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COLOR AS A MEANS OF HARMONIZING THE COMPOSITION OF THE PRINTED EDITION

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The history of color research has been considered. An exploration of the general concept and harmonious combination of colors for use in various areas of graphic design has been performed. The main functions of color in design have been defined, the psychological and physiological influence of color on a person have been established, the generalization of the color function as a means of harmonizing the composition of the printed edition has been carried out which has become the basis for the development of recommendations for the harmonious use of color to create a quality printing product.

Key words: coloring, color harmony, graphic design, printing product.

INTRODUCTION

An endless palette of colors accompanies human's life undoubtedly influencing the vision and perception of the environment. The humanity receives most of the knowledge about the world around it perceiving color visually as a means of information, symbol, impression. This is, first of all, its social significance. The study of color, as a means of not only visual but also psychological perception, is an urgent need of the time. Return to harmony in the realities of urban thinking of a society is not only a problem of color science, psychology, graphic design but is also a current scientific problem of modern aesthetics in general.

Artists and philosophers have long since tried to explain the phenomenon of color harmony and to find out the effect of color on the human psychics. Attempts to develop a theory of color date back to the times of Plato and Aristotle. Issues of color were considered by such philosophers as Leonardo da Vinci, Newton, Hegel, Kandinsky, Itten, Goethe. In addition to the general study and determination of the relevance of color research by such scientists as S. Prishchenko, T. Pachenyuk, A. Ratz modern researchers raise the issue of the use of color in various fields of design. Thus L. Shalimova, K. Verkhman, E. Tuemlow reveal the meanings and options for the use of color combinations in graphic design. R. Batra, A. Volkova, R. Ovchynnikova, L. Shalimova reveal color as a means of influencing the consumer.



PURPOSE

The task of the research is to determine the influence of color and the principle of color harmony, disclosure of the meaning of color and its emotional and psychological impact in graphic design. In modern research, the main aspects of color namely physical, symbolic, psychophysiological and figurative – psychological are chosen, however, they do not provide a comprehensive approach to color as one of the most important artistic means in creating a visual environment.

RESULTS AND DISCUSSION

Color has become the subject of study in a number of disciplines, industries, sciences and technologies such as psychophysics, psychophysiology, psychology of perception, optics, anatomy of the eye, colorimetry, lighting, design, theory of photography, printing, etc. The list mentioned above marks practical significance and urgency of the problems connected with color which grows with emergence of new means of its reproduction and new ways of use. I. Goethe first tried to characterize the sensory-emotional influence not only of individual colors, but also of their various combinations.

Color researchers later named it as “The Goethe's theory of psychophysiological color harmony”. The integrity of the color impression was recognized by him as the basic defining feature of the quality of color harmony. According to the doctrine, a conclusion can be drawn as the following: if individual colors can evoke a variety of emotions, both positive and negative, then color combinations that correspond to the principle of additionality are always perceived as harmonious [1, p.72].

It is clear that since colors are endowed with meanings, ie reveal a certain psychological meaning and figurative load, their study requires going beyond the purely mechanistic approach formed in physics. Color perception is the psychophysiological component, namely is the dominant color influence according to Itten, thereby, in this context, the importance of preliminary assessment of the impact of color and the use of harmonious combinations in the creation of design compositions are vital [2, p.39].

In general, the harmony of colors should be considered as a set of color combinations, taking into account the three main characteristics- light, color tone, saturation, as well as the shape and size of the planes. Taking into account the parameters of these basic characteristics, color harmony can be contrasting or nuanced. The main aesthetic criterion for assessing harmonious relationships is visual. In order to identify the basic patterns of construction of color harmonious combinations, it is necessary, first of all, to deduce a variety of colors and their shades arising in our consciousness in the environment [3].

The influence of color and the specificity of its intrinsic value does not depend on the attitude of a person to it. Color may not be likened but the nature of its impact on the psychics remains unchanged, independent of the state of the body at the time of exposure. Thus, the symbolic meaning of color, its psychological code is really objective and does not depend on the place of one color in a number of individual preferences.



The choice of a color is essential for the characteristics of the consumer and his psychological state. The method developed by the Swiss psychotherapist M. Lüscher in the middle of the 20th century, aimed at studying the situational emotional state of the individual and its adaptation to different socio-psychological situations [4, p.122].

First of all color in graphic design of poligraphic production allows to realize its communicative function i.e. brand color is extremely important for brand identification. This function is based on the exceptional feature of color to be perceived and remembered much faster than written or pictorial information causing the consumer's certain emotions, depending on the chosen color. In this context, it is also extremely important to consider the importance of color in industrial design, as one of the main levers of psychological influence on the viewer, addressed to human emotions and impressions. Therefore, it can be noted that the perception of color and the creation of color harmony is one of the most relevant principles of forming a holistic visual information environment in design. The main functions of color in design are expressive (drawing attention) psychophysiological (perception of objects), emotional (tonal-color perception of silhouettes of objects) and informational (formation of interests of target groups). However, when using colors in the design it is very important to take into account national features of color perception. After all, it is likely that the color that will inspire and make people act in one country, can lead to sadness and despair of people in another country.

Color as a means of harmonizing compositional solutions in graphic design performs several functions, namely definition of the main or secondary, accentuation (meaningful and emotional), emphasis on tectonic, constructive, plastic structure of the design object, approximation or removal of elements of the composition, organization of the plane, volume or space. The use of color solutions makes it possible to emphasize the compositional center, visually make the printed product larger or smaller, attract attention, affect the well-being and psychological comfort of the consumer. At the initial stage of design of design objects it is necessary to consider the consumer for whom the polygraphic product is developed, to define the basic and additional requirements. Depending on this, a certain color solution is offered.

Therefore, in order to create a high-quality printing product, recommendations for the harmonious use of color are proposed:

- for maximum emphasis on the compositional center or content, it is recommended to use a background which color saturation is desirable to be greater than the overall background;
- the use of a combination of different colors in the same proportions is very saturated, so it is recommended to choose one primary color that will prevail, the rest will serve as auxiliary
- it is recommended to add a neutral color to soften the contrast of the two colors
- with a complex combination of additional colors, one of them is taken with two or more shades
- when choosing color solutions it is important to consider the harmony of color combinations.



CONCLUSIONS

Color, as an integral part of life, carries a certain emotional load and it is the undeniable impact on the psycho-emotional and physical state of an individual. The main functions of color in design (expressive, psychophysiological, emotional and informative) are singled out. It is determined that at the initial stage of design of printing products one should take into account consumer requirements, determine the basic and additional requirements for design objects that determine the choice of a particular color solution. The recommendations for the harmonious use of color to create a quality printing product that can be used in other areas of design have been offered.

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СТРУМІНСЬКА Т., ЧУПРИНА Н., КУТАСЕВИЧ В., ПРОХОРЕНКО Д. КОЛІР ЯК ЗАСОБ ГАРМОНІЗАЦІЇ КОМПОЗИЦІЇ ДРУКОВАНОВОГО

ВИДАННЯ

Розглянуто історію кольорових досліджень. Проведено дослідження загальної концепції та гармонійного поєднання кольорів для використання в різних областях графічного дизайну. Визначено основні функції кольору в дизайні, встановлено психологічний та фізіологічний вплив кольору на людину, здійснено узагальнення колірної функції як засобу гармонізації композиції друкованого видання, що стало основа для розробки рекомендацій щодо гармонійного використання кольору для створення якісної поліграфічної продукції.

Ключові слова: забарвлення, гармонія кольорів, графічний дизайн, поліграфічний продукт.