# TEOPETИЧЕСКАЯ, ПРИКЛАДНАЯ И СРАВНИТЕЛЬНО-СОПОСТАВИТЕЛЬНАЯ ЛИНГВИСТИКА/THEORETICAL, APPLIED AND COMPARATIVE LINGUISTICS

DOI: https://doi.org/10.60797/RULB.2025.70.7

## LINGUISTIC REPRESENTATION OF SYSTEM CATEGORICAL RELATIONS IN LANGUAGE

Research article

#### Rubtsova O.V.1, \*

<sup>1</sup>N.P. Ogarev Mordovia State National Research University, Saransk, Russian Federation

\* Corresponding author (rubtsova2[at]mail.ru)

## Abstract

Linguistics as a science of language covers many aspects of its functioning, among which special attention is paid to system-categorical relationships. System-categorical relations in a language can be considered as connections between different categories of a language. These relationships determine how the various elements of a language interact with each other, forming an integrated system. This allows to understand how meaning is formed at the utterance level. Linguistic units correlate with the conceptual content of conceptual, graded, logical, prototype categorical structures (studying of which is of great significance in linguistic analysis), representing the elements of an individual picture of the human world.

**Keywords:** linguistic categories, graded categories, prototype structure, concept.

## ЛИНГВИСТИЧЕСКОЕ ПОНИМАНИЕ СИСТЕМНО-КАТЕГОРИАЛЬНЫХ СООТНОШЕНИЙ В ЯЗЫКЕ

Научная статья

# Рубцова О.В.<sup>1, \*</sup>

<sup>1</sup> Научно-исследовательский Государственный мордовский университет имени Н.П. Огарева, Саранск, Российская Федерация

\* Корреспондирующий автор (rubtsova2[at]mail.ru)

## Аннотация

Лингвистика как наука о языке охватывает множество аспектов его функционирования, среди которых особое внимание уделяется системно-категориальным отношениям. Системно-категориальные отношения в языке можно рассматривать как связи между различными категориями языка. Эти взаимосвязи определяют, как различные элементы языка взаимодействуют друг с другом, образуя интегрированную систему. Это позволяет понять, как формируется значение на уровне высказывания. Языковые единицы соотносятся с концептуальным содержанием понятийных, градуированных, логических, прототипных категориальных структур (изучение которых имеет большое значение в лингвистическом анализе), представляющих элементы индивидуальной картины мира человека.

Ключевые слова: лингвистические категории, градуированные категории, прототипная структура, концепт.

## Introduction

*The relevance of the study* of system-categorical relations in language is related to the fact that it allows language to reflect reality in constant change and development, as well as in dynamics.

*The object of the research* includes the concept of a language category, includes the semantics of graduality, in particular the prototypical language category.

The novelty of the research is in identification of transitional phenomena in the realization of linguistic units in the process of mental and speech activity

As phenomena and objects of the surrounding reality are subject to the processes of categorization-"cognitive dismemberment of reality, the essence of which is to divide the entire ontological space into various categorical areas" [8, P. 31] and evaluation through perception, understanding, and interpretation, so are language units passed through the individual's consciousness and experience, classified, representing certain knowledge structures in the form of linguistic categories. The linguistic understanding of a category involves identifying the common properties of various classes and categories of language units that constitute these classes and receive various linguistic expression.

## Main results

Linguistic categories are closely related to logical, cognitive items, which was noted in antiquity, when language "was considered an explication of the system of thought" [10, P. 21]. The logical category serves as the foundation for building a linguistic one. "Logical and philosophical categories are transformed by language into conceptual ones" [7, P. 58]. As it highlights I.I. Meshchaninov: "Conceptual categories convey in the language itself the concepts that exist in a given social environment ... At the same time, they also turn out to be linguistic categories, since they are revealed in language. Without their revelation, they remain in the realm of consciousness" [9, P. 238]. Not every concept expressed in the structure of a language can be considered a "conceptual category", but only one that "appears in the language structure and takes on a specific form: lexical (conceptual categories or categories of linguistic semantics), morphological, or syntactic (grammatical categories)" [4, P. 7–8]. Once they have a specific linguistic realization, they can subsequently acquire additional semantic content, "to acquire various connotations correlated with figurative thinking, and to illuminate the peculiarities of the cultural and historical development of the people, their centuries-old speech practice" [12, P. 8].

