SEMANTIC RELATIONSHIPS IN THE TERMINOLOGY SYSTEM OF THE U. S. HIGHER EDUCATION (BASED ON THE MATERIALS FROM THE WEBSITES OF THE U. S. HIGHER EDUCATION INSTITUTIONS)

СЕМАНТИЧНІ ВІДНОШЕННЯ У ТЕРМІНОСИСТЕМІ ВИЩОЇ ОСВІТИ США (НА МАТЕРІАЛІ ВЕБ-САЙТІВ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ США)

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The article highlights semantic relations (synonymy, antonymy, polysemy) within the terminological system of specialized language of the U. S. higher education. In the study, the authors utilize the definition of the educational term of the U. S. higher education as a standard lexical or syntactic nominative unit with a neutral connotation and communicative, pragmatic and heuristic orientation, denoting a special educational concept and functionally related to the professional sphere of higher education in the United States. The material for the study was the websites of the U. S. higher education institutions as specialized texts, which are characterized by their multimodal nature, providing for various ways of presenting information, including language, graphics, images, sound/music. Being the most important means of ensuring fast and effective communication of higher education institutions with the target audience, a university website as a type of professional text has a clearly expressed pragmatic orientation. It is outlined that the analysis of semantic relations plays an important role in the study of paradigmatic aspects of the nomination of the terminological units of the U. S. higher education. Paradigmatic relations of a term serve as the basis by which terminological units are organized into certain terminological structures.It is stated that the phenomena of synonymy, antonymy, and polysemy, in combination with logical methods of definition and classification, are considered universals of any terminological system. It is emphasized that semantic relations in the studied specialized language and in the national language differ significantly. The conclusion is drawn that while the phenomena of synonymy, antonymy, polysemy are widespread in the lexical system of the commonly used language, in the terminological system under study these phenomena have their own limitations and specificity, which is determined by such requirements for the term as unambiguity, stylistic neutrality, etc., ideally excluding any polysemantic relations.

Key words: U. S. higher education term, specialized language, website, specialized text, multimodal text, semantic relations, synonymy, antonymy, polysemy.

У статті висвітлено семантичні відношення (синонімія, антонімія, полісемія) в термінологічній системі вищої освіти США. У дослідженні автори послуговуються визначенням освітнього терміна вищої освіти США як стандартної лексичної або синтаксичної номінативної одиниці з нейтральною конотацією та комунікативною, прагматичною й евристичною спрямованістю, що позначає спеціальну освітню концепцію та є функційно віднесеною до професійної сфери вищої освіти США. Матеріалом дослідження слугували веб-сайти закладів вищої освіти США, фахові тексти цієї галузі, що визначаються своїм мультимодальним характером, передбачаючи різні способи представлення інформації, з-поміж яких мова, графіка, зображення, звук/музика. Будучи найважливішим засобом забезпечення швидкої та ефективної комунікації закладів вищої освіти зі своєю цільовою аудиторією, університетський веб-сайт як тип фахового тексту має чітко виражену прагматичну спрямованість. Зазначено, що аналіз семантичних відношень відіграє важливу роль у вивченні парадигматичних аспектів номінації термінологічних одиниць вищої освіти США. Парадигматичні відношення терміна слугують основою, за допомогою якої термінологічні одиниці організовуються в певні термінологічні структури. Наголошено, що явища синонімії, антонімії та полісемії, у поєднанні з логічними методами визначення та класифікації, вважаються універсаліями для будь-якої термінологічної системи. Наголошено, що семантичні відношення у досліджуваній спеціалізованій мові та в національній мові суттєво відрізняються. Зроблено висновок, що, хоча явища синонімії, антонімії, полісемії поширені в лексичному середовищі загальновживаної мови, у досліджува-

ній термінологічній системі ці явища мають свої обмеження та специфіку, яка визначається такими вимогами до терміна, як однозначність та стилістична нейтральність.

Ключові слова: термін вищої освіти США, фахова мова, веб-сайт, фаховий текст, мультимодальний текст, семантичні відношення, синонімія, антонімія, полісемія.

