



**ЯЗЫКИ НАРОДОВ ЗАРУБЕЖНЫХ СТРАН (С УКАЗАНИЕМ КОНКРЕТНОГО ЯЗЫКА ИЛИ ГРУППЫ ЯЗЫКОВ)/LANGUAGES OF PEOPLES OF FOREIGN COUNTRIES (INDICATING A SPECIFIC LANGUAGE OR GROUP OF LANGUAGES)**

DOI: <https://doi.org/10.60797/RULB.2026.81.11> EDN: GQPNXF

**A CORPUS-BASED STUDY OF THE ENGLISH POLYSEMANTIC LEXEME**

Research article

**Koltakova S.V.<sup>1</sup>, Malykhina N.I.<sup>2,\*</sup>**

<sup>1</sup>ORCID : 0000-0002-7089-4092;

<sup>1,2</sup> Air Force Academy named after Professor N.E. Zhukovsky and Y.A. Gagarin, Voronezh, Russian Federation

\* Corresponding author (kni.07[at]mail.ru)

Suggested: 01.07.2026; Accepted: 27.08.2026; Published: 09.09.2026

**Abstract**

This article examines the communicative relevance of sememes and their lexico-grammatical variants within a polysemantic English lexeme. The study is motivated by the necessity to reconsider conventional lexicographic entries, which frequently fail to reflect the dynamics of the actual word usage — an issue of critical importance for advancing lexicographic methodologies and foreign-language teaching practices in professional settings. Employing a comparative-parametric framework, the research demonstrates that the number of communicatively relevant sememes is lower than that recorded in dictionaries and that sememes catering to routine communicative needs exhibit the highest degree of communicative frequency.

**Keywords:** polysemy, communicative relevance, actual semanteme.

**КОРПУСНОЕ ИССЛЕДОВАНИЕ ПОЛИСЕМАНТИЧНОЙ АНГЛИЙСКОЙ ЛЕКСЕМЫ**

Научная статья

**Колтакова С.В.<sup>1</sup>, Малихина Н.И.<sup>2,\*</sup>**

<sup>1</sup>ORCID : 0000-0002-7089-4092;

<sup>1,2</sup> Военно-воздушная академия имени профессора Н.Е. Жуковского и Ю.А. Гагарина, Воронеж, Российская Федерация

\* Корреспондирующий автор (kni.07[at]mail.ru)

Предложена: 01.07.2026; Принята: 27.08.2026; Опубликовано: 09.09.2026

**Аннотация**

В данной статье рассматривается коммуникативная релевантность семем и их лексико-грамматических вариантов в составе полисемантической английской лексемы. Актуальность работы обусловлена назревшей потребностью в пересмотре традиционных словарных описаний, которые зачастую не отражают динамики реального словоупотребления, что крайне важно для совершенствования лексикографической практики и методов преподавания иностранного языка для профессионального общения. Исследование, проведенное в рамках сопоставительно-параметрического метода, показывает, что коммуникативно релевантных семем меньше, чем зафиксированных в словарях; семемы, обслуживающие повседневные коммуникативные нужды, демонстрируют наибольшую коммуникативную востребованность.

**Ключевые слова:** полисемия, коммуникативная релевантность, актуальная семантема.

**Introduction**

The problem of polysemy has always occupied a central position in both Russian and foreign linguistics, generating a substantial body of research conducted within diverse theoretical paradigms — from structural-semantic and lexicographic approaches to cognitive, corpus-based and usage-oriented frameworks [16], [19], [22]. Recent years have witnessed a growing emphasis on empirical validation of semantic theories through corpus data, with researchers increasingly combining quantitative analysis with qualitative interpretive procedures [17], [20]. Despite this wealth of scholarly attention, lexicographic descriptions continue to exhibit a systematic lag behind the dynamic, evolving nature of actual language use, where the communicative frequency of individual meanings shifts under the influence of extra-linguistic factors. Dictionary entries often fail to capture the dynamic evolving nature of the language. Therefore, studying the actual meanings used in speech is gaining importance. This research is relevant for updating lexicographic sources and methods of teaching foreign languages for professional communication, especially in domains where terminological and general-purpose meanings interact. This line of research aligns with the broader trend in usage-based linguistics, which posits that language structure emerges from language use and that frequency of occurrence is a key determinant of cognitive representation [15], [18], [21].