The object of linguistic semantics as a part of linguistic category is not seen as something single. E. Roche presented this category as "a structure in which the relationship between the center and the periphery is defined, where the center includes the most typical representatives of this category; and the further away from the center, the less typical the members of the category are" [11, P. 30]. Each specific the categorizable object has, in the vast majority of cases, not only basic categorical qualitative properties, represented in different quantitative ratios, but also other, subjective, unique, specific features, inherent exclusively to this object, highlighting subclasses within the category. Thus, the structure of the category implies the presence of many transitional, overlapping, borderline meanings, the presence of logical genus-species and linguistic hyper-hyponymic relations, which is a consequence of categorization. "The logic of categorization is also determined by highly regular semes included in the semantics of each word" [6, P. 152]. For example, the word "size" is in a semantic field with the meaning "larger than the norm" and "smaller than the norm", where each word is included in the antonymic opposition (large — small, wide — narrow, long — short, deep — shallow, etc.).

Among the variety of linguistic categories that exist in the individual's consciousness, graded categories are of particular interest. They are formed in the cognitive process when "a person thinks in vague, indistinct categories, concepts" [13, P. 11], which primarily affects the concepts related to the inner world of a person, the states of his consciousness, his emotions, thoughts. The boundaries of such categories are non-discrete, fuzzy, and blurred, because the semantics of the units that make up the category are "blurred" and do not allow for a clear definition of their place in a graded scale of categories. For example, if we consider the semantics of the words "mountain", "hill", "volcano", "rock", "cliff", it should be noted that the boundaries between the categories of hills are blurred. "The nomination of a non-prototypical elevation is determined by which feature of the object is in the focus of the speaker's attention" [2, P. 5]. For example, the height scale of a mountain or volcano in the lower section intersects with the height scale of a rock, cliff, or hill. Therefore, a hill whose height corresponds to a given area can be called a mountain (if the object appears to be the tallest in the area), a volcano (if the facts of the eruption were known), a hill (if the height is not so significant against the background of the hills that the speaker had to see, the object has a non-sharp top and rounded outlines) and even a cliff (if the composition of the object is in focus).

Despite the blurred nature of graded categories, there is definitely an internal structuring. For example, graded categories in English include graded adjectives, which are used to describe nouns in the comparative and superlative degrees: big (big) — bigger (more), biggest (the biggest); small (small) — smaller (smaller), smallest (smallest); tall (high) — taller (higher), tallest (highest). In addition, graduation adverbs are used to express the varying degrees of manifestation of the trait. They may indicate an extreme degree (completely, extremely, utterly and others), a high degree (badly, deeply, strongly and others), a sufficient degree (relatively, merely, solely and others) or a low degree (a little, poorly and others).

Some members of a category have a special cognitive status, being the "best" samples or examples of a given category. Such units, known in linguistics as "prototypes", "points of cognitive reference", "generator elements", are the most representative members of categories [3, P. 32]. Prototypes as central units of a category are at the basis of category formation, are recognized and assimilated faster, are used more often and are used in understanding the category as a whole.

"Prototype theory is based on culture and relates only to this particular culture... People of different nationalities show the ability to categorize objects according to their cultural prototypes" [5, P. 90]. For example, Russians, when they hear the word "tree", will imagine exactly the kind of tree that grows in their region: birch, oak, spruce. At the same time, the prototype tree for a Canadian is a Canadian maple, a Mexican cactus, etc.

