ISSN:2828-6235
Impact factor:13.77

International Journal of Literature and Language Studies(IJLLS)

CHARACTERISTICS OF ASSOCIATIVE FIELD FORMATION BASED ON SEMANTIC OPPOSITION

Akhmedova Nargiza Shikhnazarovna,
Associate Professor at Oriental University, Candidate of Philological Sciences
E-mail: ashnargiza@gmail.com
https://orcid.org/0009-0000-4508-4381

Abstract. This article is dedicated to one of the pressing issues in psycholinguistics: the study of antonyms as associative-verbal structures within the linguistic consciousness. Based on empirical data, the paper analyzes antonymy not merely as a linguistic universal, but as a psychological mechanism inherent in the human psyche. The article provides a scientific rationale for the results of the associative experiment, the nature of linguistic consciousness, and the cueing function of contrasting core concepts in triggering one another.

Keywords: linguistic consciousness, antonyms, associative-verbal structure, associative field, associative experiment, semantic memory, psycholinguistics.

Modern anthropocentric linguistics proposes new paradigms in investigating the cognitive system and the problems of linguistic consciousness. Within the human mind, the linguistic picture of reality is preserved not in a fragmented state, but rather within a specific systemic integrity – namely, in the form of associative-verbal networks. As noted by the prominent psycholinguist A.A. Zalevskaya, the human mental lexicon is not merely a repository of words, but a continuously dynamic and complex cognitive system.

One of the most potent cognitive mechanisms ensuring the stability of this system, its structural centers, and the high speed of information processing within it, is antonymy. While traditional linguistics studied antonyms merely as lexical units with opposite meanings entering into paradigmatic relations, in the psycholinguistic dimension, they emerge as anchor points of human semantic memory and as a leading systematizing tool that shapes the associative field.

Within the language system, antonyms operate not only as lexical units expressing opposite meanings, but also as vital semantic mechanisms shaping conceptual oppositions in human cognition. Humans frequently perceive reality through contradictions: contrasting concepts such as good – bad, light – dark, and life – death constitute the categorical foundation of thought. Consequently, the phenomenon of antonymy manifests as one of the central structural elements of the associative field. The objective of this article is to experimentally and theoretically substantiate the role of antonyms in forming the core of the associative field within linguistic consciousness, their mechanisms for generating associative-verbal structures, as well as their specific characteristics within the conceptual system of the Uzbek language. The formation of associative fields in linguistic consciousness and their internal structural organization have been investigated in psycholinguistics by such scholars as N.O. Tarasov, A.A. Zalevskaya, and R.M. Frumkina.

An associative field is a system of semantic, emotional, and cultural relations that arises in the mind of a native speaker in connection with a specific concept. Antonyms regulate conceptual thinking and clarify semantic boundaries by establishing oppositional relations within this system. This is because any concept is often more precisely comprehended through its opposing pair. For instance, the concept of "goodness" exists in opposition to the category of "evil," with each semantically activating the other.

Psycholinguistic research demonstrates that the human brain perceives and processes antonymic pairs more rapidly than other semantic relations. This confirms that antonyms possess a cognitively superior associative strength. Particularly within the semantic memory system, antonymic units form robust neuro-associative bonds with each other. As a result, one concept automatically evokes its opposing unit within consciousness.

"Within the human mental lexicon, words form a chain based on the phenomenon of mutual cognitive priming – or elicitation – and the law of spreading activation. The essence of this model lies in the fact that when a specific word is activated within the neural network of the human brain, its signal propagates like a stone thrown into water, spreading to other concepts located within the closest semantic distance and subsequently mobilizing them" [Collins, A. M., & Loftus, E. F. 1975: 420].

In traditional structural linguistics, antonyms are viewed merely as an internal phenomenon of the language system. From a psycholinguistic perspective, however, contradiction constitutes a fundamental, gnoseological law of human perception. Humans comprehend the world through criteria of perception and binary oppositions, such as high–low or existence–nonexistence. Within linguistic consciousness, the essence of an object or a concept becomes more closely materialized through the negation of its opposite or by comparison to it.

