

LETTER TO THE EDITOR

The Division of Color and Ecological Garden Plant Landscape

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Plants give nature a beautiful landscape because of its rich and varied colors. Their leaves, branches, flowers, and fruits also exhibit different colors and textures. This paper discusses the four basic principles of color planning in plant landscaping: the theme keynote principle, the seasonal rhythm principle, the environmental tone coordination principle and the regional principle, and analyzes the expression of plant color planning from the spatial composition of color, and then elaborates In the plant color planning, several configurations of color plants and different landscape effects of spring, summer, autumn and winter formed by color plants.

Color; ecological garden; plant landscaping; space division.

1 INTRODUCTION

With the increasing demand for landscape construction and urban environment, the construction of ecological gardens has become an inevitable direction for the development of urban environment. In the urban environment construction, ecological gardens imitate the natural ecological landscape through artistic processing, and play a great role in improving the living environment for human beings while achieving good landscape effects. Nature is vibrant, harmonious and harmonious because of the embellishment of colors. With the development of society, the level of material civilization and spiritual civilization has been continuously improved, and the pursuit and application of color has become more and more extensive. In the landscape design, the combination of colors is used to change the traditional composition of the past, making the modern landscape more colorful and more contemporary.

Sheng Li, Zhonghua Peng, Zongsheng Huang et al. published an article entitled "Plants Spatial Planning Method of Urban Ecological Landscape Environment" in the journal Ekoloji's 2019 Issue 107. When planning urban ecological garden environment plants, the planning is often based on plants, ignoring the macroscopic planning and design of garden plant space, resulting in fragmentation of spatial experience, and the actual experience of urban ecological garden environment is insufficient. In this paper, a new urban ecological landscape environmental plant spatial planning method is proposed. Based on the detailed study of the spatial planning characteristics of urban ecological landscape environment, the spatial layout of plants is planned according to site conditions, functional planning, spatial sequence and theme map; spatial physical size and spatial sensing size are planned according to spatial scale and scale; Adopt a macro perspective. According to the principle of plant selection, the plant distribution and landscaping are completed in the form of point-line-surface. Combined with the analytic hierarchy process and the weighted average method, the spatial planning effect of the urban ecological landscape environment is comprehensively evaluated. Experiments show that this method can scientifically and rationally plan urban ecological landscape plants and has high planning performance.

Lin proposed: Establishing an indoor ecological environment is a hot topic in today's society. The indoor ecological environment is an important part of the indoor ecological function circle and an important living environment (Lin JL 2017). It has become the ultimate goal and fundamental driving force for the construction of ecological cities. The World Health Organization has classified indoor chemical pollution as one of the five environmental factors that pose the greatest public health hazard. In recent years, air pollution problems such as smog and introduction of plants into the interior are ideal methods for improving the indoor environment. How to design plant landscaping in indoor spaces has become an urgent problem to be solved.

Gao proposed: Chinese traditional garden plant landscaping since ancient times, that is, the use of trees, shrubs, vines and herbs and other materials, through the use of artistic methods, combined with the consideration of the role of various ecological factors, give full play to the plant itself Natural beauty such as form, color, touch or smell, to create an art space that is appropriate to the surrounding environment and expresses a certain mood or has certain functions (Gao Q 2017). The article summarizes the innovative significance of modern landscapes by summarizing the plant landscaping techniques in traditional Chinese gardens.

The application of plant landscaping to the construction of indoor ecological environment is for the purpose of environmental protection and pollution prevention. The idea is novel but lacks the study of the correlation between color and space (Gao Q 2017) In-depth analysis of traditional garden plant landscapes, but not combined with modern concepts. Therefore, there are some shortcomings (Lin JL 2017). This article supplements this article and proposes a study on the division of color and ecological garden plant landscape space, hoping to provide a theoretical basis for the development of this field (Roy et al. 2018, Garcia-Garcia et al. 2017, Chicalote-Castillo et al. 2017, Jimenez-Contreras et al. 2017).

