



POSITION OF THE TERM IN DIFFERENT SPHERES

Musurmankulova M. N.

*Denau Institute of Entrepreneurship and Pedagogy,
Doctor of Philosophy (PhD) in Pedagogical Sciences,
Associate Professor of the Department of Russian Language and Literature.*

Tayanch soʻzlar: atama, tanlash, matn, tafakkur, shakl, jarayon, vosita, fan, olim, aloqa.

Ключевые слова: термин, выделение, текст, мышление, формировать, процесс, инструмент, наука, учёный, общение.

Key words: term, selection, text, thinking, form, process, tool, science, scientist, communication.

РЕЗЮМЕ:

Maqolada turli sohalarda atamalarning muhim roli va ularning professional fikrlash, ob'ektiv voqelikni o'zlashtirish hamda ilmiy aloqani osonlashtirish uchun muhim vosita sifatidagi vazifasi o'rganildi. Shu bilan birga, u atamalardan foydalanish bilan bog'liq muammolarni, xususan, ko'p ma'noli (ko'p ma'noli), noaniq kontseptual chegaralar va ixtisoslashtirilgan terminologiya vazifasini bajara olmaydigan atamalardan noto'g'ri foydalanish kabi muammolar tufayli olimlar o'rtasida tushunmovchiliklar yuzaga kelishi mumkinligini ham ta'kidlaydi. Ushbu "terminologik vaziyatlar" samarali muloqotga to'sqinlik qilishi va ilmiy nutqdagi konkretlikni kamaytirishi mumkin. Maqolada har bir fanda, shu jumladan tilshunoslikda ham asosiy atamalarning predmet dolzarbligi va kontseptual ahamiyatini aniqlash muhimligi ta'kidlangan. Mavzuning ahamiyati atamaning o'zi bildirayotgan konkret voqelik (uning denotati) bilan denotativ bog'lanishini bildiradi. Haqiqiy dunyoda atama nimani anglatishini aniq tushunmasdan, uni ishlatish muammoli bo'lib qoladi va chalkashliklarga olib kelishi mumkin. Kontseptual ahamiyatga egalik esa atamaning u ifodalagan ilmiy tushuncha bilan ahamiyatli bog'lanishiga taalluqlidir. Termin nafaqat ma'lum bir hodisani anglatadi, balki ushbu hodisaning ilmiy tushunchasini shakllantiradi va ifodalaydi.

Maqolada xulosa qilinadiki, bu bosqichdagi terminologiyaning birlamchi vazifasi atamalarning aniq belgilanishi va izchil ishlatilishini, aniq denotativ va kontseptual chegaralarni ta'minlashdan iborat. Bu aniqlik samarali ilmiy aloqa va fanlar bo'yicha bilimlarni ilgari surish uchun zarurdir.

РЕЗЮМЕ:

В статье подчеркивается ключевая роль термина как инструмента профессионального мышления и научного общения. Термины не только помогают осваивать предметную действительность, но и служат средством передачи знаний между учеными. Однако их использование может стать причиной взаимонепонимания, особенно если термины обладают полисемией, их значения подменяются или понятийные границы размыты. Эти "терминологические ситуации" затрудняют научное общение и снижают его эффективность. Автор статьи акцентирует внимание на важности прояснения предметной и понятийной отнесенности терминов в каждой науке, включая лингвистику. Предметная отнесенность термина связана с его денотативной связью, т. е. с обозначаемой им реальией (денотатом). Если



эта связь неясна или расплывчата, использование термина становится проблематичным. Понятийная отнесенность термина определяется его сигнификативной связью, т. е. связью с научным понятием, которое он выражает и формирует.

Таким образом, успешное использование терминов требует четкого понимания как их предметной, так и понятийной отнесенности. Это становится одной из ключевых задач терминоведения на современном этапе, особенно в условиях растущей сложности научного знания и междисциплинарного взаимодействия.

SUMMARY:

The article delves into the critical role of terms in professional and scientific discourse, emphasizing their function as essential tools for professional thinking, mastering objective reality, and facilitating scientific communication. However, it also highlights the challenges associated with the use of terms, particularly the potential for misunderstanding among scientists due to issues such as polysemy (multiple meanings), ambiguous conceptual boundaries, and the misuse of terms that may not truly function as specialized terminology. These "terminological situations" can hinder effective communication and reduce the clarity of scientific discourse.

The article underscores the importance of clarifying the subject relevance and conceptual relevance of basic terms in every scientific discipline, including linguistics. Subject relevance refers to the denotative connection of a term with the specific reality it denotes (its denotation). Without a clear understanding of what a term refers to in the real world, its use becomes problematic and can lead to confusion. Conceptual relevance, on the other hand, pertains to the significative connection of a term with the scientific concept it represents. A term not only designates a specific phenomenon but also shapes and expresses the scientific understanding of that phenomenon. The article concludes that the primary task of terminology at this stage is to ensure that terms are precisely defined and consistently used, with clear denotative and conceptual boundaries. This clarity is essential for effective scientific communication and the advancement of knowledge across disciplines.

