Exploration on the Paths to Improve the Construction Effect of Ecological Landscape with the Help of Ecological Landscape Science

Haoru Wang

Guangdong Industry Polytechnic, Guangzhou 510300, China

Email: whr5275@163.com

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Abstract: The rapid development of urbanization puts forward the higher request to the urban environment, thus providing many opportunities for the construction of landscape. Correspondingly, in order to meet the needs of sustainable development of ecological environment, more efforts should be made to vigorously develop ecological garden and select the type of plants according to the local natural landscape and the characteristics in humanities. Moreover, rational allocation can be conducted for plants to create the most unique ecological garden landscape. However, the research conducted revealed that part of the landscape is not integrated with the ecological landscape during construction, which reduces the ecological value of gardens. Therefore, this paper is conducted with analysis on the construction effect of the science of ecological landscape to improve the ecological gardens, hoping to improve the construction level of ecological gardens.

Introduction

In recent years, the consequences of environmental deterioration have gradually emerged, which has caused a great impact on our high-quality production and living. Therefore, we should enhance the awareness of ecological protection, strengthen the construction of ecological landscape, and give full play to greater ecological benefits [1].The construction of garden landscape can not only beautify the environment of the city, but also improve the local microclimate of the city, which generates more benefits for urban development. Moreover, the construction of the gardens also provides the public with good places for leisure and entertainment, so that they can go to the park in their leisure time to relax themselves and cultivate their sentiment, which plays an important role in the construction of spiritual civilization and is an important measure to promote the harmonious development of ecological environment and society as a whole.

1. The Principle of Constructing Ecological Gardens under the Guidance of Ecological Landscape Science

1.1 The Principle of Sustainability

The concept of sustainable development is one of the concepts that must be implemented in the construction and development of the society. The concept of sustainable development must be adhered to to promote the healthy life of human beings and for the long-term development of the society. Besides, the construction of ecological gardens fails to be made without the guidance of the concept of sustainable development [2].All departments for construction of landscape should strengthen communication and coordination to ensure the symbiotic development of vegetation in gardens. Landscape transformation should be carried out on the basis of following the development of the local natural environment, so as to reduce the impact of human activities on ecological landscape and strengthen the maintenance of vegetation to ensure the maximum value of vegetation.

1.2 The Principle of Coordination

The construction of ecological garden is required to adhere to the principle of coordination.

Ecological garden is the connection point between city and ecological environment. It is necessary to organically integrate the environment transformed by human with the natural environment, so as to promote the harmonious development of the garden construction and the natural environment[3].Therefore, it is necessary for designers to carry out a comprehensive survey of the location of the garden and determine the theme of the construction of garden according to the surrounding environment with the purpose to promote the coordinated development of ecology, culture, economy and so on and improve the rationality of the existence of ecological gardens.

1.3 The Principle of Protectiveness

The key to the construction of ecological landscape is on whether it is capable of playing the roles to beautify cities, purifying environment. However, vegetation abundance is regarded as the sole standard by some landscape builder to measure the ecosystem of landscape construction, and the types of vegetation are given too much attention in vegetation allocation ignoring the adaptability of vegetation. Consequently, the vegetation failed to be survived, which increased the construction cost. Some plants cannot coexist with the local vegetation after being introduced, which breaks the ecological security of the base for garden construction, and even causes biological invasion and other problems; as a result, the ecological balance of the local area is seriously damaged. Therefore, it is necessary to adhere to the principle of protectiveness and maintain the original local ecology.

2. The Theoretical Analysis on Ecological Landscape

2.1 Diversity and Differentiation of Landscape

A large amount of vegetation are needed in the construction of ecological landscape. In order to enhance the value of the garden, it is necessary to make a careful planning of vegetation types and planting schemes, and make correct choices. Monotonous colors that fails to attract the public attention must be avoid to ensure the abundance of vegetation of gardens [4].In order to avoid the monotonous construction of all ecological gardens, it is necessary to make different designs according to the theme and benefits of ecological gardens, so as to ensure the aesthetic characteristics in garden design, which will add bright colors to the development of the city.

