# SPECIFICS OF TRANSLATING METAPHORS FROM ENGLISH INTO RUSSIAN IN MEDICAL DISCOURSE

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## Abstract

The intensive development of medical science that is currently occurring leads to the formation of a large number of new terms. Their formation occurs mainly through such common language methods as syntactic, morphological and semantic. Metaphorical transfer as a special case of the semantic method of word formation is considered one of the most effective ways to form terminological units, which makes the analysis of the features of metaphors functioning in medical texts especially vitalor.

In medical terminology, metaphor is most often considered as a phrase consisting of a word belonging to medical discourse and a lexeme from a literary language. And one word is the main one, and the second one is in a subordinating position and serves to characterize the main element.

By medical discourse, we mean a special language subsystem oriented for medical communication: to diagnose a disease, to clarify a diagnosis, to have a positive emotional impact on a patient, to adopt and substantiate the chosen treatment method in terms of different points of view in the medical community and to develop a collegial consensus.

The article describes metaphor theories and definitions, their classification proposed by various foreign and domestic linguists.

To analyze features of metaphor translation from English into Russian in medical discourse, we used such methods as continuous sampling method, semantic analysis, structural analysis. The material for metaphor translation was various terms, phrases, dialogues and texts selected from medical encyclopedias, dictionaries, reference books, scientific medical texts and films with medical subjects. The analysis of their translation was carried out by taking into account two main approaches to translation: cognitive and linguistic. The cognitive approach involves the implementation of two types of scenarios: saving or changing the metaphorical projection during translation. At the linguistic level, the translation is performed either as

close as possible to the original, if the norms of the target language allow it, or translational transformations are used.

To determine the effectiveness of knowledge skills of metaphor translation in medical discourse, the experiment was conducted in two groups of the special course "Translation Fundamental", in which foreign fifth-year students of the Russian Language Department of the Medical University of RUDN study. The students were from different countries: Jamaica, Namibia, Sri Lanka, Costa Rica, Nigeria and others. The first experimental group (15 people), before performing the exercises on translating medical metaphors was studying its features. Another control group (15 people) was given exercises and texts on the translation of medical metaphors without studying this topic.

A final test was passed, the main task of which was to determine the final level of foreign students' knowledge of the basics of metaphor translation in medical texts. The grades of both groups led to the conclusion that in the process of teaching an experimental group the skills of students according to all criteria and the level of their grades was 25-30% higher than that of students in the control group.

The practical value of the study lies in the fact that the results of the analysis can be used as an auxiliary material in the translation of medical texts containing metaphors. Moreover, the results of this study can be used in theoretical special courses on lexicology and stylistics of the Russian and English languages, as well as the study of educational materials for medical students, the organization of advanced training and the exchange of teaching experience.

**Keywords:** metaphor, medical metaphors, medical discourse, metaphor translation from English into Russian, basics of translation.

### 1 INTRODUCTION

Medical discourse in the context of various life situations acquires special characteristics, including professional medical slang, abbreviations and specific emotional coloring. The clinical situation turns out to be immersed in a context where scientific clarity is influenced by situational extralinguistic factors; as a result, it is impossible to convey it literally. Due to this, we can observe some special metaphorization of medical discourse. Thus, translators face some difficulties in conveying the meaning of medical phrases, their stylistic coloring and general mood.

Metaphors are often used in medical English texts to describe phenomena by comparing them with well-known objects.

Metaphorical terms include: 1) hybrid terms: Latin-English, Greek-English, English-Latin and English-Greek; 2) assimilated borrowings from classical languages: Latin-Latin, Greek-Greek, Greek-Latin, Latin-Greek; 3) borrowings from other languages: French, German, Spanish, Italian, etc.

The fact that English medical terminology is based on two classical sources (Ancient Greek and Latin) determines its formal semantic heterogeneity. However, national English medical terminology is based on the material of living natural language as well; therefore, it reflects its national peculiarities. Due to this, the process of intersection and interaction of national and classical term-formation means is intensified within the English medical term system.

Modern English medical terminology tends to use colloquial English words both to denote surgical methods and abnormal apertures and to describe radiological findings, blood patterns and other phenomena (Chinese restaurant syndrome, keyhole surgery, silver fork fracture, etc.). It is extremely often that the medical sublanguage uses metaphors to describe phenomena by comparing it with well-known objects (e.g., balloon cell, housemaid's knee, Swiss cheese appearance) (Zubkova 2010, Smirnova 2011).

## **2 LITERATURE REVIEW**

The concept of a 'metaphor' itself dates back to the times of Aristotle. By his definition, a metaphor is "the transfer of a name from the genus to the species, or from the species to the genus, or by analogy ... . Composing good metaphors means noticing similarities (in nature)" (Arutyunova, 1990).

