

6. THE SYMBOLIC AND PSYCHOSEMANTIC POLYVALENCE OF COLORS

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Abstract: *Color and shape, being inseparable, are the essential elements of human optical perception. In painting, color is the main tool of expression and the most significant element. The meaning of colors depends on a complex of physiological, psychological and cultural-social factors. Psychologists see color not as a simple sensation, but as a complex and multilateral perception, inextricably linked to socio-cultural and aesthetic aspects. The phenomenon of color has been studied by many artists, painters, researchers, psychologists, philosophers, physicists, who over time, through various researches regarding the influence of colors on the human psyche, have come to the conclusion that color exists both in the external, objective world of reality, as well as in the inner, subjective world of human, generating multiple emotional, psychological and intimate effects in the human personality.*

Key words: *color, chromatic associations, chromatic sign, chromatic symbol, chromatic contrast*

1. Introduction

The dominance of color in the set of human perceptions (90% of the information is provided by sight and 10% by the other senses: hearing, tactile, kinesthetic, etc.) proves its importance. Color and shape, being inseparable, are the essential elements of optical perception; visual information is the fastest and most accessible to the human brain. The phenomenon of color has been studied by many artists, painters, researchers, psychologists, philosophers, physicists, who over time, through various researches regarding the influence of colors on the human psyche, have come to the conclusion that color exists both in the external, objective world of reality, as well as in the inner, subjective world of a person, generating multiple emotional, psychological and intimate effects in the human personality [3, p. 1].

Color, in essence, is a physical characteristic of electromagnetic radiation that causes certain visual, physiological and psychological sensations. Color perception is determined by the spectral composition of wave frequencies, contrast, brightness, physiological peculiarities of the visual system, the state of the human nervous system and psyche, experience, environment (Itten Johannes, “The Art of Color”). Since ancient times, things and phenomena have been given different chromatic associations, signs and color symbols; colors in turn – received various associations of objects and phenomena.

The ancient Greeks considered color a fundamental attribute of form ideal. Aristotle said that it is difficult to define color; blue and yellow, considering them true primary colors, which he associates with different polarities: the sun and the moon, masculine and feminine, day and night, etc.; Hippocrates used the therapeutic effects of colors in medicine and treatment; Paracelsius (15th century) likewise applied the effects of colors in the healing process, moments that later became outlined and materialized in a new science -- *chromo-therapy*.

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2. Discussions

In the prehistoric period (Paleolithic, Neolithic) colors were attributed magical powers, sacred qualities, thus establishing a beginning of chromatic symbolism. Different peoples developed their own symbolic color systems: the North American Indians associated each cosmic sector with a color; Ancient Egypt also focused on their symbolic value: black – posthumous rebirth and eternal life (mummification used black bitumen), of the underground gods Anubis and Min (protector of germination and harvest); green – the color of Osiris, of life, vegetation, youth and health; blue - Amon, the god of the sky, and respectively of immortality (the color of the priest's clothes); yellow – gold, immortality; white - bipolar color, signifies mourning and joy; red – the color of

Seth, considered inauspicious, harmful, violent and aggressive. In ancient Greece, white was considered the color of divinity, and black - of the underground gods (like the Egyptians); the colors with which the temples and statues were covered were also symbolic. In Mesopotamia the color of the ziggurat (“steps to heaven”) was significant, each step had its own color corresponding to the heavenly stars. Many peoples associated the planets and stars with one color each: red - Mars, blue - Venus, yellow - Mercury, green - Saturn, violet - Jupiter, orange - the Sun, indigo - the Moon [12, p. 110].

In the Middle Ages, the symbolism of colors reached its maximum development, being closely related to worship and iconography: red - signifies the blood of the Savior; yellow – the divine light or clay, dust, from which man is created (human's complexion on the icons is yellow – earthy); green – eternal nature; blue – aspiration towards the sky, the transcendent; purple – heavenly glory; white – righteousness (the symbol of the holy spirit is a white dove); black - atonement, sin, death, evil, hell. The later Renaissance develops these meanings and transmits this treasure to the post-medieval ages. Europeans have developed their own “system” of color interpretation, paying special attention to the blue color that denotes Heaven and the Church [12, p. 111].

