IQRO JURNALI , IQRO JOURNAL, ИКРО ЖУРНАЛИ
ISSN:2181-4341| wordlyknowledge.uz/index.php/iqro
Volume 22 Issue 02 IYUL 2026

MENTAL LEXICON FROM A COGNITIVE LINGUISTIC PERSPECTIVE

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https://doi.org/10.5281/zenodo.21693815

Annotation: This article examines the concept of the mental lexicon from the perspective of cognitive linguistics. It explores how lexical knowledge is organized, stored, and accessed through conceptual structures and cognitive processes rather than as isolated linguistic units. Particular attention is given to categorization, semantic networks, frame semantics, conceptual metaphor, and cognitive grammar as theoretical foundations for explaining the organization of the mental lexicon. The findings demonstrate that lexical knowledge is dynamic, experience-based, and closely connected with conceptualization and human cognition. The study highlights the importance of cognitive linguistic approaches for psycholinguistics, language acquisition, discourse analysis, translation studies, and artificial intelligence.
Keywords: mental lexicon, cognitive linguistics, lexical semantics, conceptualization, semantic networks, frame semantics, cognitive grammar, language processing.

Annotatsiya: Mazkur maqolada mental leksikonning kognitiv tilshunoslik nuqtai nazaridan tashkil topishi va faoliyati tahlil qilinadi. Tadqiqotda leksik bilimlarning inson ongida alohida birliklar sifatida emas, balki konseptual tuzilmalar va kognitiv jarayonlar orqali tashkil etilishi yoritiladi. Shuningdek, kategoriyalash, semantik tarmoqlar, freym semantikasi, konseptual metafora va kognitiv grammatikaning mental leksikonni shakllantirishdagi o‘rni tahlil qilinadi. Natijalar mental leksikon tajriba va konseptualizatsiyaga asoslangan dinamik kognitiv tizim ekanligini ko‘rsatadi.
Kalit so‘zlar: mental leksikon, kognitiv tilshunoslik, leksik semantika, konseptualizatsiya, semantik tarmoqlar, freym semantikasi, kognitiv grammatika, tilni qayta ishlash.

Аннотация: В статье рассматривается организация и функционирование ментального лексикона с позиций когнитивной лингвистики. Анализируется представление лексических знаний как динамической системы концептуальных структур и когнитивных процессов, а не как набора изолированных языковых единиц. Особое внимание уделяется категоризации, семантическим сетям, фреймовой семантике, концептуальной метафоре и когнитивной грамматике как основным механизмам организации ментального лексикона. Результаты исследования показывают, что ментальный лексикон основан на человеческом опыте, концептуализации и когнитивной обработке информации.
Ключевые слова: ментальный лексикон, когнитивная лингвистика, лексическая семантика, концептуализация, семантические сети, фреймовая семантика, когнитивная грамматика, обработка языка.

Introduction

The mental lexicon is one of the central concepts in cognitive linguistics and psycholinguistics, referring to the way lexical knowledge is represented, organized, and accessed in the human mind. Unlike traditional linguistic theories that describe vocabulary as a list of independent lexical items, cognitive linguistics views the mental lexicon as an interconnected

conceptual network grounded in human experience and cognitive processes (Evans & Green, 2006). Lexical knowledge is acquired through interaction with the environment and is continuously reorganized as new experiences and conceptual relationships emerge. Consequently, words are linked through semantic associations, categorization, frame structures, and metaphorical mappings rather than existing as isolated units (Langacker, 2008). Recent developments in cognitive science and neuroscience have further demonstrated that lexical processing involves complex cognitive mechanisms such as conceptual activation, semantic priming, categorization, and memory retrieval. These findings have expanded the application of mental lexicon research to psycholinguistics, language acquisition, discourse analysis, translation studies, and artificial intelligence. This study aims to investigate the organization of the mental lexicon from the perspective of cognitive linguistics and to analyze the cognitive mechanisms underlying lexical representation and meaning construction.

