Coll. Antropol. **48** (2024) 1: 1–7 Original scientific paper doi:10.5671/ca.48.1.1

Color Semiotics: Color as a Medium of Communicating Culture and Emotions

Nikša Sviličić, Izidora Radek, Ivana Grabar

University North, Koprivnica, Croatia

ABSTRACT

Color is associated with electromagnetic radiation of a certain range of wavelengths visible to the human eye. This natural phenomenon has outgrown its technical surroundings and sparked interest of humans for a long time, eventually dispersing its influence across every aspect of human life. Colors convey meaning and it can be observed that they are widely researched in practically all scientific fields, from social and natural sciences to humanities. The aim of this paper is to investigate whether the semiotics of color is universal or it differs across countries. Additionally, an analysis of the overview of idioms will try to prove that the cultural symbolism of colors is reflected in linguistic expressions of particular cultures (Croatian, English, German, Italian). The mixed-methods approach proved that colors communicate abstract and concrete concepts, emotions and perceived characteristic traits, and that some meanings are universal, while others are culture-specific.

Key words: color, culture, idioms, semiotics, communication, emotions

Introduction

Colors make up a fertile field for research. Practically, there is no scientific field which does not look at color from their respective point of research. Companies carefully investigate the power and symbolism of color when designing a logo, advertisement or a product. Colors represent a political ideology¹ (left-wing party logos display red hues; blue hues prevail among right-wing parties). In works of various famous authors red denotes fire, sexual power, revolution, the horror of a situation, war, passion, bestiality, rage²⁻⁵. Peters⁶ states that the German philosopher Hegel drew on Goethe's Theory of Color in order to argue the connection between color perception and moods, linking red to strength, power, royalty. Colors are symbolically used in movie industry: in the popular animated movie "Inside Out" colors represent emotions (e.g. Blue as sadness or Yellow as Joy); in "Schindler's list", the girl in the red coat (the only object in color) represents both innocence and an alert, communicating the needlessness of war; in M. Night Shyamalan's movies, red is a regular motif which denotes danger, forbidden or supernatural7. Even some branches of nutritional sciences employ color so it is well-known that nutrition label color affects our perceptions of healthiness. Food color not only affects the ability to identify flavor correctly but also shapes flavor preferences, often overshadowing other flavor cues such as labeling and taste⁸. Art therapy uses color in creative expression, because color has been proven to have a profound impact on the mind and body and it lends itself easily to nonrepresentational art, which can fill in some of the therapeutic gaps left by representational art⁹. The practicality of colors is identified in the cases of grapheme-color synesthesia¹⁰, where letters, digits, or words evoke automatic colors, and of chromesthesia¹¹, which involves auditory stimuli like music triggering visual images, predominantly colors. With all that taken into consideration, it is essential to recognize that interpretations of color can vary widely across cultures and individuals since the impact of color extends beyond aesthetics, shaping cultural norms and behaviors. Colors in different languages often hold symbolisms that extend beyond their literal color representations, sometimes bearing little or no direct connection to color or displaying only a distant semantic association¹³. Research¹⁴ conducted on color-emotion associations found that participants easily linked colors with emotions, especially red, black, and yellow, with various colors associated with the same emotion. Most colors were linked to positive emotions, although red was controversial in terms of valence. Consensus on color associations was high across countries, except for purple. Additionally, participants with similar languages showed more alike associations, and those living closer geographically had more similar color-emotion associations. In some societies, the color symbolism is deeply ingrained in social customs, influencing traditions such as weddings, funerals, and festive celebrations and are embedded in culture. While certain colors may hold universal associations, their significance can also be deeply nuanced and context-dependent and should, therefore, be taken into consideration whenever color is a distinctive feature; for example, when a product needs to be marketed internationally or a localized website is used, the color symbolism can be a latent advantage or disadvantage depending on whether a particular color has a positive or negative meaning¹⁵.

