

FEATURES OF MULTI-COMPONENT CONSTRUCTION TERMS TRANSLATION

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The article is devoted to identifying the strategies and tactics for translating construction terms of the multicomponent structure of the English language into Ukrainian. Active intercultural communication in various professional spheres requires high-quality adequate translation of professional texts from one language to another. Recently, multicomponent terms (MCT) have become an integral part of such texts, the main task of which is a more accurate naming of scientific concepts and phenomena. The construction sphere is included in the process of intensive development of its terminology, associated with the technical progress of science as a whole. In this regard, the study of both the MCTs themselves and their structure, as well as the difficulties and methods of translating MCTs from English into Ukrainian, will also be relevant.

Understanding the structure of MCT allows to determine correctly the main and dependent words, take into account the interaction of connections and interdependence between words and adequately convey them using the means of another language. It is especially important to take into account the composition of the term when translating from English into Ukrainian, since these languages have their own typological structure.

The semantic accuracy of the terminological equivalents selection plays an equally important role in the translation of MCT. In the construction sphere, MCT have a fairly high percentage of productivity, are characterized by semantic fullness and consist of numerous lexical units, each of which can correspond to different meanings in the language system.

The results of the fulfilled research showed, that grammatical and lexical transformations are applied for the translation of English multi-component construction terms into Ukrainian. Grammatical transformations were applied for the translation of 48% of all multi-component construction terms, among them: replacement of parts of speech (13%), replacement of a noun in the singular with a noun in the plural (14%), use of the genitive case (12%), adding words (9%). Lexical transformations were used in the translation of 39% English construction MCT, such as: concretization (25%), omission (14%). Explication is presented in 8% of all cases, and mixture of techniques is applied in 2% of analyzed terms. As for the order of the components, the translation is carried out using such methods as: tracing and inversion (3%).

Key words: translation, term, structure, multicomponent, translation transformations.

Липченко Тетяна. Особливості перекладу багатокomпонентних будівельних термінів

Статтю присвячено виявленню стратегій і тактик перекладу українською мовою багатокomпонентних будівельних термінів англійської мови. Активна міжкультурна комунікація в різних професійних сферах передбачає здійснення якісного адекватного перекладу професійних текстів з однієї мови іншою. Останнім часом невід'ємною частиною таких текстів стали багатокomпонентні терміни (БКТ), основним завданням яких є більш точне найменування наукових понять і явищ. Будівельна галузь зараз перебуває у процесі інтенсивного розвитку, зокрема її термінологія, що загалом зумовлено технічним прогресом. У зв'язку із цим актуальним буде також вивчення як багатокomпонентних термінів, так і їхньої структури, а також труднощів і методів перекладу багатокomпонентних термінів з англійської українською мовою.

Розуміння будови багатокomпонентних термінів дозволяє правильно визначати головне і залежне слова, урахувати взаємодію зв'язків і взаємозалежності між словами, адекватно передавати їх засобами іншої мови. Особливо важливо враховувати склад терміна під час перекладу з англійської українською, оскільки згадані мови мають свою типологічну структуру.

Не менш важливу роль у перекладі багатокomпонентних термінів відіграє семантична точність добору термінологічних відповідників. У будівельній сфері багатокomпонентні терміни мають досить високий відсоток продуктивності, характеризуються семантичною наповненістю, складаються із численних лексичних одиниць, кожна з яких може відповідати різному значенню в системі мови.

Результати проведеного дослідження показали, що для перекладу українською мовою багатокомпонентних термінів будівництва з англійської мови застосовуються граматичні та лексичні трансформації. Граматичні трансформації застосовано для перекладу 48% усіх термінів багатокомпонентних конструкцій, серед яких: заміна частин мови (13%), заміна іменника в однині іменником у множині (14%), уживання родового відмінка (12%), додавання слів (9%). Лексичні трансформації були використані в перекладі 39% конструкцій багатокомпонентних термінів англійської мови, як-от: конкретизація (25%), опущення (14%). Експлікація представлена у 8% усіх випадків, а поєднання різних прийомів застосовано у 2% аналізованих термінів. Щодо порядку розташування компонентів, то переклад здійснюється такими методами, як калькування та інверсія (3%).

Ключові слова: переклад, термін, структура, багатокомпонентний, перекладацькі трансформації.

