современной этимологии и исторической индоевропеистики. Указаны основные термины и процедуры семантической реконструкции славянских и германских глаголов с семантикой свечения.

Ключевые слова: этимология, семантическая эволюция, реконструкция праоснов, типологический параллелизм

### THEORETICAL AND METHODICAL ASPECTS OF THE SEMANTIC EVOLUTION OF THE VERB IN DIACHRONIC PERSPECTIVE

The article is dedicated to the study of the theoretical and methodical aspects of the semantic evolution of the verb in diachronic perspective. It focuses on the causes for the change in the priorities of modern etymology and historical Indo-European studies. The main terms and procedures for the semantic reconstruction of the Slavic and Germanic verbs meaning 'to shine' are outlined.

*The key words:* etymology, semantics, semantic evolution, reconstruction of proto-stems, typological parallelism.

УДК 82.035-2

*Н. Бідненко*, кандидат філологічних наук, доцент ЗАТ «Дніпропетровський університет імені Альфреда Нобеля», Дніпропетровськ

### INTERSCIENTIFIC HOMONYMY AS ONE OF THE COMMMON LINGUISTIC PROCESSES IN TERMINOLOGY

The linguistic processes which deal with terminology a specially semantic variation are investigated. The author of the article analyzes the semantic nature of the term and considers the reasons for interscientific homonymy in terminology.

**Keywords:** term, word, polysemy of terms, semantic variation, terminology system, monosemy, the law of a sign, professional and scientific communication.

Despite the fact that a term is based on the principle of monosemy, a great variety of terms is used in different spheres of science and technology and acquires different meanings. It is explained by the nature of a term as it is a word and it has all linguistic peculiarities of a word. The theory and practice of investigation of various terminology systems, and also the experience of lexicographical works emphasize that a term is a lexical unit whose main function is to determine a concept, can be polysemantic.

Terms having various meanings depending on a certain terminology system are called polysemantic.

Polysemy of terms as well as their synonymy, homonymy and antonymy is usually registered in the number of modern terminology lacks and failures. Even for a description of this lexical process there are two terms in terminology: polysemy and semantic variation. O.Ahmanova and A.Superanskava offer that one of the reasons for polysemy of terms is their

© Н. Бідненко, 2014

"intercategory" which lies in the fact that the concept has its own content, represented in the term, and indicated with several categories (for example, its procession and quantity) [7, p. 46], [6, p. 72]. Other reason for polysemy of terms is explained by the specificity of a term to unite peculiarities of a word and a sign, to express a content of a definite concept.

System of terms, i.e. terminology of any science does not appear by itself. It is created by people in the process of human activity. Therefore, to reflect the system of concepts of a certain science, it is necessary to observe full system of these concepts which they define. In the boundaries of definite terminology system a certain term may express only one concept, in other words may present monosemantic information.

Term monosemy is understood as «a logic principle of a sign construction" (or «the law of a sign») because the main principle of general semantics is a correlation of "each unit of the content to one certain unit of the expression or form" [7, p. 80]. Many terminologists consider that the tendency to monosemy is a vital criterion of a term existence as every term is used as a sign.

However term is a word, which instead of a simple sign specified as a definite element of a terminology system, is used for a professional and scientific communication. It expresses a scientific concept and, in the essence of each word, the boundary of scientific concept must be clearly defined in accordance with its etymology. In this fact there is a principal difference between a term and words of everyday language. At the same time terminology is not isolated from literary language, and those processes of literary language are reflected in terminology.

What happens with a term when it actually functions in scientific speech? In reality the logical principle of a sign construction is not frequently observed in everyday speech, and as a result we observe the disturbance of "the law of a sign" or often meet interscientific homonymy. The phenomenon of interscientific homonymy in terminology could be considered as one of such disturbances, when one and the same term can enter into different terminology systems of a certain language. And when we try to translate these terms it causes certain difficulties.