One of the earliest theories of metaphor called 'interaction theory' was developed by Max Black (1909–1988) and Ivor Richards (1893–1979): this theory speaks about the main feature of a metaphor, i.e., its semantic two-dimensionality: a direct and figurative meaning is realized simultaneously, a kind of "consideration of one

thing in terms of another" occurs, because "when we use a metaphor, we have two thoughts about two different things acting together and supported by one word or phrase, the meaning of which is the result of the interaction of these thoughts" (Richards 1990).

The concept of a 'diffuse meaning' of D. Davidson, on the contrary, refutes the idea of the semantic two-dimensionality of metaphors and argues that "a metaphor means only what the words in it mean, which, in turn, only acquire a new, expanded meaning" (Davidson, 1990).

To date, there is disagreement in the linguistic understanding of metaphors between scientists. Modern domestic linguists, in particular, Ye.T. Cherkasova, B.A. Serebrennikov, E.S. Kubryakov, identified linguistic concepts and processes that determine the emergence and functioning of metaphors in speech. These include: the main word meaning, i.e., a common semantic element, which is the result of the formation of a semantic two-dimensional metaphorical meaning; lexical-semantic links between words, logically inconsistent with links between real objects and phenomena; a certain semantic type of word, grammatical categories of animate—inanimate nouns.

These provisions have become traditional or rather classical in the theory of metaphors, for example: statements about the semantic two-dimensionality of metaphors, about semantic components common to the main and figurative meanings, about an unusual metaphorical environment, about certain semantic classes of words capable of developing figurative meanings.

Thus, following A. P. Chudinov, we define a metaphor as "the main mental operation that combines two conceptual spheres and creates the opportunity to use the potencies of structuring the source sphere with the help of a new sphere" (Chudinov, 2001). Metaphors are one of the most effective means of manipulating the mind.

## 3 SPECIFICS OF TRANSLATING MEDICAL METAFORS

In modern linguistics, metaphorization is recognized as the leading method of forming terminological units, including medical terms. Many factors make metaphors productive in forming terms. Following M.V. Ozingin, we identify the following factors:

- Metaphors are characterized by visibility, which is important in practical terms, including training;
- Metaphors are able to form associative pairs in the human mind, thus ensuring reliable fixation of information;
- Metaphors are able to briefly and clearly duplicate and explain foreign language equivalents, making their perception more accessible (Ozingin, 2010).

Based on the term semantics in medical terminology, the following general categories of metaphors are usually distinguished: 1) colloquial metaphors, which are based on a comparison with household items and human environment; 2) conceptual metaphors reflecting the ideas that exist in the human mind; 3) geographical type of metaphors, which are based on a similarity with the terrestrial landscape; 4) biomorphic metaphors, which are based on similarities with wildlife; 5) metaphors-somatisms, built on the similarity of human states or parts of the human body; (6) geomorphic metaphors, based on a comparison with the shape of an object or letter (Smirnova, 2011).

In translation studies, there are two approaches to the translation of medical metaphors: linguistic and cognitive. The first is based on the use of translational transformations for rendering metaphors into the target language; the second proposes to focus, when translating, on the accuracy of rendering the concepts underlying metaphorization, and changes in the perception of metaphors by speakers of the source and target languages.

Cognitive linguists paid special attention to the translation of metaphors for the reason that the rendering of the metaphorical nature of a statement is closely related to linguistic and cultural peculiarities. For this reason, at the early stage of research, the following three mutually contradictory viewpoints on the translatability of metaphors appeared:

- 1. Metaphors as such are not translatable: as a result of translation, a new metaphor will appear in the target language of translation [Nida, 1982].
- 2. Metaphors are completely translatable from the point of view of the general theory of translation: there is no special theory explaining the translation of metaphors (Reis, 1971).
- 3. Metaphors are translatable, but the accuracy of the result depends on the degree of context-specific

equivalence of a metaphor between the source and target languages as well as on its function and type (Van Den Broeck 1982, Newmark 1988).

The last view is held by the famous American linguist and translator Peter Newmark and, following him, we consider it the most realistic and correct. Newmark was one of the first researchers to propose a practical strategy for translating metaphors based on their types, functions as well as the types of texts in which they are used. He believes that an informative text most often contains erased metaphors with a high degree of translatability while, in an expressive text, metaphors bear the author's style and basic meaning, possessing a large informative load, and, therefore, it is more difficult to translate them. He points to the two-dimensional nature of a metaphor, i.e., its cognitive and linguistic components, highlighting its two main functions: connotative and aesthetic. The connotative function makes it possible to fully express the idea and describe abstract and concrete concepts, while the aesthetic function focuses on how metaphors are displayed in a text, on their form and effect on the recipient. Newmark offers seven ways to translate metaphors, placing them in order of preference:

- 1. Retaining the original metaphorical image and its rendering from the source language into the target language: this method of translation can be defined as verbatim. In domestic translation studies, researchers also use the term 'calquing').
- 2. Translation into the target language using an equivalent metaphor.
- 3. Translation by means of comparison, retaining the original metaphoric image.
- 4. Translation by means of comparison, followed by an explanation of the meaning and basis for such a comparison. Domestic researchers define this as a descriptive translation.
- 5. Rendering of metaphors only by means of semantic explanations.
- 6. Omitting metaphors.
- 7. Paraphrasing.

