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STRUCTURAL-SEMANTIC AND TRANSLOTOLOGICAL STUDY OF ENGLISH TECHNICAL TERMS

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Abstract. In this article, the issues of the methodology of definition and translation of unknown technical terms, terms created by means of semantic modification, creation of new terms by changing the meaning of simple words, terms based on similarity of external signs, terminology made by naming according to similarity of functions and similarity of concepts, terminology, semantic terminology, repetition of terms of the same concept, structural-semantic and translotological analysis of terms based on changing the meaning of simple words, analysis of terms formed by affixation, basic suffixes and prefixes used in the construction of terms in English, structural-semantic and translotological analysis of terms formed using suffixes and prefixes have been analyzed.

Keywords: technical terms, semantic modification, simple words, external signals, similarity of functions, similarity of concepts, terminology, semantic terminology, structural-semantic analysis, translotological analysis, affixation, basic suffix, prefix.

INTRODUCTION

In translation there is some unknown term that is not included in the dictionaries. How can its meaning be determined? Sometimes, this can be achieved by context analysis. The meanings of familiar words, the grammatical connections between them and the unknown term, make it possible to identify some of the

features of the subject to which the word goes. In this way, in a number of cases, the meaning of the new term can be determined in optimal conformity.

As an example, we take the following context: the speed of the killer is over 1000 km per hour. Apparently, this context has been describing and classifying the meaning of the unknown term (aircraft type) with sufficient accuracy, and as a result there is no need to analyze the term itself (lexemic, semantic, morphemic).

However, often, the context does not allow for the correct definition of the meaning of an unknown term. For example, the phrase the killer is 10 meters long reveals the meaning of the unknown term only imperceptibly. In this case, it is necessary to analyze the grammatical (-morphemic) and lexical (-semantic) structure of the term.

In any case, it is impossible to cite a universal "golden rule" that allows us to determine the meaning of an unknown term. The methodology and methods of analysis of a foreign term are determined by both objective and subjective factors [6; 159].

Objective factors include the nature of the information available in the context, etc., the grammatical type of the terms.

Subjective factors include the skills of the translator, the availability of literature that provides the necessary information, and so on.

Sometimes, in addition to knowledge of the relevant field of science or technology, the translator is also required to have considerable knowledge of literature, history, and so on.

A translator can understand and correctly translate the term boot-strap (*ўзлари ишлаб чиқарадиган маҳсулотнинг бир қисмини иш фаолиятлари учун қўллайдиган ўз-ўзига хизмат кўрсатувчи мослама)* unit only if he is familiar with the English proverb about a person trying to lift himself out of shoelaces. It is widely believed that knowledge of a foreign language and technique is sufficient for an adequate translation of technical literature. However, the practice also shows that in some sense the translator needs sufficient professional training (competence) [7; 316]. Armed with the right methodology of translation (making),

it is of great benefit, especially to professionals who do not have in-depth specialized technical training. Knowledge of special methods of technical text analysis and translation significantly compensates for the shallowness and lack of professional knowledge in the field of technology.

Structural-semantic analysis can help to some extent in determining the meanings of unknown terms. Structural-semantic analysis refers to grammatical (morphemic) and semantic (lexemic, semantic) analytical operations (processes) performed in order to determine the true original spiritual content of a term [8; 288].

Before moving on to direct structural-semantic analysis, it is always necessary to check in the relevant dictionaries whether there is a word (in the broadest sense, any lexical unit, lexeme) in the target language, in our case in Uzbek. Sometimes, it is possible to determine the meaning of a term being analyzed in this way. Dictionaries do not include the term grinding machine, but the term grinder is used or the term worldwide members is not found, but assume that chordal members (transverse set of aircraft wings) are present. Of course, it is natural to assume that unknown terms also have exactly the same meaning. If this method does not yield any results (i.e., the predicted meaning is not proportional to the context), then it is necessary to refer directly to the literal structural-semantic analysis.

MATERIALS AND METHODS

Technical vocabulary, as sources of terminology, is the English technical literature itself: texts on technical topics; technical terminological dictionaries, including the terminological dictionary of machine mechanisms, the dictionary of aerospace terms, the terminological dictionary of shipbuilding; annotated and bilingual dictionaries; samples of popular scientific journal articles; textbooks in foreign languages on the translation of scientific and technical literature.

The methods of structural-semantic and translotological as well as component, descriptive, comparative, comparative, deductive and inductive

analysis were used in the work. The method of linguistic interpretation was also used.