## Discussion

The gradation of membership determines the degree of prototypical effects. In graded categories, the degree of membership directly proportionally affects the status of a unit and the nature of its expressiveness as prototypical within the given category. The concentration of the feature is achieved in the center, and on the periphery acquires a diffuse character. It is important to take into account that all members of the category are full-fledged as its members, but are not equal in terms of the semantic content of the categorical feature. In other words, the formal and substantive aspects of language categories are not always identical.

The stability of the prototype structure of a category depends on the conventional or non-conventional nature of the latter: "in conventional it is permanent, but in the case of non-conventionality, which occurs in accidental categories formed to achieve certain current goals, the prototype structure is not constant, but is formed in specific problematic situations" [1, P. 220]. At the same time, "the prototypicality of an element cannot be absolute; we can only talk about greater or lesser degree of prototypicality" [11, P. 40–41]. Moreover, over time, in the process of language evolution and change, as well as in the process of individual language acquisition, prototypes, as well as the membership of graded categories, both conventional and non-conventional, are capable of modification.

In the process of language evolution and change, as well as in the process of individual language acquisition, linguistic categories such as prototypes, as well as the membership of graded categories, both conventional and non-conventional, are capable of modification.

# Conclusion

Consequently, one of the specific characteristics of graded categories, along with linguistic specificity, can be considered flexibility, variability in time and space. System-categorical relations in language are a fundamental element that makes it possible to understand how language functions as a system. Understanding these relationships helps linguists analyze different levels of language, including phonetics, morphology, syntax, and semantics. The study of these categories requires an integrated approach that takes into account both theoretical and practical aspects of language functioning.

## 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. Barsalou L.W. Ad-hoc categories / L.W. Barsalou // Memory and Cognition. 1983. № 11. P. 211–227.
- 2. Башкирцева О.А. К вопросу о градуированных категориях / О.А. Башкирцева // Вестник Волжского университета имени В.Н. Татищева. 2017. № 2. Т. 1. С. 2–8.
- 3. Болдырев Н.Н. Концептуальное пространство когнитивной лингвистики / Н.Н. Болдырев // Вопросы когнитивной лингвистики. 2004. № 1. С. 18—36.
- 4. Гухман М.М. Понятийные категории, языковые универсалии и типология / М.М. Гухман // Вопросы языкознания. 1985. № 5. С. 4–12.
- 5. Губанова Л.Г. К вопросу о категоризации, категориях и прототипах (на примере английского языка) / Л.Г. Губанова, В.С. Самарина // Филологические науки. Вопросы теории и практики. Тамбов : Грамота, 2017. № 4-2 (70). С. 89–91.
- 6. Илюхина Н.А. Системные отношения в русской лексике как отражение механизма категоризации знания / Н.А. Илюхина // Вестник Самарского университета. История, педагогика, филология. 2023. Т. 29. № 4. С. 150–155.
- 7. Есперсен О. Философия грамматики / О. Есперсен. Москва : Издательство иностранной литературы, 1958. 404 с.
  - 8. Маслова В.А. Введение в когнитивную лингвистику / В.А. Маслова. Москва : ФЛИНТА, 2018. 296 с.
  - 9. Мещанинов И.И. Члены предложения и части речи / И.И. Мещанинов. Ленинград : Наука, 1978. 388 с.
- 10. Петров В.В. Теория языка и логики / В.В. Петров // Новое в зарубежной лингвистике. Москва : Прогресс, 1986. Вып. XVIII. С. 4–21.
- 11. Rosch E. Principles of categorization / E. Rosch; edited by E. Rosch, B.B. Lloyd // Cognition and Categorization. Hillsdale: Lawrence Erlbaum, 1978. P. 27–48.
- 12. Савичева Х.Н. Категория интенсивности и ее отражение в русской фразеологии (в сравнении с башкирскими фразеологическими единицами): автореф. дис. ... канд. филол. наук: 10.02.20 / Х.Н. Савичева. Уфа, 2004. 21 с.
- 13. Семенова Т.И. Лингвистический феномен кажимости (на материале современного английского языка) : автореф. дис. ... д-ра филол. наук : 10.02.04 / Т.И. Семенова. Иркутск, 2007. 35 с.