The closest to the classification of Peter Newmark's translation methods are the theories of domestic linguists, T.A. Kazakova and V.N. Komissarova. They identify similar translation methods using different terms.

The main ideas of the cognitive approach to the translation of medical metaphors are as follows:

- 1. Metaphorization is understood as the cognitive process of creating concepts in the human mind, which may be the same or different for bearers of different cultures speaking different languages.
- 2. Translation of metaphors is a cross-cultural process; therefore, it is difficult to make an accurate translation of a metaphor for the context of another culture, while maintaining its expressiveness and author's style. A translator should be well-grounded in the basics of cross-cultural communication.
- 3. In practice, the same translation techniques can be used to translate both cognitive and language-specific metaphors. Principally, four translation methods are offered: (1) translation using equivalent metaphorical expressions in the target language, (2) rephrasing, (3) translating by comparison, or (4) omitting metaphors if they are untranslatable.

#### 4 METHODOLOGY

It should be noted that different branches of medicine differ in the principles of metaphorization. Thus, the basis of metaphorical transfer in anatomical terminology is the external features of an object (its shape, size, position in space), e.g., pyramid of medulla oblongata — пирамида продолговатого мозга. The predominance of this type of transfer is conditioned by several factors: the ease of fixing object features in memory, quick recognition of anatomical structures in practice, etc. In therapeutic terminology, there is a predominance of transfers associated mainly with different sensations. This is due to the main therapeutic methods of research, where acoustic, tactile, and visual impressions of the physician are important, e.g., heart murmur — сердечный шум. In psychiatry, conceptual metaphors predominate. This can be explained by the following reasons: the inaccessibility of objects for sensory perception, the dynamics of mental illness, etc. (Bleicher, Kruk, 1995). Psychiatry is also characterized by a huge number of eponymic terms, including the names of real people and literary characters. Metaphors of this type are based on the assimilation of human pathological states to the images of historical figures or fictitious characters to more accurately reveal the nature of diseas (Zubkova 2013). For example, according to the explanatory dictionary of psychiatric terms (Bleicher, Kruk,1995). Alice in Wonderland Syndrome (синдром Алисы в стране чудес) is

characterized by the depersonalization syndrome (with distortion of ideas about space and time), visual illusions, pseudo-hallucinations, metamorphopsias, a sense of split personality. This syndrome was named after Lewis Carroll's famous 19th-century novel *Alice's Adventures in Wonderland* based on an association with states experienced by Alice. Dominating in oncology, is the metaphorical 'War' model, reflecting the seriousness and aggressiveness of oncological diseases (Reisfield, 2004), e.g., *to fight cancer – ποδεθυπь paκ*.

The Russian Language Department of the PFUR Medical Institute conducts a special course in the basics of translation. The trainees are foreign fifth-year medical students from different countries: Jamaica, Namibia, Sri Lanka, Costa Rica, Nigeria, and others.

We conducted a case study as part of the training module in translations of medical metaphors from Russian into English and vice versa.

The study involved two groups. The first (experimental) group (15 students), before working with exercises and texts for translation of medical metaphors, was familiarized with their features. The second (control) group (15 students) received exercises and texts for translation of medical metaphors but was not familiarized with the topic.

While carrying out their tasks, the students of the experimental group practically made very few mistakes, whereas in the control group the number of mistakes was 30% higher.

Let us consider translations of some sentences from various medical sources made by the experimental group.

In English medical discourse, metaphors that express the struggle between the patient and the disease are widely used in connection with the concepts of 'a war', 'a defense', 'to fight', 'to attack', 'to strike', 'to defend', 'to kill' to describe the processes occurring in the human body. The 'enemies' – diseases, viruses, bacteria, infections – penetrate into the patient's body and either attack it or die due to the immune system's counterattack. This phenomenon can be traced in the following English sentences and their Russian translations:

1. The immune system wakes up and attacks the worm and everything starts to swell, and that is very bad for the brain. – Иммунная система активно атакует червя и все начинает отекать, и это очень плохо для мозга.