Problem statement. The continuous development of science and technology brings significant changes to the linguistic and conceptual view of the world, multiplying the specialized vocabulary in the lexical system of the language several times. At the same time, in the conditions of rapid technological development of modern society and increasing information flows, the need for professional communication is growing. This explains the interest in studying problems related to terminological systems. The relevance of the research is also due to a number of extralingual factors: first of all, the scale of transformations that affected the structure and content of the U. S. higher education at the beginning of the 21st century in connection with the rapid development of information technologies, diversification and further pragmatization of this educational sphere. The dialogue "society – communicators of the professional sphere" takes place in new conditions and leads to a specific, functionally directed use of the U. S. higher education terminology, which contributes to the optimal solution of the communicative tasks of the professional community. Active processes of term formation that occur in the modern terminological system of U. S. higher education are accompanied not only by a significant variability of names, but also by the emergence of new pedagogical technologies, which necessitates the ordering and unification of this terminological system, taking into account the specifics of the genesis of its terminological units.

The choice of the specialized language of the U. S. higher education as the object of our research is due to the fact that today the USA is a leader in the common globalization processes of social development not only due to its economic well-being, but also progressive trends in the development of higher education, which is simultaneously a specialized language, which are constantly developing [11]. The terminology of the specialized language of the U. S. higher education has gone through a complex path of development, the dynamics of which are determined by both linguistic and extralingual factors. Therefore, a scholarly understanding of such dynamics in the light of modern ideas about terminological units is necessary for the productive work of specialists in the field of applied linguistics.

Furthermore, today, the expansion of the horizons of professional activity in the field of the U. S. higher education in the digital era is due to the activation of information technologies, which contributed to the transformation of traditional communicative trends and the generation of innovative ones, which are realized through the symbiosis of verbal, nonverbal and paraverbal means in the modern multimodal environment of American higher education institutions. At the same time, their websites, characterized by thier multimodal nature, serve as significant conductors of knowledge, combining the use of various semiotic modes, such as language, graphics, images, sound/music [18; 19; 21]. Axiomatic in the new paradigm of education is the statement about the multimodal nature of communication and multimodality as a property of all texts without exception, even those that at first glance appear to be monocoded [21, p. 269].

Being the most important means of ensuring fast and effective communication of higher education institutions with the target audience, a university website as a type of professional text has a clearly expressed pragmatic orientation [19]. The purpose of this type of professional text under study is to create the image of an "ideal" higher education institution, attract potential students, researchers, sponsors, and disseminate the latest achievements in the field of education and science as well.

Analysis of recent research and publications. In modern Ukrainian and foreign terminological studies, attention is focused on the following aspects: the specifics of the functioning of terms in the lexical system of the language (I. Barnych (2018), G. Budin (2001), A. Dyakov, T. Kyyak and Z. Kudelko (2000), I. Kochan (2004), A. Lipinska (2007) and others); standardization and unification of terminologies of various specialized languages (I. Asmukovich (2014), Yu. Hrybinyk (2015), L. Drozd and L. Roudny (1980), O. Kaminska (2013), R. Mykulchyk (2016), L. Symonenko (1991) and others); cognitive aspect of studying terminologies of specialized languages (S. Vyskushenko (2012), G. Sadovnikova (2016) and others).

Today, individual specialized languages have become the subject of study by many Ukrainian linguists, including: L. Vaskovets (2013) (specialized language of the treasury); S. Vovchanska (2014) (specialized language of marketing); L. Zapotochna (2017) (specialized language of medicine); M. Kizil (2017) (specialized language of computing); O. Konstantinova (2004) (specialized language

of taxation); L. Zhuk (2013) (specialized language of the agricultural sector); S. Kolosova and S. Radetska (2016) (specialized language of the fashion industry); O. Petryna (2016) (specialized language of the banking sector); M. Salamakha (2016) (specialized language of environmental protection); L. Khalipovska (2010) (specialized language of aviation), O. Chuieshkova (2002) (specialized language of economics), etc.

