UDC 811. 111'37

DOI https://doi.org/10.24919/2308-4863/62-2-23

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#### PECULIARITIES OF COMPUTER VOCABULARY TRANSLATION

The article deals with the peculiarities of the translation of modern English computer vocabulary into Ukrainian based on the material of computer-related articles, as well as the integration of computer lexical units into the modern vocabulary. The rapid development of information technologies has led to the fact that they are currently an integral part of the life of all mankind. This fact is also reflected in the language: new IT terms, especially in English, appear regularly. The number and speed of obsolescence of these terms, the presence of several equivalents in dictionaries or, in some cases, their complete absence, cause certain difficulties for translators.

The study of such aspects of computer vocabulary as its interaction with commonly used words, stylistic differences of computer vocabulary, the issue of the transition of computer terms into Ukrainian slang (jargon) is of particular importance.

Despite numerous researches, this topic remains understudied. This fact can be explained by the rapid development of computer technologies and, therefore, the constant updating of lexical components.

A modern translator (especially a scientific and technical one) needs to have the skills to choose or create the most adequate version of the translation. In this regard, the identification of certain problem areas will help to optimize the process of translating English IT terminology into Ukrainian. The purpose of the article is to identify the features of modern English- and Ukrainian-language IT terminology by conducting a comparative analysis of bilingual texts on the subject of IT and studying the specifics of the formation of computer vocabulary in English and Ukrainian languages.

The results of the study confirm the exceptional importance of translation creativity when working with modern IT terminology, indicate the relationship between term-forming models and translation strategy, and also form the base for further research on translation creativity during terminology translation.

Key words: translation, vocabulary, term, IT term, scientific and technical translation.

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# ОСОБЛИВОСТІ ПЕРЕКЛАДУ КОМП'ЮТЕРНОЇ ЛЕКСИКИ

У статті охарактеризовано особливості перекладу комп'ютерної лексики сучасної англійської мови українською на матеріалі статей комп'ютерної тематики, а також інтеграція комп'ютерних лексичних одиниць до сучасного словникового запасу. Стрімкий розвиток інформаційних технологій призвів до того, що наразі вони є невід'ємною частиною життя всього людства. Цей факт знаходить свій відбиток і в мові: нові ІТ-терміни, особливо в англійській мові, з'являються регулярно. Численність і швидкість виходу з ужитку цих термінів, наявність у словниках кількох еквівалентів або, у деяких випадках, повна їх відсутність викликає певні труднощі для перекладачів.

Особливого значення набуває вивчення таких аспектів комп'ютерної лексики, як її взаємодія із загальновживаними словами, стилістичні відмінності комп'ютерної лексики, питання переходу комп'ютерних термінів в український сленг (жаргон).

Незважаючи на численні дослідження, ця тема залишається недостатньо вивченою. Цей факт можна пояснити стрімким розвитком комп'ютерних технологій і, отже, постійним оновленням кола лексичних компонентів

Сучасному перекладачеві (особливо науково-технічному) необхідно мати навички обирати або створювати найбільш адекватний варіант перекладу. У зв'язку з цим виявлення певних проблемних зон допоможе оптимізувати процес перекладу англомовної термінології сфери ІТ українською мовою. Метою статті є виявлення особливостей сучасної англо- та україномовної ІТ-термінології шляхом проведення порівняльного аналізу двомовних текстів за тематикою ІТ та вивчення специфіки формування комп'ютерної лексики в англійській та українській мовах.

Результати дослідження підтверджують виняткову важливість перекладацької творчості під час роботи з сучасною термінологією сфери ІТ, проливають світло на зв'язок між терміноутворюючими моделями та перекладацькою стратегією, а також закладають фундамент для подальших досліджень перекладацької творчості під час перекладу термінології.

**Ключові слова:** переклад, лексика, термін, ІТ-термін, науково-технічний переклад.

Problem statement and relevance. At the end of the 20th century, computer technology began to become more and more an integral part of social life. New computer realities that arise with an incomprehensible speed, require immediate reflection in modern language. As knowledge of the world develops, languages are constantly evolving, and their lexical composition is constantly changing. The main source of new vocabulary in modern English is science, especially computer technologies. Rapid development of science and active penetration of personal computers in various spheres of human life brought enough to the English language specific and special lexical units and expressions.

Development of a new vocabulary in the field of computer technology and the problem of systematization become very relevant. The study of such aspects of computer science as its interaction with commonly used words, stylistic differences in computer vocabulary, issues of the transition of computer terms in Ukrainian slang (jargon) is very important.

Translation of computer vocabulary is one of the most difficult task in the fields of linguistics and translation studies, as this vocabulary is developing very quickly and needs special attention. However, certain difficulties arise during the translation, because it is impossible to reproduce them adequately in the Ukrainian language without additional knowledge related to the origin, classification and function of lexical units.