Colors as linguistic signs can specify and categorize reality, therefore the meanings of colors encoded in languages are a source of knowledge about culture, nature, emotions and values important to humans¹⁶. Languages across the world partition colors into words in a similar way, which can be explained by the biology of human color perception, but not identical, because mappings from colors to words are not identical across languages¹⁷. Color names that exist in one language do not necessarily exist in the same number in another one. Namely, a number of green hues can be found in Italian that cannot be found in Croatian, e.g., verde limone (lemon green) or verde acqua (water green). Therefore, colors make a distinguishing part of a language and culture. In order to observe this importance, idioms can be explored. They are phrases that consist of words whose meaning usually differs from the meanings of individual words18 and can be used as excellent specimens of the connection between an emotion, a language which is used to express it and the culture in which it is articulated. They represent much more than a mere oral or written production of culturally agreed symbols. It used to be common to refer to idioms only in the terms of linguistics as a part of the figurative language widely used in literature. However, we are surrounded by those symbols, they govern our everyday functioning, they are not restricted to language but are part of our thought and action¹⁹. The category of idioms involves metaphors, metonymies, pairs of words, similes, sayings and many other forms. Building on the theories of cognitive linguistics, represented by scholars like Lakoff and Johnson¹⁹. Kovecses and Szabo²⁰ agree that idioms are conceptual, and not linguistic, in nature; they are systematic and "the meaning of many idioms appears to be motivated rather than arbitrary in the sense that there are cognitive mechanisms, such as metaphor, metonymy, and conventional knowledge, that link literal meanings to figurative idiomatic meanings". The figurative idiomatic structure of one language does not coincide with that of another. As we think in metaphors, of which some are culturally embedded, we are likely to link colors to a particular emotion, characteristic, experience, or knowledge. Steinvall²¹ argues that the etymology of idioms can evidence a link between color and emotion. She studied colors and emotions in the English language, analyzing an extensive corpus from the Bank of English and the findings support her hypothesis, namely many collocations with red and pink were found to represent love; yellow, blue, red, orange and white were connected with joy; red and green with anger; black, gray and red with sadness and white and gray with fear. Her study encouraged the authors of this paper to study the color-emotion-culture connection in a range of idioms across four languages.

Upon analyzing the available literature, it can be concluded that many linguistic studies explore colors and emotions based on literature overview or corpora from dictionaries, while sciences, such as psychology, focus on qualitative or quantitative research on human beings. With that in mind, the theoretical approach to this topic set as a framework for this paper is the prototype approach explained in the following paragraphs. A theory was proposed²², which builds on the six basic emotions: happiness, sadness, anger, fear, surprise and disgust²³. In contrast to Ekman, love was introduced and disgust was left out and sets of emotion subcategories were proposed²². Sadness accounts begin with undesirable outcomes (getting what is not wanted, suffering rejection, losing a relationship) and joy accounts begin with positive accounts (getting something desired, success, gain, receiving affection, etc.). Joy includes cheerfulness, zest, etc. Sadness is associated with inactivity and lack of energy, it includes suffering, sadness, disappointment, etc. Fear accounts begin with an interpretation of events as potentially dangerous or threatening, in this sense, fear includes horror and nervousness. Love is similar to joy as a sense of well-being, but this sense is more personalized, i.e. it is attributed to the presence or existence of the love object and that is why it is linked to affection, lust, and longing. Anger is initiated by something interfering with the person's plans or attainment of goals by reducing the person's power, violating expectations, frustrating or interrupting goal-directed activity. The angry person grows stronger and more energetic to fight. Anger is associated with irritation, exasperation, disgust, envy, etc. The status of surprise as a basic emotion is doubtful and it scored lower in their prototype list²².

Considering the aforementioned and being aware of the importance of color in everyday life, the authors of this paper decided to investigate whether the semiotics of color is universal or it differs across countries by examining the Croatian-, English-, German- and Italian-speaking cultures. With the premise that the cultural symbolism of colors is also reflected in linguistic expressions of particular culture, the authors decided to perform an analysis of the common idioms using the prototype approach.

