

## ПЕРЕКЛАДОЗНАВЧІ СТУДІЇ

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### MODERN TENDENCIES IN THE PROCESS OF TERM FORMATION

The article presents an attempt to trace some modern tendencies in English term formation caused by the informative and communicative processes development. The author analyses the characteristic features of the term formation in the Ukrainian speaking rendering. The most widely-used ways of translating new terminological constructions are investigated.

*Key words: term-formation, polysemy of terms, interscientific homonymy, terminologization, transterminologization, transterms, conversion, borrowings, the ways of term translation.*

The development of informative and communicative processes has provided the appearance of new terms in all sciences and technologies when new objects or parts of objects come into play. As a rule these terms form the most important level of vocabulary are called neologisms. Some of these terms have already become well-known for everyone and play a great role in the enriching target language. Such words like *SMS, mobile phone, Wikipedia, Bluetooth* entered quickly our life and transferred into the class of the common used lexical ones. These words are connected with comprehensive cognitive, lexical and semantic, word formative and grammar levels and designate new, not known earlier phenomena, objects, branches of science and professions.

Nowadays the necessity of new term formation to express new objects, a variety of non-determined terms is explained by the reorientation of the linguistic science towards the practical branches of human activity. It is considered that the process of terminological name-giving without going deep into theoretical problems may be represented in the following way: motivator – classifier – word-building pattern – concept (notion) – a term [9, p. 166].

Some new terms were brought to life by computer technologies development, cp.: *cyber security, cognitive radio, smartwatch, dropbox, private cloud, hybrid database* and others. The technological development has probably the most significant impact on the language. For instance M. Gaiduk emphasizes that «cyberland has been heavily influenced by pop culture and it boasts its share of counterculture phrases drawn from comic books, children's stories, sci-fi movies and New Age movements» [10]. Thus the computerization is the most noticeable feature of the technological progress of the last decades.

There are several modern tendencies in the English term formation: the process of terminologization which is considered as the most widespread among them, transterminologization, borrowings and conversion. It is also worth to mentioning the semantic volume of the terms created earlier has been changing as a result of transferring term meanings.

Despite the fact that term is based on the principle of monosemy, a great variety of terms is used in different spheres of science and technology and acquires several meanings. The theory and practice of investigation of various terminology systems, and also the experience of different lexicographical works emphasize that term as a lexical unit, which main function is determination of a concept, can be polysemantic.

Terms have various meanings depending on a certain terminology system at the process of translation and are called polysemantic. Polysemy of terms as well as their synonymy, homonymy and antonymy is usually registered in the number of lacks in many modern terminologies. Even for a description of this lexical process there are two terms in terminology: *polysemy and semantic variation* [3, p. 44]. O. Ahmanova, and then A. Superanskaya point out to one of the reasons for term polysemy, its «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) [11, 71; 7, с. 56]. Other reason for polysemy of terms is explained by the specificity of term which unites peculiarities of a word and a sign to express the content of definite concept.

However **term is a word**, which instead of a simple sign specified as a definite element of 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 the literary language, and those processes of literary language are reflected in terminology.

What happens with the term when it actually functions in scientific speech? In reality the logical principle of sign construction is not frequently observed in everyday speech, and as a result we encounter the disturbance of «the law of sign» or often meet interscientific homonymy. The phenomenon of interscientific terminological homonymy 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.

So it is evident that all lexical processes occurring 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 very productive way of term formation. It is the transition of everyday word into a term, when a non-characteristic linguistic unit from common language is used for special purposes. Scholars emphasize that nowadays the major part of neologisms are terms that is why semantic changes in a language are mostly caused by the development of new terminological meanings on the basis of common word meanings [11; 3; 12; 7; 9]. The second tendency is transterminologization i.e. a transition of term from one terminology system into another one accompanied with minor semantic changes. And the third tendency in the process of term formation is borrowing foreign terms, when a new notion is named with the help of a foreign word. There are two types of borrowings. The first type is full borrowing which means that both internal and external forms of the term are loaned. The second type, partial borrowing means that a foreign term adjusts its morphological and phonetic forms to the norms of the Target Language. Therefore, in a process of translation partial borrowing is rendered by calquing.