The study of various aspects of educational terminology is presented in the works of such Ukrainian linguists as: T. Bevz (1996) (functional and stylistic features of pedagogical vocabulary); L. Verhun (2004) (translational correspondence of educational vocabulary of English (British and American national variants) and Ukrainian); V. Harapko (2018) (structural and semantic features of English-language pedagogical terms); A. Hudmanian and G. Yencheva (2021) (structural features of aviation polylexemic terms); O. Dubinchuk (1994) (organization of educational terminology); L. Knodel (2019) (translation of English-language educational vocabulary); N. Kostenko (2016) (structural and semantic and functional parameters of English-language educational terms); N. Stefanova (2004) (extralingual conditioning of modern English-language pedagogical terminology); N. Pasichnyk (2014) (semantic and functional aspects of English-language didactic vocabulary), S. Fedorenko (2021) (lexical and semantic features of the terminology of higher education in the USA), V. Yakovleva (2007) (problems of equivalence and translation of pedagogical terminology of education), etc.

K. Sheremeta [16], a Ukrainian linguist, defines an educational term of the U. S. higher education as a standard lexical or syntactic nominative unit with a neutral connotation and a communicative, pragmatic and heuristic orientation, which denotes a special educational concept and is functionally assigned to the professional sphere of the U. S. higher education. In turn, this Ukrainian scholar considers the terminology of the specialized language of the U. S. higher education as a holistic, dynamic system, the structural elements of which are terminological units used to denote specialized educational concepts and are functionally assigned to the professional sphere of the U. S. higher education, exploited in various types of specialized texts, and which develops in accordance with the laws of language and under the influence of extralingual factors [16].

Setting the task. The purpose of the article is to characterize semantic relations (synonymy, antonymy, polysemy) within the terminological system of specialized language of the U. S. higher education. Our study sample included the websites

of the following U. S. higher education institutions: Massachusetts Institute of Technology (https://www.mit.edu/), Harvard University (http://www.harvard.edu/), University of Pennsylvania (http://www.upenn.edu/), Yale University (https://www.yale.edu/), Princeton University (www.princeton.edu/), Brown University (https://www.brown.edu/), University of Virginia (https://www.virginia.edu/), University of California, Berkeley (https://www.berkeley.edu/), University of Illinois (http://illinois.edu/).

Presentation of the main material. The analysis of semantic relations plays an important role in the study of paradigmatic aspects of the nomination of the terminological system of the U. S. higher education. Paradigmatic relations serve as the basis by which terminological units are organized into certain terminological structures. In particular, "the unity of the semantic organization of terminological lexicon within the semantic field is based on paradigmatic correlations – synonymous, hyponymic, antonymic, etc." [8, p. 179]. In general, paradigmatic relations are relations where a certain set of lexemes forms a paradigm, for example, a semantic paradigm, which consists of members of one grammatical category, which have common semantic features, but do not have others, and which confirm the systemic organization of terminology [24, p. 8]. The following relations between the meanings of terminological units are distinguished: 1) terms that have the same form but different meanings (polysemous and homonymous terms); 2) terms with a similar meaning but different forms (synonyms and hyponyms); 3) terms of different forms and meanings but semantically related on the basis of opposition (antonyms) [25, p. 3361].

In modern linguistics, the phenomena of synonymy, antonymy, and polysemy, in combination with logical methods of definition and classification, are considered universals of any terminological system. As the Ukrainian philologist O. Konstantinova states, "the systemic result of the process of semantic development of a sign is the simultaneous emergence of synonymy (and, subject to their semantic polarization, antonymy) relations for some words and polysemy for others" [4, p. 193]. Let us begin the consideration of these phenomena within the framework of the terminological system under study with synonymy.

Regardless of such basic requirements for terms as unambiguity and consistency, today's terminological systems do not exclude the phenomenon of synonymy. The nature of synonymy is based on human associative thinking and "is determined by the processes that occur in language and society" [7, p. 210]. The

emergence and widespread use of new technologies, and with them the emergence of innovations in the field of education, is accompanied by the creation of variable nominations to designate these realities. As A. Mishchenko claims, the extralinguistic factor of synonymy is scientific and technological progress, which "presupposes the creation and further evolution of the lexical composition" [7, p. 211]. So, as T. Mykhailova summarizes, the phenomenon of synonymy in terminology is due to linguistic and extralinguistic factors, including:

1) the constant development of science, accompanied by the emergence of new concepts and the desire to give each concept the most accurate name;

2) the lack of uniformity of individual terminological systems;

3) the functioning of outdated names in parallel with new ones;

4) the parallel use of borrowed and autochthonous terms;

5) preference for short forms convenient for oral communication and writing, which generates synonymy at different structural levels [6, p. 18].

