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LEXICAL PROBLEMS OF TRANSLATION OF OIL AND GAS TEXTS

Summary. The article examines the peculiarities of the translation of oil and gas terms into Ukrainian. Along with studying the specifics of text translation in this field, the authors determine the importance of terms in their language, the need for their unification, and the role of dictionaries in the process of exchanging experience between specialists from different countries and in the process of learning the language for professional purposes.

The article outlines the types of translation of lexical units, each of which demonstrates a different degree of effectiveness in the context of translation of oil and gas terminology. Thus, among the methods of translation of lexical units, the following are highlighted: finding a direct dictionary counterpart, choosing an equivalent option, recoding, calculation, contextual substitution, semantic, antonymic and descriptive translation. Among the translational transformations there are the following: specification, generalization, addition, deletion, replacement of a word of one part of the language with a word of another part of the language.

The most effective methods of translation are identified lexical units and translation transformations. Given these features, a translator of technical texts must have a deep knowledge of languages and technical terminology, as well as the ability to work with large volumes of information and adhere to high standards of accuracy and clarity.

The mentioned examples of translation difficulties show how important it is for a translator of technical texts to have a high level of professionalism, how important it is to study specialized literature and high-quality, constantly updated reference materials in order to accurately translate technical terms from English. The difficulties of technical translation in the oil and gas sector are aggravated by the fact that specialized terminology and symbols are often developed by people who are not native English speakers. In addition, the oil and gas sector combines a lot of technologies from a wide variety of fields of knowledge, such as engineering, chemistry, geology, insurance, accounting, etc.

Key words: equivalent, term, translation, transformation.

Problem statement. The oil and gas industry is an international business and there is always a need for high-quality written translations of materials on this subject for successful cooperation and maintaining one's positions on the world market.

This causes a constant demand for translations of various oil and gas-related documentation, including translation of tender documentation, translation of oil and gas equipment drawings, translation of documents on the development of oil and gas fields, translation of documents on gathering, transportation and storage of gas and oil, translation of safety documents. It is especially

often necessary to translate the instructions for the operation of oil and gas equipment, which is mainly purchased and, as a result, due to the appearance of problems, requires more careful study during installation.

Thus, a translator in the oil and gas industry requires detailed knowledge not only of a foreign language, but also of the methods and principles of scientific and technical translation, but also full knowledge of the work of this field of production.

Scientific and technical texts reveal a number of grammatical, lexical and stylistic features, which represent a special difficulty for the translator, since these texts are designed mainly for certain professional groups who possess specific extralinguistic knowledge, and, therefore, require a particularly careful analysis.

Many characteristics of scientific and technical style are present both in scientific and technical materials in Ukrainian and in English.

According to Karaban [1], this are:

- informativeness of the text and related saturation with terms and their definitions;
- standard and consistent manner of presentation;
- the nominal nature of the structure of the sentence;
- prevalence of semi-terminological stamps;
- predominance in verbs of the present tense;
- the predominance of complex compounds proposed;
- extensive use of various means of logical communication.

At the same time, a number of features of oil and gas materials in Ukrainian are connected with specific structures of the Ukrainian language and stand out due to the peculiar use of such structures, compared to other styles of the Ukrainian language.

1) First of all, the prevalence of nominative frame constructions with a word order that is not typical for other areas, in which a group of words explaining a participle or adjective acts together with it as a prepositional attribute (cables operated at low temperatures).

2) Frequent use of short adjectives ("Prefabricated flexible pipelines are very convenient").

3) Frequent use of abstract nouns (development, solution, movement, phenomenon).

The English language is characterized by:

- widespread use of structures like "A is B", i.e. simple two-part sentences with a compound predicate consisting of a linking verb and a predicative (Each hose type is subject of complex design verification testing);
- replacement of the verbal negation do not with the nominal non (liquid is non-volatile);
- use of attributive groups;

- a desire to nominalize action processes (to clean after the welding – to do post-welding cleaning);
- replacement of adverbs with prepositional-nominal combinations. (accurately-with accuracy);
- use of intensifying adverbs as the main modal-expressive means considerably, essentially, significantly);
- significant predominance of passive forms and forms of the simple present tense;
- use of transitive verbs in the intransitive form with a passive meaning (The steel forges well);
- widespread use of elliptical constructions (for example, with the conjunctions whatever, if any);
- replacement of attributive clauses with adjectives in post-position (with that wells explored...); or use of infinitive forms in the function of attributing (the temperature to be obtained).

Analysis of the latest research and publications. The study of the features of the translation of English-language technical terms and scientific and technical texts in the oil and gas industry was carried out by M. V. Shtogryn, S. I. Manhura and others. The lexical features of the translation of English-language terms in the field of oil and gas production are the subject of the study by N. M. Akopiants.