From the standpoint of cognitive linguistics, antonyms are unified under a single common hyponymic field. For instance, the superordinate concept (hypernym) for the units "oq" (white) and "qora" (black) is the field of "rang" (color). When a retrieval process is initiated in the mind, the brain is directed toward the word that possesses the highest contrast and the shortest cognitive distance within that specific field. Consequently, from a cognitive linguistic perspective, antonyms are linguistic units that manifest binary oppositions in human cognition. Through them, an individual organizes existence, evaluates reality, and constructs a conceptual map. For this reason, it is appropriate to evaluate antonyms not merely as simple lexical oppositions, but as a universal semantic mechanism that generates complex associative relations between thought and language.

If we focus on the analysis of materials from the free association experiment conducted with the participation of higher education students, it is evident that the function of antonyms to evoke one another within the associative field is remarkably high. For instance, within the associative field of the stimulus word "kun" (day), the response "tun" (night) was recalled by 68% of the participants; that is, the word "kun" activated the unit "tun/kecha" (night/evening) – its antonym – within the consciousness of the subjects. Thus, the antonymous word functions as the core of the associative field.

When analyzing the stimulus word "yaxshi" (good), which reflects human evaluative attitudes, the following cognitive picture was observed: – yaxshi – yomon (good – bad) (72%) [absolute core – antonymic opposition]; – yaxshi – odam (good – person) (12%) [near-core – syntagmatic cognitive connection]; – yaxshi – do'st / bola (good – friend / child) (8%) [near-core – semantic proximity and syntagmatic connection]; – yaxshi – baho / amallar (good – grade / deeds) (6%) [periphery – cultural-connotative]; — unanswered (2%).

Such a remarkably high rate of reverse reaction (the antonym) in words with a positive semantic evaluation is linked to the "cognitive asymmetry" in the human brain. From a neurolinguistic perspective, positive and negative poles are situated along the same coordinate within human consciousness, and when the positive pole is presented, the negative pole emerges first in order to balance it [Zalevskaya A. A. 1990: 106].

The capacity of action-denoting verbs to shape an associative field exhibits a specific dynamic compared to nouns and adjectives. Although it was hypothesized that syntagmatic connections would be stronger in verbs (e.g., qayerga kelmoq? – uyga kelmoq / where to come? – to come home), the experimental results nonetheless demonstrated the predominance of the antonymic pair (ketmoq / to go) in 55% of cases. This outcome scientifically proves that the direction of action is also encoded within a two-poled measurement system in human consciousness.

When examining the associative field of the word "do‘st" (friend), which holds a distinct linguacultural value within the mentality and linguistic consciousness of the Uzbek people, the results emerged as more complex than anticipated. Specifically, within the responses given to the stimulus word "do‘st", the following data were identified: "dushman" (enemy) constituted 48%, "sodiq/sirdosh" (loyal/confidant) 22%, "birodar/og‘ayni" (brother/companion) 18%, "sotqin/xiyonat" (traitor/betrayal) 10%, and unanswered cases accounted for 2%. In this analysis, the antonymic reaction (dushman) demonstrated a rate below 50%. The reason for this lies in the remarkably high cognitive, emotional, and social load carried by the concept of "friend" within the national linguistic consciousness. Nevertheless, it still remains at the core of the field. Conversely, peripheral associations such as sotqin (traitor) and xiyonat (betrayal) are the results of the influence exerted by the subjects' personal, real-life observational experiences on the conceptual formation within their linguistic consciousness.

In order to verify and further enrich our theoretical and experimental conclusions, we consulted data from the Uzbek National Corpus. The co-occurrence frequency of words within a corpus manifests the objectified state of linguistic consciousness in texts. The statistics of the highest-frequency antonymic pairs identified through the corpus analysis revealed the following: the collocation "katta-kichik" (big-small) appeared in 89% of cases, "yaxshi-yomon" (good-bad) in 76%, and "kecha-kunduz" (night-day) in 61% of the texts. The occurrence of antonyms in such close proximity or within the same syntactic structure with such high frequency in a textual environment is not coincidental. A text is the externally realized form of linguistic consciousness. Whichever associative network is robust within the mind, those exact connections materialize within the spoken or written discourse. The corpus analysis enables us to comprehensively verify the results of our associative experiment and scientifically confirm its objectivity.