The text you provided touches on several complex linguistic and computational issues, particularly the identification of words, phrases, and terms in connected speech and text. Here's a breakdown of the key points and their implications:

1. Word Boundaries in Connected Speech

The problem of identifying word boundaries in continuous speech is a significant challenge in linguistics and computational linguistics. This is because spoken language often lacks clear pauses or markers between words.

Prof. A.I. Smirnitsky's work in Soviet literature emphasized the "integral form of a word" as a criterion for distinguishing words from phrases. This suggests that a word is a cohesive unit with a distinct form, as opposed to a phrase, which is a combination of separate words.

2. Defining "Term"

The concept of a "term" is difficult to define precisely because it is studied across multiple disciplines, each with its own perspective. Generally, terms are single words or phrases that denote specific concepts or objects within a specialized field.

The lack of a universally accepted definition complicates efforts to automatically identify and extract terms from texts.

3. Applications of Term Extraction

Term extraction has numerous practical applications, including:

Creating terminological dictionaries from text corpora.

Automatically indexing texts for information retrieval systems.

Categorizing and thematically structuring texts.

Translating texts between languages.

Extracting knowledge from textual sources.

These applications rely on identifying and processing terminological phrases accurately.

4. Challenges in Automatic Term Extraction

Current term extraction software often focuses on nominative terminology (terms that name entities or concepts) and uses a limited set of syntactic patterns for nominal terms.

The process typically involves superficial syntactic analysis, which does not deeply analyze the structure or meaning of the text. Instead, it relies on surface-level patterns and the frequency of occurrence of certain units.

A significant limitation is the lack of reliance on domain-specific dictionaries, which could improve the accuracy of term identification by providing context and meaning.

5. Implications for Computational Linguistics.

The challenges highlighted in the text underscore the need for more advanced methods in natural language processing (NLP). These could include:

Deep syntactic and semantic analysis to better understand the structure and meaning of texts.

Domain-specific resources (e.g., dictionaries, ontologies) to improve term extraction accuracy.

Machine learning and AI techniques to identify terms and phrases more effectively, especially in specialized fields.

6. Future Directions

Research in this area could focus on developing more sophisticated algorithms that combine syntactic, semantic, and contextual analysis.

Integrating domain knowledge and leveraging large-scale text corpora could enhance the ability to identify and extract terms accurately.

Collaboration between linguists, computer scientists, and domain experts could lead to more robust and universally applicable definitions and methods for term extraction.

In SUMMARY:, the text highlights the complexity of identifying words, phrases, and terms in language, particularly in specialized contexts. It points to the need for interdisciplinary approaches and advanced computational techniques



to address these challenges effectively. The main specific feature of the language from a lexical point of view is the widespread use of terminology.

In modern linguistic literature, the concept of a term is usually defined by semantic features, depending on the meaning, or function, of the corresponding linguistic units. Terminological vocabulary usually includes “special words, limited by their special purpose” [8, p. 80].

In linguistics, there are many different attempts to define terms. We present here only two definitions of terms that reflect and synthesize, in our opinion, different arguments regarding this, which complement each other [5, P.690]. Под термином традиционно понимается слово (словосочетание), означающее понятие специальной области знания или деятельности [5, С.690].

Terms can have different structures. According to the number of components, word terms or single-word terms are distinguished, less often called monolexic terms, which can also include complex terms formed by adding stems and having a continuous or hyphenated spelling; phrase terms, or compound, multicomponent terms.

L.V. Shcherba characterized compound terms as combinations of words that have structural and semantic unity and represent a dismembered terminated nomination [5, P.690]. The criterion for considering a phrase as one nominative terminological unit is its use to name one concept.

We find a close understanding of the term in the works of V. M. Ovcharenko, who defines this concept as “a semantically integral linguistic unit, the meaning of which is not derived directly from the meanings of the components combined according to the corresponding structural-semantic model” [6, p. 143-144], as a synthetic phrase, the meaning of which “is not derived directly from the meanings of the components and consists in the correlation of the entire formation as a whole with the expressed concept” [10, p. 94]. With this understanding of the term, a necessary condition for the articulation of a phrase is considered to be “repetition of its components, their ability to retain a given meaning when combined with other signs or sets of signs [6, p. 148].

The definition of the term proposed by V. M. Ovcharenko, in principle, does not raise objections. However, in our opinion, the author understands the “semantic integrity of a linguistic unit” too narrowly, denoting a special concept. In his opinion, phrases such as electric motor are not terms on the grounds that an adjective serving as a definition supposedly retains the same meaning when combined with other nouns, for example, in the phrase electrical energy, and, therefore, I don’t have semantic integrity [6, p. 146-147].

Compound terms are subject to another very significant grammatical (syntactic) requirement, namely, the presence of subordinating connections between the



components of the phrase. Not every substantive term is considered a compound term, a phrase denoting a special concept, but only one that is formed on the basis of subordinate connections. In other words, “composite terms are a special type of subordinating phrases” [2, p. 9].