The present study is carried out within the framework of the concept of lexical-grammatical polysemy developed by M.A. Sternina (Voronezh linguistic school). This approach is adopted because it offers an integrative view of polysemy that unites the lexical and grammatical levels of language.

The object of this study is the English lexeme *order*.

The subject is the communicative relevance (frequency) of its sememes and lexical-grammatical variants of sememes.



The aim is to identify the communicative relevance of sememes and lexical-grammatical variants of sememes of the semanteme *order* and compare these findings with its lexicographic description.

### Research methods and principles

To achieve the goal, the following tasks have been set: analyzing dictionary entries [11], [12], [13] to compile an integrated lexicographic meaning [8], sampling and analyzing 500 contexts from Reverso Context, describing the actual semanteme, calculating the *Index of Communicative Relevance (ICR) of sememes within a semanteme* (the ratio of the number of occurrences of a sememe to the total number of occurrences of the lexeme) [4, P. 6] and its *lexical-grammatical variants of a sememe within a semanteme* (the ratio of the number of occurrences of lexical-grammatical variants representing a particular part of speech seme to the total number of occurrences of that sememe) [6, P. 9-10]; comparing the frequency of non-terminological (general) and terminological sememes; and interpreting the results in the context of dynamic language processes.

The choice of Reverso Context as the empirical basis for the study was determined by its balanced representation of contemporary written and spoken registers. While the platform has been less frequently used in academic corpus linguistics than established resources such as the BNC, for example, it offers several practical advantages for studies of lexical semantics:

- 1) it presents authentic contextualized examples taken from various text types;
- 2) it is freely accessible;
- 3) it provides a sufficient number of examples.

While analyzing the extracted samples, we came across certain limitations, namely inappropriate machine translation and inaccuracies. It seemed to be reasonable to rely on our linguistic intuition to verify sememe differentiation of the polysemantic word under discussion. Nevertheless, the platform has proved to be a valid source of a representative sample of naturally occurring discourse that enables testing M.A. Sternina's approach.

### Main results

The theoretical basis rests on the works in semantics, terminology and polysemy theory. Special emphasis has been placed on the differentiation of terms and commonly used words. While D.S. Lotte stated that terms should be unambiguous and system-bound [5], scholars like A.I. Moiseev [7] and E.I. Golovina [1] acknowledge that terms often demonstrate polysemy and synonymy. Our study confirms that *order* functions as a consubstantial lexeme (the term of S.V. Grinev-Grinevich [2, P. 27]), appearing in both everyday and professional speech. This observation supports recent findings that many specialized terms broaden their meanings and are used in ordinary speech, contradicting the outdated idea that terms must always be clear and single-meaning [14], [23].

Following M.A. Sternina's approach, we treat cases where a unit functions as different parts of speech not as homonymy but as *lexical-grammatical polysemy*. The latter can be of two types: *proper lexical-grammatical polysemy* (different lexical meanings correspond to different lexical-grammatical semes) or *lexical-grammatical variance* (one set of lexical semes corresponds to multiple lexical-grammatical semes) [9].

We employed a comprehensive approach combining comparative-parametric [10], contextual and component analysis methods. The quantitative criteria minimize subjective interpretation. From 500 contexts extracted from Reverso Context, each usage was matched to a specific sememe from the integrated dictionary definition (i.e. 27 sememes in the analyzed semanteme).

Our analysis of *order* has identified 20 sememes demonstrating proper lexical-grammatical polysemy (1 sememe — at the level of a verb, 19 — at the level of a noun) and 7 sememes demonstrating lexical-grammatical variance (at the level of a verb and a noun). Furthermore, the semanteme *order* contains 12 terminological sememes (e.g., *polit.* "system, state structure", etc.), 8 consubstantial sememes (e.g., "warrant, permit", etc.), and 7 general-purpose sememes (e.g., "to restore to working order/working order", etc.).