Materials and Methods

The methodology employed in this study aimed to systematically investigate color-emotion associations and their presence in four different cultures, that is four different languages. The study combines the two different aspects and this is why a mixed-methods approach was used. The study encompassed various stages, including participant recruitment, data collection, and analysis. In the first step, a questionnaire was designed and distributed to respondents from four countries: Croatia (N=27), the United Kingdom (N=22), Germany (N=20) and Italy (N=24). The collected answers of 93 respondents were descriptively analyzed to gain a general insight into whether people of different cultures and linguistic areas perceive colors in different manner, that is through emotions, characteristics of people, characteristics of their surroundings, or some other way. For that reason, the sample size was pre-determined with a view to achieving data saturation. The snowball sampling method was used.

The researchers first distributed the questionnaire in four target languages to their contacts, native speakers of each country, and then the primary sources were asked to forward it to other native speakers. The questionnaire contained ten open-ended questions. In the first eight questions, respondents were asked to associate an emotion, a person's characteristic, or a concept to a color. The focus of the analysis were primary colors (red, yellow, blue), secondary colors (orange, green, violet) and the colors white and black. Then, they had to answer which colors evoke positive connotations and which of them evoke negative ones. In the final question, the respondents had to think of examples of color symbolism they consider to be specific for the culture of their country. Guided by the theory of the six basic emotions and the prototype approach, the responses, which attributed an emotion to a color, were narrowed down and categorized accordingly. As the respondents were also invited to think of character traits and concepts, which they connect with a color, the analysis will include all three categories (emotions, character traits and abstract or concrete concepts). Examples like love, envy and shame represent emotions, responses like noble, spiritual, hard-working, or uncertain depict a specific character trait, while nature, sun, death, danger, wedding, or funeral relate to abstract or concrete concepts, which people associate with a particular color. At this early stage of research, the authors decided to focus on those emotions, traits or concepts that had been mentioned more than once. In addition, the answers with regard to color symbolism typical for the culture were analyzed.

In the second step, Croatian, English, German and Italian most common color-related idiomatic expressions chosen from monolingual and bilingual dictionaries, both online and print, were analyzed with the intent to support the premise of the connection between culture and language by later comparing the respondents' color associations with their use in the language.

In summary, the methodology section not only guides the execution of this study, but also contributes to the broader scientific discourse on the correlation between colors, emotions, culture and language. This establishes a comprehensive framework based on the data analyzed as explained in the previous chapter focusing on the frequency of color associations as a medium of communicating culture and emotions. Therefore, the following section outlines the most significant results which will be compared and discussed in relation to the insights gained by researching the previously mentioned literature and theoretical framework, elucidating their implications for both humanities and social sciences.

Results and Discussion

In the context of evoking positive or negative emotions across four languages, the data collected in the questionnaire indicates that there is significant overlap. The colors that evoke most negative emotions in all the four cultures are black and blue, which the respondents relate only to the negative emotions of sadness and fear. The only difference across the countries is that Croatian people associate black with sadness only and Germans associate blue only with fear, not sadness.

As to positive emotions, the most positive color according to the participants is white, being the only color that is related only to positive emotions of joy and love.

However, if we focus attention on a particular color-emotion relation and the number of times a color was associated with a negative emotion, it is interesting to see that the highest number of respondents from Croatia and Germany associate black (twelve times and six times respectively) with sadness, Italians chose both black and blue (five times) in relation to sadness, while the UK respondents chose red in relation to anger (twelve times) which is closely followed by blue (eleven times) in relation to sadness. This is quite thought-provoking since anger is the only emotion the UK respondents relate to red. The other cultures mainly associate red with love and joy, which makes it quite a positive color.

If other color-emotions connections are analyzed with regard to the number of positive emotions related to a color, red associates strong positive emotions for the Croatians (love 21x and joy 3x, anger 4x) and Italians (love 17x and joy 4x, anger 3x), while yellow for the respondents from the UK (joy 8x, fear 4x) and Germany (8x).