In general, in both English and Ukrainian, all texts of this type, as Karaban points out [1], show a predominant use of scientific and technical terminology. Sukhenko [2] calls terms words and phrases denoting specific objects and concepts that are used by specialists in a certain field of science or technology.

Sukhenko [2] defines terms "as unambiguous words devoid of expressiveness" and also he characterizes the term "as a special nominative lexical unit (word or phrase) of a special language, adopted for the precise naming of special concepts." At the turn of the 20th and 21st centuries, a new idea was put forward, "that in traditional terminology, linguistic facts were replaced by requirements for the terminology being created," that it is impossible to speak of the unambiguity of a term or of a one-to-one correspondence (isomorphism) "one term – one concept," if only because there is an elementary development of concepts and categories..." [3].

During the period of rapid development of science, many terms began to penetrate into the general literary language and became known even to non-specialists. As Sukhenko [2] points out, they began to be called general scientific terms, which are used in various fields of knowledge and belong to the scientific style of speech as a whole: experiment, adequate, equivalent, predict, hypothetical, progress, reaction, etc. These terms form a common conceptual fund of various sciences and have the highest frequency of use.

However, the main difficulties in translation are caused by industry terms used in one field of knowledge, or highly specialized ones, characteristic of a certain direction of a certain field. For example, in the oil and gas industry these are: capping, throttling, coker, swivel [4]. These private terminological systems concentrate the quintessence of each science, industry or type of activity.

Presentation of the main material. The development of scientific and technical thought and, as a consequence, the emergence of new methods and technological techniques for oil production, well operation, as well as the abolition of old methods of work and the withdrawal of ineffective equipment, leads to the constant development and renewal of oil and gas terminology. The process of influx of foreign borrowings and, at the same time, the reverse process of Ukrainisation of foreign terms (instead of injection well – injection; instead of well interference – interaction) is reflected in the hierarchy of terms, in the change of their structure and semantics. Texts on oil and gas topics are among the most difficult in terms of translating highly specialized vocabulary, since the terminology of the sublanguage of oil and gas production

reflects the system of concepts that its numerous industries indicates that the cores of this system are the terms of the thematic group "Well drilling. "Drilling equipment and technology", and the transitional and peripheral zones of the system include terms from other sciences and fields of knowledge that are an integral part of the terminology of oil production (the so-called attracted terms) [5].

In the terminology of oil and gas production, the terms used are those of mathematics, petrography (equipment for studying deep samples of oil and gas: free fall core, fishing operation unit); geology (logging, pay section), geophysics (stressed state of geological material), general mechanical engineering, and computer technology.

Also, a special group of the oil and gas terminology system is a group of terms that have an expressive coloring and are scientific and technical phraseological units.

In texts on oil and gas topics, these are terms like:

- monkey board – майданчик для верхового робітника;
- christmas tree – фонтанна арматура;
- doghouse – вагончик бурового майстра;
- rabbit – у нафтогазовому контексті це слово перекладається як «скребок для чищення трубопроводу»;
- ram – «плашка» (запірний елемент противикидного превентора);
- wildcat – пошуково-розвідувальна свердловина;
- graveyard tour – нічна зміна на буровій;
- snake – азбестовий шнур; пристрій для подачі кінця каната на верх бурової вежі;
- pipe dog – трубний ключ;
- butterfly – випускний клапан.[5]

The analysis shows that most oil and gas terms-phraseologisms are formed on the basis of the similarity of the appearance or functions of certain oil and gas concepts or phenomena with the corresponding animals (dog, snake, rabbit, cat etc.). That is, metaphor is the main way of forming terms of this group.

Speaking about the formal structure of terms in texts on oil and gas topics, it is necessary to note the prevalence of abbreviations:

- BA (barrels of acid);
- BOP (blowout preventer);
- MA (mud acid);
- LNG (liquefied natural gas)

In the course of the formation of Ukrainian terminology of oil production, there is a wide use of borrowed words or calques. This phenomenon is typical for the terminologies of different languages and largely contributes to the internationalization of the languages of science.

1) The majority of all foreign-language terms are borrowed lexical units from the English language, since some of the equipment was brought from the USA or manufactured according to the American model (dynamometer, infiltration, collector, liner, lubricator, preventer, flooding, etc.). There are borrowed lexical units from French (capture, logging, colmatage, filter, etc.), German (kern, clinker, nozzle, sludge, etc.), Latin (inhibitor, repression) and other languages.

2) Eponymous terms name devices, instruments, methods, etc. after the foreign scientists and engineers who created them: the Calixa drill, the Zitzman lock, the Dann method, the Dean and Stark device, the Bourdon tube, the Gall chain, the Grover washer, the Garbut rod, the Jamin effect, etc. During operation, the most common terms are abbreviated (Kapelyushnikov turbodrill > turbodrill, etc.)