The contextual analysis has revealed an actual semanteme (that includes only those sememes that are communicatively relevant in contemporary speech [3, P. 4]) containing 15 communicatively relevant sememes. The ICR revealed a discrepancy between lexicographic representation and the actual usage of sememes. The most frequent sememe, demonstrating lexical-grammatical variance, is "to purchase / purchase" with the ICR of 25% (the ICR of its verbal lexical-grammatical variant is 1%, while the ICR of its substantive lexical-grammatical variant is 24%). Substantive sememes and variants are overwhelmingly more frequent than the verbal ones. Only one independent verbal sememe ("to manage, regulate") has been identified with zero ICR. The most frequent verbal lexical-grammatical variant is the one of the sememe "to order, request (in a restaurant, cafe) / order, request (in a restaurant, cafe)" (7,6% / 4,6%). All other verbal lexical-grammatical variants indicate their communicative irrelevance since their ICR equals zero.

Regarding special vs. non-special meanings, the latter show the highest communicative potential. The highest communicative frequency indices are observed for the commonly used substantive lexical-grammatical variant (24%) of the sememe "to order, purchase / order, purchase"; a substantive sememe "system (established order)" (18,6%), etc. Terminological meanings show lower demand: the most frequent ones are *polit.* "the state system" (6,2%) and *mil.* "to order, to command" (2,6%), etc.

### Discussion

The comparison with lexicographic sources shows that some previously recorded sememes (e.g., *relig.* "a group of people who join together for religious or similar reasons and live according to particular rules") are practically absent from the modern speech. Conversely, meanings related to economics, politics and daily life are becoming more common reflecting current social concerns.

We consider it reasonable to introduce the cumulative index of communicative relevance of *commonly used / terminological / consubstantial* sememes and their lexical-grammatical variants within a semanteme (the sum of index



values of communicative relevance of *commonly used / terminological / consubstantial* sememes and their lexical-grammatical variants within a semanteme). The cumulative ICR for commonly used sememes is 78,2%, for consubstantial — 12,6% and for terminological — 9,2% reflecting the lexical system's fundamental property: the core of polysemantic words is formed by commonly used meanings serving everyday communication, while special meanings occupy peripheral positions and are mainly activated in professional contexts. Despite the significant number of terminological substantive sememes in the semanteme, their ICR values are extremely low.

Based on the ICR values, we propose the following semanteme organization:

– *The core* of a semanteme is formed by sememes with the ICR that is more than or equal to 15%: a commonly used sememe demonstrating lexical-grammatical variance "to purchase / purchase" (25% where 1% is the ICR of its verbal lexical-grammatical variant, 24% — of its substantive lexical-grammatical variant); a substantive commonly used sememe "system, established order" (18,6%).

– *The close periphery* contains sememes with the ICR that is between 5% and 15%: a substantive lexical-grammatical variant "to arrange / arrangement" (12,8%); a substantive lexical-grammatical variant of the sememe "to restore to working order / working order, condition" (5,8%); terminological substantive sememe *polit.* "system, state structure" (6,2%) which by our criteria also falls into *the close periphery*. The verbal lexical-grammatical variant of the sememe "to order (in a café, restaurant) / order, portion (in a café, restaurant)" is 7,6% while its substantive lexical-grammatical variant is 4,6%.

– *The far periphery* includes sememes with the ICR that is between 0,1% and 5%: a substantive lexical-grammatical variant "to order, request (in a restaurant, cafe) / order, request (in a restaurant, cafe)" (4,6%); a substantive consubstantial sememe "warrant; permit; pass" (4%); two substantive commonly used sememes: "scale, level" (3,2%), "fairness" (0,6%); a substantive lexical-grammatical variant of the sememe *milit.* "to command / command" (2,6%); a terminological substantive sememe "regulations, charter" (1,4%); two consubstantial substantive sememes: "social group" (0,6%) "insignia" (0,4%) and one terminological sememe *fin.* "money transfer" (0,4%).