By focusing on the prevailing emotions related to colors, it can be perceived that for the Croatians red is the color of love, blue of sadness, yellow, green, orange and white of joy, purple of anger, and black of sadness. For the Italians, red is the color, blue of sadness, yellow, green orange and white of joy, purple and black of sadness. Regarding the UK respondents, red is the color of anger, blue of sadness, yellow and orange of joy, green of anger, white of love, and black of sadness. The Germans feel that red is the color of love and joy, blue of fear, yellow, green and orange of joy, black of sadness. The colors which have not been mentioned were related to more than one emotion less than two times and therefore could not be considered as prevailing.

By placing our focus on the cultural symbolism, the analyzed data show that the respondents from all four countries feel that in their cultures black is associated with funeral and mourning.

Respondents from Croatia associated red with concepts such as danger, communism and love (red roses). Blue had no cultural connotations but was expressed through concepts such as coldness and freedom as well as with a calm and relaxed personality. Purple and orange were also not perceived in terms of culture, but purple was connected with spirituality and orange represented warmth and creativity. Yellow was associated with jealousy (yellow flowers), green with nature and calm personalities, white with weddings, innocence and cleanliness and black with bad luck, funerals and death.

Respondents from the UK connected red with the Labour Party and Christmas, concepts such as hot and intense and adjectives like bold and quick-tempered. Blue is perceived as a masculine color (baby boys clad in blue), it was connected to the Conservative Party, concepts such as coldness and adjectives calm, timid, and easy-going. Yellow reminded them of Easter and cowardice, the Liberal Party and different concepts and adjectives with mostly positive meaning (summer, relaxed, calm). Green evoked Christmas and environmental groups and concepts such as envy, nature, as well as adjectives calm, eco-friendly and relaxed. Purple was connected with the robes of state and nobility and with personality traits such as eccentric, spiritual, different. Black and white were again connected with funerals (black) and weddings and baptisms (white). White was connected with concepts such as pureness, minimalism and blank, adjectives such as plain and honest. Black covered concepts such as formalism and darkness and adjectives secretive, serious and reserved.

German respondents think of red as in red alert, danger and power. They perceive red as a feminine color. "Red" adjectives were aggressive, active and passionate. Blue is a masculine color and is linked to concepts such as cold, serenity, the sea, depth and adjectives such as strong and relaxed. Yellow in combination with white reminded them of the Church, yellow alone was connected to concepts such as the sun, warmth and light and mostly represents easy-going and optimistic people. Green was connected to nature, hope, growth and adjectives such as relaxed and nature-loving. Purple reminded them of the feminist movement, ambivalence, mysticism and spirituality. Orange was associated with warmth and positive and relaxed people. White stands for concepts such as cleanliness, neutrality, naive and virtuous people and cultural connotations were again weddings and baby baptisms. Black was perceived as quite ambivalent, neutral, elegant and strong on the one hand and dark and obscure on the other. It was connected to death and funerals and as a constituent color of the German flag (black, red, gold).

Italian respondents connect red to the revolt and concepts such as warmth and strength. Blue represents male children and concepts such as coldness, sky, sea, depth and calm personalities. Yellow flowers represent jealousy/ friendship while the color is also linked to brightness. Green reminded the respondents of the Italian flag (green, white, red) and environmental care. It was also connected to spring and health and a calm personality. Purple is to be avoided in the theater because it brings bad luck. It is connected to elegance and to mysterious persons. Orange stands for warmth, sunset and danger, it represents energetic people and is worn by road workers. White and black are again symbols of weddings and funerals. White is connected to concepts such as pureness, cleanliness, light and elegance, whereas black reminded them of oblivion, mourning and elegance and the most frequently used adjective was mysterious.