The relevance of this study is due to its significant prevalence and the constant replenishment of the computer vocabulary, as well as related to it the problem of correct and adequate translation of terms from English into Ukrainian. Difficulties in translation arise due to the presence in the language of translation of several equivalents for the same term or their complete absence, terminological dictionaries aging too quickly, transmission of English terms in an unadapted form, etc. The need to study the processes of translation of computer terms and the emergence of Ukrainian slang is also determined. A modern translator (especially a scientific and technical one) needs to have the skills to choose or create the most adequate version of the translation. In this regard, the identification of certain problem areas will help to optimize the process of translating the English IT terminology into Ukrainian.

The novelty of the work is the comparative study of computer terminology and study of IT translation methods of vocabulary. Thus, the comparison in the work is carried out in three ways: comparison of structural features of Ukrainian and English computer terms; comparison of semantic features of the computer vocabulary of the Ukrainian and English languages; comparing the ways of emergence and development of computer vocabulary.

The analysis of the research. In recent decades, the translation of computer vocabulary has received a lot of attention by domestic and foreign researchers: V. I. Zabotkina, Yu. A. Zatsny, V. O. Cherednychenko,

# K. D. Ponomarenko, E. G. Balyuta, J. L. Dillard and others.

Despite numerous studies, this topic remains insufficiently learned. This fact can be explained by the rapid development of computers technologies and, therefore, constant updating of lexical components.

The purpose of the article. The purpose of the study is to conduct a comparative analysis of English and Ukrainian computer vocabulary, compiling a short thematic glossary and identification of the connection between models of terms of IT field and translation strategy.

The presentation of the main material. Computer vocabulary is an informal layer of language consisting of unambiguous words that denote objects in the field of professional activity of computer specialists. The development of technology causes the emergence of new terms, and since modern science is tied to computer and information innovations, that is the emergence of new vocabulary and expansion of existing vocabulary is natural words in this area.

Currently, according to many linguists, technical translation, and especially the translation of computer vocabulary terms, is at the peak of its development. In today's world, such a translation is considered extremely necessary due to the convergence of many speech cultures (Карабан В. I., 2004).

The progressive process of computerization requires adequate translation corresponding texts written in one language into another. Today the problem of translation of English computer terms into Ukrainian is particularly relevant in the vast majority of cases. This is necessary for the translation of technical documentation, literature and interfaces of software products. The use of terms is a mandatory and indispensable component of the functioning of the language and speech, especially when it comes to scientific and technical discourse.

It should be noted that among other terminologies English computer terminology occupies a special place in linguistic terms. Its distinctive feature can be a significant amount of borrowed vocabulary, other semantic processes also take place – the semantic development of the meanings of previously existing words (narrowing and expanding the meanings). As in other terminologies, a significant place is occupied by national vocabulary in computer terminology. It has ceased to be a highly specialized field of knowledge and is in the process of active interaction with commonly used vocabulary (Білозерська Л. П., 2010).

There are many problems when translating computer vocabulary terms. One should remember that terms are not translated from one language to another

like ordinary words. The difficulty of translating technical texts, especially computer ones is due to the fact that many computer terms are non-equivalent, that is, they do not have a permanent correspondence in the Ukrainian language. But this does not mean that their translation is impossible at all.

The most requested is the translation of computer vocabulary in the following directions:

#### • Translation of computer games

As a rule, when a new foreign computer game appears on the domestic software market there is a need for its localization and translations into Ukrainian. Translation of dialogues and game situations require the translator to have a detailed knowledge of the plot of the game and a good understanding of all roles. The translation must be adapted to the target audience, taking into account the peculiarities of the language, and the language of the characters must be conveyed figuratively, which is as memorable as possible.

# Translation and localization of programs, applications

With the appearance of new computer programs and applications developed by foreign specialists, translation and localization of the main components must be performed for the ease of the use and perception of the program. The accompanying documentation, interface, menu buttons, and toolbar all require translation into the language of the country in which the program is planned to be distributed.

## • Translation of articles and press releases in the field of information technologies

Foreign press releases of new software and hardware are of great interest, which in turn requires the translator to pay attention to the development of the computer market, to learn about the history of each specific manufacturer in the world of the IT industry.

### Translation of operating manuals

Translation of these materials takes a significant part of the translator's time, as they are usually quite large and overloaded with a large number of complex terms.

#### Translation and localization of sites

In addition to translating the text content of the pages, one of the main tasks is to work on changing software modules, graphic and functional elements of the site. Special attention is paid to SEO-optimization of the site to adapt the original pages in search engines to the specifics of the language, which is translated (Карабан В. I., 2004).

When translating the complex texts using computer vocabulary it is necessary to trust only specialists who, in addition to linguistic education, also have a higher engineering and technical education, which ensures the highest quality of services.

