Application of Greening Trees in Urban Landscape Design

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Abstract: With the improvement of people's quality of life, the requirements for the quality of life are gradually improved, and the concept of greening and environmental protection has been established. In the field of urban landscape design, traditional design methods cannot meet the current aesthetic requirements and urban landscape greening development needs, should form a correct concept awareness, and make rational use of green tree resources. In order to enrich the connotation of urban landscape design, and form a good working model and system, the role of different greening trees will abe fully utilized to lay a solid foundation for its subsequent development.

1. Introduction

In the work of urban landscape design, we should pay attention to the application of greening trees and carry out various aspects of design work according to local conditions. In order to enhance the design effect of urban landscape, and constantly summarize the relevant work experience, the role of different design methods will be fully brought into play, to achieve the desired design purposes.

2. Application Status of Greening Trees in Urban Landscape Design

As far as urban landscape design is concerned, it can not only create a better living environment for people, promote the improvement of air quality, but also achieve the purpose of cultivating people's sentiment, so as to improve people's quality of life and living quality. For a long time, our country attaches great importance to landscape design in urban planning. In the aspect of urban symbolic color, landscape design contains rich cultural connotations. In China's urban landscape design, not only retains the traditional art and culture, but also rich in the cultural content of the city. However, in the field of urban landscape design, some regions have begun to pursue internationalization and blindly carry out construction work and planning work. Even blindly imitating foreign design methods, the city's integrity is not taken into account in the construction planning. It is not easy to choose green trees in combination with local climate characteristics, and it is easy to have problems of excessive resource application or waste. Some cities are too utilitarian in selecting green trees, failing to make correct choices based on local actual conditions, seriously affecting the application effect and value of green trees in urban landscapes, and even affecting their long-term development.

3. The importance of greening trees in urban landscape design

3.1 Help regulate microclimate

For the microclimate, it is mainly the climatic conditions above 10 to 100 meters above the surface. The climate within this range is directly related to the quality of life of people. In the life and production of people, the photosynthesis of plants themselves will lead to a certain impact on the microclimate. The growth and development of green trees will lead to transpiration, which can achieve the regulation of temperature, humidity and air heat in local areas. According to the relevant statistics, in the very hot summer environment, the surface temperature of the lawn will be lower than the ground temperature of about 6 degrees Celsius. In the cold winter environment, the

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temperature of the lawn will be about 3 degrees Celsius higher than that of the ground. At the same time, in terms of the transpiration function of greening trees, it helps to promote the increase of urban spatial humidity. The greenbelt in the region can also introduce the natural airflow in the suburbs into the city. Thus, to a certain extent, it can play a regulatory role in urban microclimate.

3.2 Help purify the air

In the process of green tree growth, photosynthesis can absorb carbon dioxide and change into oxygen, which to some extent can promote the regulation of urban air composition and prevent greenhouse effect. And promote the overall improvement of air quality. Generally speaking, in the process of using green trees, it can also absorb harmful gases in the city and improve the air quality in the area better. In the process of growing most green trees, they can absorb harmful gases such as carbon monoxide emitted from industrial production, convert them into oxygen, and improve the air environment. And the greening trees can absorb the dust substances in the air to a certain extent, eliminate harmful bacteria and create a good living environment. In daily life, we are often affected by noise and have problems with quality of life. The application of green trees in urban landscapes has a certain noise filtering effect, which can reduce the noise generated by urban production or transportation.

3.3 There is a high beautification effect

In the process of urban development in China, greening trees have become a landscape element with seasonal changes within nature. It not only highlights the vitality of the city, but also plays a good role in the beautification of the environment and enhances the artistic level of urban landscape design. And reasonable set off the relevant building lines, to a certain extent, the environment and related urban areas can be organically integrated to achieve the desired purpose of work.

4. Suggestions on the Application of Greening Trees in Urban Landscape Design

In the field of urban landscape design, we should establish correct concept consciousness, rationally use green tree resources, follow scientific working principles, and strictly carry out landscape design. The function of afforestation trees will be brought into full play, so as to improve the level of design work. Specific recommendations are as follows:

4.1 Comprehensively Using Greening Trees

In order to improve the current situation of urban landscape design, we should comprehensively use relevant greening trees, combining the biological characteristics of tree growth, seasonal characteristics, natural growth habits and so on. According to the knowledge of ecology, the design scheme of greening trees with reasonable structure and hierarchical sense is worked out, and the varieties of greening trees with many functions are selected as far as possible. As shown in Fig. 1, shrub species, tree species, rattan species and so on should be reasonably used in the field of design. The main trees and secondary trees should be defined according to their shape and crown characteristics, so as to form a hierarchical design model. In order to better carry out related design activities, in the field of urban landscape design, trees and shrub varieties, evergreen varieties and deciduous varieties can be organically integrated, and flowers and plants are appropriately used for embellishment design. In this way, a hierarchical and complex structure is formed, and a green tree design system with a high level of hierarchy is constructed to achieve the desired work purpose.