The empirically obtained results reveal new and fundamental facets of the psycholinguistic field theory. Within the associative field, antonyms do not merely elicit a linear reaction; rather, they function as a "cognitive magnet" that sustains the structural integrity of the entire system. Explaining the organization of words within the human mental lexicon, the linguist A.A. Zalevskaya notes that antonyms constitute the most stable and nuclear component of the associative field, primarily because they possess the shortest associative pathway in the brain [Zalevskaya, A. A. 1990: 176].

Karaulov, widely recognized as the founder of the Russian Associative Thesaurus, asserts that positive and negative stimulus words are interconnected like "twin poles"; when one pole is presented, the other emerges on the surface "like a magnet" to maintain systemic equilibrium [Karaulov, Y. N.: 88].

The underlying reasons for antonyms being recalled first in response to a stimulus word within an associative experiment can be outlined as follows:

1.Semantic Commonality (Semantic Invariance) and the Principle of Minimal Differentiation. Antonymic pairs belong to a single conceptual field, and their mutual distinction is manifested

through only a single distinctive feature. Consequently, as soon as the retrieval mechanism of semantic memory enters this common semantic domain, it immediately transmits an impulse to the closest and most sharply contrasting point.

2.The Law of Linguistic Economy. Human cognition tends to encode information within a binary system. In linguistic consciousness, antonyms optimize energy consumption, enabling rapid categorization and evaluation of reality.

3. Psycholinguistic Impulse and Associative Equilibrium. Experiments demonstrate that if the antonymic relationship between words is mutually symmetrical – meaning the first word immediately evokes the second, and the second word immediately recalls the first – then their degree of cognitive integration within the brain reaches its peak.

4.Scholars also point out that a stimulus word does not exclusively evoke its dictionary antonym, but may also activate opposing units that exist within the consciousness of native speakers though unrecorded in standard lexicons. The linguist Ovchinnikova states that the emergence of an antonym in the generation of verbal associations is observed in approximately 30% of cases. According to her, verbal associations constitute one of the most durable and deep-seated semantic structures within the human psyche. It is precisely due to this mechanism that words such as eshik – deraza (door – window), qiz bola – o‘g‘il bola (girl – boy), ish – bekorchilik (work – idleness), izlamoq – yo‘qotmoq (to seek – to lose), aldov – haqiqat (deceit – truth), ichmoq – yemoq (to drink – to eat), yordam bermoq – xalaqit bermoq (to help – to hinder), ish – dam olish (work – rest), ovoz – pichirlash (voice – whisper), tog‘ – jarlik (mountain – abyss), shahar – qishloq (city – village), and olov – suv (fire – water) are juxtaposed against one another. As a consequence, a single word can possess multiple antonymic components [Ovchinnikova, I. G.: 28].

Based on the points discussed above, when addressing antonymic pairs, it is appropriate to interpret them not through the traditional definition as mere labels for contradictions within a single essence, but rather as entities that are mutually juxtaposed and understood as opposites within the consciousness of native speakers. In this regard, there is ample ground to assert that the linguistic antonymy system presented in conventional dictionaries can be enriched with data from associative antonymy. The intermediate state, furthermore, is represented by the phenomena of occasional (contextual) antonymy, which manifest extensively in both spoken speech and literary texts.

In an associative experiment, the "surfacing" of an antonymic component within the perceiving consciousness is a natural phenomenon; however, this component does not necessarily have to be expressed through a specific lexical unit that matches the antonym provided in the text. It is entirely possible that the contrasting component of the antonymic pair may not be lexically actualized [Vvedenskaya, L. A.]. "Occasional antonyms," writes V.A. Maslova, "seemingly emerge precisely during the process of actualizing probabilistic, implicit (hidden) features. Furthermore, the further removed the actualized features are from explicit ones, the more unexpected and strictly contextual the resulting contradictions become" [Maslova 1980: 105].

