SYNONYMY IN PARADIGMATIC RELATIONS OF THE ENGLISH TERMINOLOGY IN THE BIOTECHNOLOGY FIELD

Ліщук Анастасія
студентка 1 курсу факультету ветеринарної медицини, Національний університет біоресурсів і природокористування України (м. Київ, Україна),
Сиротіна Олена, наукова керівниця – кандидат педагогічних наук, доцент кафедри іноземної філології і перекладу

Terminological synonymy is a widespread phenomenon in the biotechnological terminology of the English language. Synonyms are, as you know, words that have the same or similar meaning. Terms expressing the same concepts, denoting the same

objects and phenomena of reality are synonymous-terms.

The emergence of synonymy in the biotechnology terminology is caused by linguistic and extralinguistic factors. First, this is due to the constant development of scientific knowledge, which is accompanied by the emergence of new realities and the need to provide new concepts with an accurate nomination. It should also be noted the lack of unification of some terminological systems and the presence of outdated names that function in parallel with the new ones.

The central word in the synonymous series of terms is characterized by invariant relations. Such a dominant term has common semantic features characteristic of the entire series. Other terms in the synonymous series, called constituents, differ from the dominant in certain differential semantic features. Depending on the distance from the dominant term the synonyms with differential features are located, we distinguish between absolute synonyms that have the smallest discrepancy between seed characters with the dominant and relative (partial) ones that are on the periphery and differ more in differential features. Let's take a closer look at absolute / relative synonyms in the biotechnological terminology.

Absolute synonyms, which completely coincide in meaning and use, arise as a result of the existence in the terminological system of borrowings, cripples and terms created on the basis of their own language to denote the same concept. As the analyzed results of our research have shown, the synonymous series of absolute synonyms, as a rule, include terms formed using Greek-Latin elements and national terms.

In the biotechnological terminology, absolute synonyms account for 56% of the total number of synonyms that are interchangeable. Examples of absolute synonymy are: anaerobic – anoxic, false fruit – pseudocarp, fascicle – vascular bundle, assortment – segregation, ampometric – enzyme electrode, base substitution – transition – transversion (replacement of one base in the DNA molecule with another).

Relative synonyms are synonyms in which the identity of individual lexical and semantic meanings is found, that is, incomplete coincidence of the component composition of denotative meanings. These include the terms of the biotechnology field, which have the same semantic core of meaning, but different peripheral

components. As an example, consider a synonymous series of relative synonyms: biotechnology, genetic engineering.

In the English biotechnology terminology, these terms denote concepts that have meanings that overlap. In particular, the semantic analysis of these key terms showed that these units with their own semantic volume differ in shades of meaning, have different origins and are characterized by different combinatorial compatibility.

The scientific literature distinguishes between absolute synonymy, or doublet, and variance. The term "doublet", in our opinion, is inappropriate to use in the analysis of terminological systems because of its ambiguity in linguistics. In addition, this concept does not exhaust the entire variety of linguistic forms of some synonymous terms.

The synonymy of the studied terminology is characterized by the variability of the form of terms, by which we mean formal modifications of the same linguistic sign. Such relationships of variability arise between units that are identical in terms of content and different in terms of expression.

Consider the types of formal-structural options presented by examples of the English terminology in the biotechnology field:

1. Graphic variants that differ in spelling, but have the same pronunciation. Such variants are written as one word, as two separate words or a word separated by a hyphen: biocontrol – biological control, biodiversity – biological diversity, bioengineering – bio-engineering, by product – by-product, microorganism – micro-organism, subcellular – sub-cellular, antisense – anti-sense, antibody – anti-body, nonlinear – non-linear. It should be noted that those words of the English language, which in the English version have hyphenated prefixes, in the American version are written separately or together.

2. Phonetic-graphic variants differing in pronunciation and spelling, for example: chloroplastid – chloroplast, allelomorph – allele, cellulose nitrate – nitrocellulose, estrogen – estrogen, fetus – fetus, four-base cutter – four-base-pair-cutter – four- cutter.

