PHILOSOPHY OF RED COLOR:
LINGUISTIC AND EXTRALINGUISTIC ASPECTS

Abstract

This article analyzes various lingual and extra-lingual researches on the colour of red. It compares the symbolic meanings of the colour that used to be and still are specific for different cultural communities. The objective of the article is to identify peculiarities in the interpretation of red in the subjective world of sensation and the objective world of fact and to provide the full study of this colour perception and categorization based on phraseology.

Colour lexis is a multidimensional phenomenon which, at a conceptual level, demonstrates a vivid example of a change in the process of individual cognition of the world and confirms the thesis about the need for multi interval thinking, which allows one to observe any object from different cognitive standpoints.

The main conclusion of the article is that the study of the relations between linguistic and extralinguistic meanings of colour in the semantics of idioms should necessarily focus on the essential task of anthropocentric phraseology as those figurative expressions that are associated with cultural and national standards, stereotypes, mythologisms for a certain community mentality, which serve as spiritual equipment, psychological tool fixed and phraseologized in languages precisely.

Keywords: psycholinguistics, perception, colour name, lingual, extra lingual, idiom, phraseological unit.

Introduction

The current trend towards the integration of various scientific fields, such as linguophilosophy, psycholinguistics, cognitive linguistics, ethnopsycholinguistics, anthropology, etc., to study certain concepts of colour science, has proved to be extremely fruitful. Thus, the process of scientific knowledge to study the features of colour names, the division of the colour continuum in different languages does not allow for any demarcation lines, which only narrow the possibilities of the researcher.

A growing number of recent anthropological and psycholinguistic studies carried out after 2000 (Everett, 2013), confirmed the effectiveness of relevant experimental studies primarily in the domains of space, time and colour, and allowed us to speak of linguistic relativism as an utterly relevant and productive scientific theory. The study of discrepancies in colours to determine the influence of the language on memorization and colour discrimination traditionally have bee carried out in the field of comparative psycholinguistics (Kudriavtseva, 2011). Thus, psycholinguistic research methods are especially im-
The objectives of the article are to study the lexical-semantic (including connotative) and structural features of the colour term “red” in the English language within phraseological units (idioms) as cultural markers and linguistic archetypes. Moreover, the paper focuses on the analysis of compatibility of this colour term in set phrases and the influence of colour names on the idiomatic units. Among other purposes pursued, the paper is also aimed at identifying the linguistic and extralinguistic factors that determine the features of use and categorization of the studied colour designation. We also consider the influence of certain colour characteristics on the formation of linguistic units, in particular the phraseological units in English. One perceives the colour information based on their experience, culture, and education in the conditions of the society of a particular country or region. Thus, the attitude to colours is entirely determined by the cultural and historical traditions and customs of a nation. Colour is considered a psychological-emotional-cultural phenomenon, through which the emotional and mental state of a person, their characteristic traits, social and cultural aspects of people’s lives are transmitted.

The main research methods are determined by the purpose, objectives, and research material. The dictionary definition method was used in order to establish the semantics of the units analysed. The descriptive method has been applied for the respective inventory and classification of units of analysis, as well as for the interpretation of the results of this analysis. To determine the conditional connotation of colour terms and phraseological units containing them, we have also used the results of psycholinguistic experiment conducted with native speakers.

The methodological basis of the study is the dialectical approach to the consideration of English phraseology as a systemic phenomenon with its inherent patterns, as well as the anthropocentric approach associated with the orientation of the language on a person.

Colour - the Subject of Different Sciences

Colour is a visual quality that is perceived by a man and, at the same time, an essential means of aesthetic expressiveness. Colour is a powerful means of exposure to humans. Its influence is not limited only to the organ of vision - the eye; it also affects other senses - taste, hearing, touch, and smell. Colour perception is an ancient and active philosophical problem. It is an instance of a broader category of sensory perception, but since the colour spectrum fits on a single line (unlike, say, touch and taste), it has always been of particular interest (Harris, 2015).

The formation and consolidation of colour associations in our minds is identical to the process of formation and consolidation of conditioned reflexes in the cerebral cortex. The way we perceive colours depends both on the colours themselves, their purity, brightness, saturation, and on the characteristics of our perception.