To put it succinctly, respondents from all four cultures link colors to emotions, some of them to a greater extent (red, blue, yellow, orange, green and black) and others to a lesser extent (purple and white). The color-emotion attribution varies across cultures (red- anger, love). They are also prone to linking color to a specific character trait, which is not necessarily in accordance with the attributed emotions. Cultural symbolism is universal for black and white as in funerals, sorrow and weddings. There is also overlapping to some extent in terms of male-female symbolism (blue for male and red and purple for female). Colors were connected with national symbols (flag, religion, political parties, festivals), and abstract and concrete concepts (darkness, nature, warmth, depth, mysticism, bad luck, coldness etc.) The color red showed the most opposite characteristics across different cultures, with red representing both anger and love.

These results have confirmed the results of the study¹⁴ in which participants easily linked colors with emotions, particularly red, black, and yellow, showing many-to-many associations. Geographical proximity influences similarity in color-emotion links (e.g. Croatians and Italians share the majority of color associations) and participants with similar languages have more alike associations.

After completing the first stage of research in which colors were investigated and analyzed in relation to emotions, character traits and concepts they evoke for respondents, and with the intent to support the premise of the connection between culture and language, the respondents' color associations will be compared in the following paragraphs by examining their use in the language through the most common idiomatic expressions.

Black, perceived as the color with most negative associations, is present in many idioms. In Croatian *gledati sve crno* (see everything black) means to be pessimistic, and the same expression is used in German (*Schwarz sehen, Schwarzmalerei*) and Italian (*vedere tutto nero*); *imati crne misli* (to have black thoughts) means to be negative, pessimistic, *vidjeti crno pred očima* (see black before your eyes) means to be furious, whereas in German the expression *einem schwarz vor Augen werden* means to faint, feel dizzy, to black out. In Italian, black also denotes anger as in *nero dalla rabbia* (to be overcome by rage) or *essere nero* (to be furious). Similar to other languages included in the research, it implies the feeling of bad mood as in *di umore nero*. In various expressions black relates to death or tragedy: in Croatian *otići pod crnu zemlju* (go under the black soil) means to die, be buried; crna kronika the same as Italian cronaca nera (section of newspapers with news on crime and accidents); čuvati za crne dane (save for black days) means to save for rainy days. Illnesses also collocate with black: crne boginje (black pox), der schwarze Tod (plague), peste nera (black death). It is often used in business and everyday life, in combination with white: crno na bijelo in Croatian or mettere nero su bianco (in black and white, in writing or print). Black tie in English means a formal dress code for evening occasions. It can also imply something illegal: in Croatian the saying *raditi na crno* (be working in black) and the German Schwarzarbeit means moonlighting/illegal employment, the German expression Schwarzfahrer (black driver) is translated as a fare-dodger. In Italian pagamenti in nero represent hidden economic activities usually with the purpose of avoiding the payment. Some idiomatic expressions occur in Croatian, English, German and Italian with the same meaning (black swan, black sheep, black magic, blacklist, black comedy, black cat, black widow). Black comedy (gallows humor) is crni humor in Croatian and schwarzer Humor in German. It can be concluded that idioms with black refer to something negative, illegal or formal. Black can be connected with the emotions anger and sadness and the motivation in language is strong. This is in accordance with the emotions that black as color evokes among the participants of this research.

White, which denotes only positive emotions for the respondents in this research, can surprisingly be found in idioms that relate it to fear. In English and similarly in Italian to be white with fear, as white as sheet, *bianco* come uno straccio, bianco come un morto (white as death), in German and Croatian Weiss wie die Wand, bijel kao zid (white as wall) means to be pale. In Italian there is an expression andare in bianco (to fail, especially in love). White is also connected with innocence and purity in Croatian and English (bijel kao snijeg, white as snow), English to be whiter than white (pure, honest and moral) and German eine weiße Weste haben (have a white vest) means to be honorable and innocent. The term white lie exists in English, Croatian, Italian and German referring to a lie told to be polite or to stop someone from being upset by the truth. The German expression weiße Mäuse sehen (see white mice) means that a person is hallucinating, being in a state of delirium. It is the same for Croatian. In Italian if a person (especially a baby) is healthy, bianco e rosso (white and black, meaning of healthy color) is used. White is thus connected to fear but also to concepts such as illness, purity, innocence and virtue. This is not in accordance with its associations suggested by the respondents and thus confirms the results explained in the previously mentioned study¹³.

