Study on the Application of Color in Landscape Design

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Abstract: Color design is the focus of modern landscape design, and color can have a certain impact on people's vision and psychology. The beautiful and harmonious colors of the landscape design not only bring different times to the garden landscape, but also bring people artistic enjoyment. Through accurate and comprehensive understanding of the content and principles of color design in landscape design, color design apply to the landscape design, and then create a garden landscape that brings people artistic enjoyment. The paper analyzes the main contents and principles of color design in landscape design, and analyzes the application of color in landscape design, which provides a reference for designers of landscape architecture.

1. Introduction

With the development of China's economy, people are more satisfied with spiritual needs while satisfying their material life. People's life is inseparable from color. When color brings visual change, it will change psychologically. Therefore, in the design of landscape architecture, we must pay attention to the use of color, make rational use of color, and on this basis, enhance the coordination and beauty of the landscape, so that the landscape brings beautiful enjoyment. It can also meet the spiritual needs of people. Only in this way the application of the color landscape in the landscape project be strengthened, thus laying a solid foundation for the design management of the landscape project [1]. Only by doing the following measures in the color landscape in the landscape project can, we lay the foundation for the successful completion of the entire landscape project.

2. The concept of color

Color is a common visual element that will cause people to have corresponding emotional reactions, which can cause visual beauty in garden landscapes. The color composition shows the characteristics of the garden landscape to a certain extent. The garden landscape has fully exerted due to the color expression; through the contrast and harmony, change and unity of the colors, the garden landscape has distinct, rich and varied landscapes. Therefore, garden designers can make full use of the color landscape when designing the landscape, thus creating a different garden atmosphere. In recent years, all lifestyles have been emphasizing the creation of an ecological environment in which people and nature live in harmony, protecting the ecological balance and achieving sustainable social development. The development of ecological garden city construction projects has made the landscape design more concerned by the society; more and more projects, and more and more problems [1]. In recent years, landscape design has over-emphasized greening, landscape, form, etc., lacking corresponding color design, which leads to unreasonable color matching, serious color convergence, color pollution, etc.; landscapes lose their proper characteristics, not only It has caused a certain degree of psychological fatigue to people and seriously jeopardized the surrounding environment. Therefore, the key to landscape design lies in color design. Excellent color matching can stabilize people's mood, adjust temperature and space, and improve work efficiency.

3. The role of color in garden design

By rationally and orderly understanding and applying color to sublimate the artistic beauty of the landscape, it is possible to blend and contrast the landscape and color, and to enjoy the beauty. When
we are designing landscapes, we must consider what we can do to effectively match the landscape with the colors, to achieve the time, the scene, and to show the distinctive artistic.

3.1 Creating artistic conception and adding artistic expression of garden.

Artistic beauty is an important part of the beauty of garden landscape. Color is one of the important means to create artistic conception, shown as fig.1. It has the function of rendering atmosphere and highlighting the theme, and can achieve the feelings, the scenes, the scenes and the scenes. Effect. For example, different color combinations can express the overall environmental theme of the garden, highlighting the beauty of different themes such as rich, luxurious, noble, simple and elegant. In addition, the air has a perspective relationship, and the use of different colors can enrich the garden landscape and enhance the artistic expression of the garden [2]. For example, for a distant view, in order to zoom in on the visual effect, a contrasting hue of saturated complementary color can be used; and in a space with a small space, using a cool color with a contraction feeling can increase the sense of depth and depth of the space. A cool, quiet garden effect is achieved.

![Fig.1 Garden artistic creation](image)

3.2 Color can enrich the garden landscape.

The garden landscape has many aesthetic features such as taste, color, shape, etc. It is formed by the combination of various colors through specific beautification effects. Garden landscape is a comprehensive art form. The landscape of the garden landscape is diverse and different in style. The cool color has a quiet and cool feeling, while the warm color gives people a feeling of excitement and warmth [2]. Usage of different colors, methods and means that can create different garden landscapes for creating a unique and wonderful mysterious feeling in the landscape, shown as fig.2. Color as an important part of the landscape design, in the landscape design and the role of the implementation cannot be underestimated, and in its application, according to different functional uses, play a role in guiding the user's psychology.

