Analysis and Discussion on the Application of Landscape Plant Configuration in Landscape Design

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Abstract: This article analyzes the application principles of landscape plant configuration, including the principle of natural priority, the principle of adapting to local conditions, the principle of color suitability, and the principle of seasonal suitability. This article combines the application of landscape plant configuration in garden design, such as the division of spatial areas, independent landscape modeling, the use of plant culture, and the reasonable combination of colors. By studying the use of diverse plant species, we can consider the interaction between plants and native plants precautions, such as the use of foliage plants and flower plants. The purpose of this article is to improve the rationality of landscape plant configuration and the comprehensive application level of garden design.

1. Introduction
In the process of garden design, the configuration of landscape plants has always been a very important design link, and the design quality of this link will directly affect the overall garden design effect. In combination with previous design experience, in the process of landscape plant configuration, we still have a lot of content to pay attention to, combing these links, and in the actual application process, we need to consider objective relevant factors. In this way, we can not only provide reliable application information for garden design, but also have a positive effect on improving the effect of garden design.

2. Application Principles of Landscape Plant Configuration

2.1. Natural Priority Principle
In the process of landscape plant configuration, the first principle we need to follow is the principle of natural priority. The so-called natural priority principle refers to the development of the entire garden design content based on the natural relationship between plants. In the layout design, it is necessary to make full use of the plant's own growth habits to match a reasonable garden landscape effect. Or in the process of garden design, it is necessary to reduce the addition of artificial elements and apply natural plants as much as possible to build an ecological landscape. As shown in Figure 1, Huangshan's welcome pine is an ecological landscape constructed by using natural plants. It has now become a unique scenic spot in Huangshan, attracting tourists.
2.2. Adapt to Local Conditions Principle
The basic requirement of garden design is to increase the aesthetics of the structure, and landscape plants are suitable materials for landscaping. In the process of selecting landscape plants, based on a comprehensive understanding of the basic conditions of the local environment, the most suitable trees should be selected for planting to effectively ensure the survival rate of the planted trees, and then evolve into a good ecological environment. In addition to taking into account natural environmental factors, local folk customs and residents' preferences should also be given great attention. For example, in the cemetery of martyrs, plant trees such as pine trees as much as possible so that a solemn and solemn atmosphere can be created. Each area's garden contains its own characteristics, so relevant designers must consider natural and man-made factors when designing plant landscapes, and based on this, follow the design principle of adapting to local conditions.

2.3. Color Suitability Principle
In garden design, landscape plants can play a very good role. Therefore, in the actual planting process, we should consider the relevant characteristics of the building, the environment, and adhere to the principle of "appropriate colors" on this basis, so as to promote the harmonious effect of plants and the garden environment. We can use the colors and forms of plants to fully show the atmosphere of the garden, so that people can get a good emotional experience when they appreciate the landscape. In general, in terms of plant configuration, the impact of various colors on people's emotions should be considered. For trees, flowers and other related plants, they must have plants with significant colors, such as Lagerstroemia flowers in trees. This shows that the flexible use of plant color characteristics can play a role in enriching the garden.

2.4. Seasonality Principle
As an important reliance on beautifying the urban environment, in the actual application process, we also need to fully consider the seasonal evolution characteristics of the plant itself. For example, in the spring and summer, the leaves of maple and ginkgo trees are always in a green state, and they will change their color after entering autumn. This is also a beautiful landscape, as a good condition to attract tourists. Therefore, in terms of plant landscaping, the characteristics of the seasonal evolution of plants should be considered, and the garden should be constructed on the basis of fully complying with the principle of appropriate seasonal design. During plant landscaping, relevant factors such as plant growth time and maintenance methods should be considered. In different seasons, we must have matching growth plants, and on this basis, we must use scientific methods to lay out plants, and present beautiful scenery in all seasons.

