

# Conceptual Metaphorization of Colour Terms

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This study investigates the cognitive mechanism of the metaphorization of colour terms using the example of “zeloiniy”, or “green”, colourations. This process involves the stages of conceptualisation and categorisation of internal and external human experiences through the lexical system of a language (pertaining to phraseological units with colour terms for the present study). A conceptual metaphor method is utilised for research, which involves the G. Fauconnier and M. Turner’s theory of conceptual integration and A.V. Kolmogorova’s method of discursive analysis. The described model of colour metaphorization allows for an in-depth discussion of how metaphorical images of realistic objects form part of the mental capacity for colour naming.

**Key words:** *Categorisation, conceptualisation, metaphorization, colour terms, internal and external human worlds.*

## Introduction

Language is simultaneously aimed at reality and at images, acting as knowledge and the transfer of information to form a picture or model of the world. These images of the world and its contents are localised in consciousness and are constantly replenished and corrected, thus regulating human behaviour. Language transmits communicative messages through verbal statements and plays an important role in the accumulation of knowledge and the storage of information in memory. This process contributes to the complex ordering and systematisation of language, thus generating cognitive activity (Kostyushkina G. M., Ozonova A. A., Popova A. A., et al, 2006; Kostyushkina G. M., Kolmogorova A.V., 2014).

Language as a cognitive function provides the conceptualisation and categorisation of human experiences with both the external and internal worlds. The experience of an individual's outer world is realised through the stages of conceptualisation and categorisation of the inner world. This inner world functions as the main informative and methodological mechanism for knowledge processing and understanding. The importance of the inner world and its categorisation has been the object of research in many scientific and linguistic studies (Malinovich Y. M., 1989; 2007; 2012).

Since the beginning of the 20th Century, phraseological units have featured in successive scientific paradigms, though new problems and new research tasks are constantly surfacing in relation to these linguistic elements. They originated within the framework of the modern cognitive scientific paradigm, which has already confirmed its effectiveness in explaining language signs. Much attention in cognitive linguistics is given to issues surrounding the generation of meaning, particularly to the actualisation of linguistic meaning in speech. The process of meaning making is associated with an individual's linguistic and creative activity, though questions regarding the interpretation and correlation of linguistic meaning and speech sense remain unanswered.

In addition to the actual creation of meaning, one of the most striking manifestations of human innovation in language is the act of metaphorical creativity. Such an act becomes creative if a metaphor is considered as a process of conceptual integration of mental spaces. Significant elements for the categorisation and conceptualisation of the surrounding world correspond to a linguacultural community, such as recognised colour naming in different languages and deeply expressed national and cultural specificities. In the history of linguistics, colour naming has served as an exemplary model for the proof of theoretical postulates. Prior studies have been conducted on colour names of different languages from a variety of viewpoints.

## **Methods**

This study features a variety of research methods including the conceptual metaphor method, G. Fauconnier and M. Turner's theory of conceptual integration (Fauconnier G., 1985) and A.V. Kolmogorova's method of discursive analysis (Kolmogorova A.V., 2006).

### ***“Mental space” in G. Fauconnier and M. Turner’s theory of conceptual integration***

An individual's internal and external world is reflected in the lexical system of a language. The phraseological units for colour naming express objects of reality and comprise of several elements of composition, each of which actualises the mental space. The integration of these

mental spaces leads to the formation of a metaphorical image of the object in reality. This image is an invariant of information, which is the linguistic meaning of a phraseological unit.

The concept of “mental space” is the basis of G. Fauconnier and M. Turner’s theory of conceptual integration. This theory defines mental spaces as small conceptual areas which are constructed through the process of thinking and speaking in order to localise understanding and actions (Fauconnier G., 1985). Two types of interaction of mental spaces are distinguished: 1) interaction by means of overlay, in which one mental space possesses a potential element that is filled with another interacting language unit’s mental space; and 2) interaction by means of substitution, which involves one element replacing another within pair of elements, generating the possible proposition “Y as if it were X”. Mental spaces are aligned according to the principle of mapping, which is the correspondence between two sets of data across two areas. Projection space is also distinguished as the transference of a part of one structure to another based on the commonality of other components of the data structure and hybrid spaces (blends).

