

## CASES OF SYNONYMY AND ANTONYMY IN THE LATIN MEDICAL TERMINOLOGICAL SYSTEM

*Gergana PETKOVA*

Medical University of Plovdiv, Bulgaria  
e-mail: [Gergana.Petkova@mu-plovdiv.bg](mailto:Gergana.Petkova@mu-plovdiv.bg)

*Vanya IVANOVA*

Plovdiv University “Paisii Hilendarski”, Bulgaria  
e-mail: [vantod@uni-plovdiv.bg](mailto:vantod@uni-plovdiv.bg)

**ABSTRACT:** One of the most significant traits of terminology is its consistency. Each term may be perceived as an entity with bilateral nature: 1. A unity of meaning and form; 2. An entity from the natural language subject to the same phenomena and processes, which are valid for all language units. Synonymy and antonymy result from the ambiguous relation between the form and meaning of the term; unfortunately, they cannot be avoided – even in specialized terminological systems. Since scientific terminology is intended for specific purposes, it is based on the convention regarding the structuring and usage of linguistic forms and their meanings more than any other lexical subsystem. The research object of the present text is the cases of synonymy and antonymy found in the Latin medical terminology as well as the reasons for their appearance. Such lexical relations are observed between lexemes, between a lexeme and a phraseological unit, and between phraseological units. The examples provided are called absolute antonyms and absolute synonyms (or lexical doublets) and they can be part only of the specialized terminological system. Those relations between terms may cause a problem in communication because they obstruct the possibility of a specific and identical nomination in the field of science. On the other hand, they facilitate the appearance of new different variants, and these different forms may also express different opinions about the same phenomenon.

**KEYWORDS:** synonymy, antonymy, specialized terminology, Latin, medical term, lexical relations, linguistic sign

### **Introduction**

In the terminology of modern medical science, mainly Latin terms or lexical elements of Greek or Latin origin are used. In anatomy, surgery, clinical, or laboratory medicine, Greek, Latin, and Greco-Latin elements make up more than 90% of their specialized terms. In the initial period of the construction of the medical terminological system, the terms were formed from lexemes of Greek origin, which were introduced by *Hippocrates* (c. 460-377 BC), *Claudius Galen* (p. 130-200 BC), and their predecessors. The Latin terms date from the time of *Aulus Cornelius Celsus* (p. 30-50 AD). Some terms originated in the Middle Ages when Latin was used as the international language of medicine as late as the 18<sup>th</sup> century. Later, with the development of science, new terms were created almost exclusively on the same Greco-Roman basis, and it was not until the 19<sup>th</sup> century that lexemes from modern European languages began to penetrate medical terminology. The latest trend intensified in the late 20<sup>th</sup> century with the advent of high technology in medicine. However, the importance of Latin does not diminish due to the Latin basis of all the medical terminology (Арнаудова, 2005, p. xviii).

### **Features of the term as a lexical unit**

A peculiarity of the term as a lexical unit is that its semantics, illustrated by its definition, must be transparent. This, of course, is not always possible. When the linguistic motivation for its derivation is synchronous, it is obvious, but if it is diachronic, it is hidden (Попова и др., 1999, p. 19).

A “term” means a linguistic sign (word or phrase) that names a concept for an object or a phenomenon in a scientific or technical field that requires a definition, and the totality of all terms used in a particular scientific or technical field of knowledge builds its terminology (Жънчева, 2009, p. 16).

From a structural point of view, each terminology is distinguished by its systematic nature, and the terms that make it up have the “function of the main carrier of information in the language of science” (Петкова, Банасяк, 2019, p. 145 – 146), which is introduced by its “users (scientists, researchers, and specialists in a given subject area) for naming a new scientific or technical concept” (Алексиев, 2011, p. 240). For a lexical unit to fulfill the role of a term, it must be distinguished by “accuracy, unambiguity, lack of synonymy, brevity of form, word formation, grammatical correctness, and stylistic neutrality

(i.e., lack of evaluation and emotionally expressive components)”. This is essential for avoiding obscurity and ambiguity in the act of communication (Алексиев, 2011, с. 240, Кънчева, 2009, р. 17 – 18, Петкова, Банасяк, 2019, р. 145 – 146).