3. Application of Landscape Plant Configuration in Landscape Design

3.1. Spatial Division
As mentioned above, in the process of landscape plant configuration, it is necessary to follow the principle of adapting to local conditions, and to match the corresponding landscape plants according to the regional terrain fluctuations and different soil environments. And when selecting plants, you can also use the uniqueness of the plant itself to match plants according to their basic functions and growth habits. Therefore, on the basis of satisfying the aesthetic requirements, the detailed division of the spatial area is performed. As shown in Figure 2, the advantages of dense bush growth are used to separate the road from the surrounding scenery. In addition, these bushes are very plastic, and they can be built into a fixed shape. People walking in them not only play a role in guiding the direction of advancement, but also help visitors to divide the tour area and enhance the fun of the tour.

Figure 2 Park Road

3.2. Independent Landscape Shaping

The number of garden buildings in our country is very large, but the number of gardens known to Suzhou gardens is very small, and some gardens are rarely visited even by local residents. The reason is mainly due to the lack of independent landscapes in the garden. Like the Expo Gardens all over the country, everything is very similar. There is no independent landscape to attract tourists and reduce the charm of the garden itself. In the design of the independent landscape, first, it needs to be set in a relatively open area, so that it is natural to focus on the independent landscape. Second, it has certain uniqueness. For example, a tall and upright sycamore tree is set in the center of the park. The sycamore tree can play a shading effect in summer, and the sycamore tree itself is relatively large and can play a very good surface role, thereby improving the uniqueness of the entire garden [1].

3.3. Use of Plant Culture

China has a long history. In the process of cultural precipitation, many plant cultural heritages have also been endowed. As shown in Table 1, these are the plants we often use [2]. For example, the plum tree's branches are very vigorous and beautiful, and they would rather bend than bend. Later, people often use plum trees to refer to the strong and indomitable will, and they also have the reputation of "three cold friends". Therefore, in the process of garden design, you can make full use of these plants with cultural heritage, which can not only play a role in setting the atmosphere, but also play a role in promoting classical culture. For example, in the garden design, a separate park can be set up, and the "three cold friends" are planted in it, with the poems on the wall of the park, to help people better understand the deep meaning of these plants themselves, and improve people's recognition of the plant configuration wisdom [3].

| Plant | Cultural Meaning | Cypress | Bamboo | Plum Tree | Laurel | Peaches and Plums | Mulberry |
|-------|------------------|---------|--------|-----------|--------|------------------|---------|
|       | Cultural Meaning | Heroism | Human Integrity | Strong and Unyielding Will | Very Glorious, Family Honor | Many Students | Respect Your Parents and refer to your Hometown |

Table 1 the Cultural Meaning of Some Plants
3.4. Reasonable Color Matching
During the normal growth of the tree, its morphology will change accordingly, and the appearance color of the tree will change with the change of season. By rationally matching the colors of the trees, it is possible to create a clear landscape effect, thereby enhancing the ornamental nature of the garden. For example, in the design of the West Lake garden, different plant colors are fully blended, which can be divided into four levels. When spring comes, the garden mainly uses various types of flowers to show the vitality of spring, such as Su Dike and cherry blossoms are one of the commonly used flowers. After the arrival of summer, mainly green plants such as bamboo and lotus are used for embellishment. When autumn comes, the fir forest and madong forest in the garden can bring a different aesthetic sense (like Broken Bridge, Wuting Bridge, etc.) to create a winter beauty. This is an example of color matching, which is worthy of reference for other garden designers [4].

3.5. Creation of Optical Illusion
Not only people's aesthetics are reflected in intuitive visual feelings, but some geometric illusions sometimes can also enrich people's visual hierarchy. As mentioned above, the West Lake Broken Bridge is actually a geometric illusion brought by architectural sketches. In terms of plant matching, it can also give people some optical illusions [5]. As shown in Figure 3, the Singapore Botanical Garden uses a semi-circular support in the road design. The support will be wrapped by vines. People walk in it as if walking in a space-time tunnel, giving people a sense of confusion in space and time. This not only enriches the visual enjoyment of tourists, but also creates a different garden atmosphere. It should be noted that when dividing the space of the plant hierarchy, it is necessary to ensure that the height of the lower plants is lower than the height of the upper plants, and during the research process, it is necessary to understand the growth habits of the plants themselves, and reasonably match the plants, so as to improve the beauty of the plants role.