2 IDEA DESCRIPTION

2.1 Principles of plant color planning

2.1.1 Theme tone principle

For each color in the planting space, you need to determine a theme or a color tone, such as a green theme or a warm color; pre-designed themes or keynotes can help the designer to carry out in-depth design and creation in an orderly manner. For example, the warm-colored red leaf heather, red maple, purple leaf short cherry, purple leaf green peach and so on are warm and festive. The combination of cool-colored cedar, arborvitae, cypress, osmanthus, sisal and so on is fresh and refreshing.

2.1.2 Seasonal rhythm principle

The most prominent feature of plant color planning is that each plant is an organic living body. Their shape and color change with the alternation of the natural season. Therefore, the planning should follow the principle of plant season transformation and carry out scientific and rational Configuration. The seasonal variation of some of the above-ground trait organs of trees can be used to create a four-time landscape. For example, the four seasons of Hangzhou West Lake, the spring has Liulang Wenyu, Xia You Quyuan Fenghe, the autumn has Pinghu Qiuyue, and the east has broken bridge residual snow.

2.1.3 Environmental tone coordination principle

In the garden, the color of the plant should be coordinated with the colors of the surrounding environment such as buildings, garden roads, and squares. For example, the red or yellow series of colorful leaf trees such as purple leaf plum, mechanical tree, sweet gum, tea plant, and southern bamboo are planted in front of a light-colored building, or in the background of dark green conifers. The leaf series, the gold leaf series and the green tree species can all play a role in icing on the cake. In the front of the pine forest, the *Aegilops sylvestris*, or the large

turf in the large lawn, are all bright and colorful against the backdrop of autumn blue sky and white clouds and green background. The Cuizhou in Xuanwu Lake, Nanjing, is planted with several large cedar trees as backgrounds. The red leaves of the autumn spears are particularly eye-catching. The white powder wall in Suzhou garden often plays the role of drawing paper. By planting ornamental plants and painting with its natural posture and color, the effect is wonderful. The commonly used plants are red maple, plantain, Nantianzhu, etc., red leaves, Flowers and fruits are on the wall.

In the basic planting design, the color matching of the background and the foreground is also very important. Taking the wall as an example, the color of the wall forms the background color of the planting material, and the background color and the color of the plant material should be contrasted, such as white wall surface, plastic planting tower or Jiaodongweima, big leaf boxwood, red leaf small The hedge effect is very good. If you have the same color or the same color, you can't get good results.

2.1.4 Regional principle

Color planning must be consistent with the biological characteristics of the planned tree species. For example, the American red dragonfly requires full illumination to reflect its color beauty. Once it is under the condition of low light or full negative, it will return to green and lose color. Purple leaf scorpion and other requirements require full illumination to reflect its color beauty. Once in a semi-yin or full yin environment, the leaves return to green and lose the color leaf effect; The flower leaf jade requires half-yin conditions. Once the light is direct, it will cause poor growth and even death. Secondly, the planning place cannot be ignored. For example, the color of the plant in the hospital needs to create a quiet and peaceful environment for the patient, but the children's playground needs to create a happy atmosphere for children. Some plant colors need to be used in certain areas or occasions. Some are forbidden. These elements need to be carefully considered during design to avoid unnecessary effects.

3 RESULTS

The color composition of the plant highlights the individuality of the landscape and creates a distinctive landscape space, so that the color of the garden changes and coordinates in the season and composition. The new green in the early spring of the garden, the autumn leaves and the shades of many monotonous will produce a harmonious and changing color. Since most of the garden plants are green, and green is visually the most comfortable color, it gives a calm and harmonious feeling. Therefore, in the green space of the garden, the green plants usually occupy the largest area, with green as the main color, while the plants of other colors play the role of contrast, enrichment, rendering and finishing touch. The proportion should be appropriate, the proportion is too small, and the effect should not be achieved. If the ratio is too large, it will take the lead and destroy the unity and coordination of the color.

Modern research proves that human eyes like a combination of a small amount of hue, and three basic hue in the garden, and then the depth changes are sufficient. If the three colors are cool colors such as blue, purple, and green, and then adjust the area and depth of the key color, adjustment color, and dominant color, you will feel plain, clean, and elegant. For example, in a large piece of cool color, use a warm color that enhances the contrast effect, and create a color effect of "a little red in the green cluster", and then you can realize the effect of being active, moving, and fresh.