The number of techniques such as transcoding, calque, descriptive translation, lexical and grammatical transformations are used at the process of translating new terms. Sometimes to preserve the meaning of new terms a mixture of translation techniques and transformations are applied.

Terminologization deals with the semantic way of term formation, i.e. creating new terms by means of scientific (or technical) reconsideration on the base of metaphorization or metonymization of the meanings of well-known words. The general common words with the simplest semantic structure are used more often in terminologization than other ones. It sometimes occurs as an extension of everyday word meanings when the words used in different contexts acquire new connotations and new meanings. For example, in the lexical structure of the term «*confrontation*» the primary meaning was «*quarters, collation, and comparison*». Lately this word was used in military term combinations (*confrontation of armed forces*) and acquired the meaning «*contiguity of armed forces*». Now the word «*confrontation*» has acquired the meaning «*collision*», «*opposition*».

The changes in everyday words meaning can follow three directions:

a) the appearance of the new meaning of everyday word on the base of reconsideration of the earlier existed word meanings. Thus, one of the terminological meanings of the word

«*elementary*» in combination «*elementary particle*» is «*basic, complex, fundamental particle*» (cp. one of the general meanings of the word «*elementary*» – «*simplest, simple*»);

b) the transferring the name on the base of associations. As a result, terminology meanings of the following words have appeared: *Google wallet, targeted tweeter, OpenMAMA, Red Hat Summit, Harlem Sheik technology* and etc.;

c) the appearance of the new terms after the names of new inventions or devices (terminology derivation): *Apple iWatch, Android Beam, Gigabit WI-FI*.

Terminologized linguistic unit is a former word of general language which has acquired a new terminology meaning to define a new concept next to its general meaning. The process of terminologization of everyday words can follow one of the patterns:

a) a simple usage in terminology system: *a sun ray – a geometry ray*;

b) a terminology derivation: cp. *conductivity physics, the property or power of conducting heat, electricity, or sound; superconductivity*;

c) an assimilation of foreign words or borrowings from other languages: *Haemangioma, ablaut, diphthong*;

d) borrowings from other terminology system: *a virus of flu and a computer virus, military attack and heart attack*.

What could be added is 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:

– 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 literary 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.

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 (formal or informal). 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 phrasological meaning. 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 term formation 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 [2; 4; 8; 11; 12]. 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. 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 transterminologization 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.

Different abstract word borrowings belong to the semantic way of term formation: *algorithm, cybernetics, scanner, internet connection, Wed browser* and etc. It can be a mixture of the original words and borrowings: *foreign atoms, light isotopes, liquid amortization, and young neurons*.

The main reason for borrowing is the appearance of new concept with a ready-made name and absence of that concept name in the target language (TL): *marketing; dumping; manager*. Words of professional sublanguage can be also borrowed and become terms: *golden handcuffs, duvet day*.

Most linguists emphasize that borrowings play a considerable role in the increasing terminology systems. The international scientific and technical, economic, cultural and historical, social and political terms of Latin and Greek origins are known for a long time: *acclimatization, agglutination, binary, humanity, dictatorship, internationalism, curriculum* and other words from Latin; *agronomics, dynamics, grammar, space, dramaturgy, democracy* and other words from Greek.

Since the process of borrowing is marked in every field of science and technology, all terminology has a tendency to become international. There isn't a common opinion on a problem of borrowing and whether borrowings are harmful or useful. But the point of view that borrowings destroy the semantic system of the language still exists in modern science.

To borrow foreign terms D. Lotte recommended taking into account the following factors:

- 1) borrowed terms and term-combinations must correspond to the generally accepted phonology system of the target language (TL);
- 2) morphological peculiarities and structure of borrowed terms and term-combinations must correspond to the generally accepted rules in the target language (TL);
- 3) whether the name for the new concept exists in the target language (TL);
- 4) how borrowed term-combinations contact with all system of target language, i.e. if there are homonyms, synonyms, antonyms and the words of the same root in the target language (TL) [4, p. 61].

