

The Related Research on Color Psychology and Art Design

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Abstract. Color psychology occupies a pivotal position in the art of design. Summarize previous research results and ideas of color, do exploratory research from the color of mental physical, physiological mechanism and color psychology color psychology and its application in the design of the three-part art, we want to increase the clarity of color theory, science and practicality, the color theory in the practice of the art of design in more scientific applications contribute.

Introduction

Color psychology plays in art and design in a pivotal position, exposure to the environment of the human senses is the first color to bring the visual experience and impact, followed by the shape, texture, texture. Before the 20th century, mainly the "tricolor said," and the "four-color, said," Modern physiology and psychology are two theories to support this, and trying to "stage theory" hypothesis to unify the two. In addition, in order to analyze the amount of color feature, the 20th century had to study the color calibration and colorimetric measurement and it has great significance in theory and application. Physical nature of color psychology is main color without involving the recipient, the physiological mechanism of color psychology of the main recipients of the standard color perception under normal conditions and not to each individual receiving. But the color will vary depending on the audience, different conditions and have different feelings, can lead to complex psychological phenomena and psychological activities. Content includes content color psychology of color perception, color association, color symbolism, color emotions, color preference and so on.

Through regular explore color, color will have a more complete understanding of the system and help practice color theory and color art design. In the design, through the plane, space, three-dimensional, color, materials, time, sounds and smells and other elements to complete, in which color plays a very important role. Therefore, the color is not used for simple decoration, its various properties on the information communicated to the physiological and psychological impact on people with unusual role. Various characteristics of color should be a more comprehensive analysis and discussion, the flexibility to use correctly in Design Art. Color as an economic tool for effective product development has important significance and it is also marketing an essential part of the process, so that the color designs research to meet the needs of these industries.

The Theory of Color Psychology

Warm Colors and Cold Colors. Well-being and sense of color hue (the wavelength) is directly related to the long-wave range of the warmest color, the relevance of the transfer feel more direct physical background, because the thermal infrared radiation will be linked to long-wavelength red light, many issued a strong objects of thermal radiation (such as Tan, hot iron, the rising red sun, etc.) has both a rich long-wave red spectrum. In contrast, many of the cold, cold-related things emerged shortwave blue, green.

Sense Retreat of Color. Actually in different colors on the same distance, it will cause different impression of depth, that there is some color "to grab" trend, while there are some color "back" tendencies. In general, the advance and retreat of the strongest sense of contrast color combinations, are complementary color relationship, the "red - green", "yellow - blue" and "white - black" these three groups of polar opposites of the color combinations, red, yellow, white will show a very

prominent former trend looting, and green, blue, black is obviously the former retreat of background, green leaves safflower, Fen Bizi blackboard, the reason for striking, all benefit from this retreat Compared. Thus, the color is a sense of retreat from the performance comparison out, in addition to the complementary color contrast conditions, the brightness contrast in bright colors for the input, the dark retreat; saturation, contrast, color saturation is high advancing color, low color saturation is the back color; there are color lines color lines with non-contrast, the former is advancing color, which is the back color.

The Color Perception and Art Design

Color contrast is the difference between two or more colors by interaction and performance. Simultaneous contrast (simultaneous contrast): two colors together Juxtaposition phenomenon formed. Color contrast, color assimilation (color assimilation) or other color sensing (hue induction) showed that things are perceived brightness or hue depends not only on the hue or brightness of the object itself, also influenced by the environment around them. There are two main manifestations: the same color looks different; different colors will create the same impression.

Hue Contrast. Juxtaposition of different colors, showing the difference in the comparison of hue, called hue contrast. Including primary color contrast, color contrast between adjacent color contrast and similar to the color contrast, complementary color contrast. If the two are the same orange and yellow on a red background, you will find on the bottom of red orange yellow, reddish yellow on the bottom. Because orange is transferred into the red and yellow, and red when he tied, the same ingredients are reconciled and distinct part is enhanced, so it looks more yellow than when alone.

Brightness Contrast. Color brightness contrast due to differences in the formation, known as brightness contrast. That color brightness contrast chiaroscuro, may contain color from white or black number, or gray with lightness to compare, but also need to consider a variety of solid color lightness itself, such as lemon yellow brightest, darkest purple. If the two were placed in the same gray color on black and white, you will find the black on gray feel brighter, darker gray on white, chiaroscuro effect is very obvious effect on the result of the color. Very different brightness contrast, make people feel uneasy. "Brightness contrast more strongly than other contrast. Chiaroscuro is easy to see the degree of purity equivalent to three times the contrast Thus chiaroscuro occupy an important position in a variety of comparison."

Saturation Contrast. When one color to another and a higher saturation of color side by side, will feel itself saturation becomes lower, and the other a lower color saturation and time, will feel the saturation becomes higher, a phenomenon known as saturation, contrast . When there is no color gray with bright colors juxtaposed appears darker gray, bright colors seem more vivid.