Introduction. Active intercultural communication in various professional spheres requires the implementation of high-quality adequate translation of professional texts from one language to another. Recently, multi-component terms (MCT) have become an integral part of such texts, the main task of which is a more accurate naming of scientific concepts and phenomena. As a result, there is a tendency towards structural complication of special scientific terms, and the position of MCT in dictionaries is understood along with one- and two-component terms. Dictionaries of construction terms are also not an exception. The construction sphere is included in the process of intensive development of its terminology, associated with technological progress in science as a whole. In this regard, the study of both MCT itself and their structure, as well as the difficulties and methods of translating MCT from English into Ukrainian will also be relevant.

Leading scientists consider problems related to the analysis of the morphological structure of terms [2], the specifics of the terminological unit's translation [1; 3; 6]. Multicomponent terms have been studied in various aspects by such scientists as O. Snigovska [8], N. Knyshenko [5], T. Lepekha [7].

Purpose of the article is to study the peculiarities of the English multi-component construction terms translation into Ukrainian. The research material is the English construction terms obtained as a result of sampling from professional dictionary [4].

Results. In terms of translation, MCT represent a special complexity, as they act as a complex structural-semantic complex with certain connections between components. Hence, a necessary condition for successful translation is an understanding of both the structure and content of MCT.

Understanding the structure of MCT allows us to determine correctly the main and depen-

dent words, take into account the interaction of connection and interdependence between words and adequately convey them using the means of another language. It is especially important to take into account the composition of the term when translating from English into Ukrainian, since these languages have their own typological structure. Thus, for English phraseology, the postposition of the main word and the presence of dependent nouns defining the main word in the preposition are characteristic. Moreover, this type of phraseology with the preposition of dependent nouns prevails among construction MCT of the English language [2, p. 130]. The Ukrainian language is characterized by the preposition of the main word. In the case of the postposition of the main word, the dependent components are mainly adjectives, and the prepositional dependent components expressed by nouns are characteristic of the Ukrainian language. All this suggests that when translating English MCTs into Ukrainian, it is necessary to take into account the structural differences of the languages and carry out the necessary structural transformations, most often excluding the possibility of word-for-word translation.

The semantic accuracy of the selection of terminological equivalents plays an equally important role in the translation of MCT. In the construction sector, MCT have a fairly high percentage of productivity, are characterized by semantic fullness and consist of numerous lexical units, each of which can correspond to different meanings in the language system. For example, the term *fast settling patching compound*, which is translated as *суміш для латання, яка швидко твердне* [4, p. 241], is decomposed into separate components, each of which has different meanings and, therefore, different options for translation into Ukrainian: *fast* – *сильний, твердий, швидкий*; *settling* – *осідання; осадження, etc.* hence, the translator is faced with additional tasks related to the selection of exact equiva-

lents for each of the components or for MCT as a whole, depending on the content of the MCT.

The need to comply with the above conditions, related to the structural and substantive features of the MCT, requires the use of appropriate transformations and methods of MCT translation. Currently, in linguistics there are different approaches to defining the methods of terminology translation. Thus, V. Karaban, depending on the nature of the units that are considered as the initial ones in the transformation operation, distinguishes lexical, grammatical and complex lexical-grammatical translation transformations [3, p. 275]. A. Kovalenko offers such methods of translation as permutations (changing the components order), addition (using additional words in translation), substitution (specification, generalization, compensation, etc., as well as replacement of parts of speech, types of syntactic connection, etc.) and omission (omission of words in translation) [6, p. 150].

L. Bilozerska considering the features of the translation of scientific terms-phrases, points to such techniques as tracing, translation using the genitive case, translation using prepositions, descriptive translation, inversion of the components order in the MCT, transliteration, equivalents, selection of contextual meaning [1, p. 45].

Based on the studied material, we came to the conclusion that the used techniques for translating MCT in the construction sphere affect two aspects: a) the order of the components of terminological phrases; b) the translation of the components themselves.

