THE THEORETICAL ASPECTS OF TRANSLATING IT NEOLOGISMS (WITH A FOCUS OF ON POPULAR SCIENCE LITERATURE)

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Abstract. The research focuses on IT-related neologisms featured in popular scientific literature as its primary object. Its subject is the distinctive features involved in translating these neologisms, using examples drawn specifically from such literature. The data set includes neologisms selected through continuous sampling from relevant sources.

The significance of this research lies in its contribution to consolidating existing knowledge on translating IT terminology while providing an in-depth understanding of the challenges associated with such translations. This coursework highlights the distinctive features and intricacies of translating IT neologisms, identifies major issues faced during the translation process, and examines the methods and strategies applied to address these challenges effectively.

Within the IT industry, the continuous emergence of new technologies, products, and concepts plays a significant role in shaping modern life. This sector is distinct from others due to the rapid pace at which novel terms and concepts arise, necessitating frequent translation efforts. IT neologisms – referring to newly coined words, terms, and ideas specific to information technology – pose a substantial challenge for translators. Such terms are often relatively recent and might lack precise equivalents in other languages. Even when equivalents exist, they may fail to align with the target language's terminological standards, potentially resulting in misinterpretations of the text. The relevance of investigating this topic stems from the frequency and speed at which advancements occur in the domains of information technology and computer science. In the contemporary world, where technological applications and the rapid dissemination of information bear increasing significance, accurate linguistic translation becomes essential for fostering effective communication across diverse nations and cultural contexts.

This paper examines the key stages in the development of scientific thought in the field of neologism research. It describes in detail the existing methods of translating IT neologisms in the context of popular science discourse.

Key words: translation, translation analysis, neologism, popular science discourse, IT.

ТЕОРЕТИЧНІ АСПЕКТИ ПЕРЕКЛАДУ ТЕРМІНОЛОГІЇ СФЕРИ ІТ (НА ПРИКЛАДІ НАУКОВО-ПОПУЛЯРНОЇ ЛІТЕРАТУРИ)

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Анотація. Дослідження зосереджується на неологізмах, пов›язаних з інформаційними технологіями, що зустрічаються в популярній науковій літературі як на своєму основному об›єкті. Його предметом є особливості перекладу цих неологізмів на прикладі конкретних виразів, узятих із такої літератури. Набір даних включає неологізми, відібрані шляхом безперервного відбору з відповідних джерел.

Значення цього дослідження полягає у його внеску в консолідацію існуючих знань про переклад ІТ-термінології, а також у наданні глибокого розуміння проблем, пов'язаних із таким перекладом. Ця курсова робота висвітлює особливості та складнощі перекладу ІТ-неологізмів, визначає основні проблеми, що виникають під час перекладу, та аналізує методи і стратегії, що застосовуються для ефективного вирішення цих проблем.

У галузі інформаційних технологій постійна поява нових технологій, продуктів та концепцій відіграє значну роль у формуванні сучасного життя. Ця галузь відрізняється від інших швидким темпом появи нових термінів та концепцій, що вимагає частих перекладацьких зусиль. Неологізми в галузі інформаційних технологій – це новостворені слова, терміни та ідеї, характерні для інформаційних технологій, які становлять значну проблему для перекладачів. Такі терміни часто є відносно новими і можуть не мати точних еквівалентів в інших мовах. Навіть якщо еквіваленти існують, вони можуть не відповідати термінологічним стандартам мови перекладу, що може призвести до неправильного тлумачення тексту. Актуальність дослідження цієї теми випливає з частоти та швидкості прогресу в галузі інформаційних технологій і комп'ютерних наук. У сучасному світі, де технологічні додатки та швидке поширення інформації набувають усе більшого значення, точний лінгвістичний переклад стає необхідним для забезпечення ефективної комунікації між різними країнами та культурними контекстами.

У цій статті розглядаються ключові етапи розвитку наукової думки в галузі дослідження неологізмів. Детально описуються існуючі методи перекладу неологізмів у сфері інформаційних технологій у контексті науково-популярного дискурсу.