Several verbal lexical-grammatical variants have proved to be communicatively irrelevant with zero ICR. These include the verbal lexical-grammatical variants of the following sememes: "to arrange / arrangement", "to restore to working order / working order, condition", *milit.* "to command / command", "to prescribe / prescription". The independent verbal sememe "to direct, manage, regulate" has also shown zero ICR.

### Conclusion

The study demonstrates a significant gap between lexicographic descriptions and the actual usage. The actual semanteme of *order* consists of 15 communicatively relevant sememes, which is considerably narrower than its dictionary representation (27 sememes). The core is dominated by substantive, commonly used sememes, namely "to purchase / purchase" and "system, established order" reflecting the predominantly nominative character of English, especially in business and administrative discourses. Verbal sememes and variants are largely peripheral, with several sememes showing zero communicative relevance indicating they are falling out of active use. While terminological meanings exist, they are significantly less frequent than general ones. The dynamics demonstrate the adaptive nature of the language, where lexical systems prioritize efficiency and everyday communicative needs. The research contributes to the polysemy theory and demonstrates the practical value of the comparative-parametric method in studying living speech. The comparative-parametric method proves its relevance for updating dictionaries and language teaching.

### Конфликт интересов

Не указан.

#### Рецензия

Все статьи проходят рецензирование. Но рецензент или автор статьи предпочли не публиковать рецензию к этой статье в открытом доступе. Рецензия может быть предоставлена компетентным органам по запросу.

### Conflict of Interest

None declared.

#### Review

All articles are peer-reviewed. But the reviewer or the author of the article chose not to publish a review of this article in the public domain. The review can be provided to the competent authorities upon request.

### Список литературы / References

1. Головина Е.И. Введение в когнитивное терминоведение : учебное пособие / Е.И. Головина. — 2-е изд., стер. — Москва : Флинта : Наука, 2014. — 224 с.
2. Гринев-Гриневиц С.В. Терминоведение : учебное пособие для студентов высших учебных заведений / С.В. Гринев-Гриневиц. — Москва : Издательский центр «Академия», 2008. — 304 с.
3. Карпенко И.С. Национальная специфика семантем русской и английской адъективной лексики : автореф. дис. ... канд. филол. наук : 10.02.19 / И.С. Карпенко. — Воронеж, 2022. — 23 с.
4. Кривенко Л.А. Национальная специфика семантем русской и английской субстантивной лексики : автореф. дис. ... канд. филол. наук : 10.02.19 / Л.А. Кривенко. — Воронеж, 2013. — 22 с.
5. Лотте Д.С. Основы построения научно-технической терминологии. Вопросы теории и методики / Д.С. Лотте. — Москва : Издательство АН СССР, 1961. — 158 с.
6. Малихина Н.И. Полисемия английского глагола : автореф. дис. ... канд. филол. наук : 10.02.04 / Н.И. Малихина. — Воронеж, 2013. — 21 с.
7. Моисеев А.И. О языковой природе термина / А.И. Моисеев // Лингвистические проблемы научно-технической терминологии : сборник статей. — Москва, 1970. — С. 138–145.
8. Стернин И.А. Психолингвистическое значение слова и его описание. Теоретические проблемы / И.А. Стернин, А.В. Рудакова. — Саарбрюккен : LAP Lambert Academic Publishing, 2011. — 192 с.