3. Word-formation variants of synonyms in the English terminology of the field of biotechnology, to which we include those that differ in word-formation affixes, that is, these are terms denoting identical concepts, but having certain differences at the

level of affixes, for example: biotechnologic – biotechnological, fertilize – fertilize, metabolize – metabolize , synthesise – synthesize, sterilise – sterilize.

4. Syntactic variants of synonyms that differ in the syntactic position of the dependent word, for example, rate of decay – decay rate, behavior of plants (English) – plant behavior (Amer.).

5. Variants of using terms of full and short forms (reduction by means of word formation, full form and abbreviation). These professional synonyms include laboratory (English) – lab (American), biotechnology (English) – biotech (American). Examples of full form synonyms and abbreviations are: genetically modified organism – GMO.

An analysis of the factual material gives grounds to single out the following structural types of synonymous terms in the biotechnology field:

1. One-word synonyms of the same root. Their number in the studied terminology is insignificant, for example, megaspore – macrospore, geotropism – gravitropism, radioimmunoassay – RIA, plant variety protection – PVP.

2. One-word synonyms with different roots: progeny – offspring, isoform – isoenzyme, tag – label. One-word mixed-root synonyms make up approximately 50% of the total number of synonyms in the studied terminology.

3. Word and phrase: allosome – sex chromosome, gynandromorph - sex mosaic, ortet - donor plant, senescence - biological aging, radioisotope - radioactive isotope.

4. A word and two phrases: ibozyme - catalytic RNA, gene shears; biodiversity - biological diversity, ecological diversity; sporocyte - spore mother cell, prion - proteinaceous infectious particle.

5. Synonyms term- combinations, that is, syntactic synonyms. The same concept is denoted by two different phrases, most of which differ in only one component. For example: semen sexing – sperm sexing, shuttle vector – bifunctional vector, terminal transferase – homopolymeric tailing, recombinant protein – heterologous protein, restriction site – recognition site, insertion element – insertion sequence, monozygotic twin – identical twin, cell fusion – cell hybridization, cloning vehicle – cloning vector, allosteric control – allosteric regulation, tivated carbon – activated charcoal, disulphide

bridge – disulphide bond.

Synonyms of term – combinations can consist of the same attribute and different nouns: allosteric control – allosteric regulation, anaerobic digestion – anaerobic respiration and from the same nouns and different attributes: bifunctional vector – shuttle vector, freeze preservation – cryobiological preservation, anti-oncogene – recessive oncogene, flush-end cut – blunt-end cut, affinity tag – purification tag.

Based on the analysis of the biotechnology terminology, it can be argued that synonymy is a widespread phenomenon that requires attention from linguists. The presence of a large number of synonyms is explained by the fact that the biotechnological terminological system is a complex phenomenon, since the science of biotechnology itself at the beginning of the 21st century was transformed into a complex integration science, combining several dozen sections and directions and characterized by the use of terms borrowed from the terminologies of related disciplines – biochemistry, genetics, microbiology, biology, bioethics, medicine and other sciences.

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ЗА ПІДТРИМКИ СПІЛКИ МОЛОДИХ ВЧЕНИХ НУБІП УКРАЇНИ,
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ТА РАДИ МОЛОДИХ УЧЕНИХ НАПН УКРАЇНИ

«СУЧАСНІ ГУМАНІТАРНІ ДОСЛІДЖЕННЯ МОЛОДИХ НАУКОВЦІВ У ГЛОБАЛІЗАЦІЙНОМУ СВІТІ: ВИКЛИКИ, ІННОВАЦІЇ, БЕЗПЕКА»

Матеріали міжнародної очно-дистанційної науково-практичної конференції молодих вчених

6-7 листопада 2023 року
Частина 1

КИЇВ-2023

УДК 159.9:316:37:81

С 90

Сучасні гуманітарні дослідження молодих науковців у глобалізаційному світі: виклики, інновації, безпека: Тези міжнародної очно-дистанційної науково-практичної конференції молодих вчених (6-7 листопада 2023 р.) [у 2-х ч.] /За заг.ред. О.М. Прохорчука. – К., 2023.Ч.1.-233с.

Рекомендовано до друку

Вченою радою Гуманітарно-педагогічного факультету

(Протокол №6 від 17.11.2023)