



THE ROLE OF COGNITION IN DECODING COLOR-ENCODED INFORMATION

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Abstract The article looks into the constituent elements of the nominative field of the notion 'COLOUR'. We focus on English lexical elements that denote colours, taking into account their semantic links, hierarchical structures, and contextual usage. The study uses a combination of corpus-based and cognitive semantic methodologies to uncover significant components such as basic colour terms, derived terms, metaphorical extensions, and culturally unique variations. The findings show a complex interplay between language structure, cognitive processes, and cultural influence in developing the nominative field of colour, which contributes to a better understanding of lexical semantics and conceptual representation.

Keywords: concept, field of colour, linguistics, context, cognitive mechanisms, metaphor, metonymy.

RANG BILAN SHIFRLANGAN MA'LUMOTNI DEKODLASHDA KOGNITSIYANING O'RNI

Annotatsiya: Mazkur maqolada "RANG" tushunchasining nominativ maydonini tashkil etuvchi asosiy elementlar ko'rib chiqiladi. Unda ranglarni ifodalovchi inglizcha leksik birliklar semantik aloqalari, ierarxik tarkibi va kontekstual qo'llanilishi e'tiborga olingan. Tadqiqotda korpusga asoslangan va kognitiv semantik metodlardan foydalanilib, asosiy rang terminlari, hosila terminlar, metaforik kengayishlar hamda madaniy jihatdan o'ziga xos bo'lgan rang variantlari kabi muhim tarkibiy qismlar aniqlanadi. Natijalar shuni ko'rsatadiki, rangning nominativ maydonini shakllantirish jarayonida til tuzilishi, kognitiv jarayonlar hamda madaniy ta'sir o'zaro murakkab uyg'unlik hosil qiladi. Bu esa leksik semantika va konseptual tasvirni yanada chuqurroq anglashga hissa qo'shadi.

Kalit so'zlar: konsept, rang maydoni, lingvistika, kontekst, kognitiv mexanizmlar, metafora, metonimiya.

РОЛЬ КОГНИЦИИ В ДЕКОДИРОВАНИИ ИНФОРМАЦИИ, ЗАШИФРОВАННОЙ С ПОМОЩЬЮ ЦВЕТА

Аннотация: В данной статье рассматриваются составные элементы номинативного поля понятия «ЦВЕТ». Основное внимание уделяется английским лексическим единицам, обозначающим цвета, с учётом их семантических связей, иерархических структур и контекстуального употребления. В исследовании применяется сочетание корпусных и когнитивно-семантических методик, позволяющих выявить такие важные компоненты, как базовые термины цвета, производные термины, метафорические расширения и культурно специфические варианты. Результаты показывают сложное взаимодействие языковой структуры, когнитивных процессов и культурного влияния при формировании номинативного поля цвета, что способствует более глубокому пониманию лексической семантики и концептуальной репрезентации.

Ключевые слова: концепт, цветовое поле, лингвистика, контекст, когнитивные механизмы, метафора, метонимия.

Introduction. To completely understand how colours influence cognitive processes and world perception, the analysis of cognitive aspects of color-nominative lexicon necessitates multidimensional methodologies and the consideration of a variety of factors. Language is recognised as a universal cognitive tool, defined as a system of symbols used to represent (encode) and transform information. This system serves as both an external and internal object for the subject. It is produced independently of the individual and then assimilated by him during the course of his development. Language stands apart from other kinds of cognitive activity due to its dual nature.

Literature review. Research in this field contributes significantly to our understanding of human cognitive activity in general, particularly the mechanisms of classification and conceptualisation [Deane 1996].

Cognitive research confirms the tight relationship between language and human perception, as evidenced by the human-centeredness principle used to organise external information. In this context, the cognitive method for analysing colour denotations aims to expose the characteristics of language perception of colour.

When studying colour adjectives, keep in mind that the physiological mechanisms of colour perception play a crucial, but not the sole, role in colour representation. Colour classification is acknowledged as a fluid process that is impacted by cognitive factors. As a result, it is worthwhile to focus scientific inquiry on the systems that link external phenomena to interior human representations.

Categorisation is seen as crucial to cognitive linguistics; the study of categorisation processes is critical for understanding how we think and interact. As we navigate through the physical world, we automatically classify people, animals, and physical items. [Lakoff. 1987].

The creation of categories as a result of contact with the environment is an important factor. The interaction occurs through the human physical body, emphasising how physical experience serves as the foundation for category development. J. Lakoff refers to the approach

as 'empirical realism'. According to this idea, a person's conceptual system is constrained by his or her perceptual, bodily, and social interaction capacities. Abstract thought and imagination, while not necessarily directly tied to physical experience, contribute through mechanisms such as metaphor, metonymy, and analogy. In particular, the concept of 'time' is viewed figuratively as movement [Lakoff, 1990].

Research methodology. For empirical sciences, term semanticisation is required, defined as the discovery of meaning, the process and outcome of reporting the meaning of a word at actualisation, in which the use of a linguistic unit in a given context remains the necessary information about the linguistic unit's meaningfulness.

For fundamental sciences - physical scientific meaning connected with light wave, metaphorically reinterpreted phenomenon, when terminated with the realisation of a feature of a notion from naïve CM. For example, the semantic component of the black colour 'obscurity' is blackbox. Based on the foregoing, we infer that the definition is the primary source of knowledge about a term's conceptualisation in scientific discourse.