9. Стернина М.А. Лексико-грамматическая полисемия в системе языка / М.А. Стернина. — Воронеж : Истоки, 1999. — 159 с.
10. Стернина М.А. Сопоставительно-параметрический метод лингвистических исследований: 20 лет развития / М.А. Стернина. — Москва : РИТМ, 2025. — 158 с.
11. Cambridge Dictionary. — URL: <https://dictionary.cambridge.org/dictionary/> (accessed: 18.03.2026).
12. Collins COBUILD English Language Dictionary // Collins English Dictionary. — URL: <https://www.collinsdictionary.com/> (accessed: 10.03.2026).
13. Oxford Learner's Dictionaries // Oxford University Press. — URL: <https://www.oxfordlearnersdictionaries.com/> (accessed: 18.03.2026).
14. Campagna S. Specialised and general language in digital contexts / S. Campagna, G. Garzone, C. Ilie // Linguistic Insights. — 2022. — Vol. 312. — P. 15–38.
15. Divjak D. Frequency in Language: A Cognitive Linguistic Approach / D. Divjak, S.Th. Gries. — Cambridge : Cambridge University Press, 2019. — 324 p.
16. Achieving stability in corpus-based analysis of word types / J. Egbert, D. Biber, B. Gray [et al.] // International Journal of Corpus Linguistics. — 2025. — Vol. 30. — № 2. — P. 150–170.
17. Quantitative Methods in Cognitive Semantics: Corpus-Driven Approaches / edited by D. Glynn, K. Fischer. — New York : De Gruyter Mouton, 2010. — 395 p.
18. Gouws R.H. Nuwe raamstruktuurtypes in aanlyn woordeboeke // Lexikos. — 2023. — Vol. 33. — P. 89–110.
19. Gries S.Th. Corpus approaches / S.Th. Gries; edited by B. Dancygier // The Cambridge Handbook of Cognitive Linguistics. — Cambridge : Cambridge University Press, 2022. — P. 590–606.
20. Hilpert M. Quantitative approaches to construction grammar / M. Hilpert, S.Th. Gries // Annual Review of Linguistics. — 2021. — Vol. 7. — P. 67–86.
21. Kosem I. Corpus-driven lexicography / I. Kosem, M. Kosem, R. Kosem // International Journal of Lexicography. — 2019. — Vol. 32. — № 2. — P. 134–152.
22. McEnery T. Learner Language, Discourse and Interaction: A Corpus-based Analysis of Spoken English / T. McEnery, I. Clarke, G. Brookes. — Cambridge : Cambridge University Press, 2025. — 314 p.
23. Temmerman R. Towards New Ways of Terminology Description: The Sociocognitive Approach. — Amsterdam; Philadelphia : John Benjamins, 2000. — 258 p.