Taking into account the provisions discussed above, it seems to us that the definition of the term given by S. V. Grinev is exhaustive, in which he characterizes the term “as a nominative special lexical unit (word or phrase) of a special language, accepted for the exact name of special concepts” [10, P. 691].

Due to the active study of various terminologies, many definitions of the concept “term” have appeared. A considerable part of definitions is based on semantic features. At the same time, two trends in characterizing the term are outlined. According to the first, it is a separate word “with a strictly defined meaning” [10, P.691]; “a word that corresponds to one precisely defined concept from the field of science, technology, art” [10, P.692].

The integral design of a word should be understood as the presence of a common grammatical design for all elements that make up the word.

The separate design of a phrase, on the contrary, suggests that each component has a separate grammatical design [11, P.2].

The essence of the difference between the integral form of a word and the separate form of a phrase A.I. Smirnitsky shows by comparing the word shipwreck shipwreck, consisting of identical root elements, and the phrase (the) wreck of the ship. It is quite obvious that, without differing significantly in meaning, these formations are fundamentally different in their relation to the grammatical structure, i.e. differently decorated. In the word, grammatical design is carried out once ship-wrecks, in a phrase as many times as there are components in it: (the) wreck of (the) ships or (the) wrecks of (the) ships [11, P.3].

The text discusses the Smirnitsky criterion and its limitations when applied to the English language, particularly in the context of morphological richness and the formation of compound words or phrases. The Smirnitsky criterion, which was intended to be universally applicable across languages, struggles with English due to its relatively limited morphological complexity compared to languages like Russian. This limitation is particularly evident in the "stone wall problem," where the criterion fails to distinguish between compound words (e.g., "snowstorm") and phrases (e.g., "snow mountain") because the first elements in both cases lack morphological markers.

The "stone wall problem" is a notable issue in English, where formations like stone wall, speech sound, train track, street lamp, lunch room, coal mine, and radio station present challenges in determining whether they should be treated as single lexical units (compounds) or as syntactic phrases. This distinction is



crucial for tasks like syntactic analysis and term extraction in natural language processing.

The broader problem of term selection is also addressed. Beyond identifying specific terms with problem-oriented characteristics, the goal is to extract general scientific terminological phrases from texts. The ultimate objective is not only to ensure the consistent use of terms and to detect stylistic errors but also to "convolve" multi-word combinations into single units. This convolution simplifies the syntactic analysis by reducing the variability in how phrases are parsed, making the analysis more efficient and accurate.

Key Points:

Smirnitsky Criterion: Designed to be universal but limited in English due to its morphological simplicity.

Stone Wall Problem: Challenges in distinguishing between compounds and phrases in English (e.g., stone wall vs. snow mountain).

Term Selection: Extracting problem-oriented terms and general scientific phrases from texts.

Convolution: Combining multi-word phrases into single units to reduce syntactic variability and simplify analysis.

This discussion highlights the complexities of linguistic analysis in English, particularly in the context of compound formation and term extraction, and underscores the need for tailored approaches to address these challenges.

Literature:

1. Bourigault, D. (1992) Surface Grammatical Analysis for the Extraction of Terminological Noun Phrases. Proceedings of COLING-92, Nantes, France, p. 977-981.
2. Golovin B. N. On some problems of studying the term. - Bulletin of Moscow University. Series X. Philology. M., 1972. P.49-59.
3. Dowlagar S., Mamidi R. Unsupervised technical domain terms extraction using term extractor. Proc. XVII ICON, 2020, pp. 5–8.
4. Demytyeva Y.Yu., Bruches E.P., Batura T.V. Extracting terms from the texts of scientific articles // Software products and systems. 2022. T. 35. No. 4. pp. 689–697. DOI: 10.15827/0236235X.140.689-697.
5. Kobrin R. Yu. Experience in linguistic analysis of terminology. Author's abstract. dis. for the job application scientist, Ph.D. Philol. Sci. Gorky, 1969.S. 121.
6. Ovcharenko V. M. Conceptual, semantic and semiotic integrity of the term. — In the book: Linguistic problems of scientific and technical terminology. M., 1970. P. 139-153.
7. Ovcharenko V. M. Term, analytical name and nominative definition. — In the book: Modern problems of terminology in science and technology. M., 1969.P.91-122.
8. Reformatsky A. A. Introduction to linguistics. M., 1955. P.536. Smadja, F. (1993) Retrieving Collocations from Text: Xtract. Computational Linguistics, 19(1), p. 143-177.
9. Smadja, F. (1993) Retrieving Collocations from Text: Xtract. Computational Linguistics, 19(1), p. 143-177.
10. <https://infopedia.su/3xca34.html>
11. <https://studfile.net/preview/4200604/page:10/>
12. <https://www.dialog-21.ru/digest/2001/articles/bolshakova/>