RESULTS AND ANALYSIS

The methodology of structural-semantic analysis includes the following linguistic-analytical process and stage (in general, "operation"):

First, it is necessary to determine, from the context, to which category or field of science the concept represented by the unknown term belongs [10; 86]. Typically, the context allows us to determine whether the term refers to an object or a feature of an object, a technological process or equipment, machinery, and so on. In addition, the context reveals the relationship between the object (or event, process, etc.) represented by the unknown term and the other object, event, process. All this in many cases adds to the list of related, related, close concepts of the given concept and helps to determine some distinguishing features of the object or event in action. For example, in the phrase “The bow-loader can fly 24 tons of cargo, 103 men” we came across the unfamiliar term bow-loader. The current context allows us (even on the scale of this short sentence) to draw at least two important conclusions: first, we know that we are talking about an aircraft designed for some kind of air transport; secondly, we can confidently state that this hardware belongs to the type of aircraft. This is because it is known that aircraft have not yet created other types of flying aircraft with the specified payload capacity. These conclusions limit the scope of our research and allow us to ignore comments related to other “load-bearing” and other similar meanings.

After dropping the meanings of the unknown term that are absolutely inappropriate for us, we select the optimal option and once again check that the translation made is linguistically and technically sound.

Typically, the content of an article (text) or book chapters indicate to which category the concept the term being translated belongs. A general study of the spiritual structure of the term yields new information that helps to give a clearer idea of what it is about [9; 750]. By knowing the field, facade, and some of the specific features of the concept to which the concept represented by the unknown

term can be translated, the translator can determine exactly what the quoted term means. In doing so, the interpreter must, of course, test his hypothesis. If the translation is technically correct, appropriate, and literate, and is confirmed by the macro-context (i.e., the content of the whole article (text) or chapter of the book), or at least does not contradict it, then the original can be considered correctly understood.

Thus, we see that at all stages of the structural-semantic analysis of the unknown term, it is necessary to take into account both pure language and scientific-technical aspects that determine the meaning of the translated term.

The correctness of the translation of a previously unknown foreign term can be fully convinced only when it is known why the choice of this or that term is linguistically and technically justified to express the existing concept [13;8]. In other words, it is important to know the specific features that distinguish the term, how they are expressed by means of language, exactly why these symptoms are present, why they are reflected in the same means of language, and other similar aspects.

We will try to answer these questions with the example of the term bow-loader. As we have seen above, this term refers to a characteristic feature of this type of aircraft, in which the door fuselage (aircraft fuselage, hull) is located on the front, not on the side or rear, as usual [14; 59]. This symptom is expressed using the bow component. This characteristic is taken as a description of this type of aircraft, because it not only shows the important design features of the aircraft, which is crucial in the performance of its mission (cargo), but also informs the specialist about the mission of the aircraft. This aircraft is an airborne aircraft, and the term bow-loader was coined to denote the concept of a "yuk eshigi korpusning old qismida joylashgan yuk tashuvchi (transport) samolyoti" coordinated for landing and rapid unloading and loading of manpower and military equipment, as well as the fact that the door of the aircraft he represents is at the front, and also that it is intended for cargo, and that the door at the front plays a role in this.

From a technical point of view, logically correct and flawless reasoning and reasoning that emerges when reading a translated (made) text serves as the main criterion for determining the correctness of understanding the term (and therefore the accuracy of the translation as well). Therefore, the translator is required to be familiar with the field or field of science or technology to which the text is being translated. Otherwise, difficulties arise when translating the easiest, simplest phrase, expressive device.

For example, in English, adjectives do not have the plural form. In cases where one quality is combined with several horses, the quality may apply equally not only to the first horse, but also to all other horses. A similar phenomenon is observed in the devices of adjectives and adjectives. For example, the combination of the words *high-speed coil memory and tube storage* has the following meanings:

1.xim. uglerodning temirdagi qattiq eritmasi; deyarli kimyoviy sof temir;

2.fiz. feromagnitli yarim o‘tkazgich) o‘zak va elektron trubka (o‘rama)lardagi xotirada tez saqlab qoluvchi qurilma" (memory and storage terms are translated into Uzbek in the same way).

In the combination of the words random access tube *(ma’lumotlar tanlashning ixtiyoriy, erkin tartibiga ega bo‘lgan)*, on the other hand, the random access identifier applies only to the first term, and the translation must be made as follows: "*elektron trubkalardagi tanlashning erkin tartibiga ega bo‘lgan xotirada saqlab qoluvchi moslama va magnit barabanidagi xotirada saqlab qoluvchi moslama*". Here the grammatical constructions are completely the same and the correct translation depends only on the knowledge of the field-specialization, in this case, the computational technique. This means that the interpreter needs to know that the storage device in the electronic tubes is fast-moving and that the storage device in the magnetic drum does not have a free order of data selection.