As for the order of the components, the translation is carried out using such methods as:

1) tracing, when translating an English MCT, a Ukrainian terminological phrase is proposed that repeats the order of English MCT components and preserves the structure and composition of the original unit, for example: *gas distribution network* – *газова розподільча мережа* [4, p. 279], *ultimate bearing capacity* – *гранична несуча здатність* [4, p. 656], *gas-control automatic equipment* – *газорегуляторний автоматичний пристрій* [4, p. 279], *main distribution box* – *магістральна розподільна коробка* [3, p. 386] etc.;

2) permutation, or inversion, i.e. changing the order of occurrence of the components in a terminological combination, which entails a change in the structure of the original phrase in the target language, for example: *accident pre-*

vention regulations – *правила техніки безпеки* [4, p. 18], *daily pondage basin* – *басейн добового регулювання* [4, p. 170], *gas heating system* – *система газового опалення* [4, p. 279], *parallel wire unit* – *пучок паралельних дротів* [4, p. 452] etc.

At the same time, inversion often does not imply the omission of any components of the original MCT in the target language, which indicates the possibility of combining inversion and calque as translation techniques.

When translating components of the English MCT, existing equivalents and variant correspondences can be used, as well as a number of grammatical and lexical transformations are applied: replacement of parts of speech, morphological transformation, addition of words, lexical replacement (generalization, contextual replacement), omission of words. In most cases, many of the above translation techniques, including calque and inversion, are used simultaneously due to the fact that the terminological word combinations themselves represent complex semantic and structural units, when translating which, as already mentioned above, it is necessary to take into account both the substantive and formal sides. Hence, the further division of translation techniques is conditional and is carried out with the aim of a more accurate and indicative analysis of the various components of the MCT translation process.

The grammatical transformations used when translating construction MCT into English are the following:

a) replacement of parts of speech, namely, replacing a modifying noun with an adjective: *radial cone bottom* – *радіально-конічне днище* [4, p. 587], *face opening of exhaust hood* – *робочий отвір витяжної парасольки* [4, p. 239], *one pipe heating system* – *однотрубна система опалення* [4, p. 441], *omnium concrete plank* – *збірна залізобетонна пластина* [4, p. 438].

The need for such replacements is explained by typological differences in the structure of word combinations in the Ukrainian and English languages. Thus, in English, a noun quite often acts in the function of definition, while being in a preposition to the main word, which contradicts the typological structure of a word combination in the Ukrainian language, where in the function of definition in a preposition *to* the main word, adjectives, participles, pronouns, etc. can be used, but not nouns;

b) replacement of a noun in the singular with a noun in the plural: *vacuum lifting equipment* – вакуумні вантажозахватні пристрої [4, p. 666], *ladder jack scaffold* – сходові ліси [4, p. 361];

c) the use of the genitive case to attach a modifying noun in postposition to the main word in Ukrainian, in contrast to the preposition and the general case of the noun in English, i.e. the use of permutation and morphological transformation: *earliest event occurrence time* – найраніший термін настання події [4, p. 211], *packaged building program* – комплексна програма будівництва [4, p. 458], *offset yield strength* – умовна межа поточності [4, p. 438], *gas safety automation* – газова автоматика безпеки [4, p. 280];

d) adding words, namely adding various prepositions in combination with the rearrangement of components in the target language and changing the case forms of nouns: *ultimate compressive strength* – межа міцності при стисненні [4, p. 658], *occupant space requirements* – норма площі на одну людину [4, p. 434], *natural concrete aggregate* – природний заповнювач для бетону [4, p. 416], *main patching materials* – матеріали для ямкового ремонту [4, p. 388] etc.

The lexical transformations used in the translation of English construction MCT include the following:

a) concretization, i.e. replacing words of broader semantics with words with a narrower meaning: *nailed roof truss* – цвяхова кроквяна ферма [4, p. 412], *land development project* – проєкт меліорації [4, p. 357], *labour saving devices* – засоби малої механізації [4, p. 352], *early morning boost* – режим ранкового розігріву [4, p. 209], *balancing of building systems* – налагодження інженерних систем будівлі [4, p. 59], *activated sludge process* – очищення активним мулом [4, p. 19] etc.;

b) omission of words (sometimes lexical contraction), including prepositions: *calculation of heat losses* – розрахунок теплових втрат [4, p. 97], *date of the commencement of the work* – дата початку будівельних робіт [4, p. 167], *decentralized sewerage system* – децентралізована каналізація [4, p. 179], *deep well pump* – глибинний насос [4, p. 183], *gallery concreting train* – бетонопотяг [4, p. 277], *hardened cement paste* – цементний камінь [4, p. 303] etc.