![Figure 3 Singapore Botanical Garden](image)

3.6. Plant and Landscape Integration
At present, many garden designers tend to ignore the integration between plants and landscapes when they are designing gardens. The two maintain too much independence and it is difficult for people to integrate into the garden design environment. This is also to a large extent. Reduced the ornamental value of the garden [6]. In practical applications, the architectural style can be used as a reference object, and the landscape plants can be configured on the basis of this, so that the two can be effectively merged together to improve the aesthetics of the structure itself. In combination with previous application experience, in the process of landscaping, the matching frequency between the water environment and plants is very high, and more than 80% of the garden design will involve the water body. In the actual design process, some willow trees can be planted near the river, and the
willow trees reflected in the water will also be a very good landscape [7].

4. Precautions for the Application of Landscape Plant Configuration in Garden Design

4.1. Use of Diverse Plant Species
In the process of garden design, in order to enrich the effect level of the garden, in the actual design process, the frequency of use of diverse plant species can be increased, thereby improving the aesthetics of the entire landscape design content. At present, there are many combinations of landscaping plants in China. For example, choose low bushes with tall trees to create a forest feel. You can also mix flower species with shrubs to improve the beauty of garden design. It should be noted that there are some differences in the requirements for the growth environment of different plant varieties. Therefore, when we pairing tree species, we are supposed to try to choose varieties with similar living habits, which not only facilitates subsequent management, but also has a positive significance for improving the survival rate of plants[8].

4.2. Consider Plant Interactions
The main purpose of garden design is to bring beauty and enjoyment to people, so as to enrich people's spiritual life. However, when choosing green plants, it is necessary to pay attention to the interaction between the plants. For example, pine and spruce cannot be planted together, lilac and linglan can not be planted together, and ground coat will affect the growth of Pinus sylvestris. Although these plants can be planted together to increase their aesthetics, they can easily affect the normal growth of plants due to the existence of the mutual relationship. Therefore, before selecting plants for planting, it is necessary to understand the influence of plants in advance and choose the appropriate species for planting, so as to improve the survival rate of the plants.

4.3. Use of Native Plants
Compared with plants in other regions, native plants are very adaptable, and the application cost of such plants is low, and they are very easy to survive. This is also a key consideration in garden design. In concrete practice, first of all, do a good job of research on native plants, summarize the types of native plants, and select plant varieties with beautiful appearance and high survival rate. Secondly, properly introduce plants from other areas and match them with native plants to improve the beauty of the garden. Finally, the design scheme is appropriately adjusted to fully show the application advantages of native plants, thereby improving the operability of the plant itself.

4.4. Combination of Foliage Plants and Flower Plants
In addition to the above, in the process of landscape plant configuration, it is also necessary to do a good job of matching foliage plants and flower plants. For example, the leaves of the ginkgo tree will change with the change of the season and have a very high ornamental value, such as the "Ginkgo Avenue" in Dandong City, which attracts many tourists to come to watch each fall, bringing rich Visual enjoyment. However, in the foliage plant, it can be matched with some flower-viewing plants, which can play a role of embellishment, and the addition of flower-viewing plants also improves the layered sense of the garden itself, which brings people a different visual experience.

5. Conclusion
In summary, combined with previous design experience, it can be found that the configuration of landscape plants will directly affect the quality of the entire garden design. In order to improve the final presentation effect of the garden design, we need to do a good job of preliminary research, understand the local cultural heritage and basic conditions, and select appropriate design methods to complete the landscape plant configuration, so as to improve the garden design effect and enhance the garden's personalized characteristics.
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