Fig.1.Comprehensive application of green trees in urban landscape design

4.2 Organically integrating green trees and related landscape buildings

In the field of urban landscape design, we should follow the functional and appreciative working principles and integrate the two to form a corresponding working mode. Usually, urban landscape design is mainly based on the idea of artistic creation and redesigning on the basis of natural elements. However, in the current design work, the aesthetic form is too diversified, and often there will be a blunt design or a patchwork design, and it is difficult to comprehensively enhance its overall vitality. Therefore, in the field of urban landscape design, it is reasonable to apply green trees to prevent the bluntness of artificial art design, enrich the natural connotation and elements of the city, and give the city landscape a certain natural charm. During the design process, plant communities that are in accordance with the changing characteristics of the four seasons should be selected correctly and in accordance with the law of natural change. In each season, the environment can create a good atmosphere for people to experience the scenery. At the same time, in the process of choosing greening trees, we should also combine the characteristics and laws of the building groups, and correctly design the foil type. In different architectural styles, we need to choose greening trees with different specifications. In order to form a mutually responsive situation, the design mode of urban ecological integration is constructed, and the greening trees are regarded as an important element in urban landscape design, so as to better create the relevant urban landscape environment [1].

4.3 Maintaining species diversity

Reasonable use of green trees in the field of landscape design should maintain the diversity of species, establish a correct sense of design concepts, follow scientific and rational working principles, and fully exert the different design roles and advantages. The structure of the natural community can be simulated by means of advanced simulation techniques, and the richness and diversity of the natural community can be highlighted under the diversification of the mechanical energy allocation of the green trees. At the same time, in the design work, it is necessary to highlight the natural ecological season characteristics and stability characteristics, and use different green trees to derive a different ecological environment. We should correctly analyze the out-of-control conditions of the greening tree community and make rational use of the related resources in the light of the design characteristics and laws of greening plants. It makes the advantages of greening trees and other plants complement each other, forms a benign competition, and improves the stability of the overall work. In this case, it is suggested that the use of greening plants in urban landscape design should adopt a diversified mixed forest construction mode, and the phenomenon of afforestation of pure tree species should not occur, so as to improve the overall design level [2].

4.4 Selecting ornamental tree species with higher adaptability

In order to better apply greening trees in urban landscape design, tree species with higher adaptability and ornamental characteristics should be selected. Firstly, we should combine the climate characteristics and soil characteristics in the region, reasonably select tree species, and carry out greening tree design activities according to local conditions. In order to prevent the problem of adaptability of exotic tree species in the period of introduction, the working principle of giving priority to local tree species and supplementing by exotic tree species should be followed.For example, in the northern region, ginkgo trees, eucalyptus trees, etc. can be selected as the main varieties, and exotic trees are appropriately introduced as auxiliary green trees. This will not only improve the adaptability of the trees, but also create a good atmosphere for the landscape. Secondly, during the selection of ornamental trees, we should form a correct concept consciousness, follow the scientific design principles of green trees, and combine the construction needs and design features of urban landscapes to correctly handle them [3].

4.5 Constructing three-dimensional greening mode

In the field of urban landscape design, the use of green trees to build a three-dimensional

greening model can be used as a supplement to the main urban landscape design. It not only enhances the artistic effect, but also ensures the cleanliness and aesthetics of the environment, creating a lively and lively atmosphere [4]. At present, in the field of urban landscape design, the application of greening trees has received extensive attention. Through different design means and methods, corresponding greening scenes can be created to improve the level of work in all aspects. In recent years, haze weather often appears in some cities of China, which has an impact on people's quality of life. Therefore, in the field of design, green trees can be introduced appropriately, which can play the role of dust control and dust retention to a certain extent, and constantly improve the environment of urban landscape [5].

4.6 Preventing the random transplanting of big trees

For big trees, it is mainly tall trees with very flourishing branches and leaves. Their postures are diversified, and they have good greening and beautifying effects in the field of urban landscape. It can promote the improvement of human environment and urban ecological environment, and has certain advantages [6]. However, at present, in many areas in the landscape field, the phenomenon of random transplanting of large trees often occurs, which can not be combined with the actual situation of the local rational selection of large tree varieties. Without proper application of big trees in urban landscape according to specific characteristics and growth laws, to a certain extent, its long-term development and good construction will be affected. On the one hand, it will lead to an increase in labor costs, on the other hand, it will have a devastating impact on the ecological environment of the primary area. Especially after the transplanting of large trees, the growth rate is very slow. Within a short period of time, it is difficult to build a dense canopy, it is difficult to improve the effectiveness of greening work, and even most of the problems of death. Therefore, in the field of urban landscape design, the tree species should be given a certain degree of attention, and the introduction of local conditions should be taken to prevent problems arising from the unreasonable introduction of large trees and create a good landscape environment and atmosphere [7].

4.7 Doing a good job of maintenance and management

In the field of urban landscape design, in order to fully utilize the advantages and functions of greening trees, it is necessary to carry out maintenance work and management work reasonably, prepare corresponding plans, and increase management efforts in all aspects. In order to better maintain the growth of green trees. In the field of daily maintenance and management, watering and fertilization should be carried out reasonably, pruning should be carried out periodically, and the problems of pests and diseases should be strictly prevented so as to bring the technical advantages of different garden management into full play. In order to enhance the scientificalness and rationality of all aspects of work and achieve the expected objectives of work [8].

5. Conclusion

In the field of urban landscape design, in order to improve the overall design effect and level, we should formulate a perfect introduction plan of greening trees, and draw up the corresponding work plan and planning content. And adopt a reasonable way to improve the landscape area, and give full play to the positive role of greening trees, so as to improve the overall design level and achieve the desired work objectives.

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