harbinger of misery, militancy. The dog symbolizes loyalty, reliability, loyal friend, and sometimes the image of the insidious beast. One of the most interesting is the symbol of the snake, which is associated, on the one hand, with wisdom, fertility, and on the other hand with sin, death and evil. The wolf, in French legends, embodies the image of freedom, intelligence and greed, although it is sometimes a symbol of repentance and the reincarnation of evil in goodness. It is found that the symbolism of animal images is essential for the study of French folklore, which is a vivid reflection of the people about the surrounding world. It is proved that, regardless of the fact that each nation has its own language and culture, symbols for all nations have almost identical meaning.

The key words: symbol, character (image), animal, legend, symbolism, nation.

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Svitlana Martinek

OPPOSITIONAL METAPHOR LIGHT AND DARK VIA THE ASSOCIATIVE EXPERIMENTS

Cognitive linguistics considers language as a window into human consciousness providing insights into its structures and reflecting fundamental properties of the human mind. Therefore, it reveals new prospects in studying binary oppositions within human consciousness via their language manifestations. This study aims to analyse the interplay of cognitive mechanisms of contradistinction and conceptual metaphors. The paper presents an empirical investigation of the binary opposition LIGHT-DARK based on the data of the Associative Thesauri. The working hypothesis is that associative network is motivated by hierarchical conceptual structures existing in the speakers’ minds. Therefore, responses evoked by certain stimuli can be regarded as the reflection of corresponding conceptual structures. The responses obtained via AE confirm a tight connection between LIGHT and DARK and human ability of seeing as it was described by Wierzbicka (1996: 288). Furthermore, the obtained responses give possibility to trace the ways, in which LIGHT – ABILITY OF SEEING – REASONING, on the one hand, and DARK – INABILITY TO SEE – ABSENCE OF KNOWLEDGE/EDUCATION, on the other hand, are interconnected and all together generate metaphors in systematic way. The analysis of the responses reveals binary oppositions interacting with the opposition LIGHT – DARK. The consciousness of contemporary bearers of languages and cultures preserves deep-rooted relations of the light – dark opposition with the corresponding parts of other binary oppositions, namely day – night; sun – moon; white – black; red – black; sky – earth; happiness – unhappiness, life – death, etc. within the evaluative opposition positive – negative. Blended with metaphorical mappings, the LIGHT – DARK opposition creates complex mental images, which can be termed ‘oppositional metaphors’.

Key words: binary opposition, associative experiment, cognitive mechanism, conceptual metaphor, universality.

Introduction. It is difficult to establish unequivocally when humanity started exploring binary oppositions. At least, in Europe, they were repeatedly addressed in different periods: by ancient philosophers, by medieval alchemists or by linguists, psychologists, and ethnologists in the recent centuries.

Cognitive Linguistics, which starts „with an empirically responsible philosophy” and considers “the embodied and imaginative character of mind” [12, p. 468] as well as explores the forms of knowledge representation and cognitive mechanisms via language, enables a new approach to the study of binary oppositions.

The opposition LIGHT – DARK is listed as a major position by many authors. Robert Hertz, whose speciality was the sociology of religion, wrote: “All the oppositions presented by nature exhibit this fundamental dualism. Light and dark, day and night, east and south in opposition to west and north, represent in imagery and localise in space the two contrary classes of supernatural powers: on one side life shines forth and rises, on the other it descends and is extinguished. The same with the contrast between high and low, sky and earth: on high, the sacred residence of the gods and the stars which know no death; here below, the profane region of mortals whom the earth engulfs; and, lower still, the dark places where lurk serpents and the host of demons” (Hertz 2004 (1907): 96).

In recent years, Carita Paradis singles out this opposition among other “strongly opposable lexical semantic pairings in all languages, whose meanings are central to human existence” [15, p. 131].

However, despite the large number of studies devoted to binary oppositions and their systems in various languages and cultures, a lot of issues are still unexplored. In order to adequately assess the significance of light – dark contrast for humans, it should be viewed in the whole system of oppositions. The other aim of this paper is to reveal the result of interaction of conceptual metaphor with cognitive mechanism of contradistinction on the basis of the opposition LIGHT – DARK.

