

Original article

## CATEGORY “OPPOSITION” IN THE TERMINOLOGICAL FIELD “SURGICAL INSTRUMENTS” (ON THE BASE OF GERMAN TERMS)

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**Abstract.** In this article, the category “opposition” in the terminological field “surgical instruments” of the German language is examined by cognitive approach. Antonyms are analyzed in accordance with the semantic and structural classification developed by L.A. Novikov. The purpose of this work is to analyze and describe the terms of the studied terminological field, in the semantics of which there are indications of the category “opposition”. The materials for the study were compound terms (774 terms) and terminological word-combinations (524 terms) in the German language. The results of the analysis showed that the category “opposition” is characteristic for the analyzed terminological field. Using semantic classification contrarian, complementary and vector antonyms were identified in the studied terminological field. According to their structure antonyms of the terminological field “surgical instruments” in the German language are represented by compound terms and terminological word-combinations.

**Keywords:** medical terminology, medical term, surgical instruments, antonyms, opposition, semantic, opposition.

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## КАТЕГОРИЯ «ОППОЗИЦИЯ» В ТЕРМИНОЛОГИЧЕСКОМ ПОЛЕ «ХИРУРГИЧЕСКИЙ ИНСТРУМЕНТАРИЙ» (НА ПРИМЕРЕ ТЕРМИНОВ НЕМЕЦКОГО ЯЗЫКА)

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**Аннотация.** В данной статье категория «оппозиция» в терминологическом поле «хирургический инструментарий» немецкого языка рассматривается с точки зрения когнитивного подхода. Антонимы анализируются в соответствии с семантической и структурной классификацией, разработанной Л.А. Новиковым. Цель данной работы состоит в анализе и описании терминов исследуемого терминологического поля, в семантике которых есть указания на категорию «оппозиция». Материалом для исследования послужили сложные термины (774 термина) и терминологические словосочетания (524 термина) немецкого языка. Результаты анализа показали, что категория «оппозиция» характерна для изучаемого терминологического поля. Согласно семантической

классификации в исследуемом терминологическом поле выявлены контратные, комплементарные и векторные антонимы. По своей структуре антонимы терминологического поля «хирургический инструментарий» немецкого языка представлены сложными терминами и терминологическими словосочетаниями.

**Ключевые слова:** медицинская терминология, медицинский термин, хирургический инструментарий, антонимы, противопоставление, оппозиция, семантика, антонимический термин.

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## Introduction

For many centuries scientists from different countries have been interested in the nature of human cognition, his intellect, as well as the relationship between cognition, thinking and language. In the late 90s of the 20th century, cognitive terminology studies arose in the framework of cognitive linguistics and general terminology. It was formed as an independent research area and nowadays it keeps developing as a part of cognitive linguistics. Language is regarded by cognitive terminology as a unique object for understanding mental processes occurring in a person's head and determining his existence [1, c. 9]. V.F. Novodranova says that the study of language from the point of view of cognitive approach makes it possible to come closer to understanding the cognitive mechanisms of nomination, formation of the meaning of a term, and making connection between two levels – linguistic and conceptual [2, c. 101]. It is also noted that thanks to the new approach, already known linguistic phenomena are studied more deeply and comprehensively [2, 3, 4, 5].

In cognitive terminology, the term is a “living” lexical unit with three “ages”: “the period of birth, the period of maturity and the period of dying” [6, c. 352]. In addition, the term has different functions; it is created to designate special concepts ... cognitively and discursively significant only in a special semiotic space and has a conventional use” [7].

Terminological nomination is a complex cognitive process. It includes transmission and receiving of encoded linguistic information. A number of cognitive mechanisms are involved in this process: analogy, opposition, conceptual compression,

detailing and others. Opposition is one of the basic cognitive mechanisms involved in the nomination process. Its essence is to highlight the opposite concepts within one terminological field. At the semantic level opposition is expressed by antonyms.