To feel blue is a frequently used expression in English for feeling sad, but blue skies denote optimism and cheerfulness (joy) and blue-sky thinking means creative ideas. In German and English, it is also associated with surprise in expressions out of the blue, German *das blaue Wunder* erleben (experience a blue wonder) but the German version mostly means being surprised in a negative way. There is also the association with anger in German: Sich grün und blau ärgern (be angry green and blue). In Italian it can relate to the feeling of fear as *in avere una fifa blu* which means to be so terrified that your face appears so pale to be bluish. In all four cultures the expression blue blood stands for membership of aristocracy, to be of noble descent. Into the blue and the German Ins Blaue fahren mean to be heading into the unknown or an uncertain situation. True blue means to be loyal or faithful. The Croatian language lacks idioms with blue which would cover emotions. Some idioms with blue are *plava kuverta* (blue envelope meaning bribe), plava kosa (blue hair meaning blonde hair). Even though the respondents associated blue mainly with sadness, this is not noticeable to the same extent in the idiomatic expressions.

Envy and jealousy are negative emotions belonging to the category of anger and the same connection is present in Croatian, English and Italian (pozeleniti od zavisti, green with envy, green-eyed monster, essere verde dall'invidia, verde di rabbia). Green is also connected with being naive and immature in Croatian, English and German (biti zelen, be green, grün hinter den Ohren sein). The idioms which link this color and nature are also found in English, German and Italian (Einen grünen Daumen haben, to have a green thumb, avere il pollice verde) and share not only the meaning of being good at gardening, but also the auxiliary verb 'have'. In italian it is the color of hope (verde speranza). In business language (Croatian, German and English) the phrase green light means the permission to proceed with a project. In Croatian, doći na *zelenu granu* (reach a green branch), where it means to come to an agreement with somebody or to recover. The same phrase in German Auf einen grünen Zweig kommen takes the latter meaning but in terms of finances. In Italian, esseere al verde means completely opposite: to have no money left. In conclusion, green is associated with anger in many idiomatic expressions, or more specifically with envy and jealousy, but it also means to be connected to nature and to prosper. When comparing this to the respondents' answers, it can be concluded that Croatians and Germans have more positive connotations than the UK or Italian respondents have, which corresponds to their color associations obtained in the questionnaire.

Red is the color of sadness, love, and anger. Anger is portrayed through all four cultures: *biti crven kao paprika* (be red as a pepper), red mist, red rage, see red, waving a red rag to a bull, *rot sehen* (see red), *essere rossi di rabbia*. Love is present in German idioms *jemanden durch die rosarote Brille sehen* (be in love). *Rosarot* is in fact a compound (red and pink). In Italian, *a luci rosse* (at red lights) means connected to sex or pornography. Shame is a subcategory of sadness and is reflected in German (*rot wie eine Tomate* meaning red as a tomato), Italian (*rosso come una cilliegia, essere rosso della vergogna*), Croatian (*zacrveniti se* meaning to go red) and English (go red/turn red). It also represents danger in English (red flag, red alert), financial loss or not having money available in bank in German (*Rote Zahlen schreiben* meaning to write red figures), Croatian (*život u crvenom* meaning a life in red), English (be in the red), and Italian (*conto in rosso, andare in rosso* meaning red account, to go in red). In line with everything said, red is the most ambivalent color when the cultures are compared. The idioms are consistent with the associations that the respondents had with it.

On the other hand, yellow was perceived by the respondents as a very positive color and it mostly denoted positive emotions. That is not the case with idiomatic expressions, which are mostly negative. In English, it represents fear (yellow belly, cowardly) as in the Italian expression diventare giallo di paura (get so scared to become yellow). Then, the phrase *mellow* yellow means to be laid back, easy-going. German connect yellow with envy (anger) gelb vor Neid sein (be yellow with envy). The notion of fear can be noted in Italian with giallo (crime novel or movie); diventare giallo di paura (get terribly scared); raro come un cane giallo (extremely rare, almost nonexistent). The Croatian žuta minuta (the yellow minute) means that a person is in rage, losing their temper, so we can attribute it to anger. The Croatian žutokljunac and the German Gelbschnabel (vellow-beaked) mean the same: someone immature, with no experience.