**Justification of the associative experiment method.** Most often conclusions in cognitive researches have been based on a researcher’s linguistic introspection. Although it is undoubtedly a productive method (moreover, the application of any method cannot be exempt from a conscious or unconscious act of introspection), Leonard Talmy emphasized the need for empirical confirmation of “the findings resulting from introspection” [18, p. 5]. In recent years, interest in seeking for the method in Cognitive Linguistics does not fade, but even it gets deeper. The development of the methodology of cognitive linguistics goes in two directions: these are corpus-based studies and those based on information from language users [see 14]. In particular, among the studies dealing with the problem of oppositions, it can be noted corpus based cross-linguistic investigation of antonyms by Carita Paradis [15, p. 131–156].

This paper presents an empirical investigation of the binary opposition LIGHT-DARK based on the associative experiment (AE). The research is based on the data of the experiments conducted with English speakers and presented in the associative thesauri (KR, MWAN, EAT). Since all the associative thesauri log the responses received from the unequal number of respondents (from 100 to 1000), the responses from different thesauri were recalculated according to their percentages that makes it possible to compare the results.

It was James Deese [2] who used distributions of associative responses as a powerful tool for the study of word meaning but avoided attempts to classify them directly. This can be explained by the very fact that associative responses to a word reveal the corresponding fragment of complex conceptual structure with its specific features, associated emotions and evaluations in the speakers’ minds. This means that the complete classification of associative responses should reflect the entire set of human knowledge. What we can do is to find out what motivates the appearance of a response, to discover the connections between the correlative conceptual structures in the speaker’s mind, to establish the characteristic features of certain concepts, and the emotions they cause among the native speakers of a certain language. This is far from the exhaustive list of what can be achieved via the application of the associative experiment, but this is the attempt this article focuses on.

The results obtained via AE are used here to reveal oppositions that are interconnected in the minds of the English speakers and to elucidate the interplay of different cognitive mechanisms in their linguistic conceptualization.

**Universality of the LIGHT – DARK opposition.** In their classical 1969 work on the study of colour names, Brent Berlin and Paul Kay argued that all languages have a universal system of basic colours, which developed according to a certain order in most languages [1, p. 4–5 etc.]. At the beginning of forming this system, the entire colour continuum is divided into two categories, which Berlin and Kay did not quite accurately designate as black and white, meaning black along with all dark colours and white along with most of the light colours [see 1, p. 17].

In later research, Kay and McDaniel argue that semantic universals in the colour system are determined by the structure and functions of the human eyesight system [9]. Since these universals are the results of neurophysiological processes, they shape the basis of universal patterns for the meaning of the main colour terms in all languages, and therefore, at least in this case, language does not define perception (as it is claimed by the adherents of the “hard” version of linguistic relativism), but perception determines language [see [9], p. 610–611, etc.].

Anna Wierzbicka sharply disagrees with this opinion, since, despite the fact that colour perception seems to be the same for all groups of people, linguistic conceptualization is different in different cultures, even in spite of the striking elements of similarity. Therefore, Wierzbicka states that
extreme universalism in the study of language and thinking is just as unreasonable and dangerous as extreme relativism in the study of culture. Language reflects what happens not in the brain, but in our consciousness formed under the influence of the cultural environment [22, p. 290–294].

Another idea proposed by Kay and McDaniel is the application of the theory of fuzzy sets to modelling the structures of individual colour categories and elucidating relations between different universal colour categories due to the development and expansion of the basic colour vocabulary [9, p. 12, etc.]. According to George Lakoff it provided them with an opportunity to draw conclusions which were not possible to get by using the neurophysiological approach only, in particular to offer an intuitive, satisfactory explanation of the ability of the basic colours categories to contain more than one central colour [13, p. 29–30]. Perhaps, this clarifies the possibility of dividing the entire colour continuum between dark and light in the languages, which stay at the first stage of developing the colour system according to the theory of Berlin and Kay.