The concept of vision, which is a priori of colour perception, is based, according to A. Wierzbicka (2006), on imagination, since vision generally involves a description of visual impressions, and not just recalling visible natural objects. F. Birren (1987) believes that visual perception is carried out as much in the brain, as in the organ of vision. Therefore perception is often the essence of interpretation and not just a simple reaction to a stimulus (p. 291). The scientist in his extralinguistic study of the meanings of colour identifies four types of associations: 1) gen-
eral idea; 2) mental associations; 3) objective associations and 4) subjective associations. By mental associations, we mean the associations conveyed through nouns. By the objective and subjective, we assume situations where the colour is correlated with an external object or internal state of mind (Birren, 1961).

The study of colour in psycholinguistics is based on associative research in the field of the nomination of the colour continuum (which colours in different languages are denoted by specific tokens, with the names of which objects of reality are associated, in which symbolic meanings function in the language, etc.), studying not only the basic but also the shades of colour. R. Frumkina (1984) offers a method of describing the meaning of colour terms, the selection of central groups of colours, as well as explores the relationship between the world around and language. P. Yanshin explores the emotional component, which, according to the researcher, is decisive in the psychological structure of a colour (Yanshin, 1996).

The concept of colour, according to A. Wierzbicka (1997), is not a universal human concept, because among human communities, some have neither borrowed nor their concept of colour (p. 231). According to her, in all cultures, visual perception is essential for people, a description of what they see, although the existence of a special term “colour” as a semantic generalization of one aspect of visual experience is not necessary. We share A. Wierzbicka’s opinion that colour perception is the same for all people, but its linguistic conceptualization is different in different cultures.

The diversity of colours around the world is peculiarly reflected in the language. As A. Porozhniuk points in his article, not all languages have the same number of colour names. Even some primary colours of the spectrum are not always separate names. So, for example, “red”, “orange” and “yellow” in the languages of African peoples have only one name.¹

As for colour names, they are key concepts of culture in all languages. The perception of colour by different peoples and their interpretation is not the same. Therefore, the richness of the colours of the world is peculiarly reflected in different languages. This means that the attitude to colour is entirely determined by the cultural and historical traditions and customs of one or another nation, that is, its history, culture, way of life, and the like. That is, colour is associated with the history of the people, their culture, way of life, traditions, etc. Each language has its way of “dividing the spectrum”.

Key Researches of Color Science

Humankind was interested in colour phenomenon since ancient times. People tried to explain this phenomenon, to find out its effect on the brain and psyche. Attempts to develop a theory of colour date back to Plato’s time: “Plato considered colour to be the fourth element of sensation. It should be noted that he knew the basics of the doctrine of colour and chiaroscuro” (Goethe, 1964, p.145).

Isaac Newton thoroughly described the colour as a physical phenomenon. It was he who singled out 7 primary colours in the spectrum, measured the length of different light waves, which cause colour sensations. However, it is impossible to talk about colour as something definite, and it is due to the different perception of this phenomenon by different people. He is the

first to understand the rainbow – he refracts white light with a prism, resolving it into its component colors: red, orange, yellow, green, blue, and violet. Newton’s circular diagram became the model for many colour systems of the 18th and 19th centuries. Claude Boutet’s painter’s circle of 1708 was probably the first to be based on Newton’s circle (Porozhniuk, 2000, pp. 28-29).

Goethe’s study on colour was a big step in the field of colour science. Here is how he explains the nature of colour: “colors are acts of light, acts, and suffering. In this sense, we can expect from them the disclosure of the nature of light. Colors and light are actually in the most accurate relationship with each other... Color is an indigenous nature concerning the sensation of vision” (Goethe, 1964, pp. 125-131). Goethe considered colours in terms of the effect of colour on the human psyche. In his doctrine of colour, “yellow” and “red”, for example, symbolized the idea of power and nobility. The German philosopher criticizes some of the provisions of Newtonian theory; and although the criticism of the laws discovered by Newton was not based on Goethe on a physical basis and in this sense was devoid of scientific evidence, the study of the relationship light-colour-emotion was his great achievement. Goethe creates his colour wheel, which offers the idea of a six-colour series, which includes red, violet, blue, green, yellow, and orange.