As a result, the way humans shape the world around them is linked to their physical structure and the influence of their thinking, as they orient themselves to the features of their own bodies in order to comprehend the characteristics of the external world. As a result, the rules used by humans to order the environment are based on their image of themselves as a model for structuring connections and linkages.

According to E.Rosch and L.Wittgenstein, the traits that define a notion are not inherent in all members of a group, but share a common type. A prototype is a representative of a known category who is the most comparable to other members of that category and shares the fewest characteristics with representatives from other categories. To determine whether an object or idea belongs to a specific category, compare it to a category prototype, which acts as a reference or benchmark (Rosch, 1975).

The concept 'COLOUR' encompasses two types of highlighting. When experiencing and studying the diversity of the surrounding world, a person identifies colour as a psychologically relevant attribute of items. One of the primary functions of this allocation is to classify items based on their colour features in order to differentiate them from comparable objects [Prokhorova, 2006]. There are times when a specific detail of an object that stands out with its distinctive colour against the background of the rest of the portion develops psychological significance.

The ability of humans to focus attention on a conditioned area of an object causes detail to be highlighted. The dynamic aspect of the world around us is reflected in the changes that occur to items during their existence, including changes in their colour qualities, which are of constant and fundamental human interest. According to the notion of spreading activation, activation spreads throughout a network of concepts linked with a given item, and the most relevant (active) element is chosen [Langacker, 1991].

Human knowledge and cognitive processes are complex and multifaceted phenomena that cannot be fully explained by a single discipline. Instead, the study of human knowledge and cognition frequently requires the interaction and consideration of other disciplines, including philosophy, psychology, logic, neuroscience, cultural anthropology, medicine, and languages.

In response, cognitive science evolved, bringing together the efforts of experts from several domains of knowledge. The essence of science is the study of world knowledge, with a focus on solving a wide range of problems connected to information acquisition, processing, storage, retrieval, and use [Kubryakova, 1997]. Cognitive science is the study of cognition as a person's ability to perceive, comprehend, recall, and apply knowledge. Science also takes into account the outcomes of this ability, namely, direct knowledge and impressions of the surrounding world. To actualise this skill, a person employs specific structures and mechanisms that enable him or her to gather information about reality [Demyankov, 1994].

Cognitive linguistics should be studied in order to have the most explicit and natural access to cognitive processes and mechanisms. Language allows us to learn about the structures of consciousness and provide a brief account of each of these sciences in natural language [Kubryakova, 2010].

The cognitive-discursive approach in the study of colour denotations entails a thorough examination of linguistic units relevant to colour description through the integration of cognitive and discursive elements. This approach is founded on the idea that color-nominant linguistic units and concepts in language are more than just descriptions of shades; they also reflect the distinctive perception, classification, and interpretation of colour in various cultural and linguistic settings.

Results and analysis. One of the most important areas of cognitive-discursive research is determining the involvement of cognitive mechanisms in the production of language representations of colour. It recognises that colour perception and interpretation are culturally and linguistically conditioned processes that are determined not only by physical colour characteristics, but also by mental representations, associations, and categorisations formed through interaction with the surrounding world and other native speakers.

To analyse colour denotations using a cognitive-discursive approach, it is necessary to consider not only the lexical features of a specific language's colour lexicon, but also their relationship with cognitive concepts, metaphors, metonymies, cultural stereotypes, and discursive strategies within a clearly defined language community.

The cognitive-discursive study is a theoretical paradigm for studying language that holds that every act of linguistic communication combines cognitive and discursive features. The approach described above for analysing colour denotations in language allows us to understand colour as a socio-cultural phenomenon displayed through language and impacting world meaning.

Cultural contexts, which examine how colour lexemes reflect meanings and representations in different cultures, as well as what connections a colour like 'red' elicits in different cultures and how these influence language expression.

Discursive methods involve the study of colour within discourse to produce unmistakable associations, emotive colouring, or metaphorical imagery, as well as the use of colour terminology to underline established concepts or create visuals.

The semantics of colour nomenclature in the context of language and culture. The study of semantic variations between colours in different languages and their impact on perception of the environment.

As a result, cognitive-discursive principles allow us to view colour denotations not just as language units, but also as a reflection of cultural, cognitive, and discursive processes that shape communication and perception of the world. The cognitive-discursive approach allows us to analyse colour denotations as part of the language picture of the world, reflecting the specific perception and interpretation of colour via the lens of cognitive processes, discursive techniques, and cultural and linguistic differences.

Conclusions. The cognitive-discursive technique emerged as one of the primary study lines in Russian linguistics, contributing to a better understanding of speech generation and perception processes, as well as the interplay of language and cognitive processes. The technique is distinguished by the fact that language is viewed as a form of cognitive activity, with knowledge structures functioning as mental representations. At the same time, it is critical to recognise that language forms not only represent knowledge, but also actively contribute to its development and alteration.

At the same time, cognitive-discursive analysis emphasises discursive action, which is the process of producing and hearing speech in a variety of circumstances. The study of language in this approach takes place within the framework of discursive activity, allowing us to understand how human knowledge is objectified and modelled in linguistic forms, as well as how it is extracted from them.

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