The peculiarity of this phenomenon could be scrutinized on the examples. In the English language the word "*plate*" is polysemantic. Its main meanings can be translated as *«тарілка», «металевий посуд», «плита», «лист», «штаба» (металу), «пластинка», «дощечка»* and so on [1, p. 1031]. The word "*plate*" in the meaning *«пластинка», «плита»*, *«ава сопредерение)* specialists from literary language into all spheres of knowledge. And when this word became a term it expressed a definite concept in each sphere of knowledge, cp.: "*plate*" in the building industry means *«підкрокв'яна в'язка»,* in the mining industry it means *«сланцева порода», «плитинк»,* in the electric technology – *«анод» (лампи)* от *«електрод» (акумулятора),* in the metallurgy – *«товстолистова сталь», in the military terminology – «броня»* [1, p. 1031]. Of course, *«plate»* as *«підкрокв'яна в'язка»,* and "*plate*" as *«сланцева порода»,* are interscientific terminological homonyms because they are used in different terminological systems and it's the main criterion to distinguish these words.

Thus, unlike non-terms, many of which are polysemantic, terms within the boundaries of one science or technology must be monosemantic. The expressively limited, mainly motivated specialization and absolute semantic precision must be inherent by them. However, the absolute distinguishing criterion of terms is relative. It is a requirement to the ideal term because there are not many terms in really existent terminologies which are monosemantic.

So it is evident that all lexical processes happening in a certain language could also be reflected in a certain terminology system. In the development of vocabulary three lexical processes are to be distinguished: terminologization, transterminologization and determinologization. All these processes in the development of term polysemy are caused by linguistic reasons though. Everyday words are involved in the term migration.

Terminologization is a process of creation of new names or terminological notions by the use of everyday words. As a result of this the second, special meaning of everyday word arises. The issue of terminologization is fundamental to the description of a special language.

Firstly we can mark special communication: particular grouping of lexical items must be clearly assigned to free compounds or term-combinations, phrases, idioms used by specialists are terminologized. The main aim of lexicographers is to distinguish terminological meaning of one lexical unit from collocation. Thus several difficulties appear before terminologists. Among them:

- recognition of terminological units in the texts,
- · lexicalization of new terms,

• recognition of terminological units by special language users with the aim to know the appropriate concepts.

Moreover there are conceptual units called "terminology phraseology" which are often met representing a definite concept. Vice versa there are terms which are determinologized and become lexical units of general language. The problem of determinologization should be considered carefully.

Determinologization of terminological vocabulary is a process of transition of terms from a certain special, professional sphere to the sphere of general use. Such determinologized terms are not deprived with the belle letters and official elements. These kinds of terms can be met and in the colloquial speech (mainly of educated people). As a rule they are used ironically.

Cp.: So, armed with all this intelligence, she dialed the third girl wanted a lovely flat, near park (Binchy).

Ukrainian translation of this sentence shows that the words "armed with all this intelligence" are not used in their direct meaning: Озброєна усіма даними розвідки, вона зателефонувала третьої дівчині, бажаючи улюблену квартиру поруч з парком.

What are the reasons for determinologization? In a great deal it depends on the sphere of activity where the term is used, i.e. on different functional styles of speech (colloquial and belles letter). On the other hand, it is closely related to the intensity of borrowings from one or other levels of vocabulary limited on the sphere of use or their distribution. Many words, idioms and phrases quite often have other metaphorical, lexical or phraselogical meaning.

Ср.: *каталізатор* (спец.) – «речовина, що прискорює, уповільнює або змінює протяг хімічної реакції» і *каталізатор* (перен.) – «стимулятор чого-небудь»; *контакт* (спец.) – «з'єднання електричних проводів» і *контакт* (перен.) – «зв'язок, взаємодія», «узгодженість у роботі» і т.п.

As the example shows, the special meaning of terms is lost at the process of determinologization, but the terms obtain expressive-emotional meaning. So, this method could be considered as the way of creation of new names with the elements of semantic expression.