Many different theories and hypotheses about the number and universality of colour terms in linguistics have been put forward since then. In our opinion, one of the most substantial works on the number of colour symbols in different languages is the work “Basic Color Terms” by Berlin Brent a Paul Kay, 1969. These scientists compared the exact definitions of basic colour symbols in 20 different languages and analyzed colour descriptions based on this knowledge in 78 other languages. They argue that there are universals in the semantics of colour notation and distinguish 11 primary colours (Brent & Kay, 1969). As a result of the obtained data, they came to the following conclusions: 1) there are universals in the semantics of colour in (probably) all languages; all the colour designations listed by the informants, as it turned out, come from one (or more) of 11 focal colours (for English, it is black, white, red, green, yellow, blue, grey, brown, pink, orange, purple); 2) there is an apparent evolutionary sequence in the development of colour lexicons of different languages. Scholars believed that: 1) all languages have the terms “white” and “black”; 2) if there are 3 categories in the language, it is “white”, “black” and “red”; 3) if the language has 4 basic colour terms, it is “white”, “black”, “red” and “green” or “yellow”; 4) if the language has 5 categories of colour, it is “white”, “black”, “red”, “yellow”, “green”; 5) if there are 6 main colour terms in the language, it is “white”, “black”, “red”, “yellow”, “green” and “blue”; 6) if there are 7 main colour terms in the language, it is “white”, “black”, “red”, “yellow”, “green”, “blue” and “brown”; 7) if the language has 8 or more colour categories, then, in addition to all the above basic colour terms, there must be terms to denote “purple”, “pink”, “orange”, “grey” in various combinations (Brent & Kay, 1969). As it can be seen, researchers identify 7 stages of the evolutionary development of colour lexicons.

It should be noted that the idea of the development of colour lexicons in the evolutionary sequence has been criticized (Durbin, 1972), but it has not been proven that such a sequence does not exist.

Turner’s research (1983) showed that col-
our representations prevailed in primitive communities, built on a peculiar dichotomy of a sense of colour, which, according to the author, consists of three positions and is a particular case of it (p. 77). In the view of the primitive culture carriers, the primary colours were “black”, “white” and “red” (and these colours, as it was proved earlier (Humeniuk, 2010), quantitatively prevail others in the English phraseology), which together symbolized the initiation ritual. The colour triad is the process of experiencing pleasure and pain, and its symbolism is a derivative of physiological experience. An interesting fact is that the same colour triad (black, white, and red) is reflected in the “Divine Comedy” by Dante Alighieri. According to medieval tradition, colour, and light are not only external attributes of things and phenomena but also indispensable elements of traditional allegorical visions that have mystical meaning (Gaiduk, 1971, p. 174).

The work presents the same magical colour triad; however, colour representations from Christian symbolism are extrapolated to it. Man overcomes three colour levels at the gates of Purgatory: white, symbolizing the innocence of a baby; red: first crimson/red with a touch of black - a symbol of a sinful life, then actually red, symbolizing the blood that “bleaches”, cleanses from sin; white, which takes on a shade of radiance, is a harmonious fusion of other colours. So, the semantics of colour in this sense is proof of conceptual anthropometry and, accordingly, the linguistic picture of the world.

Colour is one of the factors that shape the state of our psyche, which, as an experienced conductor, monitors the correct sound of instruments in a sophisticated ensemble called the human body. For example, the Italian painter Leonardo Gianno Paolo Lomazzi associated colours with the qualities of the human soul. He believed that “red” corresponds to the sanguine temperament. Besides, he claimed that fiery red glorify the soul, sharpen vision, and light red excites pleasure (Gonikman, 1997, p. 78). But in the Indian iconic script, “red” meant war. In ancient China, it meant fire, south, summer, Mars, phoenix, justice, note Shang. In Japanese theatre, “red” means courage, justice, and superhuman strength. In ancient Rome, the colour “purple” was a symbol of supreme power, and the purple toga was worn only by the Roman Caesar.

As for the origin of the word red itself, we see Old English rēad, of Germanic origin; related to Dutch rood and German rot, from an Indo-European root shared by Latin rufus, ruber, Greek eruthros, and Sanskrit rudhira “red”.

Red is the first visible colour in the spectrum with a wavelength of one 37,000th of an inch. Thus it becomes the grossest of all colours. Under the red vibration, we find many destructive forces such as war, sensual red-light districts, anger or fear. Although red lies beyond infrared, it remains closely associated with heat and warmth. Even the stones heat up to red. This is visible during volcanic eruptions when lava spills onto the surface of the earth.

