Research on Plant Landscape Art Design in Modern Urban Landscape Architecture

Li Weiqi, Zhou Hanhan*

College of Tourism and Landscape Architecture, Guilin University of Technology, Guilin, Guangxi, China

Abstract: In modern urban landscaping, plant landscape design plays a crucial role in protecting the urban ecological environment, improving urban cultural quality, enhancing the quality of life of citizens, and promoting urban economic development. With the development of the times and changes in ideological concepts, the plant landscape design in modern urban gardens has shown a new development trend of paying more attention to understanding the laws of plant evolution, making moderate adjustments in accordance with the laws, and fully protecting the natural characteristics of plants. At present, in order to enhance the artistic design effect of plant landscape in modern urban gardens, strategies such as clear design goals, scientific planning and layout, rational allocation of plants, strengthening ecological design, enhancing citizen participation, and continuous evaluation and improvement can be continuously optimized. This can better meet the needs of modern urban construction.

Keywords: Urban Landscaping; Plant Landscape; Art and Design

1. Introduction

Cities are a necessary factor for the development of modern society. Nowadays, with the continuous improvement of development, various demand points in cities are gradually increasing; The greening and construction of urban gardens are not only related to the improvement of urban ecological environment and cultural quality, but also to the quality of living environment, people's happiness, and urban economic development. Therefore, landscaping is an indispensable supporting link in urban construction.

Plants are important natural elements with vitality and continuous growth and change in landscape design. It is not only a component of the natural environment, but also a setting and performer of landscape design themes, playing a

crucial and irreplaceable role in urban landscaping construction. Therefore, strengthening the research on plant landscape art design in modern urban gardens is of great significance for promoting urban construction and sustainable development.

2. The Importance of Modern Urban Landscape Plant Landscape Art Design

With the acceleration of urbanization and people's demand for a better life, the importance of modern urban plant landscape art design is becoming increasingly prominent. It has become an important means to enhance urban image, improve the quality of life of residents, promote ecological balance and economic development.

2.1 Protecting the Urban Ecological Environment

Ecological environment construction is an important part and key link in the comprehensive construction of cities. The plant landscape in modern urban gardens can effectively improve the environmental quality, maintain the ecological balance, and promote ecological overall environment construction of modern cities. Firstly, green plants themselves are natural air purifiers. In urban landscaping construction, utilizing the natural characteristics of plants and making reasonable use of them can not only create green spaces for cities, improve air quality and microclimate, but also reduce noise pollution in modern cities to a certain extent and protect biodiversity; Secondly, in urban landscaping construction, reasonable selection of plant species and scientific planning and layout can also help prevent soil erosion, protect water sources, and reduce urban carbon emissions. short. scientifically and reasonably designing the plant landscape in modern urban gardens is an effective way to protect the urban ecological environment.

2.2 Enhancing the Quality of Urban Culture

In the new era, cultural soft power has become an important indicator for measuring the comprehensive strength of a city. Emphasizing the improvement of urban cultural quality has also become an important path to accelerate the construction of a national civilized city; Excellent urban landscaping and plant landscape art design can reflect the cultural heritage and artistic taste of a city. Therefore, in the process of plant landscape art design in modern urban selecting plants with local gardens, characteristics and effectively combining them with the historical and cultural elements of the city, not only can a unique and charming urban landscape be created, but also a unique urban cultural and tourism image can be created. This can also enhance the city's visibility and influence.

2.3 Improving the Quality of Life For Citizens

With the rapid development of the social economy and the continuous improvement of living standards, people's demand for a better life is also constantly increasing. Strengthening the artistic design of plant landscapes in modern urban gardens can to some extent meet people's needs for a better way of life. Firstly, the plant landscape in modern urban gardens is increasingly emphasizing humanized design. We should pay attention to adhering to the principle of putting people first, by paying attention to the needs and aesthetic tastes of citizens, arranging seats, pavilions, and garden roads reasonably in and improving the landscape, relevant infrastructure construction. Through this, it can create a comfortable, beautiful, and attractive green space for citizens, providing a good place for leisure, entertainment, and learning; Secondly, in the process of plant landscape art design, it is necessary to carefully design the seasonal changes of plant landscapes based on understanding the laws of plant evolution. [1] This is beneficial for citizens to enjoy plants throughout the year, enhancing their sense of happiness and belonging.

