# Planning and Design Strategy of Urban Landscape

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Abstract: With the increasing popularity of urban construction concepts such as Sponge City, the application of relevant theories in landscape design is constantly innovating, and the number of landscape in cities is also increasing. The planning and design of urban landscape engineering is a comprehensive discipline. It requires rational allocation of urban landscape architecture and garden plants, and requires consideration of their social and ecological benefits. Landscape refers to a series of landscapes formed by specific urban plants, etc. The planning and design of landscape needs to comprehensively consider social environment, natural environment and human environment. From the perspective of ecology, a healthy and comfortable natural environment can provide a good place for people to live and work in a pleasant state, which can maximize people's potential and inner creativity. Based on the principles of landscape design and application in urban planning, this paper focuses on the analysis of the problems existing in the design and its application.

#### 1. Introduction

With the continuous expansion of urban roads and buildings, the continuous destruction of urban natural environment is exacerbated, resulting in the continuous rise of urban pollution index, the continuous occurrence of haze weather and the heat island effect. In this case, it is urgent to strengthen the urban landscape [1]. Urban gardens can not only carry the historical culture and landscape, but also lead the modern trend of life. Although the domestic urban landscape culture has a long history, the planning and design of modern urban landscape in China developed relatively late. We can see the shortcomings of the design in the current situation of the overall planning [2]. With the continuous enrichment and improvement of the material life of the public in the current society, it also drives the development of horticultural technology to a certain extent [3]. The use of horticultural technology makes the design of garden landscape more diverse and fundamentally close to the daily life of the public. The most important content in urban construction is urban landscape planning, which can improve the living comfort of urban residents internally and increase the influence of its investment environment externally [4]. Landscape design is an important part in urban planning, which plays a very important role in beautifying the city and protecting the ecological environment. The problems existing in landscape design must be solved through some practical measures, so as to promote the better application of landscape design in urban planning [5].

The design of modern urban landscape has become the mainstream of the development of the times, and some problems in its planning have become the key points that designers must consider [6]. With the globalization of network information and people's understanding of different styles of architecture, the aesthetic point of view is different from that of the past. The traditional concept of life can not satisfy the public's need for beauty [7]. The design of modern urban landscape has become the mainstream of the development of the times, and some problems in its planning have become the key points that designers must consider. In the process of urban landscape planning, integrating the concept of landscape design plays a very important role in improving the urban ecological environment, building a characteristic city and improving people's quality of life [8]. Therefore, we need to master its application principles and specific application strategies in order to effectively promote the landscape design to play a full role in urban landscape planning. Firstly, this

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paper comprehensively discusses the problems in the current landscape design, and then analyzes the solutions to the relevant problems.

## 2. The role of landscape design in urban landscape planning

The so-called landscape design refers to the planning strategy of gardens. In a more specific form of introduction, it refers to the adoption of relevant landscape engineering techniques within a certain geographical range. With the rapid development of China's economy, the gradual acceleration of urbanization, the continuous expansion of commercial land area and the serious pollution of industrial wastes, people's requirements for the environment are getting higher and higher [9]. At present, the rapid development of industrialization has seriously affected the construction of ecological environment and greatly influenced the development of urbanization. Therefore, in urban planning and construction, landscape design should be put on the agenda, ecological quality should be actively improved, and a good living environment should be created. Fast-paced life makes people particularly tired. If we can add some artificial green facilities to the reinforced concrete frame, people can enjoy the natural atmosphere in their spare time.

### 3. Analysis on the current situation of modern urban landscape planning and design

# 3.1. Lack of uniqueness of design style

Urban landscape is a highly comprehensive discipline, especially in the planning and design of modern urban landscape, which adopts geometric shapes such as symmetry which is compatible with modern architecture and pays attention to rational analysis. Through the layout of urban roads, squares, green spaces, residential areas and other buildings, the artificially transformed landscape design is carried out. Different regions have different regional and cultural environments. In order to create a unique landscape design environment, regional characteristics must be reflected to ensure that the design style is refreshing. Landscape design should not only give consideration to aesthetic value, but also fundamentally meet the daily needs of the public, and the most ideal effect is to achieve sustainable development. This means that the landscape design should have both aesthetic and practical functions, and at the same time, it should fundamentally reduce the economic cost while achieving the first two.