According to J. Lyons, any two lexical units are synonyms if the "true semantic" meaning does not change when replacing one word with another [22, p. 428]. Synonyms in the terminological system are represented by terminological units that belong to the same denotation, but differ in conceptual content, semantics of word-forming elements, etymology, level of modernity and specifics of functioning (e.g., *agency – proactivity; autonomy; ability to exercise choice; civic engagement – civic participation; public engagement)*.

As for the classification of synonym terms, in modern linguistics there is no generally accepted classification. For instance, the Ukrainian philologist T. Mykhailova distinguishes three types of synonymous relations between terms according to the semantic criterion: absolute synonyms (terms-doublets); relative (differing in seme) and complex synonyms (the synonymic series includes absolute and relative synonyms) [6, p. 11].

In general, synonymy is based on the identity of the semantic components of the semantic structure of terminological units. The invariant implementation of the meanings of lexical units belonging to the level of linguistic abstraction is implemented in synonymous variants – units of the linguistic level. This approach to synonymy allows us to distinguish synonymous series taking into account the different proximity of the meaning of their components, conceptual essence and stylistic nuances at the functional level.

Therefore, synonyms form series of words that are distinguished by establishing the similarities and differences of their meaning based on the analysis of the components of the semantic structure of terms.

Taking into account the fact that in the literary language the presence of words that completely coincide in meaning and use is doubtful, at the level of terminological systems absolute synonymy is mainly widespread, which gives grounds to call this phenomenon terminological doublets – words or combinations of words that are connected by a special terminological correlation with one scientific concept and subject of reality [8, p. 67].

O. Pryimachok, analyzing the works of researchers on the issue of doublet and variant within the phenomenon of synonymy in terminological systems, concludes that "the concept of a variant focuses on the formal side of differences, and the concept of a doublet is directed to the semantic (conceptual) plane, which makes it possible to talk about variant and doublet as different scientific phenomena and to study them separately" [9, p. 131]. In the terminology under study, the most common type of synonymy is doublet, which can be traced in [16]:

1. The use of synonymous core components of terminological phrases. Mostly these are such pairs of term elements as: *education/learning, skills/literacy, competencies/skills* (e.g.: *environmental education – environmental learning; core competencies – fundamental skills*).

2. The use of synonymous attributive components of terminological phrases. Attributive term elements-synonyms can be of different etymology (borrowed/autochthonous) or different structure (word/abbreviation), which arise as a result of fixing different characteristics of a certain object or phenomenon, e.g.: *first-year seminar (FYS) – first-year launch, freshman seminar, first-year experience, orientation seminar; mobile learning – M-learning, e-learning, mobile classes*.

3. The use of non-synonymous lexical units as attributive term elements in terminological word combinations that characterize different aspects of the highlighted object; comparison of such terms is possible only on the basis of definitions or their parallel use in the same context, e.g.: *general education – liberal education, broad-based education, broad-minded education, open-minded education; hard skills – specific occupational competencies, specific job competencies, hard proficiencies*.

4. Parallel functioning in the analyzed terminological system of terms with different structures – terminological word combinations and monolexemic units. Such doublets arise if the

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attributive component of the terminological word combination is omitted, e.g.: *elective – elective course, elective unit, optional unit.*

5. The functioning of terms not related by derivational relations, e.g.: *higher education – postsecondary education (in the USA); doctorate – third level of education, PhD education.*

Taking into account the last example mentioned above, it should be emphasized that the phenomenon of synonymy is sometimes difficult to differentiate from hyper-hyponymic relations between terminological units within a certain terminological system. Let us consider the synonymous terms *education* and *learning*. The former term, *education,* has the following meanings: 1) the act or process of acquiring knowledge, esp systematically during childhood and adolescence; 2) the knowledge or training acquired by this process; 3) the act or process of imparting knowledge, esp. at a school, college, or university; 4) the theory of teaching and learning, e.g., *a course in education*; 5) a particular kind of instruction or training, e.g., *a university education* [17].