Under these conditions, the term is defined as “ideal” (Попова, 2011, р. 47).

According to Maria Popova’s concept of the term as a lexical unit, it is clearly distinguished by “unity of meaning and form” and subordination to “the same phenomena and processes valid for all other linguistic units” (Петкова, Банасяк, 2019, р. 145). For this reason, the “ideal” term described above is *avis rara* (Попова, 2011, р. 47).

The asymmetry between meaning and form, i.e., between the internal and the external form (Петкова, Банасяк, 2019, р. 145), as well as the use of the term as a full-fledged lexical unit in a given spoken language (Попова, 2011, р. 47), accounts for semantic systemic relations such as polysemy (ambiguity), *homonymy*, *synonymy*, and *antonymy*, which are also manifested in the terms (Петкова, Банасяк, 2019, р. 145, Попова, 2011, р. 47). They hide dangers of inaccuracies in the practical use of the terms, but unfortunately, they cannot be completely avoided. However, the use of several techniques such as an additional application of an extended definition of the term used, as well as clarifying the specific meaning with which it is used in cases of polysemy, can help avoid possible mistakes (Петкова, Банасяк, 2019, р. 146). The standardization, unification, and normalization of the term are also essential. This practically means compliance with the existing generally accepted standards, compliance with international requirements, as well as with the literary norm of the language of which the specialized word is a part (Алексиев, 2011, р. 240, Попова, 2011, р. 47).

### General features of the medical terminological system

There are three subsystems within medical terminology: *anatomical* (composed of terms of anatomical and histological education), *clinical* (comprising terms of pathoanatomy, pathophysiology, surgery, and therapy), and *pharmacological* (including terms, their names, medicinal plants, and dosage forms, as well as means and chemical nomenclature) (Кънчева, 2009, р. 8).

From the point of view of their structure, they are separate words (nouns), for example *musculus* (muscle), *nervus* (nerve), and word combinations consisting of two or more words with the same terminological meaning and referring to a single anatomical object, e.g., *cornua uteri* (horns of the uterus) (*ibid.*, р. 13). Nouns, in turn, are divided into substantive nouns, such as the examples above, and nouns, which name the results of processes and actions such as *intoxicatio* (poisoning), *abortus* (abortion), *partus* (birth) (Кънчева, 2009, р. 75).

The number of adjectives is not small either; however, they are not used as independent linguistic signs, but only as definitions within terminological phrases. The use of dialects is similar too (*ibid.*, р. 76). Although medicine is rather assigned to the so-called exact sciences, it is surprising how many linguistic challenges can be found in a detailed examination of its terminological apparatus such as the object of the present study, which focuses on the formation of antonymous pairs and synonymous nests.

### Cases of antonymy in Latin medical terminology

Antonyms are pairs of words that differ in their sound composition and have opposite meanings; the concepts named with them are correlated with each other and the existence of one is unthinkable without the existence of the other.

Cases of antonymy are extremely common in anatomical terminology; antonymy is observed in the designation of homogeneous objects that differ in one feature. The compilation of the Basel anatomical nomenclature is based on them (Кънчева, 2009, р. 81 – 82).

From the point of view of the construction of the term, two types of antonymous pairs can be distinguished – formed by adding antonymous pairs of adjectives to the term (*ren dexter/ ren sinister* (right kidney/ left kidney), *caries suprafacialis/ caries profunda* (superficial caries / deep caries) *pelvis maior / pelvis minor* (large pelvis/ small pelvis), *ligamentum longum/ ligamentum breve* (long ligament/ short ligament) for the respective object or by prefixation (*endoderma/ exoderma* (endoderm/ exoderm))) (Кънчева, 2009, р. 81 – 82).