However, in some cases, the presence of the main contradistinction between dark (macro-black) and light (macro-white) causes doubts among researchers. For instance, in the Martu Wangka language, which unites several dialects in the Western Desert in the northwest of Australia, the contrasting colours are maru-maru ‘macro-black’ and miji-miji ‘red’ (miji means ‘blood’) [5, p. 210]. That is how Hargrave concludes that tribes traditionally inhabiting the desert do not distinguish white as a separate feature of natural phenomena, and thus, white is not a basic colour term in their language [5, p. 212]. On the other hand, the researcher supposes that the colour samples offered to respondents did not match their perception of the main macro-white colour [5, p. 212]. In the Anbarra language of the aborigines in Arnhem Land there is the colour term gungalija ‘light, white’, whose meaning additionally requires “a touch of brilliance or ‘animation’ as well as a high degree of brightness” [8, p. 27].

This example is also of a great interest because it clearly demonstrates the dependence of the colour system, which is formed in a certain language and culture, on the environment. Wierzbicka remarks the universal or near-universal role of the typical features of the landscape as a fundamental element of reference in describing visual perception in general and colour perception particularly [22, p. 289]. So, the above situation is motivated by the important role of comparing or – more precisely – the universal concept SIMILARITY in transmitting visual sensations.

However, Wierzbicka claims that the focus of research must shift from the search of “colour universals” to the search for “universal of seeing” [22, p. 288]. In her view, “[w]hat does seem universal, or near-universal, in the domain of seeing is, first of all, the distinction between times when people can see (“day”) and times when people cannot see (“night”)” [22, p. 288]. The AE results with the speakers of the languages analysed confirm this opinion by Wierzbicka, since they reveal the close connection of the opposition LIGHT – DARK with the opposition DAY – NIGHT (see the examples below). In addition, the AE results clearly show the significance of the connection between “light” and “day” and the prototype source of light, i.e. the sun (see the examples below).

So, on the one hand, as Bernd Heine notes, “[t]he human species, irrespective of whether it is located in Siberia or the Kalahari Desert, has essentially the same pool of options for conceptualization” [5, p. 14]. On the other hand, Nicholas Evans and Stephen C. Levinson have correctly noticed that language is one of the best examples of co-evolution that “evolved biological underpinnings for culturally variable practices, where the biology constrains and canalizes but does not dictate linguistic structures” [3, p. 447]. In addition to biological (namely the embodiment) and cultural and historical factors, it can be noticed that conceptualization of the opposition LIGHT and DARK is also impacted on by the environment where a certain ethnic group lives.

Thus, we observe two basic strategies for naming colours. The first one is directly related to the embodiment, because it is based on the ability of a human to visual perception, and therefore it is universal or near-universal. The second one is based on the universal cognitive mechanism of comparison, the establishment of similarity, but the implementation of this way of naming colours is culturally and linguistically bound, since it depends on the environment and/or prototype referents specific to the particular culture.
The opposition LIGHT - DARK and its correlation with vision and mind. The opinion that the concepts LIGHT i DARK are motivated by the ability to vision is proven by the obtained responses: 

- light - see 2,4 %, seeing 0,3 %, sight 0,3 %, vision 0,2 %, eyes, look, seen 0,1 % (KR: 76); see 0,11 %, eyes, look – 0,01 % each (MWAN: 23-24); glare 0,1 % (EAT); 
- dark – blind 0,2 %, blindness 0,2 %, eyes 0,2 %, invisible 0,2 %, eye, unseen – 0,1 % each (KR: 48); see 0,1 % (EAT).

They compose a relatively small group, but it should be noted that the number of responses obtained via AE is not an absolute indicator. This is due to the fact that respondents can rarely provide reactions, which reveal the so-called core element of meaning, since it seems excessively informative and tautological.

Besides, the interpretation of the AE results is complicated by the fact that the respondent’s intentions remain “behind the scenes” for the researcher, who can only guess by using their own experience and empathy, why the respondent gave the very response. In general, there are quite a lot of examples where the stimuli designating light and darkness cause antonymic responses (see the examples below). Presumably, this is evidence of the (unconscious) application of different strategies, namely answering with similarities or opposites.

On the other hand, the verbs of visual perception are characterized with a semantic shift from perception to mental ability. John Taylor supposes that this extension “is plausibly motivated by the fact that much – perhaps most – of our knowledge of the outside world (for sighted people!) comes from vision” [19, p. 33].