In conclusion, within a psycholinguistic interpretation, the opposition between linguistic and contextual antonymy is eliminated – that is, it dissolves – because these are branches of a single linguistic universal. Antonymy is not merely a linguistic universal, but a psychological one. Specifically, for "associative antonyms," criteria such as grammatical part-of-speech homogeneity are no longer unquestionably valid. As for the specific characteristics of texts that emerge based on antonymic associates in oral and written speech, as well as in experimental settings, their comprehensive analysis must undoubtedly take into account a series of text-specific parameters –

whereby the text is understood as one of the primary mechanisms for revealing the content of human linguistic consciousness.

Based on the aforementioned insights, it can be asserted that antonyms are the primary cognitive-psycholinguistic tool that shapes the associative field and stabilizes its microstructure within linguistic consciousness [Akhmedova, 2025: 528]. This psycholinguistic attribute of antonymy demonstrates that human semantic memory possesses a binary structure, and that information processing within linguistic consciousness relies on mechanisms of contrast and opposition.

Consequently, antonyms serve as one of the foundational instruments in forming the associative field, playing a vital role in semantic opposition, cognitive categorization, emotional evaluation, and the organization of cultural concepts.

Foydalanilgan adabiyotlar :

1. Залевская А. А. Введение в психолингвистику. – М.: РГГУ, 2000. – 382 с.
2. Залевская А.А. Слово в ментальном лексиконе человека: психолингвистическое исследование. – Л.: ЛГУ, 1990. – 176 с.
3. Караулов, Ю. Н. Активная грамматика и ассоциативно-вербальная сеть. – Москва, 1999. – 180 с.
4. Тарасов Е. Ф. Языковое сознание – перспективы исследования // Вестник психолингвистики. – М., 2005. – № 2. – С. 4-15.
5. Collins A. M., Loftus E. F. A spreading-activation theory of semantic processing // Psychological Review. – 1975. – Vol. 82. – No. 6. – P. 407-428.
6. Овчинникова И.Г. Ассоциативный механизм в речемыслительной деятельности. Автореферат диссертации…доктора филологических наук. – СПб., 2002.
7. Mahmudov N. Tilning mukammal tadqiqi yo‘llarini izlab... // O‘zbek tili va adabiyoti. – Toshkent, 2012. – № 3. – B. 3-16.
8. Введенская Л.А. Словарь антонимов современного русского языка. – М., 2003.
9. Маслова В.А. Принцип противопоставления и его реализация в системе языка (на материале лексических единиц). Диссертация на соиск.уч.степ.кандидата филол.наук. – Ош, 1980. – 151.
10. O‘zbek tili milliy korpusi materiallari (uzcorpora.uz).
11. Ахмедова Н. Ш. Место антонимов и синонимов в ассоциативном поле // Бюллетень науки и практики. 2025. Т. 11. №2. С. 525-529. https://doi.org/10.33619/2414-2948/111/66
12. Akhmedova N. The role of the concept in the formation of the associative field in the uzbek language / The multidisciplinary journal of science and technology, Volume-4, ISSUE-12 (2024): ISSN: 2582-4686 (SJIF 2024 – 6.875. ResearchBib IF: 8.848) P.1263-1266.
13.Akhmedova N. The Role of Associative Units in the Creation of the Uzbek Language Corpus // European Journal of Innovation in Nonformal Education (EJINE) Volume 4 | Issue 5 | May - 2024 ISSN: 2795-8612, P 26-29
14.Akhmedova N. The Associative Field Of Words Denoting Evaluation In The Uzbek Language // American Journal of Science and Learning for Development. – Volume. 2 No 12 (2023): ISSUE 12. ISSN – 2835-2157. P11-114