The simplest but non-productive type of term borrowing is literal. Literal borrowing is considered as a full phonetic, grammatical assimilation of foreign terms based on the distinctions between two language systems. This type of borrowings leads to creation of international words which are almost identical in several languages: *film, text, visit, radio, doctor and etc.*

Words borrowed from different languages (mainly from Latin and Greek) occupied a considerable place in scientific and technical texts. In most cases they belong to various terminological systems: *atom, proton, focus, cosmos* – to physics; *plus, integral, logarithm* – to Mathematics; *radio, diode, modem* – to radio engineering. But it is necessary to distinguish cases when terms are built from foreign elements but from elements (usually Latin and Greek) where they weren't independent.

Calques or translation-loans belong to the number of borrowed words or phrases which do not retain their original form, but undergo the process of translating one part after another, e. g.: *машино-будівництво* – *machine building*, *self-service* – *самообслуговування*, *антисоціальний* – *antisocial*. At the time of a term borrowing from a foreign language the meanings of the newly formed words can be identical to their original ones. But consequently, such terms lose their original meaning and become «translator's false friends» or misleading words, or pseudo-international words receiving different terminological meanings. Many international words, for example *analysis, candidate, scenario, critical, originally, pioneer, practical, signal, revolutionary, traditionally* and others can be translator's false friends. It is worth paying attention on that translator's false friends (misleading words) are identically in sound forms but have different lexical meanings that's why their identical graphical forms often cause mistakes.

Thus, for instance, «*activities*» is translated as «*діяльність*» but not as «*активність*», *communal* used in the meaning *громадський* and rarely – *комунальний*; *aspirant* – *претендент*, but not *аспірант*; *direction* – *напрямок*, but not *дирекція*; *obligation* – *зобов'язання*, but not *облігація*; *magazine* – *журнал*, but not *магазин*; *fabric* – *текстильний вироб*, but not *фабрика*.

Morphological syntactic way of name-giving is a highly productive process of formation of new terms in the English language. It is a transition of a word from one part of speech to another which is generally called conversion. In modern terminology conversion is a special type of affixless derivation where a newly-formed term acquires paradigm and syntactic functions different from those of the origin word. Noun which converts into verb, verb which converts into noun, adjective which converts into verb or noun are most widespread, for example, *the needy* – *нужденні*, *front-page* – *перша сторінка*.

In modern terminology conversion is a special type of affixless derivation where a newly formed word acquires paradigm and syntactic functions without any change in the external form of the original word. Different linguists classify converted words taking into account different criteria of converted words: the criterion of completeness / incompleteness; the semantic links or syntactic functions, on the base of their correlation to the parts of speech, pointing out the main types of transposition such as verbalization (*a map (n) – to map (v)*, *an air (n) – to air (v)*), substantivation (*to back out (v) – a backout (n)*), adjectivation (*to get-out (v) – get-out (adj)*), adverbialization (*on-line (adj) – on-line (adv)*) and others, on the base of derivative stem (simple and complex), abbreviations, phrases and sentences.

All mentioned modern tendencies of the English term formation require the further deep analysis and investigation.

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Стаття є спробою дослідити сучасні тенденції в англійському термінотворенні, які були спричинені розвитком інформативних та комунікативних процесів. Автор аналізує характерні особливості творення термінів з позиції їх перекладу українською мовою. Досліджуються найбільш вживані способи перекладу нових термінологічних конструкцій.

*Ключові слова: термінотворення, полісемія термінів, міжнаукова омонімія, термінологізація, транстермінологізація, транстерміни, конверсія, запозичення, способи перекладу.*

В статье сделана попытка изучить современные тенденции в английском терминообразовании, которые были вызваны развитием информационных и коммуникативных процессов. Автор анализирует характерные особенности создания терминов с точки зрения их перевода на украинский язык. Исследуются наиболее употребляемые способы перевода новых терминологических конструкций.

*Ключевые слова: создание терминов, полисемия терминов, межнаучная омонимия, терминологизация, транстерминологизация, транстермины, конверсия, заимствования, способы перевода.*

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