Lila der letzte Versuch (purple the last attempt) is the only saying in German that we could find, and it goes back to the times of Goethe. It was worn by mature unmarried women desperately looking for a future husband. The English born in the purple means to be born into royalty. When you are very angry, you are purple with rage.

Interestingly, orange, as a color, is also not found in idioms. German and English idioms mostly refer to the fruit. Orange is the new black was the only idiomatic expression in English where the orange color refers to the color one stereotypically wears in an American prison. In terms of the fashion industry, the color orange can be replaced with any other color denoting that the particular color has become fashionable. The idioms have not been sufficient to make any comparisons in the idiom overview.

This part of research has confirmed that the meanings of colors encoded in languages are a source of knowledge about culture, nature, emotions and values important to humans, as has already been evidenced in literature¹⁶. In most of the cases, as has been presented earlier²¹, etymology of idioms can evidence a link between color and emotion.

Conclusion

Given the significance of color in daily life, the authors embarked on a study to explore whether color semiotics is uniform or varies among Croatian, English, German, and Italian cultures. Recognizing the influence of cultural symbolism on language, they conducted an analysis of shared idioms through a prototype approach. The study described in this paper has highlighted differences and similarities in color-emotion associations and cultural symbolism across Croatian, English, German, and Italian respondents, shedding light on the intricate interplay between language, culture, and emotions by analyzing the cultural symbolism of colors reflected in linguistic expressions of particular culture. Red has shown to be the most prominent color related to quite opposite emotions in cultures. Purple and orange as colors which are perceived guite consistently with regard to emotions in the four cultures, have surprisingly low use in everyday communication.

In light of these findings, future research should focus on a more detailed approach to color-emotion relation by including cultures which are more geographically distant to investigate whether there is any similarity in the perception of color and how they are crucial due to significant immigration embedded in the culture. This is of great importance since inclusion has become numbers, especially in Croatia. The small sample size, which was used in this study to assess the feasibility and effectiveness of the research methods, before conducting a larger-scale study should be made bigger to draw more reliable conclusions. In addition, a questionnaire that is to be created should contain more detailed questions based on the answers collected for the purposes of this study. This would be invaluable insight that could be used by employers, marketers, communicators, and anyone active interculturally with the purpose of reaching a better understanding of individuals and their perception of a different cultural environment.

REFERENCES

1. CASIRAGHI MC, CURINI L, CUSUMANO E, Party Politics 29/3 (2023) 463. doi: 10.1177/13540688221080539. — 2. GILCHRIST J, Twentieth Century Literature, 58/3 (2012) 462. doi: 10.1215/0041462X-2012-4003. — 3. PŠENKO T, PISKAČ D, Kroatologija: časopis za hrvatsku kulturu, društvo i povijest, 3/1 (2012) 129. — 4. CLOUGH WO, PMLA, 45/2 (1930) 598. doi: 10.2307/457812. — 5. WOGAN CC, Modern Fiction Studies 6/2 (1960) 168. — 6. PETERS J, Psychologie 15 (2017) 167. doi: 10.1515/9783110673692-012. — 7. BRILL L, Senses of Cinema, 46 (2008). https://www.sensesofcinema.com/2008/feature-articles/m-nightshyamalan/. — 8. GARBER LL, HYATT EM, STARR RG, Journal of Marketing Theory and Practice 8 (2000) 59. doi: 10.1080/ 10696679.2000.115018. — 9. WITHROW RL, The Journal of Humanistic Counseling, Education and Development, 43 (2004) 33. doi: 10.1002/j.2164-490X.2004.tb00040.x. — 10. SMEES R, HUGHES J, CARMICHAEL DA, SIMNER J, Phil. Trans. R. Soc. B, 374 (2019). doi: 10.1098/rstb.2018.0348. — 11. HOSSAIN SR, SIMNER J, IPSER A, Cortex, 105 (2018) 74. doi: 10.1016/j.cortex.2017.06.013. — 12. NERURKAR NK, CHITNIS TA, PEREIRA J, International Journal of Phonosurgery & Laryngology, 12 (2022) 12. doi: 10.5005/jp-journals-10023-1235. — 13. KASKATAYEVA ZA, MAZHITAYEVA S, OMASHEVA ZM, NYGME-TOVA N, KADYROV Z, Rupkatha Journal on Interdisciplinary Studies in Humanities, 12 (2020) 1. doi: 10.21659/rupkatha.v12n6.14 — 14. JONA-USKAITE D, MOHR C, DAEL N, International colour-emotion survey data from 30 countries (Version 1.0.0) [Data set] (FORS data service,