3.1 Plant color landscaping application

Lonely planting, solitary trees are often used in gardens, lawns, rockeries, and water bodies. At the end of the bridgehead and garden roads, the individual beauty of individual trees is expressed. If you choose it properly and

configure it properly, the solitary tree can play a finishing touch. Very colorful leaf species are suitable for solitary planting, especially for those with beautiful trees, such as pine, ginkgo, gooseberry, sapindus, maple, and eucalyptus.

The clusters, three or five clusters of colorful leaf trees in the garden green space, not only enrich the landscape color, but also active the garden atmosphere. The deep and dense scenery of the forest makes people feel mysterious and timid, and does not dare to be deep.

Planting or planting, planting color plants in groups, can create a more imposing landscape. For example, Ginkgo biloba, Liquidambar formosana, Astragalus, Golden Leaf Hedgehog, Golden Pine, Purple Leaf Sakura, and Triangle Maple can all be planted into landscape forests, and their beautification effect is far better than pure green landscape forest. For example, the “Xiangshan Red Leaf” in Beijing is mainly planted in Huanghua. The “Qixia Danfeng”, one of the ten scenic spots in Jinling, is mainly planted with maple scent, and the red maple in the “Quiet Stone, Qingquan and Red Maple” of Suzhou Taiping Mountain. Mainly refers to the triangular maple. Whenever it falls, the mountains are red, the layers of forests are dyed, the miscellaneous forests, the red and green, and the spectacular, the autumn and winter mountains are beautifully decorated.

Basic planting, in the modern city square and road greening, a variety of colorful leaf shrubs, such as golden leaf privet, purple leaf scorpion, safflower ash, red leaf heather, constitute a variety of spectacular patterns. In particular, the basic planting in the background of green lawns can often make the foliage trees more beautiful. Sprinkling the golden peach leaf coral is an excellent spotted leaf tree species under the overpass and the edge of the forest.

The application of flower borders is also a highlight of the basic planting color scheme. The flowering of various colors in the green grass of the West Lake in Hangzhou, such as pansy, tulip, daisy, etc., brightens the spring landscape. In the Taiziwan Park in Hangzhou, large tulip, narcissus, iris, lavender, and corn poppy are planted, and red maple, purple leaf plum, cherry blossom, and smile are more dazzling under the green background of the big tree metasequoia, cedar, and toon.

3.2 Static spatial feature

The main feature of static space is quietness. The main function is to create a place for leisure and relaxation. Such places are mostly corridors or pavilions. These small buildings not only beautify the environment, but also create a place for rest and stop. Compared with those closed spaces, these open environments promote human-natural contact and expand communication and communication between people. When people stop and rest, they often choose a condensing position or an open-air position. The open and open environment can create a sense of vision. In addition, from the perspective of inner security, the visitors in the open place have a sense of security. Visitors can stop to observe the people and things around. For the arrangement of tables and chairs, it is necessary to consider the different situations in the rest area. In most cases, in order to facilitate the communication between tourists in the dynamic environment, the tables and chairs can be arranged in parallel or in a semi-enclosed form; instead, a relatively quiet environment needs to be created. When the table and chairs are arranged, they need to be placed separately to avoid mutual interference when visitors talk.

In the color configuration, we strive to be gentle and stable, and we cannot design the effects of entertainment areas or sports areas. Especially in the rest facilities, the color is warm and warm, the shape of the table and chair also considers the experience of the visitors, including the choice of shape and material. For example, in the cold area of the north, the material of the table and chair can be selected from wood materials, on the one hand, the comfort is high. In addition, the color is also mild, and it is also suitable to match the flowers and plants, which can attract tourists to stop and stay. This requires the designer to consider the requirements of the tourists and the

spiritual needs of the tourists. The more materially developed the society, the higher the people's pursuit of the spirit. This is reflected in the history of the development of landscape architecture in China. Now the urban garden planning is no longer a simple greening problem, but a greening and landscape integration. Urban works. The Green Mountain is the Jinshan Yinshan. This sentence should be used as the motto of the landscape architect.