We consider it necessary to determine the difference in the meaning of the word “opposition” when used in everyday discourse and terminology. Opposition or contradistinction in the defining dictionary of S.I. Ozhegov has the following meaning: *an object or phenomenon completely different with what is being compared* [8, c. 614]. In antonymy, opposition is formed by opposite but not contradictory cognitive features within one concept [9, c. 8]. In our work we use the definition for antonymy given by L.A. Novikov. Antonymy is “a semantic relationship of opposite meanings expressed by formally different words that implement the function of opposition and other related functions” within one terminological field [10, c. 247]. For example: *elastische Klemme* (*flexible clamp*) – *steife / harte Klemme* (*stiff forceps*).

### **Purpose, methods and materials of the study**

Nowadays medical and surgical terminology of the German language is described in a number of works, e.g., stomatological terminology (Y.V. Plotskaya, 2020), internationalism in German names of surgical instrument (M.V. Shuyupova, Y.V. Plotskay, 2020), antonymy in medical terminology (Jerome Baghana, S.M. Velichkova 2012,), metaphoric terms (S.L. Mishlanova, 2019) and others. But there is not description of antonymy in the terminological field (TF) “surgical instruments” of the German language.

The purpose of the article is to consider the types of the terms in the TF “surgical instruments” of the German language in semantics of which the category “opposition” is indicated. TF “surgical instruments” was analyzed by means of definitional, conceptual and semantic types of analysis. The material for the study consists of compound terms (774 terms) and terminological word-combinations (524 terms) which belong to the studied TF.

### **The relevance of research**

The relevance of the study can be determined by the following factors: at present, there is no classification of antonymic terms from the TF “surgical instruments” of the ISSN 2712-9519. ЛИНГВИСТИКА И ОБРАЗОВАНИЕ. 2023. Том 3 № 4

German language. The functions of the antonymic terms of this TF have not been described as yet. In the article we examined the antonymic terms found in medical papers, dictionaries, patents. These terms were analyzed on the basis of semantic and structural classification.

### **Scientific novelty**

The novelty of the study is provided by the use of cognitive approach to the study of the category “opposition” in the TF “surgical instruments” of the German language.

### **Findings**

The formation of the TF “surgical instruments” in the German language is associated with the origin of surgery. The first steps of formation of surgery as a science can be found at the early stages of the existence of human society. On the one hand, surgery is the most ancient field of medicine. As soon as a man began to hunt and work he needed medical knowledge to remove foreign elements from his body, to cure wounds and diseases and to stop bleeding. On the other hand, surgery will always be a young science, because its development will not stop. Nowadays we see the intensive development of medicine in general and surgery in particular. Because a term is “a cognitive structure that accumulates special knowledge necessary in the process of scientific communication and professional scientific activity” we have a number of new terms [15, c. 674].

The analysis of the works of some prominent linguists (E.V. Bekisheva, 2007; N.N. Boldyrev, 2006; O.Ya. Ivanova, 2004; E.S. Kubryakova, 2004; V.F. Novodranova, 1997; E.A. Sloeva, 2007) demonstrated that an individual in the process of analysis and generalization distributes the obtained knowledge into groups, i.e., he categorizes his knowledge. This is caused by the necessity to group the objects that we comprehend as similar or dissimilar in some way to the best example of an object, which we know or according to the opposite poles of a mental scale.

In the works on medical terminology, it is proved that the category of space is the main category of medical terminology, because it has “pragmatic significance, which is explained by the need to accurately indicate the specific shape and size, location and interposition of organs, tissues and body systems” [19, c. 84].

In the TF “surgical instruments”, the category *space* is a categorizing and classifying one, which is verified by the need to indicate 1) the place of a surgical handle (*die Herzpunktnadel – needle for cardiocentesis*), 2) the place of tissue extraction for its further diagnosis (*die Nadel für bronchiale Biopsie – needle for bronchial biopsy*), 3) the place for an implant (*das Herzimplantat – heart implant*).