Research on the influence and effects of color on humans is varied and numerous: the physicist I. Newton discovers the separation of white light into the seven spectral colors; the researcher J. Itten (“The art of color”) analyzes the entire structure of color phenomena, from subjective perception to objective physical laws, attests that the preference for certain colors is directly related to temperament; classify colors in specific structures (chromatic circle, spectral sphere); states that each color is radiant energy that can influence positively or negatively, has distinctive features and its own character [8, p. 11].

Goethe researches the emotional side of color (“Doctrine of color”), considering them actions of light, blue being the one that appears from darkness, and yellow - from light; Lomonosov's deliberations in “Word on the Origin of Color”, 1757; the painter W. Kandinsky establishes his own chromatic model (“The spiritual in art”); the works of R. Steiner (“The essence of color”) and R. Arnheim (“Art and visual perception”); research on the symbolic meaning of color in different cultures, by N.V. Serov (“The chromaticism of the myth”, “Esthetics of color”); studies on the effects of color by the Romanian psychologist Florin Ștefănescu-Goangă.

According to N. N. Volkov, it was in the Renaissance that the radical change occurred in the process of receiving color in painting. Interest in it grows in the century. XX: the Bauhaus school, where technology and creative experiment come together with art, creates its own color system [10, p. 57]; studies appear regarding the relationship between colors and emotions (“The interaction of colors” J. Albers, “The Blue Horseman” W. Kandinsky). Joseph Albers, Bauhaus theoretician, claims that the color phenomenon is, above all, psychological. The Romanian researcher, Andrei Pleșu, considers polysemantic, symbolic and meaningful colors, they can indicate both physiological reactions and some “soul states which are, first of all, color states - “black of anger”, “red of anger, “bruised of spite” [11, p. 25].

The painter and theoretician W. Kandinsky, in his work “The Spiritual in Art”, talks about “the purely physical and psychic effect of color”; it can cause “a whole chain of psychic experiences” [10, p. 49]; opts for its liberation from “exteriority” and orientation towards “interiority” [10, p. 71], claiming that “color has its own inner sound” [10, p. 50]; and “a psychic force, which awakens soul vibrations” [10, p. 50]; he spoke of their “spiritual effects” [10, p. 75]; “color has a direct influence on the soul. The color is the key, the eye is the hammer, the soul is the piano. The artist is the hand that makes the soul vibrate”[10, p. 53].

In painting, color is the main tool of expression and the most significant element: yellow and blue, united with the ideas of purity, virtue and wisdom, form Vermeer's favorite harmony; red, full of vital force, is dominant in the paintings of Rubens, Renoir, Titian; Delacroix, one of the great modern colorists, claimed that she acts without the knowledge of man; C. Monet brings considerations for light and shade; P. Cézanne replaces the classic model of chiaroscuro with the juxtaposition of color spots. V. Gogh (cited by Elgar, 1994) believed that “color is suggestive of a certain emotion” [4, p. 17]; and through the red and green in his canvases, he expressed the terrible passions of the human being (the painting “The Night Bar”); the artist emancipated color, giving it maximum intensity and sonority. Cubists paid attention of form, treating color in a restricted way; the expressionists showed interest in both; and the Impressionists and Tachists preferred color over form. There is therefore an obvious relationship between color and shape: ex. cold and dark tones visually reduce the size of the shape, warm and light ones increase it. Color dynamizes, expands or contracts space, mobilizes dimensions, increases or decreases form and space [9, p. 21].

3. Results

The chromatic sign has maximum symbolizing force, contains general-human elements, but also differentiating features, cultural-religious and ethnic connotations, includes various associations, and is manifested at all levels of knowledge: cosmological, mystical, biological, psychological, religious, political, etc. Colors have “cosmic symbolism”, found in cosmogonic myths, deities and beliefs, among all peoples, through their ability to convey almost universal meanings, to awaken deep emotions and feelings [8, p. 5]. Warm colors (yellow, orange, red), e.g. it evokes the same emotions of warmth and comfort everywhere; cold colors (blue, violet, green) signify in all cultures calmness, tranquility, sadness, coolness [3, p. 75].