3.3 Dynamic spatial feature

Dynamic space and static space are obviously different. From the perspective of use, dynamic space is a place for people to create a dynamic entertainment activity. Under normal circumstances, dynamic space visitors are relatively concentrated, such as various sports clubs, theater theaters, playgrounds, studios, ice rinks, science and technology museums, etc. In the current urban planning and design, some landmark buildings are often built here, so that the dynamic space for sports and leisure is built here, and it is also a question to be carefully considered in landscape design. In order to ensure the necessary per capita space, there is a clear requirement for the per capita land quota in such cases.

In all kinds of sports spaces, the layout and color arrangement of children's and even children's sports spaces are very particular. For example, space in different age groups is set in the children's activity space, such as playgrounds for preschool and school-age children, such as science and technology museums and playgrounds, water parks, science parks and other places. The layout of these local amusement facilities should be lively, harmonious, natural and inclusive, and the picture should reflect the attributes of young children, so that children can have a strong visual resonance and have a feeling of seeing. In addition, in the choice of facilities, to reflect the child's geometric scale, the architectural sketch should be able to match the height of the child, and if it can match the color or content of the educational meaning, the effect will be better. Bright and bright colors can have a strong visual impact on young children, and can also stimulate children's sense of closeness and love for nature in the future. The design of dynamic and static space is a common situation in landscape planning. Under the premise of satisfying the function of use, it is necessary to deeply explore the properties of these two spaces, optimize the design from various aspects such as color configuration and structural layout, and combine modern high. Technology expression techniques to enhance the user's visual beauty. The rational use of color is the basic accomplishment of landscape architects, and it is also an important task or content in design. It requires long-term practice and exploration to achieve the realm of use.

4 DISCUSSION

The application of warm and cool colors in landscape design. The warm color mainly refers to the three colors of red, yellow and orange and the adjacent colors of the three colors. Red, yellow and orange are symbols of warmth and joy in people's minds. They are used in landscape design for some celebrations. Warm colors have a balanced psychological temperature and should be applied in cold areas. The colors of cool colors mainly refer to the colors of cyan, blue and their neighbors. Due to the short wavelength of the cool color light, the visibility is low, and there is a visual sense of retreat. The cool color on the area has a sense of contraction, giving a sense of tranquility and solemnity. Cool color has the feeling of lowering the temperature psychologically. In the hot summer and the warmer south, the cool color will make people feel cool.

The application of similar colors in landscape design. In the color wheel table, the same color refers to the adjacent color of each color, and the color difference is not close to the color. This color combination is relatively close in hue, brightness and purity, so it is easy to achieve coordination. In the plant combination, it can reflect the sense of layering and space, and it can produce a soft and quiet feeling of elegance in psychology. The same

color is also often used in some flower beds. For example, the color from the center of the flower bed is darker or lighter, giving a sense of layering and comfort.

The application of contrast color in landscape design. Contrast color mainly refers to the contrast of complementary colors, because the complementary color contrast is very different from the color equality, the contrast effect is strong and conspicuous, and it is used more in outdoor environment design. The complementary colors are at right angles to each other in the color wheel table, such as red and green, yellow and purple, orange and blue. Contrast color in the landscape design, suitable for squares, gardens, main entrances and major festival scenes, using contrasting colors to form various patterns and flower beds, styles, main shapes, etc., can show strong visual effects, giving people a cheerful, warm feeling. The use of complementary color contrast is particularly prominent in landscape plant landscaping. The landscape of “a little red in the green cluster” that people usually describe is the concrete embodiment of this method. A small amount of red variety is dotted in a large green space to form a striking and contrasting landscape effect.

5 CONCLUSIONS

Seasonal changes should be taken into account when configuring color plants, so that the landscape changes with the seasons, and strives to have flowers and beautiful scenery. According to the changes of color, shape and posture produced by the phenological changes of different color plants, plants of different flowering periods, different hue and different forms should be coordinated to extend the viewing period. Plant landscapes will look different in different seasons, as long as they are properly configured.

Nature gives plants a pleasing color. The color of plants is ever-changing, expressed through leaves, flowers, fruits, branches, trunks, and skin. The scientific and rational use of the color of the trees can enhance the taste of the garden construction and achieve the effect of natural and meticulous.

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