The designation of spatial relations in the TF “surgical instruments” of the German language is of functional significance. The terms of the studied TF mark such characteristics as *form*, *size*, *quality*, *time* or *duration* of use of a surgical instrument, *function*, *gender* of a patient. These characteristics or categories are objectified by antonyms from the studied TF:

- 1) location in space (*innere Tracheostomiekannüle* (*internal cannula of the tracheostomy tube*) – *äußere Tracheostomiekannüle* (*external cannula of the tracheostomy tube*)),
- 2) size (*kleine Nadel* (*small needle*) – *große Nadel* (*large needle*)),
- 3) quality (*mehrteilige Spritze* (*non-disposable syringe*) – *die Ganzspritze / die Spritze aus einem Stück* (*disposable / one piece syringe*)),
- 4) time or duration of use of a surgical instrument (*der Verweilkatheter* (*permanent / indwelling catheter*) – *zeitweiliger Katheter* (*non-indwelling / temporary catheter*)),
- 5) form (*der Dreiflanschnagel ohne Kanal* (*uncannulated three-flange nail*) – *der Dreiflanschnagel mit dem Achsenkanal* (*cannulated three-flange nail*)),
- 6) function (*das Instrument für Gewebsverbindung* (*instrument for suturing tissue*) - *das Instrument für Gewebstrennung* (*instrument for separating tissue*)),
- 7) gender characteristics of a patient (*der Frauenurethralkatheter* (*female urethral catheter*) – *der Männerurethralkatheter* (*male urethral catheter*)).

### Semantic and structural groups of antonyms

There were identified 41 antonymic lines (87 terms) in the TF “surgical instruments” of the German language. The frequency of antonymic terms is 5.7% (1524 terms were studied). The analysis of quantitative structure of the antonymic lines demonstrated that the first place belongs to two-member lines (37 lines – 90%). It

should be noted that in the studied TF there are three-member (3 lines – 7.5%) and four-member (1 lines – 2.5%) antonymic lines. For example, *kleines Amputationsmesser* (*small amputating knife*) – *mittleres Amputationsmesser* (*amputating knife of middle size*) – *großes Amputationsmesser* (*large amputating knife*); *atraumatische Nadel* (*atraumatic / noninjuring needle*) – *stechende Nadel* (*pricking needle*) – *durchstechende Nadel* (*piercing needle*) – *schniedende Nadel* (*cutting / knife needle*).

In the article the antonyms of the TF “surgical instruments” are analyzed using semantic and structural classification developed by L.A. Novikov [10].

In the TF “surgical instruments” of the German language, three classes of semantically opposite terms were distinguished:

1) **Contrary antonyms** represent qualitative opposition, which contains a middle component: *gebogene chirurgische Nadel* (surgeon's *curved* needle) > – *halbgebogene chirurgische Nadel* (surgeon's *half-curved* needle) – < *gerade chirurgische Nadel* (surgeon's *straight* needle).

2) **Complementary antonyms** are characterized by the fact that there is no middle component between the opposite lexical units: *der Dauerkatheter / der Verweilkatheter* (*permanent / indwelling catheter*) – *zeitweiliger Katheter / der Zeitweilkatheter* (*non-indwelling / temporary catheter*).

3) **Vector antonyms** are based on the opposition of multidirectional actions, movements, features: *das Instrument für Gewebsverbindung* (instrument for *suturing* tissue) – *das Instrument für Gewebstrennung* (instrument for *parting / dividing / separating* tissue); *die Darmklemme / die Darmquetsche anlegen* (*to apply* an intestinal clamp/constrictor) – *die Darmklemme / die Darmquetsche abnehmen* (*to remove* an intestinal clamp/constrictor).

Each of these three types of antonyms demonstrates a common feature – an extreme negation is indicated in the definition of one of the antonymic terms.

In his structural classification, L.A. Novikov divided antonyms into two groups: 1) terms of the same root and 2) terms of different roots. The mechanism of oppositeness of **antonyms of the same root** is expressed through the use of:

1) prefixes with negative semantics (2 two-member antonymic lines): *resorbierbarer* Faden (*resolved* thread) – ***unresorbierbarer*** Faden (*unresolved* thread);

2) a component of compound adjectives with the semantics of incompleteness, insufficiency (1 two-member antonymic line): *gebogene* chirurgische Nadel (surgeon's *curved* needle) – ***halbgebogene*** chirurgische Nadel (surgeon's *half-curved* needle).