Ключові слова: *переклад, аналіз перекладу, неологізм, науково-популярний дискурс, інформаційні технології.*

Problem statement. The IT industry is a dynamic field where new technologies, products, and concepts emerge continuously, shaping modern life in significant ways. Unlike other sectors, the IT domain sees the frequent introduction of new terms and ideas that often require translation. IT neologisms – new words, terms, and concepts specific to this field – pose a considerable challenge for translators. These terms are often recent developments and might lack precise equivalents in other languages. Even when a corresponding term exists, it might not align with the linguistic or terminological norms of the target language, potentially leading to misinterpretations and confusion.

The purpose of this work is to explore the specific features involved in translating IT-related terminology from English into Ukrainian and to identify potential challenges that may emerge during the translation process. To achieve this **goal,** the following tasks need to be addressed:

1. Examine the theoretical framework relevant to the topic of this study.

2. Analyze the English-language information technology vocabulary found in popular scientific literature, identifying key terms and newly coined words that require translation into Ukrainian.

The subject of this research is on IT neologisms found in popular scientific literature.

The study examines the specific aspects involved in translating these IT neologisms, drawing from examples within popular scientific texts as an object.

Presentation of the main research material. The examination of neologisms constitutes a significant area of inquiry within linguistics, as it offers valuable perspectives on the dynamics of language evolution and the intricate relationship between language and society. This subsection delves into the concept of neologisms in linguistic studies, encompassing their definition, classifications, and functions. Additionally, it addresses the complexities associated with the analysis and translation of neologisms, with particular emphasis on the domain of information technology (IT), where novel terms are frequently generated. Within the realm of science, neologisms form a vital component of a language's lexical framework. Their emergence is often driven by the rapid advancements in science and technology, which necessitate the creation of new terminologies and conceptual categories. These newly coined lexical units carry specific scientific interpretations and are indispensable elements of specialized vocabularies. Scientific neologisms play a pivotal role in articulating innovative technical processes and methodologies, thereby facilitating the precise and unequivocal transmission of information. This precision supports the accurate interpretation and comprehensive understanding

of scientific developments while simultaneously fostering progress in scientific and technological domains. However, not all scientific neologisms attain permanence within the linguistic repertoire. While some may fade over time, others achieve widespread adoption, emerging as universal terms deployed across various scientific and technological disciplines [5, p. 271].

Translating IT neologisms in popular science literature demands a comprehensive theoretical foundation in both translation studies and information technology. This task presents significant challenges, particularly when dealing with specialized IT terminology. One applicable theoretical approach for tackling the translation of IT neologisms is functionalism. This framework highlights the necessity of identifying the communicative purpose of the text and tailoring the translation to align with the needs of the target audience. Consequently, translators must assess the technical expertise and familiarity with IT terms among the intended readers, selecting suitable translations for neologisms according to this understanding [9, p. 13].

An alternative theoretical framework applicable to the translation of IT neologisms is skopos theory. This approach prioritizes the purpose of the translation and the needs of the target audience over strict adherence to the source text. Within skopos theory, the primary goal for the translator is to create a version of the text that fulfills the same communicative intent in the target language, even if this requires departures from the original content [7, p. 156].

Neologisms rank as some of the most challenging lexical units to translate due to their unique meanings, often tied to emerging phenomena, processes, technologies, objects, and concepts. Various methods are available for translating neologisms, as outlined in [1, p. 322–323]:

Transcription involves the phonetic rendering of a word from one language into another, ensuring that the sound structure is preserved in accordance with the phonological characteristics of the target language. For instance, the English-origin neologism "big data" can be transcribed directly into the same form as "big data". 2. Transliteration refers to the process through which the written format of a word is adapted from one language into another while maintaining its original orthographic representation. As an illustration, the neolo-

gism "blogger" is transliterated identically as "blogger". 3. Calquing entails the formation of a new lexeme in the target language, modeled after the structural and semantic components of a term in the source language. This strategy ensures the preservation of both the meaning and configuration of the original term. When translating neologisms, it is essential to consider the semantic and stylistic nuances inherent to the source word, alongside the context in which it is employed. Furthermore, identifying equivalent terms in the target language often proves challenging, particularly when the neologism is relatively recent and lacks a standardized translation [10, p. 62].