Contemporary researches prove that there is no clear borderline between scientific-technical categorization and classification where meanings of words and utterances show a high degree of ambiguity. But different types of meaning and parallel 'processing' at different fields are highly productive in coping with any communicative situation. Usually narrow professional words are not highly distributed in literary language; i.e. other words the sphere of their use remains limited. Moreover the speech of representatives of one or another profession is often colloquial. That is why secondary terminologization of professional words and expressions appears quickly: terms existing in the boundaries of one terminology system pass to another one. In a new sphere of knowledge such terms can modify the meaning, so the reader cannot understand them in the sense he knew them before, (in that science, where they came from). But sometimes the clear division between these factors is practically impossible to be conducted.

This process is called transterminologization, while the terms which obtain other semantic meaning are called transterms. In the case of transterminologization transterms become the unique officially legalized names. The analysis of transterminologization process as a creation of new special meanings of terms in other terminology systems presents a particular and increasing interest for the modern science, which stimulates the linguistic study of terminology in this aspect. The subject of the research occupies the terms of different sciences, fixed in such lexicological sources as homonyms and polysemants which have two or more meanings in appropriate terminology systems.

The objective process of transferminologization consolidates the influence of such factors as scientific, technological, economic development of the countries, mass media, political situation in the world, extension of multilateral cooperation in the economics and science. Verbal speech, systematic transmissions of proper themes on radio and television promote the processes of determinologization and transterminologization of professional and technical terms. The reasons for the secondary terminological nomination are explained by the influence of such intralingua facts as phonetic convergence, the process of the word-formation, semantic processes. The other reason for the secondary terminologization is the integration of scientific knowledge which is realized by the different ways and implicated in various forms, the unification of conceptual and categorized apparatus and the formation of the synthetic sciences. The instance of the term borrowings without any semantic transformations can explain the presence of the same terminological units in certain close subject science research. Interfield sciences (biochemistry, biophysics radio astronomy, geophysics, geochemistry, etc.) often demonstrate the attraction of the blocks of the terms of initial sciences, which include different subsystems of the suitable concepts. But the main characteristic language reason for transterminologization is the tendency to economize language material.

Specific character of polysemy of terms allows creating and appearing of synonymous rows in terminology. The following example clearly shows this linguistic phenomenon. There are two synonymic groups of the word "*alphabet*": *1. «абетка, алфавит, буквар»; 2. «буквар, начала, основи, підстава, початок, абетка»* [1, р. 80]. The problems of polysemy and synonymy become urgent with the necessity of the compelling opposite dictionaries, concordances where the method of synonymous correlation is used.

The following issue, on which we should stop, is the synonymy of terms, – the one called a coincidence of the basic meanings (usually with the retention of differences in the nuances and the stylistic characteristic) of terms, morphemes, constructions, phraseology units and etc. The problems of synonymy were considered many times in Ukrainian linguistics but these investigations studied mostly general vocabulary. Although the question of the choice of appropriate terminological meaning caused a great interest in practical terminology, such Ukrainian linguists as T. Rybak, T. Leshuk, L. Kucherenko, B. Rytsar worked on the problems of terminology synonymy.

Synonyms for terminologists are difficult to handle with: their "surface" is the only distinction between them. In a semantic net they name the same node. Consequently, they are seen as being the same with the exception of their surface and grammatical structure. They are included in a term bank generally in the same way as abbreviations and short forms of terms with their full form. Due to the entry structure (every concept gets a single set of data) they should be found in the same record, with their grammatical features, pronunciation or every information on the surface structure that is to be included in the data base. What is more it receives a classification of its usage, for example as a preferred term or deprecated term.

The phenomenon of synonymy in terminology is traditionally thought as negative that is why the lexicographers of terminological dictionaries are always trying to avoid synonyms and chose only a standard variant. Moreover, a lot of terminological dictionaries are completed, as a rule, without philologists and the choice of available meaning became dependent on the choice of the author. One of the most important requirements for a term in the linguistic opinion is the absence of synonyms in one terminological system [5, p. 147].