Concerning the latter term *learning,* it is used to denote: 1) knowledge gained by study; instruction or scholarship; 2) the act of gaining knowledge; 3) in psychology, any relatively permanent change in behaviour that occurs as a direct result of experience [17].

Quite interesting is the phenomenon of synonymy of terms of American higher education, on the example of the nomination of students studying in various courses in higher education institutions in the USA in general and at the University of Virginia in particular [16]. Thus, the terminological units *freshman, sophomore, junior, senior* in the specified meaning are marked in dictionaries of modern English with the *US* mark. It should be noted separately that the term *freshman* in American English is used not only to refer to a freshman, but also to a person in his or her first year of performing certain duties or professional activities in a particular institution, including a higher education institution [17], i.e., in this case it also captures the phenomenon of polysemanticity of the terminology under study. Therefore, the indicated terms function within the terminological systems of all higher education institutions in the USA, which is also confirmed by the definitions of these lexemes in glossaries on the official websites of American universities.

Along with the above, it is interesting to note that the University of Virginia website uses the term "fourth-year student" instead of "senior," since the latter of the two terms implies that students have reached the final stage of their education.

However, Thomas Jefferson, one of the authors of the Declaration of Independence, the 3rd President of the United States from 1801 to 1809, and the founder and first president of the University of Virginia, considered the use of the term "senior" inappropriate. It should be noted that even at that time he expressed the opinion that learning is a lifelong process. Following Thomas Jefferson, the University of Virginia administration still does not exploit the term "freshman", "sophomore," "junior" or "senior" used in other American institutions of higher education [16].

Thus, taking into account the aforementioned, we can argue that in the studied specialized texts, synonymy serves primarily as a means of eliminating information gaps, performing a semantic, system-orienting function. In addition, synonymous repetition acts as a mechanism for increasing the status of the addressee, a signal of his professional competence, as well as a signal of special communication between specialists in the educational sphere and persons who use the services of a particular educational institution.

As for antonymic relations, they are characteristic of almost all terminological systems, and the educational terminological system is no exception. In terminology, as in general literary language, antonyms are used to name opposite concepts, which generally helps to identify and lexically represent the logical possibilities of a certain terminological system [14, p. 368].

Antonyms, unlike synonyms, which are characterized by the formation of synonymous rows, form a group of words from two units opposite in meaning. In such elementary antonymic microfield, oppositional relations are established, based on differences within one phenomenon. Usually, the logical basis for the phenomenon of antonymy is the opposition of specific concepts that are included in the scope of the corresponding generic concept [2]. At the same time, only lexemes belonging to the same grammatical category can be antonymic. Antonyms are linguistically conjugated pairs of words belonging to the same part of speech, are elements of a unique binary opposition [3, p. 15].

According to the structural organization, antonymic pairs of terms are divided into two groups: lexical, the differential semantic character of which is carried out through the semantic opposition of roots (*state university – private university*), and word-forming (*education – miseducation, conscious – unconscious, schooling – unschooling, synchronous learning – asynchronous*) [15].

In turn, the phenomenon of polysemy consists in the internal kinship of the meanings of a specific

terminological unit, which convey the essential features of two or more concepts of a certain field and have the same special semantics [6, p. 178]. In this case, the term is used in different meanings, and its syntactic, morphological and semantic features remain unchanged [20, p. 6]. In modern linguistics, polysemous relations are considered as internally related meanings of a terminological unit that denote essential features of two or more concepts of a certain field of knowledge and have the same special semantics [6; 10]. According to M. Salamakha, the phenomenon of polysemy is inevitable in any terminological system, serving as a manifestation of "a general tendency to economize on means of verbal expression and professional competence" [10, p. 145].

The emergence of polysemy in terminological systems of various fields is associated with the processes of metaphorization and metonymization, as well as with the tendency of human thinking to systematize and generalize knowledge about the world around us, discover new knowledge, and with the need to ensure effective communication [5]. This indicates that polysemy of terms is a manifestation of both linguistic and extralingual factors.