3) Terms with foreign-language morphemes are both root and affixal morphemes found in noun terms and their derivatives: vibr-o-, hydr-o-, gas-o-, piez-o-, kern-o-, vakht-o-, term-o-, turbo-

elektro-o-, -graf, -azh, -or, etc. Often these terms can be considered as the use of the method of creating hybrid terms, that is, terms consisting of native and borrowed morphemes (glinization, etc.).

4) Tracings and semi-tracings were created as new concepts emerged, new equipment was introduced, and new technological processes were mastered. They are represented either by single-word compound nouns (turbobit) or phrases (drilling valve, absolute permeability)[5].

Thus, it can be stated that oil and gas industry terms are formed using syntactic, lexical, morphological and semantic methods. The most commonly used is the syntactic method of forming terms – the formation of phrases. The lexical method of forming terms consists in creating terms by borrowing or tracing words from other languages. The morphological method of forming terms consists in forming terms by adding affixes.

The lexical-semantic method considered in this article is one of the main sources of replenishing the terminological vocabulary. As a result of the interaction of the vocabulary of the general literary language and the terminological vocabulary, a terminological rethinking of the substantive side of an already existing linguistic sign, the original word of the general literary language, occurs.

Conclusions. In the course of the research, we singled out several more ways of translation, taking into account the semantic features of the oil and gas term. Such methods of translation are the selection of the dictionary equivalent (caused by the fact that not all terms of the English language, namely the oil and gas industry, have a dictionary counterpart in the Ukrainian language) and synonym selection (we can use it in the case of the need to replace the dictionary equivalent with a synonym of the language into which the translation is carried out)[4].

Every professional translator strives to achieve maximum accuracy and adequacy when translating. For this, the primary task should be the recognition of jargon in a scientific text and the study of its semantics with the help of a terminological dictionary. The next step will be finding the correct equivalent in the translation language and using it competently during translation. Compliance with all the above-mentioned conditions ensures full adequacy of the received translation text.

In order to perform a competent and as accurate translation as possible, it is necessary to know the main features of translation. Mastering the appropriate skill involves studying the regularities of the functional style of the language of science and technology, getting to know the lexical and grammatical features of the translation of scientific and technical texts, in particular the reproduction of complex terms in the translated language, mastering the methodology of text analysis and translation techniques.

Translation of oil and gas industry terms is a complex and comprehensive process, during which the original text undergoes certain grammatical and lexical changes necessary for its adequate reproduction in the target language and allows its normal perception by the audience for which the translation text is intended. The most effective methods for translating reference texts in the oil and gas industry have proven to be tracing, transcoding and finding dictionary correspondence. Transpositions and additions have become necessary in the translation process, contributing to the standardization of the text in accordance with the grammatical norms of the target language, without distorting the meaning of the original text. Translation of industry dictionaries is a necessary factor in the exchange of knowledge and unification of professional terms by native speakers of different languages.

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Мангура С., Серeda А. Лексичні проблеми перекладу текстів нафтогазової тематики

Анотація. У статті розглядаються особливості перекладу нафтогазових термінів українською мовою. Разом із вивченням специфіки перекладу текстів у цій галузі, автори визначають важливість термінів у своїй мові, необхідність їх уніфікації та роль словників у процесі обміну досвідом між спеціалістами з різних країн і в процесі вивчення мови для професійних цілей.

У статті окреслюються види перекладу лексичних одиниць, кожен з яких демонструє різний ступінь ефективності контекст перекладу нафтогазової термінології. Таким чином, серед способів перекладу лексичних одиниць виділено: знаходження прямого словникового відповідника, вибір варіанта еквівалент, перекодування, обчислення, контекстна заміна, семантичний, антонімічний і описовий переклад. Серед перекладацьких трансформацій зазначаються конкретизація, узагальнення, доповнення, вилучення, заміна слова однієї частини мови словом іншої частини мови.

Найефективніші способи перекладу – ідентифіковані лексичні одиниці та перекладацькі трансформації. Враховуючи ці особливості, перекладач технічних текстів повинен мати глибокі знання як мови, так і технічної термінології, а також здатність працювати з великими обсягами інформації та дотримуватися високих стандартів точності та чіткості.

Наведені приклади труднощів перекладу свідчать, наскільки важливий для перекладача технічних текстів високий рівень професіоналізму, як важливо вивчати спеціальну літературу та якісні довідкові матеріали, що постійно оновлюються, щоб точно перекладати технічні терміни з англійської мови. Складнощі технічного перекладу в нафтогазовій сфері посилюються тим, що спеціальна термінологія та умовні позначення найчастіше розробляються людьми, які не є носіями англійської мови. До того ж, нафтогазовий сектор поєднує в собі масу технологій із різних галузей знань, таких як інженерна справа, хімія, геологія, страхування, бухгалтерія та ін. Більш того, нафтогазові компанії часто розробляють власну термінологію.

Ключові слова: еквівалент, термін, переклад, трансформації.