2.2 Landscape Connectivity

Both humanistic characteristics and natural scenery are needed in construction of ecological landscape, so landscape connectivity is required. When designing the construction scheme, designers should effectively connect the various parts to ensure the integrity of the landscape [5].After the design scheme is finished, it is necessary to conduct a careful assessment of the scheme and analyze the feasibility of the scheme as a whole, so as to ensure that the urban ecological landscape with high degree of beauty and economic efficiency can be created and the best landscape viewing experience can be provided to the public.

2.3 The Principle of Patches-Corridor-Basement

The principle of patch-corridor and basement plays an important role in the construction of ecological garden, which can be said to be the principle followed in construction of most gardens. To put it simply, landscape design is divided into three parts: patch, corridor and basement, which can be coordinated together to ensure greater benefits in garden construction [6].The patch represents the appearance and has an impact on biodiversity and various ecological processes. The corridor is an important passage connecting the two parts of the landscape. The basement is the element with the largest area and the degree of connectivity, which has the control effect on the landscape. As a result, basement plays a decisive role in the keynote of the entire landscape.

3. The Specific Path to Promote the Construction of Ecological Gardens With the Help of the Science of Ecological Landscape

3.1 Improvement of the Utilization Rate of Space of Ecological Garden

With the acceleration of urbanization speed, there are fewer and fewer places available for development in the city. Therefore, the utilization rate of space should be fully improved in the construction of ecological landscape, and the maximum development of space should be carried out to make the landscape more colorful and ensure the variety of landscape [7].In the process of design, attention should be paid to the collocation of the urban concept. While ensuring the functions of the garden, the occupied space should be reduced to make the best use of the materials, and the project construction should be completed with the minimum landscape area to extend the life cycle of the landscape.

3.2 Rational Allocation of Garden Vegetation

If the plants are allocated with a single color in ecological garden design, the landscape will be relatively monotonous. After investigation, it is found that some landscapes are only covered with large areas of green. As time goes on, people's interest for sightseeing will be reduced. Therefore, it is necessary for designers to reasonably allocate plants to ensure that vegetation allocation conforms to the theme of garden construction and gives play to the role of humanistic quality of garden landscape. At the same time, it is also necessary for gardens to be presented with different landscapes in different climates and seasons to meet people's demands for diverse landscapes [8].

3.3Attention to the Harmful Effects of Plants

Different plants have their own growth habits, so when selecting vegetation, their growth rules should be fully respected. Moreover, different requirements on purification for soil and water are required by different types of plants, and even some vegetation may produce substances harmful to human health, causing serious impacts on the public. Cordate telosma blooms at night, and its flowers will release aroma and produce toxin that will make people feel dizzy if too much toxin is absorbed by people. Therefore, the harm of plants should be fully considered when allocating plants [9].

3.4 The Design Concept for Sponge City

The construction of ecological gardens also needs to meet the requirements of construction of sponge city. Urbanization leads to the hardening of urban ground, which results in the failure of natural circulation system in urban area to play its role in the rainy season. Consequently, serious urban waterlogging is caused, which affects the safety of residents' life and property [10].Therefore, it is necessary to build sponge city with the help of ecological garden landscape, and architectonics, landscape science and ecology should be organically integrated to build artificial wetland system to finally speed up water circulation in natural manner.

4. Conclusion

With the development of the society, people's concept of life is undergoing changes constantly, putting forward new requirements for the living environment, and the construction of livable environment is also the focus of urbanization. Therefore, the construction of ecological landscape should adhere to the construction principle of ecological landscape, and the construction of landscape and ecology should be integrated and used for reference, so as to create a more optimized, purified and beautified high-quality living environment. As a result, the construction and development of cities will conform to the needs of modern cities.

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