Among ***the antonyms of different roots*** the following types of lexical antonyms were identified:

1) ***compound terms*** (5 two-member antonymic lines): der *Frauenurethralkatheter* (*female* urethral catheter) – der *Männerurethralkatheter* (*male* urethral catheter), der *Flachmeißel* (*flat* bone chisel) – der *Hohlmeißel* (*grooved* bone gouge);

2) ***terminological word-combinations*** (36 two-member antonymic lines): *direkte* Harnröhrenbougie für Frauen (*female straight* urethral bougie) – *gebeugte* Harnröhrenbougie für Männer (*male curved* urethral bougie), *stumpfer* chirurgischer Hacken (*blunt* ponget surgical retractor) – *scharfer* chirurgischer Hacken (*sharp* ponget surgical retractor).

The most productive structural group is the group of antonyms with different roots, in which the mechanism of opposition is expressed through the use of lexical antonyms as a part of terminological word-combinations (90% of the total number of the analyzed antonyms). The productivity of this type, in our opinion, is explained by the fact that oppositions of this type are easy both to understand and to form. For surgeons it is more practical to use the terms with different roots. For example, in the antonymic line “*unscharfes / scharfes Instrument* (*blunt / sharp instrument*)” it is better to choose *das Stumpfinstrument* (*blunt instrument*) than *unscharfes Instrument* (*sharp instrument*) because when surgeons face a critical situation in the operating room and when time counts by seconds, it is important to make the right decision and use the appropriate surgical instrument. Moreover, an operating surgeon must tell the nurse which instrument he needs. It should be done very quickly and there is no time to repeat this information again and again.

It should be noted that for antonymic terms, the orienting function is of primary importance. They convey not only information about the function, form, size, quality of the instrument, but also about its use. For example, *elastische* (*non-crushing* intestinal clamp) and *harte* Darmklemme (*stiff* intestinal clamp). All parts of clamping instruments are made of steel, and “elasticity” (the degree and nature of compression) when it is used is achieved not due to softer materials, but due to the length of the jaw and the number of interlocking teeth on its surface. Non-crushing intestinal clamp (*elastische* Darmklemme) is a metal fixation clamp used to *capture* and *hold* the intestines *with minimal trauma due to the specific pressure* on the tissue not more than 2-3 kgf. A *stiff* intestinal clamp (*harte* Darmklemme) is designed to *clamp* the intestinal walls; it has *spear-shaped jaws* with an internal cutout of the same shape.

## Conclusion

The analysis of the terms of the TF “surgical instruments” in the German language revealed the terms in the semantics of which the category “opposition” is indicated. This confirms the opinion of V.M. Leichik and E.A. Nikulina about the relevance of this category in terminology [21, c. 35].

According to the semantic classification the studied TF is characterized by contrasting, complementary and vector antonyms. As to their structure the antonyms of the TF “surgical instruments” in the German language are represented by compound terms and terminological word-combinations where opposition is expressed mainly by an adjective.

As it was noted above, the oppositeness mechanism is one of the basic cognitive mechanisms involved in the nomination process. Thus, we can conclude that antonyms exist in any language, any terminological system, any terminological field and serve as linguistic means of representing mental oppositions in the minds of people, making it possible to obtain a more complete understanding of the object.

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## References

1. Kubrjakova E.S. Jazyk i znanie: Na puti poluchenija znanij o jazyke: Chasti rechi s kognitivnoj tochki zrenija. Rol' jazyka v poznanii mira [Language and knowledge: Towards acquiring ISSN 2712-9519. ЛИНГВИСТИКА И ОБРАЗОВАНИЕ. 2023. Том 3 № 4

knowledge about language: Parts of speech from a cognitive point of view. The role of language in understanding the world]. – M.: Languages of Slavic culture, 2004. – 560 p.

2. Novodranova V.F., Motro Ju.B. Semanticheskaja modifikacija termina v medicinskom diskurse [Semantic modification of a term in medical discourse] // Vestnik Cheljabinskogo gosudarstvennogo universiteta [Bulletin of Chelyabinsk State University], 2011. – No 33 (248). – Pp. 101-104.

3. Madzhaeva S.I. Jekologichnost'/nejekologichnost' medicinskogo teksta v SMI [Ecological /non-ecological nature of medical text in the media] // Lingvistika i obrazovanie [Linguistics & education], 2021. – Vol.1. – No 4 (4). – Pp. 93-102.

4. Kasimceva L.M., Grechuhina Z.R. Vosprijatie medicinskih terminov studentami inostrancami [Perception of medical terms by international students] // Lingvistika i obrazovanie [Linguistics & education], 2022. – Vol.2. – No 4 (8). – Pp. 62-72.