### ***Integrated space resulting from the fusion and emergence of mental space***

The emergence of linguistic meaning in the framework of this theory refers to discourse unfolding as a result of merging mental spaces, which thus produce integrated spaces or blends. Through this process, four interacting mental spaces are formed: two source mental spaces, one shared space and one new integrated space. The interaction between these spaces creates a blend in which structural elements from both the domain and source domain are projected. Blends are not inherent within initial mental spaces, but rather adopt the initial structure (in different cases, the ratio of inherited structures may vary), while simultaneously forming distinct characteristics. Both source spaces contribute to the creation of a third special space (Lakoff G., 1997).

This emergence thus refers to the uniqueness of a value as the main property of a blend and can be explained by the integration theory. The process of a blend formation involves the simultaneous activation of at least two areas of the brain which are responsible for visual and abstract images. At least two frames are activated, the composite structural elements of which, at first glance, have nothing in common. This process continues according to the following algorithm: 1) human perception of the object or phenomenon; 2) activation of certain language forms pertaining to the search process of associated frames; 3) placing the content of the statement in an existing frame (model), and 4) meaning interpretation as based on previously acquired knowledge (Kozlova N. N., 2010). The understanding of new information is therefore initially reduced to a search in memory for a situation most similar to the new situation (Ageev S. V., 1999). The results of conceptual integration become an

integral part of the conceptual framework, and often serve as material for further conceptual integration.

### ***The process of linguistic phraseological meaning***

Mental spaces are not incorporated in consciousness as ready-made structures, but rather acquire information through the process of communication and knowledge of the world. This process results in the allocation of certain stable integrated spaces, which are fixed in the linguistic consciousness of speakers in the form of phraseological units. Linguistic phraseological meaning thus becomes a process of sequential deployment and merging of mental spaces; their interaction and subsequent fixing in consciousness take the form of mental images of the object. Such images function as an intermediary between the object itself, such as an environmental element, and a linguistic communicative sign. This sign functions as a description of an individual's experienced interaction with the object within both the sacred and the profane spheres of human existence (Kolmogorova A.V., 2006).

The sacred sphere includes images of objects that are not perceived by external senses. This includes images of the person and the mental, social and spiritual entities that open the "inner eye" according to religious and mythical ideas and stereotypes. These images are beyond human understanding and are mentally embedded by something that is difficult to explain or analyse. Such images are the most difficult to explicate, as there are significant variations among different languages and mentalities. For example, the colour term "green" can distinguish the following sacred and closely interacting images:

- 1) Object (X) symbolises life / Object symbolises life itself.
- 2) X symbolises hope / X represents hope.
- 3) X symbolises goodness / X symbolises generosity.
- 4) X symbols revival / X symbolises rebirth.

In contrast to the sacred sphere, the profane sphere is a cognitive structure which is formed on the basis of images sourced from unconscious practice. This sphere is based on the practical faith that allows interactions with the world and belief in its reality. It is a kind of generalisation of propositions, understood by the researchers as a judgment about an object of the surrounding world. This judgement involves the knowledge of, and subsequent attribution of certain properties to, a visually and physically perceived object within a situation (Barabashev A. G., 2001). Judgments in this proposition are not formulated linguistically, however, or through any logical structure immediately preceding or organising "linguistics". Judgements in the profane sphere are structures based on the unconscious logic of the body (Lakoff G., 1997). In the process of perceiving an object, a person must unconsciously activate some knowledge about a similar situation that has already taken place. This automatic reflection assigns certain properties to the object in order to classify it with known objects.

Profane images of colour objects based on bodily experiences involve a spatial characteristic: they are a set of “traces” in the memory of the body. These traces refer to typical situations in which objects-elements in the environment can be explicated for research purposes in the form of propositional judgments (Kolmogorova A.V., 2006). For example, the language sign “green” opens the mental space in which the following profane images actualise:

- 1) The Object has one of the seven colours of the spectrum, located between yellow and blue. It is the colour of fresh greenery, grass and foliage.
- 2) The Object has a pale, earthy complexion.
- 3) The Object is associated with the planting of vegetation.
- 4) The Object consists of, or is prepared from, greenery.
- 5) The Object is immature and unripe.