Translation strategies play a crucial role in accurately translating IT neologisms found in popular science texts. One effective method for this task is employing lexical transformations. This approach encompasses techniques such as practical transcription, transliteration, conventional reproduction, and loan translation. These methods focus on adapting words from one language to another, usually in a formal and sometimes phonetic manner [4, p. 40–42].

An alternative method involves employing lexical and semantic transformations, as outlined in [8, p. 143]:

1. Transposition: Adjusting the arrangement of words or phrases to align with the grammar and syntax of the target language.

2. Replacement: Substituting original text elements with equivalent expressions in the target language.

3. Addition: Incorporating extra words or phrases to clarify or ensure accurate meaning in the target language.

4. Omission: Excluding certain words or phrases from the original text when they are unnecessary or may cause confusion in the translation. Lexical-semantic transformations constitute more extensive adjustments to the meanings of words, including processes such as generalization, differentiation, substantiation, and modulation. These techniques are instrumental in ensuring that the translated content faithfully conveys the original intent while being easily comprehensible for the target audience [8, p. 143–144].

Additionally, translators must employ grammatical transformations, as outlined in [8, p. 144], to ensure the text seamlessly adapts to the target language: 1. Antonymic translation involves conveying words or phrases using their

opposite or contrasting meanings in the target language to fit the context. 2. Total reorganization requires rearranging the structure of the text, such as altering paragraph or section sequences, to enhance readability and alignment with the norms of the target language. 3. Compensation refers to modifying the text to account for linguistic differences, which may include adding supplementary words to express nuances implicit in the source material. 4. Transformations of idioms in translation involve converting idiomatic expressions from the source text into culturally or contextually equivalent phrases in the target language, potentially requiring adjustments to grammar, syntax, or vocabulary.

The translation of neologisms necessitates careful consideration of their classification and the specific characteristics of their formation. In the case of neolexes, the recommended strategies often include borrowing or calque techniques, while the translation of neophrases may involve either calque methods or content-based translation approaches. Additionally, it is essential to acknowledge the varied forms in which neologisms manifest across languages, such as through transcription, transliteration, or calquing [3].

The application of particular translation methodologies may vary based on the context and the nuanced characteristics of the text. For instance, in technical documentation, precise terminology is often more appropriate, whereas in advertising or promotional content, a modified rendition tailored to appeal to the target audience may be preferable [6, p. 8].

Neologisms within the realm of the Internet and information and communication technologies (IT) are linguistic innovations that emerge due to the rapid advancements in IT and its influence on society. These neologisms serve as a vital component of language, reflecting the ongoing technological progress and transformations within the socio-cultural domain [2].

Various methods are employed to translate IT neologisms, with the most prominent being [2]:

1. Tracing: This involves directly translating neologisms from another language while retaining their phonetic and graphical structure. Examples include електронна пошта (email), веб-сайт (website), хештег (hashtag).

2. Borrowing: Here, terms are adopted from other languages where they have already gained widespread usage within the field. Examples are selfie (селфі), internet (інтернет), blog (блог).

3. Neutralization: This approach replaces neologisms with more familiar words or expressions that effectively convey their meaning. Examples include online store (інтернет-магазин) and webcam (відеокамера). 4. Combination: This method involves forming a new word by merging two or more terms that illustrate its meaning. Examples are електронна комерція (e-commerce), програмне забезпечення (software), and мережа соціальних зв'язків (social network).

Conclusions. In summation, the process of translating IT neologisms in popular science literature demands a thorough grasp of both the source and target languages, as well as their respective cultural nuances. The translator must possess an in-depth understanding of the distinctive features of modern scientific discourse alongside a solid command of the lexical, grammatical, and semantic adaptations pertinent to the translation process. The choice of suitable translation strategies for IT neologisms in this context is contingent upon both the situational framework and the intended audience of the resultant text. Thus, it is imperative for the translator to take into account the preferences and expectations of the target readership while ensuring that the translation retains accuracy, fluency, and accessibility.

The research employed several methods to meet its goals and objectives, including analysis and synthesis, descriptive translation, continuous sampling, discursive analysis, and statistical analysis. The study's theoretical value is rooted in its ability to consolidate theoretical knowledge regarding the translation of IT terminology and delve deeper into challenges related to the accurate translation of these terms into the target language.

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