### Список литературы на английском языке / References in English

1. Golovina E.I. Vvedenie v kognitivnoe terminovedenie [Introduction to Cognitive Terminology] : textbook / E.I. Golovina. — 2nd edition, stereotyped. — Moscow : Flinta : Nauka, 2014. — 224 p. [in Russian]
2. Grinev-Grinevich S.V. Terminovedenie : uchebnoe posobie dlya studentov vysshih uchebnyh zavedenij [Terminology Studies] : textbook for university students / S.V. Grinev-Grinevich. — Moscow : Publishing Center "Academy", 2008. — 304 p. [in Russian]
3. Karpenko I.S. Nacional'naya specifika semantem russkoj i anglijskoj ad"ektivnoj leksiki [National Specificity of Semantemes of Russian and English Adjectival Lexemes] : abst. of dis. ... of PhD in Philology : 10.02.19 / I.S. Karpenko. — Voronezh, 2022. — 23 p. [in Russian]
4. Krivenko L.A. Nacional'naya specifika semantem russkoj i anglijskoj substantivnoj leksiki [National Specificity of Semantemes of Russian and English Substantive Lexemes] : abst. of dis. ... of PhD in Philology : 10.02.19 / L.A. Krivenko. — Voronezh, 2013. — 22 p. [in Russian]
5. Lotte D.S. Osnovy postroeniya nauchno-tehnicheskoy terminologii. Voprosy teorii i metodiki [Fundamentals of Scientific and Technical Terminology Construction. Issues of Theory and Methodology] / D.S. Lotte. — Moscow : Publishing House of the USSR Academy of Sciences, 1961. — 158 p. [in Russian]
6. Malykhina N.I. Polisemiya anglijskogo glagola [Polysemy of the English Verb] : abst. of dis. ... of PhD in Philology : 10.02.04 / N.I. Malykhina. — Voronezh, 2013. — 21 p. [in Russian]
7. Moiseev A.I. O yazykovej prirode termina [Concerning the Linguistic Nature of the Term] / A.I. Moiseev // Lingvisticheskie problemy nauchno-tehnicheskoy terminologii [Linguistic Problems of Scientific and Technical Terminology] : collection of articles. — Moscow, 1970. — P. 138–145. [in Russian]
8. Sternin I.A. Psiholingvisticheskoe znachenie slova i ego opisanie. Teoreticheskie problemy [Psycholinguistic Meaning of the Word and Its Description. Theoretical Issues] / I.A. Sternin, A.V. Rudakova. — Saarbrücken : LAP Lambert Academic Publishing, 2011. — 192 p. [in Russian]
9. Sternina M.A. Leksiko-grammaticheskaya polisemiya v sisteme yazyka [Lexical-Grammatical Polysemy in the Language System] / M.A. Sternina. — Voronezh : Istoki, 1999. — 159 p. [in Russian]
10. Sternina M.A. Sopostavitel'no-parametricheskij metod lingvisticheskikh issledovanij: 20 let razvitiya [Comparative-Parametric Method of Linguistic Research: 20 Years of Development] / M.A. Sternina. — Moscow : RITM, 2025. — 158 p. [in Russian]
11. Cambridge Dictionary. — URL: <https://dictionary.cambridge.org/dictionary/> (accessed: 18.03.2026).
12. Collins COBUILD English Language Dictionary // Collins English Dictionary. — URL: <https://www.collinsdictionary.com/> (accessed: 10.03.2026).
13. Oxford Learner's Dictionaries // Oxford University Press. — URL: <https://www.oxfordlearnersdictionaries.com/> (accessed: 18.03.2026).
14. Campagna S. Specialised and general language in digital contexts / S. Campagna, G. Garzone, C. Ilie // Linguistic Insights. — 2022. — Vol. 312. — P. 15–38.



15. Divjak D. *Frequency in Language: A Cognitive Linguistic Approach* / D. Divjak, S.Th. Gries. — Cambridge : Cambridge University Press, 2019. — 324 p.
16. Achieving stability in corpus-based analysis of word types / J. Egbert, D. Biber, B. Gray [et al.] // *International Journal of Corpus Linguistics*. — 2025. — Vol. 30. — № 2. — P. 150–170.
17. *Quantitative Methods in Cognitive Semantics: Corpus-Driven Approaches* / edited by D. Glynn, K. Fischer. — New York : De Gruyter Mouton, 2010. — 395 p.
18. Gouws R.H. Nuwe raamstruktuurtypes in aanlyn woordeboeke [New frame structure types in online dictionaries] / R.H. Gouws // *Lexikos*. — 2023. — Deel 33. — Bl. 89–110. [in Afrikaans]
19. Gries S.Th. *Corpus approaches* / S.Th. Gries; edited by B. Dancygier // *The Cambridge Handbook of Cognitive Linguistics*. — Cambridge : Cambridge University Press, 2022. — P. 590–606.
20. Hilpert M. Quantitative approaches to construction grammar / M. Hilpert, S.Th. Gries // *Annual Review of Linguistics*. — 2021. — Vol. 7. — P. 67–86.
21. Kosem I. Corpus-driven lexicography / I. Kosem, M. Kosem, R. Kosem // *International Journal of Lexicography*. — 2019. — Vol. 32. — № 2. — P. 134–152.
22. McEnery T. *Learner Language, Discourse and Interaction: A Corpus-based Analysis of Spoken English* / T. McEnery, I. Clarke, G. Brookes. — Cambridge : Cambridge University Press, 2025. — 314 p.
23. Temmerman R. *Towards New Ways of Terminology Description: The Sociocognitive Approach*. — Amsterdam; Philadelphia : John Benjamins, 2000. — 258 p.