The researcher R. Arnheim states that the chromatic signs depend on the

individual experience, the biological conditions of the species, the culturological side of the individual; considered color to be a strong affective stimulus in relation to shape, specified the primacy of chromes as a stimulus in the composition of the image [1, p. 48]. Many researchers have tried to decipher the symbolism of colors: the authors Jean Chevalier (1969) and Hans Biedermann (1998), have expressed their theorizations in valuable dictionaries of symbols; American colorists: K. Jackson and G. Waterman, developed a color harmonizing theory based on the chromatic range of the four seasons; still applied today in fields such as design, fashion, art therapy.

The ways of chromatic organization of the plastic space, in a pictorial composition, especially in the associative one, constitute an important problem; the artist expresses his mood in it through different associations of colors, shapes, artistic means. Chromatic associations vary in time and space, historical era, people, culture; the “language of colors” is reflected in myths, folk legends, fairy tales, folklore, heraldry, mystical, religious teachings, etc. Having associative force in itself, color in pictorial compositions acts as an indicator of the image. The chromatic sign is characterized by its universality and the power to build a symbolic thought without effort and geographical delimitation; they excite certain emotions, ideas, feelings, sensations, senses, physiological and psychic reactions, evoke different memories and stimulate the imagination.

The meaning of colors depends on a complex of physiological, psychological and cultural-social factors; it can be subjective, individual or collective (common to some social groups or cultural-historical regions). The main ways of forming chromatic symbols are: religious rituals; historical and social events (concrete in heraldry), traditions and experience cultural, mythology, occupations and social statuses (the executioner's red clothes, the tuxedo, the lawyer's black robes, the soldiers' uniforms); popular attire, varied among different peoples, mental associations with various natural elements (sky, fire, darkness, etc.); gastronomic influences (analogies between colors, tastes and smells); thermal reflexes (hotness of fire, coldness of ice) [12, p. 111].

Studies on the effects of color on humans in different historical eras, social categories, ethnic groups, have determined that primitives were more impressed by red (the most energizing color) and variegated colors. Different cultures and peoples perceive color differently: Eskimos perceive more than 40 shades of white; the French, the Italians love vivid, warm colors; Nordic peoples (Germans, English) prefer the calm range of colors. The meanings of the colors can vary depending on the culture - in the West black is mourning, and in Asia - white. Colors can have different meanings and depending on the context: red can evoke passion; in contests, it is associated with failure, in road traffic – with danger and attention. The objective aspects of colors are studied by physical optics, while the subjective aspects are studied by the physiology and psychology of color perception [15, p. 2].

Colors have physical, physiological, psychological effects. Physical effects are based on the purely physical associations and sensations they cause: thermodynamic (hot-cold) effects; mass (heavy-light); spatial (far-close) [8, p. 14]. The thermodynamic effects are focused on the differences and peculiarities of the two groups: warm colors (yellow, orange, red) favor body processes (good mood,

comfort, active dynamic state), have a stimulating, exciting effect; it causes emotions of warmth and comfort, but also anger and hostility; cold colors (blue, indigo, violet) favor passivity, have a sedative and calming effect, are peaceful, but can also cause feelings of sadness, indifference. The colors also give a mass effect: the light, pastel ones seem lightweight, the dark ones seem heavier and tend towards the bottom of the canvas. The spatial effect of colors, sought especially in painting, is also based on thermodynamic properties: warm ones – give the impression of closeness in space, cold ones – give the impression of distance; effect used in painting and to render the volume: warm colors – for lighted areas, cold colors – for shaded areas.

Colors can cause certain reactions and physiological processes (eg red color increases blood pressure and heart rate; blue colors calm, reduce nervous excitement, soothe). Color can also excite other senses: tactile, auditory, gustatory, olfactory. Shades of red, orange, yellow (warm tones) associate well with fire, heat, and cause corresponding psychophysiological reactions; cold tones: white, blue, violet, are associated with water, ice, the coolness of the night, the cold of winter, and have a cool effect [15, p. 29]. These values and associative aspects, are currently used in various therapies (chromotherapy) and psychological cures. Depending on their psychophysiological effect, colors cause processes of:

- 1) stimulation - red, orange, yellow: facilitates communication, activity, good mood, cheerfulness, pleasant sensations;
- 2) braking – blue, violet, purple: associated with passivity, monotony, isolation, anxiety, sadness;
- 3) static – green, yellow-green, turquoise: induce states of stability and balance, calmness, self-centeredness.