2.4 Promoting Urban Economic Development

The plant landscape art design in modern urban gardens is not only a key link in promoting urban construction, but also an important means of promoting modern urban economic development. On the one hand, the beautiful plant landscape art design in modern urban

gardens can attract a large number of tourists to come and admire, thereby driving the development of local tourism industry and bringing economic benefits to local related industries; On the other hand, the construction of plant landscapes in modern urban gardens requires a significant investment of manpower, material resources, and financial resources. This can not only promote employment to a certain extent, but also provide broader development space for local enterprises.

3. The Development Trend of Modern Urban Landscape Plant Landscape Art Design

In different eras, people will form different understandings of the relationship between humans and nature. Different views on nature can largely lead to differences in the form and connotation of urban plant landscape art design. At present, influenced by the transformation of people's ideological concepts, the plant landscape art design in modern gardens has shown the following development trends.

3.1 Understanding the Laws of Plant Evolution

Only by living in harmony with nature can humans promote sustainable social development. Under the influence of this natural concept, the first step in modern urban landscape art design is to understand the evolution laws of plants. As a living organism in nature, plants have unique laws of growth, reproduction, and evolution. When designing urban landscaping plant landscape art, only by understanding the biological characteristics of plants, studying their growth environment and ecological needs, can plant resources be better utilized and beautiful urban landscaping be created.

3.2 Following the Rules and Adjusting Appropriately

On the basis of understanding the laws of plant evolution, plant landscape designers also need to make moderate adjustments in accordance with these laws. The plant landscape art design in modern urban gardens is not only a simple imitation of nature, but also needs to fully tap into human subjective initiative, scientifically select suitable plant species based on factors such as urban climate

and soil, and reasonably complete plant configuration and landscape design. This can promote harmonious coexistence between plants and the city. In addition, it is necessary to continuously adjust and optimize existing designs based on factors such as plant growth rate, flowering period, stress resistance, and the unique urban environment.

3.3 Protecting the Natural Characteristics of Plants

The essence and bottom line of plant landscape design in modern urban gardens is to fully protect the natural characteristics of plants and continuously utilize natural resources to serve humanity. In the artistic design of urban landscape plants, designers should not only pursue beautiful forms, but also attach importance to the visual effects of plant landscapes; It is even more important to respect the life process and natural characteristics of plants, and design plant types that can adapt to local natural conditions, have self-renewal ability, and reflect the local natural landscape style.

4. Optimization Strategies for Modern Urban Landscape Plant Landscape Art Design

The effect of plant landscape art design in modern urban gardens is of great significance for the further development of urban construction. Therefore, when designing plant landscape art, it is necessary to conduct a detailed analysis of actual needs, clarify the content and focus of the design, and choose appropriate methods for optimization from different perspectives, in order to improve the comprehensive effect of the design.

4.1 To Clarify Design Goals and Scientifically Plan Layout

In order to enhance the comprehensive effect of plant landscape art design in modern gardens, when designing plant landscapes in modern urban gardens, design goals should be clearly defined and scientifically and reasonably planned and arranged. Firstly, it is necessary to fully consider the regional characteristics, cultural background, and citizen needs of the city. On this basis, clear design goals for plant landscapes should be established, so that the artistic design of plant landscapes in gardens can complement the overall construction of local cities; Secondly, guided by design goals,

scientifically and reasonably plan and layout the construction of plant landscapes. [2] In this process, attention should be paid to the combination of functionality and aesthetics, which not only meets the leisure and entertainment needs of modern citizens, but also reflects the unique charm of the local city; Thirdly, when designing the plant landscape in modern urban gardens, we should follow the principle of sustainability, pay attention to the rational development and utilization of land resources, protect the original ecological environment, and promote the achievement of the goal of harmonious coexistence between humans and nature.