### ***The cognitive mechanism of image metaphorization***

In addition to the aforementioned sacred and profane spheres, the metaphorical sphere must also be examined. The metaphorical shares similarities with the profane sphere and is tied to the experience of the person, but conversely concerns discursive characteristic rather than bodily experiences and structures. This area is associated with the use of language units in speech. Within this sphere, metaphorical images are formed which associate with the figurative meaning of the language sign. Unlike profane images, metaphorical images are actualised more often in phraseological units or in the presence of another linguistic sign. For example, the metaphorical sphere’s mental spaces actualise the following images for the language sign “green”:

- 1) The Object is young and inexperienced.
- 2) The Object is tedious and unbearable.
- 3) The Object allows you to perform the action.

Regarding this study of colour metaphorization, it should be noted that at the conceptual-categorical level, the central element as a reinterpreted colour name always activates the metaphorical image of the object. It is this element that determines the linguistic meaning of phraseology. In the process of implementing the cognitive mechanism of metaphorization, a “metaphorical projection” (metaphorical mapping) or “cognitive mapping” occurs, involving knowledge about one conceptual area in or through another conceptual area. This means that the structure of knowledge from the source domain is mapped to the target domain. Such a mechanism “makes it possible to understand psychological processes, direct and obvious conceptualisation of which is not available to a person” (Lakoff George. Johnson, M., 1980/2004).

From the cognitive approach in linguistics, concepts from one structured and more detailed sphere are transferred to another, more abstract, sphere. Metaphorical operations of knowledge lead to a change in the ontological status of the concept: the previously unknown becomes known, and the known becomes absolutely new. This new categorisation is then projected onto an individual's reality or onto its separate fragments (Baranov A. N., 2001). The conceptual metaphor can thus be considered as a kind of mental scheme that facilitates the assimilation and explanation of information. Each person uses his or her own scheme, which is improved over time. The more developed the scheme, the easier it is for a person to assimilate complex information. The metaphorical models inherent in an individual's conceptual system are the schemes according to which thinking and acting occur.

## Results

Summarising the results of structural-semantic and cognitive studies, the metaphorical model of colour naming can be described as follows:

- 1) The source conceptual domain, which refers to the sphere included in the model of language signs or words in the initial value recorded in dictionary definitions. This study considers the semantic sphere of PLANT and the conceptual area of COLOR.
- 2) A new conceptual area, or sphere-target, refers to a semantic sphere which figuratively includes words within the model. The material under study allows discussion about the semantic areas of MAN and PHENOMENON. However, this issue affects characteristics like age; mental ability; attitude towards other people; experience or lack thereof; intensity; force, and tension.
- 3) A component that connects the primary and the secondary values covered by this model of units. This allows investigation into the metaphorical use of relevant concepts and why the conceptual structure of the source sphere is suitable for the designation of elements from a different sphere (Chudinov A. P., 2001). This is also referred to as the "foundation of a metaphor." On the basis of the studied material, it can be concluded that such a component of the colour metaphor are transferrable by the state of development ("green" – inexperienced, young; "green" – vigorous, etc.), and by colour ("green" – envious; "zeloiniy / green" – allowing, etc.).

## Discussion

Issues of dialectal meaning have been the focus of modern linguistics for many years, particularly those of a cognitive nature. Regarding the conceptualisation and categorisation of experience, it is important to identify the cognitive mechanism, both in the generation of speech (meaning formation) and in its interpretation. Problems of conceptualisation and categorisation of the language experience have been previously researched by the following scientists: Arutyunova N. D. (1990); Baranov A.N. (2001); Danilenko V. P. (2003);

Demyankov V. Z. (1994); Kostyushkina G. M. (2006 and 2014); Kubryakova E. S. (1992); Petrov V. V. (1988), and Radchenko O. A. (1997).

Despite the numerous studies devoted to these problems, however, many issues remain unexplored. One such issue is the problem of forming linguistic meaning from units which are subjected to rethinking, a concept known as metaphorization. The theory of metaphors and colour metaphorization was previously researched by Arkhangelski V. L. (1964); S. Bally (1961); Vasilevich A. P. (2007); Vezhbitskaya A. (1997); Irishanova O. K. (2001); Culpina V. G. (2001); Laguta O. N. (2003); Lakoff George and Johnson M. (1980 and 2004); Teliya, V. K. (1988); Fauconnier G. (1985), and Khakhalova S. A. (2000).