Literature Review

Research on the mental lexicon has increasingly shifted toward cognitive explanations of lexical organization. Aitchison (2012) argues that lexical knowledge is organized as an interconnected semantic network rather than a simple mental dictionary. Words are connected through meaning, experience, and conceptual relations, allowing efficient retrieval during language use. Fillmore's (1982) Frame Semantics explains that lexical items activate conceptual frames containing background knowledge necessary for interpretation. Similarly, Lakoff (1987) demonstrates that categorization and prototype structures influence the organization of lexical concepts and semantic relationships. Langacker (2008) emphasizes that lexical meaning cannot be separated from conceptualization because linguistic units represent cognitive structures grounded in experience. Evans and Green (2006) further argue that the mental lexicon reflects embodied cognition and conceptual organization rather than purely formal linguistic information. Recent interdisciplinary studies in psycholinguistics and cognitive neuroscience support these theoretical approaches by showing that lexical access involves distributed neural networks associated with semantic memory, conceptual processing, and contextual interpretation.

Research Methodology

This study adopts a qualitative research design based on descriptive, analytical, and comparative methods. Academic books, peer-reviewed journal articles, and theoretical studies related to cognitive linguistics, psycholinguistics, and lexical semantics were reviewed. The analysis focuses on semantic network theory, Frame Semantics, Prototype Theory, and Cognitive Grammar as theoretical frameworks explaining the organization of the mental lexicon (Fillmore, 1982; Lakoff, 1987; Langacker, 2008). The collected data were analyzed thematically to identify the cognitive mechanisms responsible for lexical storage, semantic activation, and conceptual representation.

Results and Discussion

The analysis demonstrates that the mental lexicon is organized as a dynamic conceptual network rather than a static collection of words. The findings indicate that lexical items are connected through semantic relations, conceptual categories, frame structures, and experiential knowledge, enabling efficient lexical access during language processing (Aitchison, 2012). The study reveals that Prototype Theory plays a significant role in lexical organization. Speakers classify lexical concepts around prototypical examples rather than fixed definitions, making lexical retrieval flexible and context-sensitive (Lakoff, 1987). Likewise, Frame Semantics explains that words activate broader conceptual structures, allowing listeners and readers to interpret meanings through shared background knowledge (Fillmore, 1982). Furthermore, the findings confirm that Cognitive Grammar views lexical meaning as inseparable from conceptualization. Words function as symbolic units connected with cognitive processes, perception, and embodied experience rather than existing independently of human cognition

(Langacker, 2008). Semantic networks also facilitate conceptual metaphor and inferencing, strengthening lexical connections across different conceptual domains. The research additionally highlights the interdisciplinary significance of mental lexicon studies. Cognitive models of lexical organization are widely applied in psycholinguistics, language acquisition, bilingualism, translation studies, corpus linguistics, and Natural Language Processing. These applications demonstrate that understanding the cognitive organization of the mental lexicon contributes to more effective language teaching, computational language modeling, and semantic interpretation. Overall, the findings confirm that cognitive linguistics provides a comprehensive framework for explaining lexical knowledge as a dynamic conceptual system.

Conclusion

This study examined the organization of the mental lexicon from the perspective of cognitive linguistics. The findings confirm that lexical knowledge is represented as an interconnected conceptual network shaped by categorization, semantic relations, embodied experience, and cognitive processing rather than as isolated lexical entries. The analysis demonstrates that Prototype Theory, Frame Semantics, Cognitive Grammar, and semantic network models collectively explain how lexical meanings are stored, activated, and interpreted. These theories reveal the close interaction between language, cognition, memory, and conceptual knowledge. Future research should investigate the mental lexicon in multilingual communication, psycholinguistics, neurolinguistics, corpus linguistics, and artificial intelligence. Such interdisciplinary studies will contribute to a deeper understanding of lexical processing and further advance cognitive linguistic theory.

References

1. Aitchison, J. (2012). Words in the mind: An introduction to the mental lexicon (4th ed.). Wiley-Blackwell.
2. Evans, V., & Green, M. (2006). Cognitive linguistics: An introduction. Edinburgh University Press.
3. Fillmore, C. J. (1982). Frame semantics. In Linguistics in the Morning Calm (pp. 111–137). Hanshin Publishing.
4. Lakoff, G. (1987). Women, fire, and dangerous things: What categories reveal about the mind. The University of Chicago Press.
5. Langacker, R. W. (2008). Cognitive grammar: A basic introduction. Oxford University Press.
6. Levelt, W. J. M. (1989). Speaking: From intention to articulation. MIT Press.
7. Croft, W., & Cruse, D. A. (2004). Cognitive linguistics. Cambridge University Press.