From a semantic point of view, the juxtaposition can be based on **size** (*ale maior/ ale minor* (large wing/ small wing), *musculus longus/ musculus brevis* (long muscle/ short muscle), *macrognathia/ micrognathia* (jaw larger than normal/ jaw smaller than normal)), **location in space** (*manus sinistra/*

manus dextra (left hand/ right hand), membra superiora/ membra inferiora (upper limbs/ lower limbs), **properties** (musculus extensor/ musculus intensor (extensor muscle/ flexor muscle)), and **conditions** (caries sicca/ caries humida (dry caries/ wet caries), dolor acutus/ dolor chronicus (acute pain/ chronic pain), tachycardia/ bradycardia (accelerated pulse/ slow pulse), adactylia/ polydactylia (absence of a finger/ presence of more than five fingers)).

From the pharmaceutical terms, pairs of antonyms are found in the way of drug administration (usus externus/ usus internus (external use/ internal use)), in its form, composition, or properties (syrupus amarus/ syrupus dulcis (bitter syrup/ sweet syrup), extractum siccum/ extractum liquidum (dry extract/ liquid extract)).

### Cases of synonymy in Latin medical terminology

Synonyms name the same concept differently. Synonymous terms are defined as absolute synonyms or lexical doublets, characterized by identical semantic and stylistic use and compatibility. The existence of thematic synonymous nests is because the nomination is based on different features of the objects (membrum/ extremitas (limb)) or the different origins of the lexemes (in this case Latin or Greek) (therapia/ curatio (treatment), derma/ cutis (skin)) (Кънчева, 2009).

The emergence of cases of synonymy can be provoked by the replacement of a used term, which later began to be perceived by society as discriminatory, with a new one (mongolismus (an old term)/ Down syndromum (a new term) (Mongolism/ Down syndrome)). Until the standardization and editing of scientific and reference literature, the two terms are considered synonymous.

The cases related to the use of eponyms in modern medical texts are similar. Although this type of term was extremely popular in the past, nowadays it is not preferred and is gradually being replaced by descriptive terms (Down syndromum/ chromosoma-21 trisomia (Down syndrome/ trisomy 21)).

From a structural point of view, we observe cases of synonymy **between two or more lexemes** (cavum/ cavitas (cavity); pharmakon/ remedium/ medicamentum/ medicamentum (medicine)), **a lexeme and a phrase** (lymphonodus/ nodus lymphaticus (lymph node)), kaolinum/ bolus alba (kaolin / white clay)), between **phrases** (Bulgaria' bacillus/ Lactobacillus bulgaricus (Bulgarian bacillus/ lactobacillus bulgaricus), febris Haverhilli, Haverhill' febris/ erythema arthriticum epidemicum/ erythema polymorphum acutum/ morbus morsus Muris (Haverhill fever/ epidemic joint erythema/ acute polymorphic erythema/ mouse bite disease<sup>1</sup>), or **a combination of a lexeme and phrases** (mongolismus (an old term)/ Down syndromum / chromosoma-21 trisomia (Mongolism / Down syndrome/trisomy 21)).

Cases of synonymy are observed mainly in clinical terminology (almost all the above examples) (Polackova, 2001, p. 175), rarely in the anatomical nomenclature (haema (Greek)/ Sanguis (Latin) (blood), soma (Greek)/ Corpus (Latin) (body)), and pharmaceutical terms (pro usu proprio/ ad usum proprium (for personal use), ad capsulas/ in capsulis (in the form of capsules)).

### Conclusions

As already noted, in medical terminology the expression of spatial relations, as well as those of size, states, sensations, and perceptions, is based on the use of antonyms. However, the use of synonyms is often perceived as a violation of all rules of term formation. The presence of a large number of synonyms and the free use and handling of them is more than advisable in the colloquial form of a language, but this is not the case when we have to adhere to the scientific style of expression (Polackova, 2001, p. 174). This is especially true of Latin terminology.