2020). doi: 10.23662/FORS-DS-888-2. — 15. BORTOLI MD, MAROTO J, Colours Across Cultures: Translating Colours in Interactive Marketing Communications, (Global Propaganda, Granada, 2008). http://www.globalpropaganda.fresa.net/articles/TranslatingColours.pdf. — 16. GOLDA P, MĘŻYK J, RYSZKA J, UCHMAN T, JEDZINIAK A, GEMA Online Journal of Language Studies, 22 (2022) 39. doi: 10.17576/gema-2022 2204-03. — 17. TWOMEY CR, ROBERTS G, BRAINARD DH, PLOTKIN JB, PNAS, 118 (2021). doi: 10.1073/pnas.2109237118. — 18. OXFORD ADVANCED AMERICAN DICTIONARY, Idiom. https://www.oxfordlearnersdictionaries.com/definition/american_english/idiom. — 19. LAKOFF G, JOHNSON M, Metaphors We Live By (University of Chicago, Chicago, 1980). — 20. KOVECSES Z, SZABCO P, Applied linguistics, 17 (1996) 326. doi: 10.1093/applin/17.3.326. — 21. STEINVALL A, Colors and emotions in English. In: MACLAURY RE, PARAMEI GV, DEDRICK D (Eds) Anthropology of Color: Interdisciplinary multilevel modeling (John Benjamins Publishing Company, 2007). doi: 10.1075/z.137.23ste. — 22. SHAVER P, SCHWARTZ J, KIRSON D, O'CONNOR C, Journal of Personality and Social Psychology 52 (1987) 1061. doi: 10.1037//0022-3514.52.6.1061. — 23. EKMAN P, Studia Psychologica, 15/2 (1973) 140.

N. Sviličić

University North, Trg dr. Žarka Dolinara 1, 48000 Koprivnica, Croatia e -mail: niksa.svilicic@proactiva.hr

SEMIOTIKA BOJA: BOJA KAO MEDIJ KOMUNICIRANJA KULTURE I EMOCIJA

SAŽETAK

Boja je povezana s elektromagnetskim zračenjem određenog raspona valnih duljina vidljivih ljudskom oku. Ovaj prirodni fenomen prerastao je svoje tehničko okruženje i već je dugo predmet interesa, a na kraju je svoj utjecaj proširio na sve aspekte ljudskog života. Boje prenose značenje i može se primijetiti da su opširno istražene u gotovo svim znanstvenim područjima, od društvenih i prirodnih do humanističkih znanosti. Cilj ovog rada je istražiti je li semiotika boja univerzalna ili se razlikuje od zemlje do zemlje. Nadalje, analizom pregleda idioma nastojat će se dokazati da se kulturna simbolika boja odražava u jezičnim izričajima pojedinih kultura (hrvatske, engleske, njemačke, talijanske). Pristup mješovitih metoda dokazao je da boje komuniciraju apstraktne i konkretne pojmove, emocije i percipirane osobine te da su neka značenja univerzalna, dok su druga specifična za pojedinu kulturu.