5. Lukojanova T.V. Medicinskij termin kak kognitivnaja edinica, otrazhajushhaja uporjadochenie special'nogo znanija [Medical term as a cognitive unit reflecting the order of special knowledge] // Terminy v kommunikativnom prostranstve: materialy nauchno-prakticheskoy konferencii s mezhdunarodnym uchastiem «Diskursologija, terminologija, jekologija jazyka v sovremennoj lingvistike» (11 maja 2018) / otv. red. S.I. Madzhaeva. [Terms in the communicative space: materials of the scientific-practical conference with international participation “Discursology, terminology, language ecology in modern linguistics” (May 11, 2018) / responsible editor S.I. Madzhaev]. – Astrakhan: Publishing house of the Astrakhan State Medical University, 2018. – Pp. 244-251. URL: <https://elibrary.ru/item.asp?id=35628334>

6. Lejchik V.M. Dinamika termina (tri vozrasta termina) [Dynamics of the term (three ages of the term)] // Nonmultum, sedmulta: nemnogo o mnogom. U kognitivnyh istokov sovremennoj terminologii: sb. nauch. trudov v chest' V.F. Novodranovoj [Nonmultum, sedmulta: a little about a lot. At the cognitive origins of modern terminology: collection. scientific works in honor of V.F. Novodranova]. – M.: Author's Academy, 2010. – Pp. 351-359.

7. Lukojanova T.V. Kognitivnoe terminovedenie kak odno iz napravlenij sovremennoj lingvistiki [Cognitive terminology as one of the new schools in modern linguistics] // LinguaMobilis [Lingua Mobilis], 2014. – No 3 (49). – Pp. 75-80. URL: <https://elibrary.ru/item.asp?id=22821359>

8. Ozhegov S.I., Shvedova N.Ju. Tolkovyj slovar' russkogo jazyka: 80000 slov i frazeologicheskikh vyrazhenij. Rossijskaja akad. nauk, In-t rus. jaz. im. V.V. Vinogradova [Defining dictionary of the Russian language: 80,000 words and phraseological expressions. Russian academical sciences, Institute of Rus. language named after V.V. Vinogradov]. – Moscow: A TEMP, 2006. – 938 p.

9. Chupanovskaja M.N. Reprezentacija protivopolozhnosti v semantike proizvodnyh antonimov (na materiale slovarej russkogo jazyka): avtoreferat diss.... kandidata filologicheskikh nauk: 10.02.01 – russkij jazyk [Representation of opposites in the semantics of derived antonyms (based on Russian language dictionaries): abstract of diss... Candidate of Philological Sciences: 02.10.01 – Russian language]. – Novosibirsk, 2007. – 22 p.

10. Novikov L.A. Semantika russkogo jazyka [Semantics of the Russian language]. — M.: Higher. school, 1982. – 272 p.

11. Plockaja Ju.V. Strukturno-semanticheskie osobennosti nemeckoj stomatologicheskoy terminologii: dissertacija na soiskanie uchjonoj stepeni kandidata filologicheskikh nauk: 10.02.04 – germanskie jazyki [Structural and semantic features of German dental terminology: dissertation for the degree of candidate of philological sciences: 02.10.04 – Germanic languages]. Omsk, 2020. – 173 p.

12. Shujupova M.V., Internacionalmi v nemeckih nazvanijah hirurgicheskogo instrumentarija [Internationalisms in German names of surgical instruments] // Aktual'nye voprosy lingvistiki v sovremenном professional'no-kommunikativnom prostranstve: materialy IX Mezdunarodnoj molodezhnoj nauchno-prakticheskoy konferencii [Current issues of linguistics in the modern professional and communicative space: materials of the IX International Youth Scientific and Practical Conference]. – Omsk, 2020. – Pp. 24-28.