It is therefore natural that the conceptualization of ‘light’ and ‘dark’, ‘vision’ and various aspects of mental activity are closely interconnected. George Lakoff and Mark Johnson describe this in the following way: “Someone who is ignorant is in the dark, while someone who is incapable of knowing is blind. To enable people to know something is to shed light on the matter. Something that enables you to know something is enlightening; it is something that enables you to see. New facts that have come to light are facts that have become known (to those who are looking)” [12, p. 239].

Thus, the LIGHT – DARK opposition interacts with the conceptualization of visual perception and mental activity, which leads to the emergence of complex metaphors, KNOWING IS SEEING, and KNOWING IS LIGHT where the latter concerns mental processes, and means logical mind and clear thoughts, education and civilization, etc. It is clearly revealed by the responses caused by stimulus light: education, knowledge – 0,1 % each (KR: 76); head, study, truth – 0,1 % each (MWAN: 23-24); knowledge 0,1 % (EAT). Vice versa, IGNORANCE, UNCERTAINTY is INVISIBILITY, BLINDNESS, and also DARKNESS, where dark means ‘unknown’, ‘unclear’, and also ‘uncultured’, ‘uneducated’, ‘illiterate’, sometimes due to the distance from the centres of education and culture. This metaphorical “metathesis” is witnessed by the responses mysterious, oblivion, obscure – 0,1 % each (KR: 48); obscure 0,1 % (MWAN: 16); ages 0,2 % (EAT) evoked by stimulus dark.

Thus, the results of AE give possibility to trace the ways, in which light – ability of seeing – reasoning, on the one hand, and dark – inability to see – absence of knowledge/education, on the other hand, are closely interconnected and together generate metaphors in a systematic way.

LIGHT – DARK in the system of binary oppositions. Primarily, the correlative member of this binary opposition is one of the most frequent responses. So, the concept LIGHT is closely related to DARKNESS: light – dark 23,1 %, darkness 9,3 % (KR: 76); dark 64,7 %, darkness 0,5 % (MWAN: 24); dark 41 % (EAT). Similarly, the concept DARK is tightly linked with its opposite in the speakers’ minds: dark – light 42,7 % (KR: 48); light 82,9 % (MWAN: 16); light 41 % (EAT).

Secondly, the responses caused by the stimuli light and dark have also revealed the links with some concepts that can be considered as creating other binary oppositions: light - sun 8,5 %; day 8,1 %; 
- moon 1 %; good; heat; night; sky; white 0,8 %; life 0,7 %; fire 0,6 %; happiness 0,4 %; warmth 0,2 %; 
- heaven; red – 0,1 % each (KR: 76); 
- sun 2,5 %; day 1,6 %; house 1,2 %; heat 0,5 %, white 0,5 %; night 0,4 %; heaven 0,3 %, red 0,3 %; earth; flame; high; sky; warm – 0,1 % each (MWAN: 24); house 4 %; 
- day 3 %; earth; fire; sun – 1 % each (EAT); dark - night 22,1 %; black 7 %; white 0,9 %; moon, red 0,6 %; man 0,4 %; cold, house 0,2 %; bad; day; dead; ground; sky – 0,1 % each (KR: 48); night 5,5 %;
black 3.1\%; white 0.9\%; right 0.4\%; house 0.2\%; cold; mood; moon; murder; red; women – 0.1\% each (MWAN: 16-17); night 16\%; black 3\%; ground, man, sky, winter – 1\% each (EAT).

Thus, the opposition LIGHT – DARK is related to the following oppositions in speakers’ minds: day – night; sun – moon; white – black, red – black; sky – earth, ground; high – (down); good – (bad); happiness – unhappiness; life – death; (summer) – winter, fire – (water); house – (forest); man – woman, etc. Some of these connections are more stable and regular, but the responses received convincingly show the existence of connections between certain oppositions in the consciousness of contemporary speakers.