As a result of the omission technique, English MCT become two- and one-component in the Ukrainian language, which is possible if there is an equivalent in the Ukrainian language of the concept expressed by the English MCT. In this case, often such an equivalent is a compound word: *impact pile driver* – вібромолот [4, p. 333], *vacuum method wellpoint* – голко-фільтр [4, p. 364].

The lexical and grammatical transformations used in the translation of English construction MCT include the following: explication or descriptive translation, which is used in the case when the target language does not have any possible equivalent of the term in the original language and other transformations, more optimal from the point of view of the translation compactness, are impossible: *partial safety factors* – коефіцієнти, що враховуються в розрахунок конструкцій за граничним станом [4, p. 451], *panel air system* – система кондиціонування повітря з радіаційними панелями [4, p. 443], *omnium concrete floor* – збірно-монолітне перекриття типу «Омнія» [4, p. 438].

In general, the translation of English MCTs in the construction sphere is characterized by a mixture of techniques, which is explained by the complexity of the MCT structure. For example, there are cases of combining the use of genitive case and inversion (*lateral soil load* – бічний тиск навантаження [4, p. 365]), descriptive translation and inversion (*panel air system* – система кондиціонування повітря з радіаційними панелями [4, p. 443]), etc.

Such mixed techniques allow translators to achieve a more accurate translation, without piling up the term with additional components and without deviation from the norms of the target language.

Inversion as the main technique is associated with the difference in the position of the main word in word combinations in Ukrainian and English – in the preposition and postposition in relation to dependent components, respectively. Inversion in this regard becomes necessary to balance the typological differences of languages.

The use of different translation techniques leads to the fact that the number of components of the corresponding MCT in Ukrainian and English may not coincide. For example, if you look at the equivalents of many English three-component terms, the number of components in Ukrainian terms is often higher: (1) *balances*

cantilever method – *монтаж мосту методом нависаючої збірки* [4, p. 57], (2) *canal concrete paver* – *машина для бетонування обшивки каналу* [4, p. 102] etc. The increase in the number of components in the Ukrainian language is usually associated with the need for semantic expansion and clarification of some monosyllabic concepts of the English language. Thus, in the above example (1), the explanation of the first component *balances* of the English phrase and its contextual specification lead to the appearance of the phrase *монтаж мосту* in Ukrainian, which fully reflects the meaning of the English version. Similarly, in example (2), the component of the English phrase *canal* has a Ukrainian counterpart *обшивка каналу*.

On the other hand, there are the opposite cases when English MCT in the Ukrainian language was reproduced with the shorter equivalent (often a complex word or a phrase containing a complex word). For example, English three-component term corresponded to a one-component term in Ukrainian (*gallery concreting train* – *бетонопоїзд* [4, p. 227], *vacuum method wellpoint* – *ізлофільтр* [4, p. 364]), and a four-component term in English has a two-component term in Ukrainian: *parallel flow heat exchanger* – *прямоточний теплообмінник* [4, p. 451], *zeolite water softening plant* – *нульовий пікет* [4, p. 702] etc.

All these differences, appeared as the result of translation transformations application, are

due both to the possibilities and differences of the Ukrainian and English languages, and to the translator's desire to find semantic, rather than literal, correspondences that allow achieving equivalence and adequacy when translating terms into another language. Understanding the internal structure of the MCT, the typological features of the original and target languages is a necessary condition for high-quality translation, as it allows you to reveal correctly the meaning of the term and determine the semantic connections between its components.

Conclusions. The results of the fulfilled research showed, that grammatical and lexical transformations are applied for the translation of English multi-component construction terms into Ukrainian. Grammatical transformations were applied for the translation of 48% of all multi-component construction terms, among them: replacement of parts of speech (13%), replacement of a noun in the singular with a noun in the plural (14%), use of the genitive case (12%), adding words (9%). Lexical transformations were used in the translation of 39% construction MCT of the English language, such as: concretization (25%), omission (14%). Explication is represented in 8% of all cases, and mixture of techniques is applied in 2% of analyzed terms. As for the order of the components, the translation is carried out using such methods as: tracing and inversion (3%).

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