13. Bagana Zh., Velichkova S.M. Antonimija v medicinskoj terminologii (na materiale nemeckogo jazyka) [Antonymy in medical terminology (based on the German language)] // Nauchnaja mys' Kavkaza [Scientific thought of the Caucasus]. 2012. – № 2 (70). – Pp. 180-182.
14. Mishlanova S.L. Metafora v medicinskem tekste: na materiale russkogo, nemeckogo, anglijskogo jazykov: dis. kand. filolol. nauk: 10.02.19 – teoriya jazyka [Metaphor in a medical text: on the material of Russian, German, English languages: dis. Doctor of Philological Sciences: 02.10.19 – theory of language]. Perm, 1998. – 166 p.
15. Komarova Z.I. Metodologija, metod, metodika i tehnologija nauchnyh issledovanij v lingvistike: uchebnoe posobie [Methodology, method, methodology and technology of scientific research in linguistics: textbook]. – Ekaterinburg: UrFU Publishing House, 2012. – 818p.
16. Bekisheva E.V. Formy jazykovoj prezentacii gnoseologicheskikh kategorij v klinicheskoj terminologii: avtoref. dis. ... dokt. filol. nauk [Forms of linguistic presentation of epistemological categories in clinical terminology: abstract of diss... Doctor of Philological Sciences]. – M., 2007. – 48p.
17. Boldyrev N.N. Jazykovye kategorii kak format znanija [Linguistic categories as a format of knowledge] // Voprosy kognitivnoj lingvistiki [Questions of cognitive linguistics]. – Tambov: All-Russian public organization “Russian Association of Cognitive Linguists”, 2006. – № 2. – Pp. 5-22.
18. Ivanova O.Ja. Lingvokul'turnaja specifika slovoobrazovatel'noj kategorii lokativnosti (na materiale russkogo i anglijskogo jazykov): diss. kand. filol. nauk [Linguistic and cultural specificity of the word-formation category of locativity (based on the material of the Russian and English languages): diss. of Candidate of Philological Sciences]. – Stavropol, 2004. – 221 p.
19. Novodranova V.F. Sposoby vyrazhenija kategorii prostranstva v medicinskoj terminologii [Ways of expressing the category of space in medical terminology] // K jubileju uchenogo: sb. nauch. tr., posv. jubileju E.S. Kubrjakovoj [To the anniversary of the scientist: a collection of scientific works dedicated to the anniversary of E.S. Kubryakova]. – M.: MGPU, 1997. – Pp. 83-86.
20. Sloeva E.A. Kognitivno-kommunikativnyj podhod k opisaniju anatomicheskogo ob'ekta: diss. kand. filol. nauk [Cognitive-communicative approach to the description of an anatomical object: dissertation. Candidate of Philological Sciences]. – Samara, 2007. – 182 p.
21. Lejchik V.M., Nikulina E.A. Issledovanie terminologizmov v paradigmatiske: javlenie antonimii [Study of terminology in paradigmatics: the phenomenon of antonymy] // Vestnik Moskovskogo universiteta. Serija 19: Lingvistika i mezhkul'turnaja kommunikacija [Bulletin of Moscow University. Series 19: Linguistics and intercultural communication], 2005. – No 1. – Pp. 30-43.

### **Список источников**

1. Кубрякова Е.С. Язык и знание: На пути получения знаний о языке: Части речи с когнитивной точки зрения. Роль языка в познании мира / Е.С. Кубрякова// – М.: Языки славянской культуры, 2004. – 560 с.
2. Новодранова В.Ф., Мотро Ю.Б. Семантическая модификация термина в медицинском дискурсе / В.Ф. Новодранова, Ю.Б. Мотро // Вестник Челябинского государственного университета. – 2011. – № 33 (248). – С. 101-104.
3. Маджаева, С.И. Экологичность/неэкологичность медицинского текста в СМИ / С.И. Маджаева // Лингвистика и образование. 2021. – Т. 1. – №4 (4). – С. 93-102.
4. Касимцева Л.М., Гречухина З.Р. Восприятие медицинских терминов студентами иностранцами / Л.М. Касимцева, З.Р. Гречухина // Лингвистика и образование. 2022. – Т. 2. – №4 (8). – С. 62-72.
5. Лукоянова Т.В. Медицинский термин как когнитивная единица, отражающая упорядочение специального знания / Т.В. Лукоянова // Термины в коммуникативном пространстве: материалы научно–практической конференции с международным участием «Дискурсология, терминология, экология языка в современной лингвистике» (11 мая 2018) /

отв. ред. С.И. Маджаева. – Астрахань: Изд-во Астраханского ГМУ, 2018. – С. 244-251. URL: <https://elibrary.ru/item.asp?id=35628334>

6. Лейчик В.М. Динамика термина (три возраста термина) / В.М. Лейчик // Nonmultum, sedmulta: немного о многом. У когнитивных истоков современной терминологии: сб. науч. трудов в честь В.Ф. Новодрановой / редакция: Е.С. Кубрякова, В.З. Демьянков. – М.: Авторская академия, 2010. – С. 351-359.