## Список литературы на английском языке / References in English

- 1. Barsalou L.W. Ad-hoc categories / L.W. Barsalou // Memory and Cognition. 1983. № 11. P. 211–227.
- 2. Bashkirceva O.A. K voprosu o graduirovannyh kategorijah [On the issue of the graded categories] / O.A. Bashkirceva // Vestnik Volzhskogo universiteta imeni V.N. Tatishheva [Bulletin of the V.N. Tatishchev Volga State University]. 2017.  $N_{\odot}$  2. Vol. 1. P. 2–8. [in Russian]
- 3. Boldyrev N.N. Konceptual'noe prostranstvo kognitivnoj lingvistiki [The Conceptual Space of Cognitive Linguistics] / N.N. Boldyrev // Voprosy kognitivnoj lingvistiki [Issues of Cognitive Linguistics]. 2004. № 1. P. 18–36. [in Russian]
- 4. Guhman M.M. Ponjatijnye kategorii, jazykovye universalii i tipologija [Conceptual Categories, Language Universals, and Typology] / M.M. Guhman // Voprosy jazykoznanija [Questions of linguistics]. 1985. № 5. P. 4–12. [in Russian]
- 5. Gubanova L.G. K voprosu o kategorizacii, kategorijah i prototipah (na primere anglijskogo jazyka) [On the question of categorization, categories and prototypes] / L.G. Gubanova, V.S. Samarina // Filologicheskie nauki. Voprosy teorii i praktiki [Philological Sciences. Questions of theory and practice]. Tambov: Gramota, 2017.  $N_{0}$  4-2 (70). P. 89–91. [in Russian]
- 6. Iljuhina N.A. Sistemnye otnoshenija v russkoj leksike kak otrazhenie mehanizma kategorizacii znanija [System relations in Russian vocabulary as a refl ection of the mechanism of knowledge categorization] / N.A. Iljuhina // Vestnik Samarskogo universiteta. Istorija, pedagogika, filologija [Bulletin of Samara University. History, pedagogy, philology]. 2023. Vol. 29. 80. 10
- 7. Jespersen O. Filosofija grammatiki [Philosophy of Grammar] / O. Jespersen. Moscow : Publishing House of Foreign Literature, 1958. 404 p. [in Russian]
- 8. Maslova V.A. Vvedenie v kognitivnuju lingvistiku [Introduction to cognitive linguistics] / V.A. Maslova. Moscow : FLINTA, 2018. 296 p. [in Russian]
- 9. Meshhaninov I.I. Chleny predlozhenija i chasti rechi [Members of the sentence and parts of speech] / I.I. Meshhaninov. Leningrad : Nauka, 1978. 388 p. [in Russian]
- 10. Petrov V.V. Teorija jazyka i logiki [Theory of Language and Logic] / V.V. Petrov // Novoe v zarubezhnoj lingvistike [New Developments in Foreign Linguistics]. Moscow : Progress, 1986. Iss. XVIII. P. 4–21. [in Russian]
- 11. Rosch E. Principles of categorization / E. Rosch; edited by E. Rosch, B.B. Lloyd // Cognition and Categorization. Hillsdale: Lawrence Erlbaum, 1978. P. 27–48.
- 12. Savicheva H.N. Kategorija intensivnosti i ee otrazhenie v russkoj frazeologii (v sravnenii s bashkirskimi frazeologicheskimi edinicami) [The Category of Intensity and Its Reflection in Russian Phraseology (in Comparison with the

Bashkir phraseological units)] : abst. diss. ... of PhD in Philology : 10.02.20 / H.N. Savicheva. — Ufa, 2004. — 21 p. [in Russian]

13. Semenova T.I. Lingvisticheskij fenomen vneshnosti (na materiale sovremennogo anglijskogo jazyka) [The linguistic phenomenon of appearance (based on the material of modern English)]: abst. of dis. ... of Grand PhD in Philology: 10.02.04 / T.I. Semenova. — Irkutsk, 2007. — 35 p. [in Russian]