The Red Color in Phraseology

While analyzing colours as parts of idioms addressing the history milestones is necessary. So, the colour of fire, or red – “red as fire”, “red rooster” – “fire”, acts on humans excitingly. Sometimes it just annoys – “to fly at one like a bull at a red cloth” – “to attack someone like a bull on red”. However, in some cases, people

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2 See: https://www.dictionary.com/browse/red.
have a positive attitude to the colour red – “red as a poppy” – “red as a poppy flower”, “red as a cherry” – “blood with milk”, “red carpet” – “elegant”, “red-letter day” – “holiday”. The idiom red-letter day appeared in the XIX century, the phrase initially meant a saint's day, as it was marked on church calendars in red letters. The red carpet “luxury reception” dates back to 1934, but the dignitaries’ custom was described back in the era of Aeschylus (“Agamemnon”); it was also a type of English moth (Harper, 2020).

As red colour excites, and therefore impresses the viewer. Therefore, the clothing of kings, cardinals were red – “red hat / scarlet hat” - “cardinal hat, the title of cardinal”. In the Orthodox religion, red is the colour of martyrdom and the bright holiday of Easter. According to legend “Mary Magdalene brought a testicle to the Roman emperor to announce the Resurrection of Christ, but he did not immediately believe her. Faith came only after the egg turned red before his eyes. In the clothes of the clergy, this colour symbolized the power of God the Father – “scarlet lady” – “the Roman Catholic Church”. Red is the colour of the sacred blood of Christ shed for the salvation of men. The second meaning of red in Christianity is associated with the image of the sacred fire, which is lit on the Day of Judgment (Kriulina, 1993, p. 79). The exciting qualities of red are associated with the fact that it is associated with addiction – “scarlet fever” - “passion for the military”. Being a sunny, warm, fiery colour, it not only warms, but scarlet symbolized desperate self-forgetfulness, love, although innocence was not enough - red dresses were usually worn by courtesans – “a red hot mamma” - “sultry woman, sex bomb”. Red lanterns all over the world point the way to where sexual arousal is proposed – “red lamp” - “brothel”, “red-light district” - “brothel district”. From psychology, red means desires, and various inclinations and aspirations. It is also the desire to get results, to succeed. This is a greedy desire for everything that can contribute to the richness of life and the fullness of experience – “to paint the town red” – “arrange a noisy party”. These are all forms of vitality and strength – “red alert” – “state of readiness in the face of danger”, “red blood” – “courage, courage”. Also, red is the primary colour for goods that are associated with energy, strength, pleasant excitement, and speed. That is why fast food companies often have logos and designs that use bright red and white colours.

In English, red is very important and can be seen in many idioms. The national emblem of England is a red rose. Buses and phone booths of the same colour. English soldiers dressed in red uniforms. In England, there is even a holiday called “Red Friday” in honour of the victory of miners over the ruling class. It was the colour name to denote Native Americans in English from the 1580s. The colour used to define “British possessions” on a map has been testified since 1885. The colours of British and American flags are white, red, and blue, thus the collocation “Red-white-and-blue” has been referred to patriotism since 1840 for the American context and since 1852 for the British one. Also, it must be mentioned that the red flag has been used as a symbol of resistance inland or sea battles since 1600. The expression “to see red” - “to become irate” was first recorded in 1898 as an American English collocation. “Red Rover”, a fun school-yard game for children has been evidenced since 1891, was banned later because of excessive violence to children. “Red ball” taken from railroad jargon and meaning “express” in 1904, originated in 1899 to mark a system of moving and tracking freight cars. The records of the “red dog” phrase, denoting the type of American
football pass rush, date back to 1959. The phrase “red meat”, mostly marking bison and beef, the food type which was deliberately served or preferred undercooked, has been widespread since 1808, later the collocation started to denote some fresh and exciting news, information. “Red shift” in spectrography was first mentioned in 1923. “Red light” as a sign to stop originated in 1849, long before traffic signals. As a brothel symbol, it was recorded 50 years later in 1899. As a children’s game (about the traffic light meaning) it is recorded from 1953 (Harper, 2020). “Red herring” means some misleading clues that are planned to trick someone into making a wrong conclusion. The figurative sense of the phrase can be traced back to the early 1800s.