The study of cognitive mechanisms of meaning generation through the modelling of mental spaces of metaphorically reinterpreted colorations in phraseological units is dictated by the interest of linguistics to the problems of conceptualisation and categorisation of experience through this type of vocabulary. Theory of the linguistic and the speech meaning was investigated by Artyomova, A. F. (1992); Arkhipov I. K. (1997); Kobozeva I. M. (2002); Kolmogorova A. V. (2006); Kunin A. V. (1986); Lebedev M. V. (1998); Leont'ev A. A. (2001); Nikitin M. V. (1996), and Sologub U. P. (2002).

Conceptual metaphorization arises from studying algorithmic meaning making through metaphorically rethought colorations into phraseological units. The study of conceptual metaphorization is also explained by the role of linguistics within problems of conceptualisation and categorisation of experience as specified by vocabulary. A solution to this problem can be determined by a number of factors, first including the theory of linguistic meaning in phraseological units, which involves the process of sequential deployment and integration of mental spaces. Secondly, the components of linguistic and discursive meanings of metaphorical colour names in phraseological units should be aptly identified and described as a possible solution to the problem. The mental spaces of phraseological units with “green” and “zelyoniy” colorations should also be appropriately modelled with recreated sacred, profane and metaphorical spheres. Finally, the study and practice of A.V. Kolmogorova’s discursive analysis technique (2006) will allow for the identification of discursive meaning in speech; through using necessary illustrative conditions and signs, the components of structure that creates meaning can be described, i.e. the image of the sign. The linguistic and discursive meanings of phraseological units with colorations of “green” and “zelyoniy” were evidently described and figuratively matched in the Russian and the English languages.

The revealed cognitive mechanism involved in forming discursive meaning of phraseological units with colour metaphorization confirms the subjective nature of meaning making. The results of this study contribute to the development of a number of theories and ideas previously researched, including the theory of language conceptualisation and categorisation

of experience; the theory of speech activity; the theory of conceptual integration, and the theory of language sign actualisation. The proposed interpretation of the linguistic and discursive meanings of phraseological units with the metaphorically reinterpreted colour names “green” and “zelyoniy” allows for further studies on phraseological colour metaphorization and the modelling of mental spaces with language units.

## Conclusion

This study aimed to identify the cognitive mechanism of colour metaphorization in phraseological units with the reinterpreted names “green” in English and “zelyoniy” in Russian. To achieve this, the roles of colour names, phraseological units and cognitive metaphors in the formation of a naive worldview were determined. Such elements were found to consist of nationally and culturally specific phraseological units with metaphorical names for colours that could fully form certain fragments of a linguistic world picture. Additionally, using such phrases in speech was found to convey certain meanings as intended by the speaker. When considering phraseology from conceptual-categorical and discursive viewpoints, both phraseological meaning and discursive senses were distinguished.

Based on the analysis of definitions and cognitive characteristics, phraseological meaning can be defined as an invariant of information formed through a complex psychological process. This process involves the deployment and fusion of semantically complicated and separately formed elements of phraseology through mental spaces, as well as their interaction and consolidation in consciousness to create mental images of an object.

The mechanism of metaphorization and actualisation of phraseological meanings in a discursive sense is implemented at two algorithmic levels: 1) the conceptual and categorical level, and 2) the speech organisation level. The first cognitive mechanism involves the merging of two mental spaces and their respective elements of phraseological units, one of which is a metaphorically reinterpreted colour term. This reconstruction and integration is impossible without modelling the appropriate mental space for colour naming, which is a purposeful formation within the process of communication and acquisition of knowledge rather than a subconsciously ready-made structure. Within mental spaces exist relatively resilient spheres of human existence, including the sacred, profane and metaphorical spheres. Images of these spheres are activated by the integration of another phraseological element with its respective mental space, thus forming a blend of a phraseological meaning.

This described model of colour metaphorization therefore allows discussion about how metaphorical images of objects in reality are formed, which are the part of the mental space used in colour naming. It is this image that allows us to actualise the linguistic meaning of phraseological units at a conceptual and categorical level.



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