![Fig.2 Color colorful garden landscape](image)
3.3 Color can make people feel the beauty of garden landscape (fig.3).

Color is real and objective in garden design and it exists abstractly in people's thinking activities. Colors can reflect different style themes and art forms, and they have a tension beauty. In addition, the landscape design is carried out because of protecting the ecological environment [3]. The color used in the design should reflect the theme of the environment to form a harmonious, safe and simple beauty.

4. The application of various tones in landscape garden design

4.1 The application of warm color in landscape garden design.

The color wavelength of warm color system is relatively long, and it feels more jumping. This is commonly used in landscape garden design. The so-called warm color system mainly refers to the three colors of red, yellow and orange and the adjacent colors similar to the three colors. The warm color generally brings a feeling of warmth, happiness and joy, such as the flowerbed and the entrance hall of the square. The entrance and so on, through design can bring people a sense of vitality, body and mind. For example, at the Kunming World Expo in 1999, the design of the main style of the red-based main color was adopted on the main entrance and the Yingbin Avenue, while the curved pattern based on yellow and red on the ground made people after entering the World Expo, I will feel the warmth and joy of the Expo. In addition, in the landscape design of the northern region, the warm color system is also the most important design factor. The cold season in the northern region is relatively long, and the warm color system can effectively alleviate the cold feeling of people in winter [3]. It is worth noting that warm tones are not allowed to use on the design of scenic green belts on both sides of the road. The reason is that the visibility of these three colors is high, and the driver's attention will disperse, resulting in traffic accidents.

4.2 The application of cool color in landscape garden design.

Cool color is mainly blue, cyan and adjacent colors, low visibility, visually feels very far, so the edge design is often in the case of small space Applied, it is generally used to cool or cold plants, which can increase the sense of space. In terms of area, the cool color will give people a sense of contraction. The area of the cool color is generally smaller than the warm color area [4]. Therefore, the blue area should be slightly larger than the warm color area to create a sense of balance and coordination.

In fact, in the landscape design, the cool color is matched with white and warm colors, which can produce a bright and cheerful feeling. Now some cities in the square design generally put some cool colors together with white and warm plants or flowers. Give people a sense of satisfaction. However, the simple cool color system generally feels very solemn and quiet, and is often used in the design of some large cemeteries, such as the Zhongshan Mausoleum in Nanjing [3]. In addition, in the southern region due to the high temperature, in the landscape design of some areas in the south, the design of the cool color is more than the warm color, which can give people a refreshing feeling in the summer.

4.3 The application of contrast color in landscape garden design.

The so-called contrast color mainly refers to the contrast of complementary colors. This is because
in general, the complementary color has a great difference from the color, and the contrast is more compelling. The effect makes the scenery feel very eye-catching. Contrast color is also used in landscape garden design. In the relationship between each other, there are generally red and green, yellow and purple, orange and blue color combinations. Contrast colors are used in urban squares and amusement parks [4]. In the landscape design of the entrance or major festivals, the contrasting patterns, flowerbeds, styles, three-dimensional shapes, etc. of flowers and shrubs can be used to bring people strong visual effects.

4.4 The application of gold, silver and black and white in landscape garden design.

Gold, silver, and black and white are mostly used in the design of architectural environment and garden essays in landscape garden design. In the traditional design, gold and silver are generally used as the painted color of the building, but the modern gold and silver colors are gradually enriched, and the modern sculptures embellished with some gold and silver in the landscape garden have become the common design of many park designs. In addition to gold and silver, black and white are widely used in landscape garden design, especially in the ancient Jiangnan garden design [5]. The black top of the wall and the white wall form a distinct foreshadowing, fully demonstrating the spiritual realm of the ancient literati. In addition, aesthetic pursuit. Some of the antique landscape groups in the design of modern landscape architecture also adopt this color technique in design, which reflects the return of modern people's aesthetic concept.