Psychologists see color not as a simple sensation, but as a complex and multilateral perception, inextricably linked to the socio-cultural and aesthetic aspect, when certain images, memories, emotions and mental states associated with it appear when viewing it. The objectivity of the relationship between color and psyche is often questioned, but it is certain that Color is a very strong psychological factor and possesses an enormous associative force. The division of colors into warm and cold ranges respectively led to their association with positive and negative emotions (“black from disgust”, “hunted from spite”, “red from anger”, “yellow from illness”, etc.): the warm range – it is associated with life, activity, joy, struggle, dynamism; cold range – with melancholic emotions, calmness, passivity, silence. V. Gogh saw in color a hidden power of imagination and human psyche; its pictoriality is an indispensable condition for the expressiveness of the image [3, p. 75].

Psychologist K. G. Jung believed that ideas, feelings, sensations, intuition - the main human functions are expressed by colors; these exerting a specific influence on the psyche, reaching the deepest and most intimate areas; the predilection and choice of certain colors, he explained as reflections of personality traits [5, p. 47]; stating that introverts usually choose the color blue, and extroverts - red. The psychologist believed that red signifies blood and affectivity, the physiological reaction that connects the spirit and the body, and blue – the spiritual process. The primary instinctual image (archetype) considered it purple, a “mystical” color, which perfectly reproduces its paradoxical aspect; and the mechanism of contrasts

considered it a pendant of suggestibility [6, p. 18].

K. G. Jung considered the blue color to be of healing essence; green, through its supreme, creative characteristic, attributed it to Divinity, the Holy Spirit (just like gold); red - represents the male and leads to the area of “fire” and “abyss”, on the periphery of Buddha's mandalas; violet has a “dual nature”, of spirit and body (red and blue); black, represents the state of deepest depression; the white color indicates the feminine, air and unconscious influence [7, p. 283]. Depending on a person's preferences for one color or another, it is generally determined the moral and psychological traits that characterize it [8, p. 5], a fact currently used successfully in psychological tests to determine the behavioral qualities and human temperament.

The chromatic symbol thus becomes a sign, capable of transmitting information, feelings, ideas, experiences, phenomena, and its origin, its content, intercultural differences - these are some of the main issues addressed today in the study and research of color. There are three main types of color symbols:

- 1) the color itself – isolated from other colors and forms, the pure color;
- 2) the combination of colors – two or more colors make up a symbolic whole, the meaning of which is not reduced to the sum of the values of the individual colors (e.g. the *martisorul* – white and red);
- 3) the combination of color and shape – the symbolism of colored shapes, both abstract geometric shapes (circle, square, triangle) and specific physical objects (e.g. the symbolism of precious stones) [15, p. 3].

The expressive qualities of shape and color are perceived and act in sync (shape and color support each other). Color researcher I. Itten and theoretical painter W. Kandinsky deduce and establish certain associations for colors and shapes: square – red; the triangle – yellow; circle – blue; trapezoid – orange; cone – green; ellipse – purple [10, p. 57]. Each artist has his own vision of the subject and emotional palette of colors, but in their main characteristics, the associative compositions of different authors will not differ much from each other; the state of nature, for example, with its specific colors, will look the same to different painters: spring is always associated with bright and sonorous colors, summer - with juicy, intense colors, autumn - with the red, orange, yellow of leaves, winter with cold colors (white, blue, purple) of snow, ice. Pure and active colors are associated with activity, dynamics, energy; poorly saturated and inactive colors are associated with concentration, internalization, tranquility.