7. Лукоянова Т.В. Когнитивное терминоведение как одно из направлений современной лингвистики / Т.В. Лукоянова // LinguaMobilis. 2014. – №3 (49). – С. 75-80. URL: <https://elibrary.ru/item.asp?id=22821359>

8. Ожегов С.И. Толковый словарь русского языка: 80000 слов и фразеологических выражений / С.И. Ожегов, Н.Ю. Шведова//. – изд. 3-е, стереотипное – М.: АЗЪ, 1996. – 928 с.

9. Чупановская М.Н. Репрезентация противоположности в семантике производных антонимов (на материале словарей русского языка): автореферат дисс... кандидата филологических наук: 10.02.01 – русский язык / М.Н. Чупановская // – Новосибирск, 2007. – 22 с.

10. Новиков Л.А. Семантика русского языка: Учеб. Пособие / Л.А. Новиков // – М.: Высш. школа, 1982. – 272 с.

11. Плоцкая Ю.В. Структурно-семантические особенности немецкой стоматологической терминологии: диссертация на соискание учёной степени кандидата филологических наук: 10.02.04 – германские языки / Ю.В. Плоцкая. Омск, 2020. – 173 с.

12. Шуюпова М.В. Интернационализмы в немецких названиях хирургического инструментария / М.В. Шуюпова, Ю.В. Плоцкая (научный руководитель) // Актуальные вопросы лингвистики в современном профессионально-коммуникативном пространстве: материалы IX Международной молодежной научно-практической конференции. – Омск, 2020. – С. 24-28.

13. Багана Ж., Величкова С.М. Антонимия в медицинской терминологии (на материале немецкого языка) / Ж. Багана, С.М. Величкова // Научная мысль Кавказа. 2012. – № 2 (70). – С. 180-182.

14. Мишланова С.Л. Метафора в медицинском тексте: на материале русского, немецкого, английского языков: дис. канд. филол. наук: 10.02.19 – теория языка / С.Л. Мишланова// Пермь, 1998. – 166 с.

15. Комарова З.И. Методология, метод, методика и технология научных исследований в лингвистике: учебное пособие / З.И. Комарова // – Екатеринбург: Изд-во УрФУ, 2012. – 818 с.

16. Бекишева Е.В. Формы языковой презентации гносеологических категорий в клинической терминологии: автореф. дис. ... докт. филол. наук / Е.В. Бекишева // – М., 2007. – 48 с.

17. Болдырев Н.Н. Языковые категории как формат знания / Н.Н. Болдырев // Вопросы когнитивной лингвистики. – Тамбов: Общероссийская общественная организация «Российская ассоциация лингвистов-когнитологов», 2006. – № 2. – С. 5-22.

18. Иванова О.Я. Лингвокультурная специфика словообразовательной категории локативности (на материале русского и английского языков): дисс. канд. филол. наук / О.Я. Иванова. – Ставрополь, 2004. – 221 с.

19. Новодранова В.Ф. Способы выражения категории пространства в медицинской терминологии / В.Ф. Новодранова // К юбилею ученого: сб. науч. тр., посв. юбилею Е.С. Кубряковой. – М.: МГПУ, 1997. – С.83-86.

20. Слоева Е.А. Когнитивно-коммуникативный подход к описанию анатомического объекта: дисс. канд. филол. наук / Е.А. Слоева. – Самара, 2007. – 182 с.

21. Лейчик В.М., Никулина Е.А. Исследование терминологизмов в парадигматике: явление антонимии / В.М. Лейчик, Е.А. Никулина // Вестник Московского университета. Серия 19: Лингвистика и межкультурная коммуникация. – 2005. – № 1. – С. 30-43.

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