5. The application of color in landscape design

5.1 In the garden landscape design, we should be good at using the basic theory of color science.

Colors are generally divided into red, yellow, blue, orange and other color with color and gray, white, black and color without color. The basic characteristics of color are three attributes of hue, lightness and Chroma, which are important basis for distinguishing colors. People have certain illusions and hallucinations about color. This is because the colors of different attributes are juxtaposed together, which produces a visually erroneous reaction of color. Colors have different emotions and different symbolic meanings in different cultural or social contexts. At the same time, it is also affected by many factors such as age, personality, ethnicity, customs, and environment. Such as the active red, it will be exciting; the cool green will arouse people's yearning for nature; the blue of the sea will make people deep and broad, and it will make people feel depressed and sad [5]. The most classic example is the iron bridge in London, which was originally designed in black, which caused many people to commit suicide by the river; then it was green, and the number of people who were born was reduced a lot; finally, it was red, and no one committed suicide here.

5.2 In the garden design, we should be good at conducive to the contrast of colors.

When multiple colors are combined, the corresponding color contrast is formed because of the difference in color, and the intensity is proportional to the distance and angle on the hue circle. There are several color contrasts, one of which is zero degree contrast [6]. The so-called zero-degree contrast is achromatic contrast; although there is no obvious hue discrimination, there are differences in the combined application. Black and white, black and dark gray are modern, solemn and elegant, plain and monotonous. There is no color and color contrast, such as gray and purple, black and red, etc. These colors are more lively and elegant when they are large. The second is to reconcile and contrast. It is divided into three types: the relative color contrast ratio, the similar color contrast ratio, and the medium difference color contrast ratio. The contrast of adjacent colors, that is, the adjacent three colors on the hue ring, such as orange and yellow, is soft, elegant, monotonous, and boring. In the landscape design, this combination can reflect the sense of layering and space [6]. For example, the green and light green plants are dotted on the green space, which is elegant and quiet, which makes people feel soft and elegant inside. The similar colors are relatively weak contrast types, such as red and yellow orange, which are rich and lively in the landscape design, but they are not uniform, elegant and harmonious; they can reflect the height of the space and reflect the depth and shallowness.
The layering. In addition, the relative type of color difference, such as yellow and green, in the landscape design, not only can reflect the natural changes, but also make people feel refreshed and integrated.

5.3 In the garden design, it is necessary to make good use of the landscape elements.

The landscape elements, that is, the material carriers of the colors in the garden landscape, such as rocks, water bodies, plants, buildings, pavements, etc., the landscape elements are mainly divided into two major categories: artificial and natural. Natural elements cannot be changed, such as rocks, sky, water surface, etc., and the color of artificial elements is enriched with the improvement of modern garden art, such as architecture and pavement [7]. As we all know, plants are the main color of landscape design, with green as the main tone, supplemented by flowers, leaves and fruits, which constitute a rich garden color landscape. The color of the plant itself is an indispensable part of the garden's artistic conception. Therefore, in the landscape design, only the familiarity of the color of the plants can make full use of the color of the plants to show the garden art. In addition, color is the transmission of architectural elements emotions and atmosphere. Different cultural customs can be expressed in different architectural colors. The heavy European church buildings show the solemnity of religion; the magnificent Islamic church buildings are somewhat mysterious; while the ancient Chinese architecture is beautiful, lively and full of life.

Landscape design is a foundation of the color world. Color design has a strong appeal, can cause people's visual beauty, and is a symbol of garden vitality and charm. The excellent landscape design is naturally inseparable from the excellent color matching, which can fully display the characteristics of the garden landscape. In the landscape design, the color design is people-oriented, using the color difference and other factors to reflect the regional characteristics; the natural and artificial factors in the garden are rationally arranged, unified planning and design, reducing color pollution and enhancing the beauty of the garden landscape [7].

6. Summary

In short, if you want color design to play the biggest role in the landscape, you should first conduct in-depth research on the application of color, fully understand the content of color design and the role in landscape design, and then adopt the appropriate method. The artistic function of color is displayed in the garden landscape, enriching the content of the completely garden landscape, allowing people to fully enjoy the artistic beauty of the garden landscape. Therefore, the application of color design in landscape design has great practical significance and very broad application prospects.

References