An analysis of the websites of the U. S. higher education institutions has shown the presence of polysemic terms, within which the following types of polysemy have been identified, such as:

1. Intra-branch polysemy, which involves the presence of two or more meanings of the same term in the field under study. An interesting example in this case is the polysemic term faculty, which is used to denote an innate mental or physical strong quality of a person, as well as all the teaching staff of a university or college, or of one department [17].

We also consider it necessary to refer to such important, in our opinion, concepts of American higher education as intra-branch polysemic terms, such as *school, college,* and *academy*. The term "school", with regard to higher education in the USA, has the following meanings: 1) a faculty or group of faculties of a university; 2) a separate group of students who receive higher education; 3) a group of scientists united by common scientific ideas and developments [26, p. 1328].

The term "college" in the US higher education system is used to refer to both an independent institution of higher education (with a two- or four-year term of study) and an analogue of a university faculty that trains specialists in any field of knowledge and has a certain autonomy [12, p. 103].

In turn, the term "academy" has the following basic meanings: 1) an institution or society for the advancement of literature, art, or science; 2) a high school or college in which special subjects or skills are taught; 3) higher education institution for training in a particular profession, e.g., the US Military Academy, the US Air Force Academy, the US Naval Academy, the US Coast Guard Academy, and the Merchant Marine Academy [23].

2. Inter-disciplinary polysemy, when the meanings of a polysemic term function not only in the field of higher education in the USA, but also in other professional languages. For example, the terms "audit" and "credit", in addition to the analyzed terminological system, are also used in economics, and the term "agency" was borrowed by the educational sphere from the field of sociology. The latter is used today in the field of American higher education to denote the free will of a student. In turn, the term "audit" has the meaning of "attending classes in a discipline or a set of disciplines as a free listener", and the term "credit" is a unit of measurement of the amount of educational workload of a higher education applicant necessary to achieve the expected learning outcomes).

3. General linguistic polysemy, when the terms are recorded both in the sphere of American higher education (with a special meaning) and in general use [1]. For example, the polysemantic noun "course" has the following dictionary definitions:1) the route or direction followed by a ship, aircraft, road, or river; 2) an action or a series of actions that you can do in a particular situation; 3) one part of a meal; 4) refer to the way that events develop; 5) a series of lessons or lectures on a particular subject [17]. Only the last in the above list of meanings of the word course is associated with the sphere of American higher education, denoting a certain academic discipline or educational component.

This group also includes the term "workshop", which in common usage means "workroom", and within the educational sphere (a usually brief intensive educational program for a relatively small group of people that focuses especially on techniques and skills in a particular field [23]).

Another example of general linguistic polysemy within the analyzed terminology is the lexeme "unit", which in the professional language of education is used in the following meanings: 1) an amount of work used in education in calculating student credits; 2) a part of a school course focusing on a central theme [23].

Conclusions. Thus, taking into account all of the above, we can conclude that semantic relations in

the studied specialized language and in the national language differ significantly. While the phenomena of synonymy, antonymy, polysemy are widespread in the lexical system of the commonly used language, in the analyzed terminological system these phenomena have their own limitations and specificity, which is determined by such requirements for the term as unambiguity, stylistic neutrality, etc.

The scope for further research lies in studying the specifics of translating the U. S. higher education terms, taken from from different types of specialized texts.

REFERENCES:

1. Васковець Л. Термінологізація та детермінологізація в казначейській терміносистемі. *Вісник Національного університету «Львівська політехніка». Проблеми української термінології*. 2013. № 765. С. 87–90.

2. Дудок Р. І. Проблема значення та смислу терміна в гуманітарних науках. Монографія. Львівський національний університет, 2009. 358 с.

3. Коваль В. П. Експресивне використання антонімів в художньому мовленні. *Українська мова та література в школі*. 1986. № 4. С, 15–21.

4. Константінова О. В. Лексико-семантичні особливості термінів оподаткування сучасної англійської мови. *Мовні і концептуальні картини світу*. 2004. № 11, кн. 1. С. 193–198.

5. Куньч З., Харчук Л. Полісемія в українській електроенергетичній термінології. *Вісник Національного університету «Львівська політехніка». Серія «Проблеми української термінології»*. 2016. № 842. С. 77–81.