On the one hand, synonymy is an exotic feature that allows representatives of different scientific schools to take advantage of the freedom to express their different opinions and attitudes to a problem (Суперанска и др., 1986, p. 34) and thus maintain diversity in the use of specialized vocabulary (Зидарова, 1998, p. 113). Also, being based on different features of the same object can help for its narrower and more detailed understanding (Кънчева, 2009, p. 84). Sometimes it can lead to confusion in the act of communication, because the terms have lost their main function – to clearly and accurately name objects, processes, and other concepts of human knowledge (Зидарова, 1998, p. 113) and thus it

---

<sup>1</sup> We do not always have the same corresponding expressions in English and Bulgarian. The translations are literal and are applied by the authors of this text to emphasize the various nuances that the individual members of the synonymous nest express.

can lead to mistakes and misunderstanding (Кънчева, 2009, p. 84). For this reason, the standardization and periodic updating of scientific and reference literature are of utmost importance. This also applies to the teaching aids used in the training process by future medical professionals.

REFERENCES:

- Алексиев, Б. (2011)** Социолонгвистични аспекти на терминологията. – В: Езикът и социалният опит, т. 10 (Проблеми на социолонгвистиката), с. 240 – 245. (*Aleksiev, B. Sotziolingvistichni aspekti na terminologiyata. – V: Ezikat i sotsialniyat opit, t. 10 (Problemi na sotsiolongvistikata, s. 240 – 245)*)
- Арнаудова, П. (2005)** Nova terminologia medica polyglotta et eponymica. Нова медицинска полиглотна и епонимна терминология на седем езика. София, Медицина и физкултура. (*Arnaudova, P. Nova terminologia medica polyglotta et eponymica. Nova meditsinska poliglotta i eponimna terminologiya na sedem ezika. Sofia, Meditsina i fizkultura.*)
- Зидарова, В. (1998)** Очерк по българска лексикология. Пловдив, Пловдивско университетско издателство. (*Zidarova, V. Ocherk po balgarska leksikologiya. Plovdiv, Plovdivsko universitetsko izdatelstvo.*)
- Кънчева, П. (2009)** Българската анатомична терминология днес. София, Медицинско издателство АРСО. (*Kancheva, P. Balgarskata anatomichna terminologiya dnes. Sofia, Meditsinsko izdatelstvo ARSO.*)
- Петкова, Е., Банасяк, Я. (2019)** Някои наблюдения върху синонимията в терминологията. // *Български език*, 66 (2019), 4, с. 142 – 157. (*Petkova, E., Banasyak, Ya. Nyakoi nablyudeniya varhu sinonimiyata v terminologiyata. // Balgarski ezik, 66 (2019), 4, s. 142 – 157.*)
- Попова, М. (2011)** Социални конотации на термина. – В: Езикът и социалният опит, т. 10 (Проблеми на социолонгвистиката), с. 46 – 51. (*Popova, M. Sotzialni konotatsii na termina. – V: Ezikat i sotsialniyat opit, t. 10 (Problemi na sotsiolongvistikata, s. 46 – 51.)*)
- Попова и др. (1999)** Въпроси на българската терминология. София, Академично издателство „Проф. Марин Дринов“. (*Popova et al. Vaprosi na balgarskata terminologiya. Sofia, Akademichno izdatelstvo “Prof. Marin Drinov”.*)
- Суперанска и др. (1986)** Теория и методика ономастических исследований. Москва, Наука. (*Superanska et al. Teoriya i metodika onomasticheskikh issledovaniy. Moskva, Nauka.*)
- Polackova, G. (2001)** Synonymy of medical terminology from the point of view of comparative linguistics. // *Bratislavske lekarske listy*, 102 (3), 2001, p. 174-177.