But in terminological literature there is an opposite point of view according to which synonymy in terminology is a natural expression of the vocabulary development. Synonymy of terms exists notwithstanding the requirements for a term. Contemporary terminological dictionaries have a great variety of synonymic terms, so the researchers can choose a more suitable word.

The appearance of synonymic terms is caused by several reasons.

1. Term synonyms appear in the process of borrowings which is the main source of extending and enriching national scientific terminology. Thus, most terms in Ukrainian were borrowed from other languages with the Russian language as an intermediary during the last century and coincided with their Russian variants, i.e. they were borrowed according to the rules of the Russian not Ukrainian grammar, cp.: *ажурний – прозірчастий, буферний – вирівняльний, інфлюентний – впливовий, горизонтальний – поземний, декоративний – оздобний, дистанційний – віддальний, дистиляційний – перегінний, кінетичний – руховий, пульверизаційний – розпорскувальний/ прискальний, рольковий – коточковий, селективний – вибірчий, термічний – тепловий, шунтовий – узбічниковий.* 

2. Term synonyms appear in the period of a certain national terminology establishment. There was a tradition due to which the foreign term or calque occupied a dominant position in the target language. For example, there is a term *автоматичний*, which was borrowed from Greek *automatos* next to Ukrainian *самочинний*, or *свердловий* and *буровий*, *очеретяний* and *тростинний*, *броварний and пивоварний*.

3. It is possible to suppose that the basic reason for the appearing term synonyms is the desire to avoid repetition, in other words a tendency toward the variation, the ability of polysemantic terms to enter into different synonymic groups. In order to present this problem more widely, it is evidently possible to turn both to the scientific definition and synonymous groups. If we compare three words from different terminological dictionaries, where they appeared simultaneously: *area, circle, and graph,* we observe the following:

*Area* – the measure of the region enclosed within bounding lines, or the measure of the surface of a geometric solid. Bearing in mind scientific definition given in the dictionary and comparing every meaning in the English-Ukrainian and Ukrainian-English dictionaries, it is possible to build the following synonymic group: *area, space* – площа, простір.

*Circle* – a closed curve lying in a plane and constructed in such a way that all its points are equally distant from a fixed point in the plane. Sometimes, however, a circle is regarded as a plane figure bounded by such a curve. It follows that a term is ambiguous, referring sometimes to a boundary, sometimes to a disk. If we consider terms "*коло*" and "*окружність*" as synonyms, it is possible to build two synonymic groups: 1. *circle, disk* – коло, топологічний образ кола, диск and 2. *periphery* – коло, окружність кола, межа фігури, кордон замкнутої криволінійної фігури.

Thus, a synonymous group includes the following elements: *circle, disk; circumference, periphery*.

The definition of the term *"graph"* is more strictly, and one synonymic group is easily separated: *graph, diagram, chart, scheme* (графік, діаграма, карта, схема).

*Graph* – a diagram showing the relationship between two or more variable quantities. Compare: *diagram* – діаграма, схема, графік; *схема* – scheme, plan, diagram, circuit; *график* – graph, diagram, chart, schedule. How can we distinguish and select the necessary meaning in the number of synonyms? Only if we use a contrastive method to oppose meanings of the words or compare them with antonyms, for example: *circle* – *square; periphery* – *line*.

In most cases related terms are not antonyms -- they are not one of two in a direct antonym pair. In fact most of them are distinguishable from each other by very small differences only, making them even partially synonymous. Nevertheless they are related to one another by the same super ordinate concept, consequently they are characterized as related terms only. In general it is impossible to give a grade of relation that can be individually and subjectively distinguished. Related terms, not denoting the same concept, are not placed in the same data record, but they point to each other by mentioning the other term as a representation of a related concept.

On the examples mentioned above we are able to define the basic principles of synonymy: the concept of synonymy is usually associated with the concept of antonymy. For instance, in a well-known investigation dedicated these problems and done by Russian professor A.Reformatskiy, the concepts of synonymy and antonymy are very considerably going parallel.