#### 3.2. Unreasonable allocation of landscape plants

Because most buildings in modern cities are made of reinforced concrete, the surface is quite simple, which is different from the architectural features of Chinese classical gardens. However, in the planning and design of modern urban landscape, landscape, plants, roads and other elements can still be used to reflect the unique artistic conception of Chinese classical gardens, so that the artistic conception of gardens can have a new experience and development. The purpose of strengthening landscape design is to create a good landscape and meet people's living needs. Among them, the infiltration and strengthening of the people-oriented principle is very important, but this principle is not fully reflected in the work. For example, when designing lawns, there is no reserved pedestrian passage, resulting in serious lawn trampling [10]. When some landscape plants are collocated, it is difficult to guarantee the rationality of collocation, which wastes and loses a lot of social resources, such as planting the same plant in a large area, and if there are pests and diseases, the loss is immeasurable. In the process of landscape design, the whole construction design process needs certain requirements, and landscape design has strict requirements on regional scope and engineering technology. In landscape design, it is necessary to use high-tech scientific and technological means, make scientific and reasonable arrangement, seriously transform the terrain and plant plants.

# 4. Thoughts on planning and design of modern urban landscape engineering

## 4.1. Pay attention to ecological balance

With the development of economy and society, people are constantly developing various technical levels to change society. However, with the development of technology, the natural environment is getting worse and worse, and people are often at a loss about the harsh natural environment. This is the consequence of people dominating nature. In the past process of urban landscape design, designers usually regard the natural environment as the raw material of design, and tend to design nature artificially. As a comprehensive whole, the planning and design of urban landscape should take human creation as the center and fully reflect the ecological and civilized living environment. Including the accessibility of landscape, the ecology of architecture, the stability of ecology and the beauty of landscape, etc. At present, the most important thing in garden city construction is to protect and improve the ecological environment. The division of garden space can ensure the rational application of land resources, and the effective division of plant growth space can ensure the environmental protection and scientific nature of garden landscape. When planting the vegetation in the garden landscape, we should choose native plants as much as possible, so as to prevent foreign species from damaging the local environment, and we should not pursue good ornamental value. If you want to build a landscape full of natural colors, you should first conform to the laws of nature, follow the principles of ecology, and recognize the elements formed by the natural landscape. In addition, the nature needs to have a certain renewal and evolution process. In the design, the relationship between environment and the composition of nature should be considered, and the original animals and plants should be retained and adopted as much as possible for planning and design.

# 4.2. Respect the laws of nature

In order to effectively save the land resources, it is mainly to build small-scale landscape gardens in urban construction, and it is also very good to adopt three-dimensional landscape planning and design, which can not only effectively save the land resources, but also promote the green area of the city, thus improving the unit land utilization rate of the city. Modern landscape planning and design no longer stays in the narrow space of garden design. But began to get involved in a wider field of landscape design. Including following the ecological development process of the site, recycling energy and materials, and the application of sustainable treatment technology, etc. In landscape design, if the artistic effect is excessively pursued, depending on one's own subjective intention, the original ecological balance will be impressed by removing some elements or adding some elements casually, which will make the designed landscape lose its due effect. If the designed landscape is rejected by the original ecological environment, it will bring a high price. In the process of selecting planting types of urban garden plants, it is best to choose soil as the soil foundation for planting. Before breeding, appropriate amount of natural fertilizers such as rotten leaves can be added to the soil to improve the nutrition level of the soil itself. After planting, it is also very important for the maintenance of plants in the garden, which should be treated as a key issue in garden planning. In the planning and design of landscape architecture, we should also pay full attention to and protect the locality of the region. The protection of local nature does not mean to copy the history delicately, but to emphasize that when inheriting the tradition, we should discard the dross, take its essence and make necessary amendments, and apply the inherited valuable culture to landscape planning and design.

#### 5. Conclusions

Incorporating characteristic garden landscape design into the process of urban planning can not only further adapt the garden design to the needs of residents, but also create an excellent realm of harmonious coexistence between man and nature. With the continuous development of the city, the expansion of roads and the establishment of high-rise buildings, the original natural and cultural environment of the city has been damaged to varying degrees. In order to increase the humanistic

atmosphere of the city, the planning of urban landscape has been put on the agenda. If the planning and design of urban landscape engineering wants to be fully recognized by the society and form a unique design style, it is necessary to select the appropriate scale, style, standard and cultural connotation according to the regional characteristics, so that the garden can truly become the image project of the city. In landscape design, we should advocate distinctive design style to avoid the appearance of original copy or patchwork design. At the same time, the vegetation used for greening should be reasonably selected to meet people's requirements for high-quality life, so as to achieve the best scheme of social and humanistic benefits. Only by combining with the needs of urban planning, adhering to the people-oriented principle, constantly innovating regional culture, and integrating the low-carbon concept to fully embody the practicality and beauty of landscape design, can we create a beautiful urban landscape.

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