design content of the slow walking space of the green lane of the old city should be fully paid attention to. In the construction of slow-moving greenways, not only the bearing capacity is required, but also requires it to have traffic traffic, landscape environment, leisure and recreation, culture and entertainment and other functions. [1].

3.1. Paving Setup for Slow-moving Trails

In the process of hard paving design, in line with the design principle of ecological priority, the material selection, collocation, and process aesthetics of paving in the research lot are analyzed according to the specific problems of space design. Ecological hard paving work mainly includes
the recycling of various construction wastes and waste materials, including several important components such as warm mix asphalt mixed materials, noise-reducing asphalt pavement and permeable cement concrete pavement. [2].

3.2. Plant Landscape Configuration for Slow Walking Trails
In the process of updating the space design of the slow walking path, based on the artistic aesthetic design, the principle of plant ecology, and the plant landscape design, the plants inside the slow walking path space are configured harmoniously and scientifically. It can effectively coordinate and reasonably match multiple fields such as space, culture, artistic aesthetics and scientific practice.

On the other hand, plants are alive, different plants have different growth habits, and the choice of plant configuration in the process of plant landscape construction is inseparably related to the soil geology, water resource conditions and other related natural environment factors in the study area. Therefore, the selection of characteristic plant landscaping according to local conditions fully excavates the characteristic creation and environmental rendering capabilities of green landscapes.

3.3. Garden Construction Sketch Landscape in the Slow Walking Trails
The ecological recreation slow space has a high daily attraction to urban residents, and the probability of the crowd resting in the internal rest space is relatively high, so it is important to strengthen the interaction between the spatial environment and people in the landscape design of the slow travel space. [3] Based on the priority of ecological environmental protection, the material selection of landscape space garden sketches gives priority to environmental protection materials, so that the crowd can experience more comfortable and relaxed in the space, reduce the encroachment of the environment on people, make the environment and the crowd symbiotic, and better play the functions and advantages of the landscape sketches in the space. The most important feature of the construction of landscape sketches is the practicality and decoration of sketches, so in the whole process of designing and constructing sketches in the slow travel space of ecological recreation, it is not only necessary to put the architectural aesthetics of sketches in an important position, but also pay attention to the realistic availability of sketches.

4. Functional Composite
In the process of creating a composite ecological green ring, not only a simple landscape greening function, but also a rich node function on the green ring, for the old urban form, the block open space to achieve functional composite mode not only refers to the overlap of different forms of space and a variety of functions conducive to public health functions, but also needs to intensively integrate the available functional space and pay attention to multi-dimensional compounding, forming a full range of functional composite block open space. [4] The diverse and diversified functional composition is an important part of the open space of the functional complex block, which promotes the physical activity of the residents of the block by integrating multiple functions conducive to public health, and combines the passive function with the active health function to improve the boring and passive status quo of the single-function place, enhance the fun and participation of the open space, and realize the healthy activity needs of different classes and ages. [5].

5. Organic Penetration
In the design of the composite ecological green ring landscape, it is especially necessary to pay attention to the opening of the street landscape, and carry out corresponding planning and
integration through the block cultural corridor and slow walking path to create a good street landscape environment. [6] In the landscape environment transformation of the renewal of the old city, it is necessary to maintain and preserve some landscapes with historical significance and commemorative value in accordance with the principle of ecological priority and natural original beauty as the main principle according to local conditions. In addition, in the process of spatial planning of composite ecological green ring landscape, specific problems are analyzed, and the design ideas and concepts of landscape construction construction are put forward for corresponding integration, and the spiritual and cultural needs are reflected to the material space level, and the organic integration and penetration of static space landscape and dynamic space landscape are required in the design process, effectively creating the beauty of landscape space form combining dynamic and static.

6. Conclusion

Urban landscape space is an important carrier of urban residents' life, high-quality landscape space can reshape the relationship between space and lifestyle, the construction of composite ecological green ring in the renewal of the old city, so that the public space environment to private space better transition, clear level, into a network of landscape, landscape resource sharing, to achieve a better symbiosis between people and the city. The systematic composite ecological green ring landscape space design is the natural link between man and nature, the material carrier of man and the environment, and it is also to reconstruct the living environment of the old city block and create a better urban ecological artistic conception.

References


[5] LU Hao: Discussion on the spatial reshaping mode of old city blocks based on greenway theory (MS., Qingdao University of Technology, China 2012).