The composition of the identified binary oppositions, which are typical but, perhaps, unconscious among contemporary bearers of various languages and cultures, may differ. In view of the etymology, the indisputable connection between ‘holiness’ and ‘glitter’, ‘glow’ was declared afore by Toporov [20, p. 190–191, 208, etc.], who analyzed the Indo-European stem *k’ẹn-(to). He claimed that derivatives of this stem are present in Baltic, Germanic, Indian, Iranian, Slavonic, and Tocharian languages, but it is only in Baltic, Slavonic and Iranian, they designate holy, sacred attributes. The other languages have not elaborated this sense.

In particular, if compare the results obtained in such an experiment with the Ukrainian speakers, it is possible to reveal the preserved connections between ‘light’ and ‘holy’, on the one hand, and ‘dark’ and ‘sinful’, on the other: svitliy ‘light’, svyatyy ‘holy’, svyetlyi ‘dark’, svyatyi ‘sinner’, svyatyi ‘sin’, svyaty ‘saint’ – 0.5\% each (UAT 1: 280); temnyi ‘dark’, hrikh ‘sin’, hrishnyk ‘sinner’, chort ‘devil’ – 0.5\% each (UAT 1: 315).

On the contrary, English word light comes from another root, namely Proto-Indo-European *leuk- ‘light, brightness’ (see OED). Therefore, among English speakers, this stimulus does not cause responses revealing connection with holiness. In addition, the English stimulus dark caused only a few responses that reveal the connections of this type: hell 0.1\% (KR: 48); God 1\% (EAT).

The quoted examples confirm Sweetser’s view that “we cannot rigidly separate synchronic from diachronic analysis” [17, p. 9; for the importance of panchronic analysis, see also 16]. So, the AE results demonstrate clearly that processes occurring in languages can lead to a change in links between different oppositions and to a decrease in their significance or even their disappearance in the minds of contemporary representatives of certain languages and cultures.

**Binary oppositions and category of evaluation.** Tomas Krzeszowski describes the axiological ‘plus-minus’ parameter with regard to the opposing dimensions (like IN-OUT, UP-DOWN, etc.), in which the second elements are assumed to carry negative default evaluations, and notes that these evaluative components are preserved in metaphorical extensions [10, p. 156 passim].

Nevertheless, evaluation of the members of the binary opposition in the positive-negative parameter is not always so unambiguous (in particular, the positive member of the opposition in the ironic context may transform its evaluative meaning into the opposite one, see also [4]). In AE, the stimuli which mean light and dark, sometimes also cause “non-classical” responses, but they are of limited frequency. For instance, light can cause pain 0,1\% (EAT). Instead, responses to the stimuli with the meaning of dark reveal a positive evaluation or emotion, linked with the relevant stimulus in the respondent’s mind: dark – nice 0.1\% (KR: 48).

Responses that express positive evaluation or emotions associated with LIGHT and, accordingly, negative evaluation or emotions associated with DARK in the consciousness of the speakers are more frequent: light – cheery 0.1\% (MWAN: 24); pleasant 0.3\%, beautiful 0.2\%, beautifying, cheer, enjoy, nice, peaceful, placid, pleasure – 0.1\% each (KR: 76); dark – gloomy 1.1\%, afraid 0.6\%, fear 0.6\%, dismal 0.3\%, fright 0.2\%, dreary, fearful, fearsome, lonely, lonesome, lonesomeness, scare, stillness – 0.1\% each (KR: 48); lonely 0.1\% (MWAN: 16); fear – 0.4\%, frightening, gloomy, pain, scare, slow – 0.1\% each (EAT).

Actually, this positive markedness for LIGHT or negative markedness for DARK (in contrast to occasional instances of evaluating these concepts) creates the foundation for metaphorical transferences. Since “we understand morality via mappings of structures from other aspects and domains of our experience” [12], among which LIGHT and DARK occupy an important place, our moral concepts and values find their expression through them. Therefore light is associated with different moral virtues:
hearted, joy, pathway, peaceful, placid, truth – 0,1% each (KR: 76), and dark serves to express negative evaluation (and also uncertainty): horse 0,3%, subject 0,1% (KR: 48).