Around this time, English journalist William Cobbett wrote a presumably fictional story about how he had used red herring as a boy to throw hounds off the scent of a hare. “Red State” – a state voting for Republicans in a given election or prone to vote for Republicans in general, the phrase became popular in 2000 to denote Texas. “Red rag” – something that incites anger or vexation. In the 17th century, to wave a red rag at someone was merely to chatter with them – “red rag” was then a slang term for the tongue. This usage is cited in print as early as 1605 and is nicely illustrated in Francis Grose’s definition in The Classical Dictionary of the Vulgar Tongue (1785). The waving of a cloth rag at an animal to distract it may have been a common practice for centuries, but it was not until the 1700s that it was documented in print. The animal in question was not, as we might suppose, a bull. The first creature known to be susceptible to rag-waving was that most dim-witted of birds, the pheasant5. In literature, sometimes colour designations make up a single characterization of a character. We can find such a hero in the tale of the Grimm brothers: “Little Red Riding Hood”.

Over a long period, we can see that red colour became a symbol of a social phenomenon, a certain period in the history of some countries. Thus another meaning of red was popular with the connection of the “Bolshevik movement”, 1917, they assumed the colour to identify themselves. Association of Reds with revolutionary politics in Europe (based on the concept of blood and violence) has arisen since at least 1297 but took wind later in 1793 with the adoption of the red Phrygian cap (French bonnet rouge) as a sign of the French Revolution. The first concrete political reference in English was in 1848 in news reports of the Second French Republic (for example, the Red Republic). The phrase Red China became popular in 1934. The noun meaning “radical, communist” is from 1851 (Harper, 2020). Nevertheless, now red mean republicans (Bonfiglio, 2017).

Also known as the law of the emotional influence of colors, which is based on the fact that each color affects our senses in some way, perhaps because of the connection that exists between natural phenomena and colour (Humeniuk, 2008). Red in W. Turner’s classification is ambivalent: on the one hand, it is directed to life, on the other - to death, but in both cases, it is associated with blood: (man (kills) - blood - woman (gives birth)) (Turner, 1983). Thus, the colour red is mostly associated with the imagination of man with fire, blood and causes a feeling of danger, vigilance – “to see a red light” – “to see or suspect danger”. Such a conclusion was earlier made based on the results of a psycholinguistic experiment in the form of a test with native English speakers, since only a native speaker, relying on knowledge of his national culture, can help

explain the phenomena and concepts that underlie phraseology (Humeniuk, 2010). The purpose of the psycholinguistic experiment was to obtain data on the connotative features of individual colour symbols and idioms with them. The experiment involves the following tasks: 1) determining the conditional connotation (positive (+), negative (-), neutral (0)) of each colour name; 2) comparison of relations of connotations of separate colour names with connotations of idioms with these colour names. The developed questionnaire was filled out by native English speakers, namely: thirty informants, who were students of Mount Saint Vincent University (Canada, Nova Scotia, Halifax). As a result of the experiment, we found that both the colour name “red” and idioms, which include it, for most informants were “negative”, thus we can assume that the conditionally negative connotation of the colour name affects the connotation of the idiom containing this colour name. To be more precise, due to the experiment, the connotations of red in percentage were the following: positive connotation – 27%, negative connotation – 46%, neutral connotation – 27% respectively. The connotations of idioms with red are classified into positive ones – 17%, negative ones – 45%, and neutral connotation – 38% respectively.

Conclusions

The study of the phenomenon of colour and all colour issues in a language, according to the reasonable definition of many researchers, will not soon exhaust themselves, because at the level of thinking, the universe surrounding a person, including the physical world of colour, is indirect by linguistic consciousness, in which the limitations associated with perception phenomena caused by objective laws of the language are also added. After analyzing the phraseological dictionaries of the English language and compiling a card index for the lexical-semantic subgroup “red”, we recorded nine colour names, including three adjectives of simple (scarlet, ruby, bloody), one adjective with a higher degree of comparison marker (redder), a combination of two adjectives (dark and bloody) and verb forms (bleed, blush, flush). The adjective red (116 cases) is used in the vast majority of idioms, followed by the colour designations “blush” (14), “scarlet” (7), “bloody” (6), “bleed” (2), “flush” (1), “redder” (1), and “ruby” (1).