Vivid, bright colors produce positive effects, but sometimes become excessive and exciting; matte, muted colors have an internalizing effect, sometimes with a negative tone. Pastel colors are associated with delicacy, tenderness, capacity for compromise; dark colors have an oppressive, severe character [8, p. 4]. Joy, e.g. in a pictorial composition, artists often associate it with free spaces, smooth, clear forms, ornamented with spiral, wavy lines or arrangements; fear - with illogical, unstable, sharp, dissonant forms, arranged at an angle or differently oriented (“*Guernica*” P. Picasso); danger -- is associated with large spaces, deep shadows, darkness, dark monochrome shapes, with green, blue tones [16, p. 22] (“*The Scream*” E. Munc). Amoeboid, flowing, unstable amorphous forms are well associated with the romantic, emotional uncertainty, melancholic, pessimism, mystical [16, p. 9] (the strange beings, O. Redon's mirages).

Chromatic associations depend on ethnicity, people, cultural traditions, religion, education, occupation, age, sex, individual neuropsychic structure of human. The religious symbolism of colors is found in most religious traditions and beliefs: Christianity, Islam [15, p. 3], Judaism, paganism, Asian cultures [15, p. 9]. Color associations also depend on its objective properties: the brighter and purer it is, the clearer and more stable the human reaction; complex, poorly saturated causes more varied and unstable reactions. The type of light also influences the colors: the artificial one gives the artistic image a dramatic character; natural – invites spontaneity and fun; the nocturnal one – gives the colors depth, magical nuance, mystery. Researcher Golubeva O. L. groups chromatic associations into the following categories [16, p. 19]. Any color can have both positive and negative meanings [15, p. 29].

Chromatic contrasts also have important meanings and associations in the pictorial space. Some readers, such as Goethe, Chevreul (“Simultaneous contrast”, 1860), Hölzel (forerunner of the Bauhaus School), Klee, Kandinsky, Itten, observed that human senses receive sensations and information only through comparison; the eye looks at and analyzes the sum of the colors as a whole. Chromatic effects can be amplified or diminished by existing relationships between colors: 1) contrast (opposition) between certain values, and 2) assimilation (chromatic proximity, analogy, chromatic dominance). The already existence of two or more opposite elements suggests situations of dialogue, convergence or conflict: a strong chromatic contrast often implies a conflict, a struggle, an opposition (e.g. the strong red-black contrast suggests conflict, struggle, war -- “Guernica”, Pablo Picasso).

Juxtaposed colors create special effects; the color of the background also plays an important role, creating certain effects and impressions of depth: on a white background dark colors seem to stand out, they are pushed out; on dark – light colors seem close. These patterns and associations allow the creation of spatial illusions, depth and picturesque spatial positioning of objects in the painting. The seven color contrasts, each with its own specifics and characteristics, optical effects with unique expressiveness, give different associations and unique suggestions [13, p. 1].

4. Conclusions

The historical course of human culture has established a certain color code, strictly observed by any people. With the evolution of socio-economic, religious and political life, colors increasingly intertwine with the universe of human life, the language of meanings becoming extremely complex and perfectly outlined for each culture and people, being embedded in the deep, almost archetypal levels of the human psyche [14, p. 65].

Chromatic signs in different peoples can have different meanings, sometimes even diametrically opposed: the color black in the West, associated with mourning; in Asia white color serves for this purpose; those in the West prefer the color azure, those in East Asia have opposite feelings towards it, associating it with coldness, evil, unpleasant behavior (evil spirits are blue). In addition to its cultural-symbolic universality, colors can therefore have positive meanings in some cultures and negative meanings in others [15, p. 8].

The coloring in the art of a people depends to a large extent on the surrounding

nature: in the Baltics, blue, brown colors predominate, close combinations - yellow with brown, red with cherry, the Gzhel painting style (blue, purple, yellow), colors of the Nordic winter; central areas, Russian peoples – Hohloma style: gold, black, red, leaves, apple trees. The traditional Romanian color is rich in bright, contrasting colors, “a people in white” – a fact that suggests its spiritual purity [2, p. 30]. The Russian palette prefers white, yellow, red, green; India – pure, bright colors, golden tones (superlative). Warm colors are preferred by the inhabitants of cooler areas, cold ones – by the inhabitants of arid regions (Greece, Morocco – houses, streets, are painted blue).

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