The linguistic term of «antonym» defines a very approximate and vague concept of meanings polarity. But, on the other hand, there are words which, while not being different in their forms, quite frequently, especially in the field of terminology, are polar, or, at any rate, may be regarded as polar so far as their meanings are concerned. For example, the opposition of *«acid"* and *"base"*:

*Acid* is defined as "a chemical compound which yields hydrogen ions when dissolved in water; the hydrogen of which can be replaced by metals or basic radicals, or which reacts with bases to form salts and water".

*Base* is "a compound which yields hydroxyl ions in aqueous solution, and which reacts with an acid to form water and salt".

The definitions mentioned above may not support an adequate basis to make up the decision of antonymy. Nevertheless we clearly associate these terms with the two classes of chemical substances with polar properties.

To sum up, we can emphasize that such linguistic processes as terminologization, determinologization, transterminologization and other specialization, metaphorization and metonimization of the term meanings are basic sources of the development of polysemy, synonymy and antonymy of terms. The ways of completing of these lexical processes are borrowing, calques, reconsideration and etc.

### LITERATURE

1 Англо-український словник/Є.І. Гороть, Л.М. Коцюк, Л.К. Малімон, А.Б. Павлюк, під заг. керівництвом Є.І. Гороть. – Вінниця: Нова Книга, 2006. – 1700 с.

2 Арнольд В.И. Лексикология современного английского языка: Учеб. пособие. – М.: Высш. Шк., 1986. – 295 с.

3 Журавлева Т.А. Особенности терминологической номинации. Монография. – Донецк: АООТ Торговый Дом «Донбасс», 1998. – 112 с.

4 Коваленко А.Я. Загальний курс науково-технічного перекладу. – Київ: Фірма ІН-КОС, 2002. – 320 с.

5 Панько т. І., Кочан І. М., Мацюк Г. П. Українське термінознавство. – Львів., 1994. – 216 с.

6 Суперанская А.В., Подольская Н.В., Васильева Н.В. Общая терминология. Вопросы теории. – М.: Наука, 1989. – 246 с.

7 Terminology. Theory and method. Edited by Olga Akhamanova and Galina Agapova. – MGU, 1974. – 206 p.

Стаття надійшла до редакції 13.08.14

# Н.П. Бідненко, кандидат філологічних наук, доцент

ЗАТ «Дніпропетровський університет імені Альфреда Нобеля», Дніпропетровськ

# МІЖГАЛУЗЕВА ОМОНІМІЯ ЯК ОДИН ІЗ ЗАГАЛЬНИХ ЛІНГВІСТИЧНИХ ПРОЦЕСІВ В ТЕРМІНОТВОРЕННІ

Досліджуються лінгвістичні процеси, пов'язані з термінологією, особливо явище семантичної варіації. Автор статті аналізує семантичну природу терміна і освітлює причини, що впливають на міжгалузеву омонімію в термінології.

*Ключові слова:* термін, слово, полісемія терміну, семантична варіація, термінологічна система, однозначність, закон знака, професійна або наукова комунікація.

#### Н.П. Бидненко, кандидат филологических наук, доцент

ЗАТ «Днепропетровский университет имени Альфреда Нобеля», Днепропетровск

# МЕЖДИСЦИПЛИНАРНАЯ ОМОНИМИЯ КАК ОДИН ИЗ ОБЩИХ ЛИНГВИСТИЧЕСКИХ ПРОЦЕССОВ В ТЕРМИНООБРАЗОВАНИИ

Исследуются лингвистические процессы, связанные с терминологией, в частности явление семантической вариации. Автор статьи анализирует семантическую природу термина и рассматривает причины, которые влияют на межотраслевую омонимию в терминологии.

Ключевые слова: термин, слово, полисемия терминов, семантическая вариация, терминологическая система, однозначность, закон знака, профессиональная и научная коммуникация.