4.2 To Reasonably Configure Plants and Strengthen Ecological Design

Plant configuration is the core content of garden landscape art design. In the process of urbanization, attention should be paid to the rational allocation of plants and strengthening of landscape ecological design of garden plants, in order to promote the construction of urban ecological environment. Firstly, when selecting plants, comprehensive consideration should be given to the diversity of plant types, as well as the adaptability and stability of plants, and a scientific and reasonable combination of trees, shrubs, flowers and other types of plants should be carried out to form a rich and diverse plant community; Secondly, it is necessary to comprehensively understand the natural characteristics and different ecological functions of various types of plants, so as to promote the maximization of ecological functions in purifying air, reducing noise, regulating climate, and other aspects of plant landscape design and construction through scientific design and reasonable combination. and thereby promote the construction of a healthy and stable ecosystem; Thirdly, it is necessary to further strengthen ecological design, pay attention to the coordination and combination of plants with elements such as terrain, water bodies, and architecture, in order to create a lively, interesting, and artistic landscape.

4.3 To Enhance Citizen Participation, Continuously Evaluate and Improve Quality

In the process of modern urban construction,

the success of plant landscape art design in gardens depends on whether it can meet the needs and expectations of urban residents. Therefore, in the process of artistic design of plant landscapes in modern urban gardens, it is necessary to increase the participation of citizens and continuously evaluate and improve the design. Firstly, in the design process, it is necessary to broaden the channels for citizens to participate and fully listen to their opinions and suggestions, so as to make the landscape design of garden plants more closely related to the lives citizens; Secondly, a comprehensive evaluation and improvement mechanism can be established. By regularly evaluating the artistic effects, ecological environment, and functional use of garden plant landscapes, and making timely and continuous improvements based on the evaluation results, we can further promote the continuous improvement of the quality and efficiency of urban garden plant landscape art design.

5. Conclusion

In summary, continuously optimizing the plant landscape art design in modern urban gardens is of great significance for promoting urban construction. This is not only beneficial for protecting the urban ecological environment and improving the cultural quality of the city, but also for improving the quality of life of citizens and promoting high-quality and sustainable development of the urban economy. At present, the plant landscape art design in urban gardens should keep up with the trend of the times, adjust appropriately according to the laws, and pay attention to protecting plant characteristics, based on understanding the laws of plant evolution. At the same time, in order to improve the level of modern urban landscape plant art design, enhance its aesthetic value, ecological benefits, and social benefits, in the process of design, optimization strategies such as clear design goals, scientific planning and layout, rational allocation of plants, strengthening ecological design, enhancing citizen participation, and continuous evaluation and improvement can be adopted. This can create a more livable and beautiful urban environment for citizens.

Acknowledgments

This paper is supported by New Agricultural Science Research and Reform Practice Project of the Ministry of Education, Construction and Practice of Landscape Innovation Talent Training Model with Interdisciplinary and Teaching Research Integration" (Project Number: 2020151); Guangxi **Tourism** Industry Research Institute Special Fund Project in 2023, Research on Guilin Urban Landscape Creation and Optimization Based on Five Sensory Factors (Project Number: LYCY2023-014); Guangxi University Young Middle aged Teachers Research and Foundation Ability Enhancement Project in 2024, Research on the Relationship between Biodiversity of Landscape Plants and Landscape Design (2024KY0258).

References:

- [1] Wang Jun. Research on Modern Urban Center Plant Landscape Art Design [J]. Journal of Integrative Plant Biology, 2022, 57 (1): 1-2
- [2] Zhang Panpan. Research on Modern Urban Landscape Plant Art Design [J]. Journal of Integrative Plant Biology, 2021,56 (5): 1-2
- [3] Wang Jing. Application of Landscape Plant Environmental Art Design in Plant Landscape Design [J]. Journal of Plant Genetic Resources, 2024,25 (02): 304-305