The comparison of the above-mentioned binary oppositions to the so called ‘orientational metaphor’ described by Lakoff and Johnson [11], where image-schemas are used metaphorically to structure other complex concepts (happy is up, sad is down; conscious is up, unconscious is down; health and life are up, sickness and death are down; good is up, bad is down, etc.), reveals a certain parallelism. For instance, up as a member of the opposition is used metaphorically to structure corresponding members of other oppositions (e.g. happy, life, good), while down is used for the contrasting members of those oppositions (e.g., sad, death, bad). So, the orientational metaphor up and down, as well as light and dark, is a binary opposition that forms a complex system of metaphoric transformations.

Thereby binary oppositions form a productive base for creating metaphors while maintaining the same general tendency: the corresponding members of binary oppositions can establish the relations of symbolic substitution between each other.

Conclusions. Thus, the AE responses confirm a tight connection of LIGHT and DARK with the human ability for visual perception in light or darkness. It is also possible to trace the ways, in which light – ability of seeing – knowledge/reasoning, on the one hand, and dark – inability to see – absence of knowledge/education, on the other hand, are closely interconnected and all together generate an extended metaphorical complex.

Furthermore, responses obtained via the AE demonstrate the importance of oppositional relations between LIGHT and DARK. The consciousness of contemporary bearers of language and culture preserves deep-rooted relations of the light – dark opposition with the corresponding parts of other binary oppositions, namely day – night; sun – moon; white – black; red – black; sky – earth; happiness – unhappiness, life – death, etc. within the evaluative opposition positive – negative.

The interaction of different cognitive mechanisms, in particular mechanisms of metaphor- and opposition-making, leads to the shaping of interrelated conceptual domains. The opposition of LIGHT – DARK takes part in the moulding of metaphors in combining with the mechanism of contradistinction where positively marked members of binary oppositions may interact with each other in metaphorical interchange as well as negatively marked members do.

Sources
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Ключевые слова: бинарная оппозиция, ассоциативный эксперимент, когнитивный механизм, концептуальная метафора, универсальность.

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Valentyna Marchenko

SPEECH-AND-MUSIC WORK AS A MULTIMODAL TEXT: PATTERNS OF SPEECH AND MUSIC COMPLEMENTARITY

The article deals with speech-and-music work as a multimodal text created by the synthesis of speech and music, which is integrated and processed by the mind of the recipient in a single universal-subject code of thinking, for the implementation of a communicative-aesthetic or entertainment function that has self-sufficient artistic value and is broadcast to the listener in conditions of live communication or with the help of technical means. In the article, the generation, actualization and perception of speech-and-music work is considered as a synergetic mechanism consisting in the integration of the verbal and musical cultures of the author under the influence of his psychic energy excited by the extra-linguistic factors, and the oral rendering of speech-and-music work takes place through the interaction of phonetic, lexical and syntactic means of language and music components. At the same time self-development of communicative-cognitive and speech-thinking processes in the spheres of the sender’s spiritual being during the generation of speech-and-music work and in the receiver’s one in the process of its perception is considered as such, in the course of which the key influence of the parameters of order, namely speech and musical culture, is exercised. On the basis of the data obtained during the theoretical and experimental-phonetic processing of the proposed invariant model, variant models of the generation, updating and perception of speech and music as multimodal text were developed: a model of balanced interaction of text and music, the model of speech dominance, the model of music dominance, and the model of reverse interaction between verbal and melodic components. Thus, in the work the most recurrent variant model of the parity interaction of text and music is presented and analyzed, and on the example of the song “Memory” from E. L. Webber’s musical “Cats” the mechanisms of generation, actualization and perception of the speech-and-music works of this type are revealed. The expediency of studying the interaction of speech and music on the example of multimodal texts, which, besides the verbal and melodic component, also have iconic features, such as musicals, video clips, TV ads, etc., is promising and will allow us to deepen the knowledge about the interrelation of speech and music.

Key words: intonation, multimodal text, music, speech, speech-and-music communication, speech-and-music work, synergetic model.

Introduction. Speech-music relations is an enormously broad area of research involving a wide range of scholars: philosophers (Plato, Aristotle), linguists (D. Bolinger, R. Jacobson), musicologists (T. Adorno, L. Bernstein), neurolinguists (N. D. Cook, A. D. Patel), neurologists (S. Koelsch, J. Sloboda), etc.