Due to the developing technological progress, the technologies started to be replaced each other with incredible speed. Communication gradually moved to virtual networks and currently takes place in a large group of people called «Internet users». Since the users had to first understand the new space, the interaction in this system took place quite actively, language processes were involved, which in the new sphere of communication began to take on a new form, new terms began to be formed, which could cause the creation of slangisms.

Computer slang of the Ukrainian language is used with a purpose of giving speech an emotional color, expressing the subjective attitude to an object or phenomenon, creation of an individual image of the hero or due to the lack of counterparts in the literary language. In each of the styles, slang functions differently, and also differs in its own set of lexical or syntactic units, which most often occur in the texts that are inherent to it.

Many existing technical terms are quite inconvenient in daily use. There is a strong tendency to reduce and simplify words. For example, one of the most commonly used terms «CD-ROM Drive» is translated as «накопичувач на лазерних дисках», and as a slang it has a meaning: «сидющник».

It is also necessary to note the fact that most non-professional users do not have a sufficient level of English. But, one way or another, they still have to use the new English terminology, and the wrong reading of the English word often occurs, and the words that arise in this way sometimes become firmly embedded in their vocabulary. So, for example, from the incorrect reading of the message «NO CARRIER» the expression «HO KAP'CP» appeared in slang, and both of them mean the absence of a connection when using a modem. As a result, computer users began to speak a language of their own making.

The most common methods of translation the computer vocabulary are as follows:

- 1) The appearance of new lexical units in English can occur according to the word formation. Syntax can be demonstrated on such examples:
- nanocomputer consists of two words nano and computer (комп'ютер, що складається з елементів перемикання розміром з молекулу),
- nanotechnology consists of two parts nano and technology (нанотехнології).
- 2) Conversion allows to create other parts of the language from the existing words without morphological changes:
- to program програмування, and program програма;
  - to code кодувати, and code код програми.

- 3) A prefix is needed to combine existing words with prefixes or suffixes to create new lexical units. Example:
  - fire-wall (брандмауер);
  - note-book (ноутбук);
  - news-group (група новин).
- 4) Charade words, where parts of words can be encrypted with a number or letter, for example:
- f2f face-to-face (контакт віч-на-віч, у реальному житті);
  - p2p pay to play (плати, щоб грати);
- f2p free to play ((грай безкоштовно) (Baron N. C., 2008).

The transition to the communication of Internet users in the Ukrainian-speaking environment with the help of English slangisms has happened recently, but slangisms have already firmly established themselves in our language and can be used very often. In the Ukrainian language, English slangisms get word endings characteristic of the Ukrainian language. We use the addition of Ukrainian word-forming morphemes to assimilate words into the language. From the original language, during the transition of the lexical unit to the target language, it is necessary to modify the word for consonance with other translation languages.

There is also the formation of verbs using the suffixes -um, , -am and others: бекапити (to backup) — створювати резервні копії файлів на комп'ютері для відновлення втраченої інформації; бутити (to boot) — перезавантажувати комп'ютер; крекнути (to crack) — зламати програму.

Transliteration is a method of creating words and is used when completely copying the letter image of words for its recognition in the Ukrainian computer environment. It is quite popular and productive method, since mostly slangisms are used more in speech than in writing, which involves the frequent use of well-known slang units of another language according to their sound image.

Transcription is the reproduction of the sound rather than the literal form of a word by using the symbols of the language to be translated. This is a rather productive way of forming new lexical units, as it ensures the maximum similarity and recognizability of the lexical unit being translated from one language to another, both in the target language and in the language the sound form of the word will be matched to the original. For example: фулскрин – full-screen; скріншот – screenshot; інтерфейс – interface; файт file; фотошот – photoshop (Карабан В. І., 2004).

Conclusion. Due to constant changes in the computer environment and society, official words and expressions often remain unchanged, while slangisms reflect the assessment of people of the

current situation, they are constantly modernized, more new units are added. With the growing popularity of virtual space, slang is very relevant – it is a phenomenon that connects many users of the Internet, who exploit computers that do not only allows them to communicate and interact as effectively as possible with each other, but also reflect the picture of the computer world nowadays as a whole, being a kind of «indicator» of the environment in which it is used. A special feature of computer vocabulary is the need for its use by ordinary speakers, and not only by people dealing directly with computer technologies. The problem of translating computer vocabulary is extremely important. Inconsistencies

in the translation of terms or mistakes can be the cause of misunderstandings between specialists and, in general, affect the final result of the work.

The specifics of terminology translation include the fact that these term units require unification and bringing them to a single standard in the language of translation. Therefore, the main task of the translator is to choose one or another technique or method of translation, based on the content of the text, in order to most accurately convey the meaning of each term, since the success of the translation of computer vocabulary and the entire text as a whole depends on it, and it also actively affects formation of international speaking level B2.

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