The analysis of the combinations with “red” in the idioms has detected that this colour term is mostly combined with nouns: 70 combination cases detected. Nouns that are combined with the colour term “red” in the idioms in dictionaries more than once are highly productive. These are 17 nouns: rag (5 lexemes), herring (5), cent (5), sky (3), carpet (3), sun (2), shank (2), neck (2), man (2), hand (2), fire (2), line (2), cock (2), book (2), blood (2), light (2) and beet (2). So, it should be stated that there is a significant number of phraseological combinations such as “red” + “herring” and “red” + “rag”.

Summarizing the interpretation of red, it can be claimed that in combination with nouns defining natural phenomena, men and animals, even household items, it denotes fire, blood, life, passion, love, ecstasy, martyrdom, danger, and honour. The study of colour symbols through the prism of phraseology helps to obtain thorough information about the holistic picture of the world, about the values that characterize a particular ethnic group.

Idioms (including those with colour names) are a living embodiment of the ancient myth, the first ideas of a man about the structure of the
world. They reflect in their semantics the long process of development of the people’s culture, record, and transmit from generation to generation cultural attitudes and stereotypes. Phraseological units convey the peculiarities of the national worldview, reflect the results of cognitive and evaluative human activity; each phraseological inversion is an element of a clear system and performs specific functions in describing the realities of the surrounding reality.

Thus, having studied the phraseological units of English, which include tokens to denote red, we can say that at the time of idiom formation colour name is used in its original meaning or, less often, acquires such a semantic shade, which is attributed to the meaning of colour. It must be stated that the colour name as an idiom constituent can have varying degrees of deactivation. A certain percentage are phraseological units, which include tokens to denote colour in the literal sense. In some other cases, the psychological interpretation of colour was central to the formation of the meaning of phraseology. However, being part of the phraseology, the names of colours in some cases lose their original meaning (colour sign) and acquire completely different semantic nuances. In some idioms, it is possible to single out the meaning of a component; in others, it is impossible because the interaction of all components of the phrase generates its meaning. The semantics of each of the components is manifested differently in different types of idioms. For example: “to come out of the red” - “get out of debt”, “to go into the red” - “become unprofitable”, “thin red line” - “defence with small forces”, “go through the red thread” - “be the main”, etc.

The ability of colour names to be combined with a large number of different words during the formation of an idiom also testifies to the special semantic performance of this group of tokens. There is no doubt that the development of the spectrum of meanings in colour terms from concrete to abstract, from features inherent in an object of a certain colour to an assessment of those realities that may not coincide with the very concept of colour. The widespread use of colour names in the formation of idioms is primarily associated with a rethinking of the very concept of colour, with its symbolic meaning. Departing from real object relationships, colour names become conditional and abstract and denote the most diverse concepts.

So, colour labelled associations can be born based on one’s own linguistic experience, be the result of a person’s psychophysiological conditions, or come from a cultural-symbolic foundation of a nation (native speaker).

In addition to the associative connections of colour symbols with the surrounding world, the semantic significance of colour is associated with specific historical events and the national-cultural context as a whole, which determines the specifics of colour symbolism in individual linguistic and cultural communities.

Summing up, we note that the study of perception and categorization of colour is one of the areas that constitute the problems of linguistic relativity. Despite several significant differences in the methodological approaches of the contemporary universalist and relativistic trends, there is some consensus between them on the issue of whether speech affects the perception of colours. Both directions recognize the influence of language on perception, as well as the phenomenon of categorical perception. Numerous neurophysiological data also testify to the involvement of language in colour perception. However, despite significant progress in this area, there is currently no consensus on the mechanism of language in-
fluence, the depth of this influence, the stage at which the Wharf effect works, as well as the reorganisation of cognitive abilities in the process of language acquisition. Prospects in this area are primarily related to fieldwork, which should lead to a significant expansion of comparative analysis and the involvement of communities in particular, which have preserved the authentic model of language functioning.

REFERENCES


Kudriavtseva, N. S. (2011). Hipoteza lingvistichnoi vidnosnosti: za i proty (Hypothesis of Linguistic Relativity: Pros and