DISCUSSIONS

It should also be borne in mind that English terms, when one word is used instead of another on the basis of the closeness of the concepts they express, are understood in a special metonymic, figurative sense. The phrase of the type of the

tape no longer means “tasmaning aylanishi”. In fact, the magnetic tape (a tape recorder or computer memory device) does not rotate, but is wound from one reel (coil) to another. And, this is where knowing the specialty comes in handy for a translator. The exact structure of structural-semantic analysis depends on the type of term. Indeed, the analysis of conjunctions and so-called ‘non-stationary conjunctions’ (air brake, valve unit) is essentially to determine the type of spiritual connection between the components. On the other hand, the grammatical form of word-combinations clearly indicates the type of semantic connection between the components. For this reason, the task of exploring the existing redefinition of components comes to the fore [2; 208].

A large number of technical terms in many languages are created by changing the meanings of common language words and terms derived from other branches of science and technology. In Uzbek, English and Russian such terms include *tirsak – arm – рычаг, samolyot oyog‘i – leg – шосси, qanot – wing – крылья* and others.

This method of constructing terms differs from others in that in other cases a new form (i.e., a word with a new combination of elements) is re-created to express a new concept, where the new meaning is replaced by the old form (i.e., a pre-existing lexeme). For example, to express the concept of "helicopter" a new word helicopter (in Russian *верто+лёт, вертеться – айланмоқ* - from the verb to rotate and *(само) лёт*) was created; The term "*самолёт қанотларининг юзи*" was first used to refer to the flying organ of birds and insects.

The peculiarity of creating a term by changing its meaning is that the object being terminated (i.e., the object or event to be named) always has something in common with the object or event whose name is used as the term [5; 211]. This commonality can be manifested in similarities between their appearance or the function they perform, and in other similar aspects as well. The name of an existing object can be changed to a new one only if the concepts about these objects are clear and have a common aspect that connects them, otherwise it cannot be done. This is why this method of creating terms is used to name more objects.

Concepts about specific objects are always more general (although it is not the most important aspect of the concept).

When reading and translating foreign, especially English, scientific and technical literature, we always encounter a large number of new terms created by changing the meanings of simple words. In order to properly understand and translate such terms, the translator must have a clear idea of the specific features of their construction (structure) and spiritual (semantic) content. It is also necessary to take into account the diversity of spiritual connections between the words that served as the basis for the emergence of these terms [4; 68].

When translating terms formed by changing the meaning, the sign taken for the description of the subject and which serves as the basis for the transfer of the name may, to one degree or another, be accidental [1; 408]. Unlike other ways of making terms here, does not have to make a term that reflects the necessary features, but rather chooses a word that reflects one of the many features that can serve as a representation of an entire subject in its entirety. The following basic types of term formation can be distinguished by changing the meaning in terms of which specific feature is used in the transfer of the name (or in other words, what common features of the old and new objects are used in the construction of the term) [3; 265]:

1) naming on the basis of similarity of external signs;
2) naming on the basis of similarity of tasks;
3) naming of concepts according to their connection (dependence, proximity);
4) naming according to similarity of concepts.

CONCLUSION

Instead of the conclusion, we give a general descriptions and general outlines of some theoretical and practical conclusions and recommendations based on our research. Although the second chapter of this dissertation is entitled “Structural-semantic and translotological study of English technical terms by means of semantic modification and affixation”, it is important not only for structural-semantic and translotological analysis, but also for a number of other

English technical terminology translation theory and practice. issues of importance, i.e. all types of creation of new terms by changing the meaning of simple words (expanding, adding new meanings to them) and general analytical information on the main suffixes and prefixes used in the creation of technical terms in English [12; 7].

Thus, the practical-analytical part, developed on the basis of the theoretical part of our research "Linguo-translotological interpretation of technical terminology" and its logical continuation, focuses on the structural-semantic and translotological study of terms. A comprehensive linguistic and translational study of the grammatical-morphological, lexical-semantic changes that take place in the structure was also carried out, which, in turn, not only facilitated the implementation of structural-semantic analysis of the term, but also formed its structural basis.

The main purpose of structural-semantic and translotological analysis, as noted in the introduction, is to correctly understand (comprehend) unknown terms with different morphological structure, encountered in the English technical terminology system, and then adequately translate and express them into Uzbek. Not only this, but also the creation of an alternative term to this or that English technical term, which does not exist in the technical terminology of the Uzbek language on the basis of structural-semantic and translotological analysis, has become one of the main tasks of our work.

It should be noted that translation based on the methodology of structural-semantic and translotological analysis can be used not only in the field of technical terminology, but also in other terminological systems or, more broadly, within the whole language (or different languages) as an effective method (tool, method). possible.

Thus, the methodology of structural-semantic and translotological analysis allows to solve two tasks at once: primary - selection of adequate from the alternatives available in Uzbek in the translation of this or that unknown English term, and secondary - a specific technical concept that does not exist in Uzbek to

understand correctly and on this basis to express it clearly and concisely in accordance with the requirements of term formation.

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