Application of Color in Interior Design
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Abstract. Color is the soul of the design of interior environment. It makes the interior space design become interesting with countless changes like a capricious demon. How to arrange the interior space more reasonably and beautifully with color expression to let people live more comfortably and pleasantly so as to reach satisfaction and balance the requirements of people in spirit and psychology, which is a subject that a successful interior designer needs to study carefully and profoundly.

Introduction
Interior color design needs to consider many factors, including space, form, structure, light, material and color. However what is usually omitted in the design factors is color. This kind of method usually can’t let the effect of the color reach the best condition. The selection of color should be brought into the content of the integrate design of the construction, but not be processed routinely afterwards. The successful color design is processing all of the colors with other materials as a color combination. The most successful interior color design should be conform with the objective of the integrate design. Color is the first choice of element undoubtedly, it has more visual impact compared with the composition, shaping and the expression language, and can better play its attractive charm. Besides the understanding of people to color is more rational and personal than the past, and they eager to search for new stimulation of color in tradition. So a successful interior designer should also better apply color design to make complete and accurate illustration to the design concept of interior environment.

Color Introduction

Color definition
Color is caused by light, while light has its physical property. Three primary colors (red, yellow, blue) are the basic elements to compose colors. Mixing the three primary colors in a proper proportion can get different colors. Hue, brightness and pureness are named as three elements of color. The three elements of color are the most primary properties of color, they are the foundation of researching color, and also the most important concept. They are the foundation to research color. Two bright colorful lumps putting together will produce strong excitement, and two gentle colorful lumps putting together will produce harmony beauty. Different combinations of colorful lumps bring different visual feelings to people. Understanding the concept of the color combination through scientific series training methods to master the rule of the matching of color can design works with intuitive and effective color design and express the theme of plane design. Color has stimulation to vision, and it usually has the power of overawing others in the visual communication design, which may be the primary performance of visual impact of design that people usually refer to. “See color in a long distance, and see the flower in a short distance”, “70% of colors with 30% flowers” just explain that color is very easy to cause the emotional response and change of people. The special sensibility of human vision to color decides the important value of color design in packing visual transmission.
Functions of color

Everything has color, and each component element in the interior environment has different color. The sum of these colors form the tones of the interior environment. A specific tone is usually corresponding to a specific environment atmosphere, so different environment tones give people different feelings. Tone doesn’t only depend on the color of the item, but also on the shape and texture of these items. So we can’t take color design as an isolated problem, but run through the whole process of the interior design. Color is closely related with psychology and physiology of people in interior color design. When we keep eyes on red color for a certain time, and then turn to white wall or close eyes, it seems like that we can see green color. In addition, take a pure bright color as the base color, and embed a gray block in the colorful area, if the pure color is green, the gray block will look like to have red color, vice verse. As to these phenomena, the former is called “continuous contrast”, and the latter is called “simultaneous contrast”. While the visual organs make adjustment to the stimulation of color according to the natural physiological condition so as to keep the physiological equilibrium in vision. And the vision can be met and tend to balance only when the supplementary relation of colors are established. We will not have the visual phenomenon that is different from the middle gray if we observe the gray block from the gray background in the middle. So the middle gray will match with the balance condition that human vision requires, and it is the objective basis when considering the balance and coordination.