6. Михайлова Т. В. Семантичні відношення в українській науково-технічній термінології: автореф. дис... канд. філол. наук. Харківський національний університет ім. В. Н. Каразіна, 2002. 20 с.

7. Міщенко А. Лінгвістика фахових мов та сучасна модель науково-технічного перекладу. Монографія. Вінниця: Нова книга, 2013. 448 с.

8. Панько Т. І., Кочан І. М., Мацюк Г. П. Українське термінознавство: підручник. Львів: Світ, 1994. 216 с.

9. Приймачок О. Синонімія, дублетність та варіантність в українській літературознавчій терміносистемі. *Лінгвостилістичні студії*. 2017. № 7. С. 128–136. https://doi.org/10.29038/2413-0923-2017-7-128-136

10. Саламаха М. Я. Англомовна терміносистема охорони довкілля: структура, семантика, прагматика. Дисертація на здобуття наукового ступеня кандидата філологічних наук. Львівський національний університет ім. Івана Франка, 2016. 317 с.

11. Федоренко С. В. Теорія і методика формування гуманітарної культури студентів вищих навчальних закладів США. Дисертація на здобуття ступеня доктора педагогічних наук. Київ, 2017. 551 с.

12. Федоренко С. В. Прагматичний аспект перекладу термінолексики вищої школи США. *Культурно-детерміновані фактори у практиці перекладу: монографія* / А. К. Солодка (ред.). Миколаїв: ФОП Швець В. М., 2017. С. 187–202.

13. Федоренко С., Шеремета К. Студіювання фахової мови в лінгводидактичному та власне лінгвістичному аспектах. *Наукові записки Національного університету «Острозька академія». Серія «Філологія»*. 2021. № 11 (79). С. 42–45. https://doi.org/10.25264/2519-2558-2021-11(79)-42-45

14. Халіповська Л. А. Явище антонімії в авіаційній термінології. *Науковий вісник Волинського національного університету імені Лесі Українки.* 2010. № 9. С. 366–369.

15. Черненко І. Антономічні відношення в українській термінології туризму. *Вісник Національного університету «Львівська політехніка». Серія «Проблеми української термінології»*. 2010. № 675. С. 183–186.

16. Шеремета К. Б. Структурно-семантичні та функційні особливості термінології фахової мови вищої освіти США. Дисертація на здобуття ступеня доктора філософії за спеціальністю 035 Філологія. Національний технічний університет України «Київський політехнічний інститут імені Ігоря Сікорського», 2025. 289 с.

17. Collins dictionary. URL: https://www.collinsdictionary.com/dictionary/english/resilience

18. Fairclough N. Critical discourse analysis and the marketization of public discourse: The universities. *Discourse & Society*. 1993. Vol. 4, № 2. P. 133–168. https://doi.org/10.1177/0957926593004002002

19. Fedorenko S., Sheremeta K. U. S. University Websites as Specific Multimodal Texts. *Alfred Nobel University Journal of Philology*. 2023. Vol. 2, № (26/2). P. 9–26. https://doi.org/10.32342/2523-4463-2023-2-26/2-1

20. Gergely P. What is Polysemy? A survey of current research and results. *Pragmatics and the flexibility of word meaning* / E. T. Németh and K. Bibok (Eds.). Oxford: Elsevier, 2001. P. 175–224.

21. Hall S. Representation: cultural representation and signifying practices. London: SAGE Publications; Thousand Oaks: The Open University, 2003. 400 p.

22. Lyons J. Introduction to theoretical linguistics. Cambridge University Press, 2001. 519 p.

23. Merriam-Webster Dictionary. URL: https://www.merriam-webster.com/dictionary/scaffolding

24. Murphy M. L. Semantic relations and the lexicon: antonymy, synonymy and other paradigms. Cambridge University Press, 2003. 292 c.

25. Paradis C. Lexical Semantics. *The Encyclopedia of Applied Linguistics* / C. A. Chapelle (Ed.). C.A. Oxford, UK: WileyBlackwell, 2012. P. 3357–3366.

26. Rundell M. Macmillan English Dictionary for Advanced Learners. Bloomsbury Publishing, 2011. 1748 p.