The verbs 'to wake up' and 'to attack' used in the original sentence introduce the personification of the immune system, which is repeated in the translation. The meaning of the first verb – 'προςωπαπωςα' – was compensated by the 'attack' implication using the adverb 'aκπυβμο'. To denote the action 'to attack' the first meaning of this word was used, i.e., 'amaκοβαπω'.

In the next example, to illustrates a similar pattern, a synonymous translation of the verb 'to attack' was chosen:

2. An infectious agent's molecular structure can resemble the spinal cord's. When the immune system attacks the infection, it ends up attacking the spinal cords as well. – В возбудителе инфекции может быть молекулярное сходство с тканью спинного мозга. Когда иммунная система атакует инфекцию, она поражает и спинной мозг.

The following examples and their full translations show two more variants of rendering the verb 'to attack' into Russian, namely 'вредить' and 'бороться'.

- 3. JRA is an autoimmune disease. Her body is attacking itself, causing inflammation in the joints, eyes and her heart. Детский артрит это аутоиммунное заболевание. Тело вредит само себе и вызывает воспаление суставов, глаз и сердца.
- 4. What if his body worked so hard attacking the anthrax that it started attacking itself? Что, если его организм так упорно борется с сибирской язвой, что начал бороться с самим собой?

Having considered several examples in which the conceptual metaphor 'Medicine is war' is realized, it can be concluded that, from a cognitive point of view, the translations in most cases did not lose the metaphorical projection, affecting similar basic concepts of English and Russian. At the linguistic level, in those cases where literal translations were not possible, such transformations as specification and compensation were used. The single case when the metaphor was omitted in translation and one of the shades of its meaning was compensated can be considered as a situational feature of the episode, in which this expression was used, and the translator's personal decision. It can also be noted that, to translate the meanings of 'to attack'

and 'to fight', the students picked up a series of verbs ('атаковать', 'поражать', 'нападать', 'бороться', 'вредить'), which have minor differences in their semantics.

In some sentences, it is possible to trace the use of the metaphorical model, where bacteria, viruses, parasites can feed on the body cells, starve, occupy a certain place, or travel:

- 1. ... now it's back, and the spirochetes that cause syphilis are eating away at your brain cells. ... но он вернулся, и спирохеты, вызывающие сифилис, пожирают клетки вашего мозга.
- 2. Your hand is dying. The bacteria are eating it. When they run out of food there, they go somewhere else. Твоя рука умирает. Ее пожирают бактерии. И когда здесь еда закончится, они пойдут дальше.
- 3. Get a sample of his CSF before the little bugs that are now feasting on his brain move on to dessert. Возьмите спинномозговую жидкость, пока жуки, пирующие в его мозгу, не взялись за десерт.

One of the basic components of the brain-control center are neural connections that send signals to different parts of the body and are responsible for the established contact in the work of all systems. In the following example, we can trace the parallel drawn between this brain function and the concept of 'electrical wires': The brain's like a big jumble of wires. MS (multiple sclerosis) strips them of the insulation, and the nerves die. — Мозг похож на большой комок проводов. СД (SD — Sclerosis Disseminata) разрушает изоляцию этих проводов и нервы погибают.

Based on the analysis of the translated sentences, some of which are presented in this article, it can be concluded that in most cases the original sentences were quite adequately rendered into Russian without any transformations (66.4%). In other cases, translations underwent some changes. The most frequent methods turned out to be grammatical transformations, including replacement of content words as well as segmentation and combination of sentences (9.7%) associated with differences in the structures of the English and Russian languages. It should also be noted that in some cases the metaphoric meaning was not conveyed and the metaphor was omitted (7%). The next most frequently used method was concretization (5.3%). The methods of equivalence (3.5%), generalization (2.7%), and compensation (2.7%) were also used. In individual cases, translations were made using stylistically more neutral variants, antonymic expressions and explications.

#### 5 CONCLUSIONS

This article examines some peculiarities of translating medical metaphors from English into Russian. We have shown that metaphorization is an inherent feature of medical discourse. Metaphors are the result of active reflection of the surrounding reality, the result of the interaction between professional and commonplace knowledge. Due to their expressiveness and emotional coloration, metaphors provide medical terms with such an important quality as embeddedness, which makes medical discourse more convincing, thereby facilitating more successful communication between doctors and patients. Metaphors facilitate understanding of terms, allow to avoid long descriptive nominations in the doctor's vocabulary. Moreover, each area of medical knowledge is individual and is distinguished by its peculiarities in forming highly specialized terminological units.

Therefore, the main task in translating metaphors is to preserve both the content and the style of the original text, and translators always have the necessary arsenal of techniques and language tools that they can use to convey the appropriate level of expressiveness.

The analysis of selected examples of translated metaphoric expressions allows us to conclude that in most cases the original sentences were translated most closely to the text, retaining the original metaphoric image in the target language.

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