Color Performance in Interior Design

The basic requirement of interior color design

The interior color should mainly meet the requirements of function and spirit, and the goal is letting people feel comfortable. In the requirement of function, firstly analyze the usage nature of every space carefully, and make full use of the physical performance of color and the effects of color to human mind, which can change the spatial scale, proportion, separation, permeate space and improve the spatial effect to some extend. For example, when the house space is over high, it can use advancing color to weaken hollowness and enhance the intimacy. When the wall face is too big, it is better to adopt contracting color. When the pillar is too thin, it is better to use light color. When the pillar is too thick, it is better to use dark color to weaken the clumsy feeling. The basic concept of color coordination is arranging the color with white spectrum from purple to red according to the wave length. These pure colors coordinate mutually, and the discriminated colors adding black or white with the equal volume into the pure color are also coordinated, but adding color with unequal volume will not be coordinated. For example, cream-color and green, red and brown are not coordinated, scarlet pimpernel and yellow that are close to pure color are coordinated. Those hues that are in relative position in chromatic circle and form a couple of complementary colors are coordinated, trisect the chromatic circle will cause a special harmony combination. The approximate coordination and contrastive coordination of color are all required in the interior color design. Approximate coordination is sure to give people unite and harmony calm feeling, but contrastive coordination can inspire people more in the harmony relationship that is constituted by the opposition and conflicts between colors, the key is processing and applying the unifying and changing rule of color. Harmony is order, the interval of adjacent light colors are conform in all of ideal color scheme, and 7 kinds of coordinated arrangement rules can be found in a color solid.

Personality of interior color

The same as other artistic forms, interior design art also needs to compete, and it is the organic combination of technology and art. An excellent interior design must have specialty, only this kind of design program can have stronger competitiveness, and the personality of interior design color stresses novelty, specialty and attractiveness. It is an important problem that the modern designers are facing to create the personality of color. Designers should be brave to challenge the tradition, and
let their own design program be novel to reach the effect of winning with novelty. Firstly break through the convention and taboo, strive for bold innovation and personality, overcome the inflexible, sole and publicity restraints of the logic thought of the routine color, make logic and non-logic thoughts compatible, apply subconscious activity and variation conscious activity of the brain to be different in convention and look for breakthrough in regular tendency. Apply colors boldly and prospectively to make it novel but not strange, unique but not weird so as to expand the color space, enrich the color connotation and color language, and promote the design to be special in the competition. In addition, designers need to develop new fields, understand the nature, usage of different colors, and the psychological effect brought to people dialectically and comprehensively. So designers should think broadly according to the different subjects that interior design refers to, find inspirations from the sister arts, develop the source of color, widen the design field of color, and find the atmosphere, conception, and sentiment of designing color, understand, analyze and research the effects of color to human psychological feeling, which is the basis for designers to grasp the color tone of interior design. It is favor to expand the color design thinking, and let the color relation of residential environment tend to be ideal and perfect.

**Performance of interior color**

The composition of interior color is a change and combination of many spaces and many items. The diversification and complexity of the spatial item form the colorful environment with many layers, and the color in the interior space doesn’t only have comparison and change, but also has coordinating and unifying due to the effects of usage function, light, decoration material; etc. to form an organic colorful space; that is what is called dominant tone. The formation of the dominant tone usually makes use of the advantage of the area of the elements such as ceiling, ground, wall, furniture, etc., and color combination form. It plays the role of dominant, polishing and foiling in interior, and it needs to reflect the theme of the interior design, display the function of interior space, and perform the change in mind and emotion brought by color to people. Bright and warm primary tones can give people warm, pleasant and relax feeling; they give people a calm and profound feeling to make the bedroom be warm and romantic. Cool tone performs transparent, calm, cool and rational characteristic, which is easy to give people calm and profound feeling. Let the thinking of the schoolroom be wisdom. The tones of the living room mainly have yellow, white, gray, which are widely used. Yellow tone builds elegant, warm, and bright atmosphere, and it can display magnificence matching with red; and release elegance matching with white or gray tone. So in interior color, it demands to change on the unite basis to form a certain rhythm and sense of rhythm.

**Conclusion**

The interior color design includes wide contents, and it refers to knowledge in aspects such as architeconics, chromatics, psychology, physiology, etc. It also has many factors to consider in the specific process of color design, such as material. A successful design can not only meet the aesthetic requirement of people, but also display the individual expression of residents. We can design the best cases of interior color only through constant exploration and collecting the latest popular information.

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