Warm and Cold Contrast. Feeling cold and warm feeling of the skin could have been a reflection of the outside world, because of people's experience of life and physiological functions and color of the world is closely related to people's vision gradually becomes the pilot skin feel, see red, yellow, brown will feel warm, see blue, green, blue, purple and other colors will feel cold. White, gray and black color can be rendered non-warm or cold properties. Magenta and green is the color of edge (marginal), it depends on the color of its surroundings, an environmentally-colored contrasting colors. Warm colors are vivid, they are lively and energetic, with a forward resistance; therefore, the design to show popular elements, consider using warm. But pay attention to the eyes of the warm afford. It is cool to relax the mind, which gives the impression of quiet, there will be too strong stimulation, cool feeling of space back there.

The Color Association and Art Design

Visual organ receiving external stimuli shade, while color will automatically evoke brain-related memory traces, and the immediate past color and visual experiences linked together, through analysis and comparison, imagination, judgment and induction activities, the formation new physical and psychological experiences or new ideas, the creative thinking process, is the "color association."

When the color of the nerve irritation occurs, cause a variety of analyzer excitability, resulting in color perception. Analyzing the phenomenon of a color not only visually, but also includes other analyzers feeling and thinking and memory and it is a process of understanding the full range of colors. Therefore, the association is also a full range of colors, including warm and cold colors. Lenovo, Lenovo strength of color and the color of the severity of Lenovo, Lenovo simple and gorgeous color, the color of light and melancholy association, color and excitement of contact and so quiet. See the color's association to understand the psychological aspects of the development of the association's attention, imagination and personality development situation is very good. Learn about the different groups of people of a certain color associations, the product design and logo design has reference value. For example, the Olympic rings (Olympic symbols) on the use of five different colored rings, reminiscent to a different local people and the land. Sky blue easy to think of Europe, Asia, yellow, green for Australia, red for the Americas, black for Africa, later this association form a fixed symbol and logo, has been widely circulated in the world.

Lenovo nature color by color, the main purpose of the feelings and creativity is limited. Color subjective factors also affect the color associations. The physical properties of color are the primary factor restricting color association. A large amplitude color reminiscent of bright things, small amplitude color, will make people think of bleak things.

The Colors Symbol and Art Design

Some colors represent abstract ideas called symbolic color, which is a color thinking category. "The symbolism of color when a color and think of things to establish a close relationship, show some special significance, and is recognized by the people and spread in the community, when this color is formed with certain symbolism associated things. Specifically refers to a number of countries, according to national needs, to a variety of colors with a specific meaning, the passage of time the color becomes a symbol of something. Symbolic color in the world has a relatively commonality, stability and continuity, but each national habit there is also differences. "In essence focus, color in most cases and is a symbol of something is not necessarily reasonable or internal relations. Even if there is sporadic or similar, not identical relationship, but the active role of the imagination in the human brain function down, they produced a statement which may be alien to each other whereby the correspondence between the two.

Since living in different times, geographic, ethnic, historical, religious, class and other people of color in the background of the association, needs and experience do not have to give a specific color symbolic meaning and will face each proprietary rich meaning. Overall, the color symbolic because both the historical heritage of human phenomena, but also a symbolic form of social consciousness. Therefore, it holds relatively stable nature of inheritance in a certain cultural environment, and has played a dual function flag and dissemination in social behavior. At the same time, but also live in the same space-time atmosphere of the common people followed the color scale. "Various different colors are generally obtained spiritual enlightenment, maintain a variety of creatures symbolize white is the color of the light, a symbol of purity, truth, innocence and sage white spirits although sometimes also has its negative implications. - Fear, bravery small, surrender, apathy, loss and death caused by pale, but in black and white symbol of the opposition, the white is still a good representative. membership is also satisfied that the new white flag, a symbol of the new, Protestant or candidates , in addition to various rites, such as baptism, marriage ceremony and administered the rite is closely related, because white represents bright and happy. because white is the color of spirituality and divinity, on behalf of truth and revelation, so not only in Christianity, Germany Lute Yi scholars and other pagan clergy are also advocating white. it is also thus, be used as a sacrificial victim who should wear white clothes. White dove symbol of peace, white lily represents chastity. White also He said means, such as "Confessions," "White Paper" and the like.

Pop Art in the 1960s, many people seem too colorful. In the 1970s, black and white is the designer's favorite color. No color capabilities were excised. Color pattern decorative wallpapers disappear from all the fashionable people in the room, white fibers into a unified appearance. Following the cold and simplified design, it appeared in the 1980s with the formation of the control

after the modernist style. Architects distorted imitation of classicism, those 70 years and now is not the white stuff all become white: black rubber floor disappears from the architect's work, instead of white marble; previously been hailed as the architect "barbaric Aesthetics," the gray concrete been applied with lime. White is not a fashionable color, but with a modern color. In the beginning of the last century, when the United States first have to build a house bathroom, all glazed tiles are white. Then they are blue and green, pink, light blue, light gray, light yellow color has become standard. Garde interior decorators like black bathroom.

Conclusions

Color psychology studies color acceptance and application of the laws of science, and its perspective, art anatomy together form the basis of the theory of art. Since the shape and color are the two basic elements of the appearance of the image of the images and art, therefore, the color characteristics of the research and application of theory of art has become a fundamental and important issue. Color psychology theory and practice of art and design research involving physics, physiology, psychology, design, aesthetics and art theory and other subjects; color psychology research results and to provide materials for these disciplines, facilitate their development.

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