

ON SOME BIOLOGICAL TERMINOLOGY TRANSLATION PECULIARITIES FROM ENGLISH INTO RUSSIAN

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Abstract. *The article examines the translation peculiarities of biological terminology from English into Russian. Based on the analysis, which acts as a practical part of the study, there were identified three of the most frequent translation techniques of biological terms. The author also highlights the most common mistakes and ways of dealing with them when translating biological terms.*

Keywords: *translation transformations, translation techniques, calque, transliteration, biological terminology*

Translation from English into Russian can lead to a number of issues, especially when it comes to scientific texts containing many biological terms. Sometimes it is difficult to give literal translation of some words and phrases due to the lack of complete equivalents in Russian. Vast majority of scientific articles, including biological ones, are written in English. That is why, in order to distribute scientific materials, it is necessary to have a competent, high-quality translation.

In this paper we studied the translation peculiarities of biological terms from English into Russian studying the examples of terminological units in biological and medical texts taken from Biology Today journal [3].

There is no unified definition of the term “term” due to the large number of points of view regarding the features of this concept. In this paper we use the definition of the term “term” given by Akhmanova O.S. “A term is a word or phrase of a special language (scientific, technical, etc.) that is used for accurate expression of special concepts and designation of special subjects” [1].

Translation methods

Translation transformations are used for correct, harmonious translation. Translation transformations are techniques for converting elements of the source text to achieve translation equivalence, that is, to preserve the equality of meaningful, semantic, stylistic and functional-communicative information in the original language and translation. We will focus in more detail on transliteration and calque translation techniques.

Transliteration is the reproduction of the graphic form of the original lexical unit, its alphabetic composition using the letters of the translation

language. Calque is the replacement of the components of the original lexical unit of the original language with their lexical correspondences in the translation language [2].

Translation transformations examples

1. Blood is a mobile connective tissue composed of a fluid, plasma and the cells, the blood corpuscles. – Кровь – это подвижная соединительная ткань, состоящая из жидкости – плазмы и клеток – телец (корпускулов).

The term “connective tissue” is calqued as “соединительная ткань” (connective – from English “connect” – “соединять”, “tissue” – “ткань”). The term “fluid” is calqued as “жидкость”, term “plasma” is transliterated, so it is translated as “плазма”, and term “cell” is calqued as “клетка”. The last term in this sentence, “corpuscle”, can be translated in two different ways: it either can be transliterated as “корпускул”, or can be calqued as “тельце”.

2. Serum is plasma without clotting factors. – Сыворотка – это плазма, не содержащая факторов свёртывания.

The term “serum” is calqued as “сыворотка”, and term “plasma” is transliterated as “плазма”. The term “clotting factor” can be calqued, so it’s going to be translated as “фактор свёртывания” (clotting - from English “clot” – “сгусток”; “factor” – “фактор”).

3. Cardiac arrest is the complete stoppage of a heartbeat. – Остановка сердца – это полное прекращение сердцебиения.

The term “cardiac arrest” is calqued as “остановка сердца”. The term “heartbeat” is calqued as “сердцебиение”.

4. Blood normally contains 1,500,00 – 3,000,00 mm^{-3} platelets of blood. – В крови обычно содержится 1,500,00 – 3,000,00 mm^{-3} кровяных пластинок.

The term “platelet of blood” can be translated as “кровяная пластинка”. Here we used calque technique.

5. Blood transports hormones from endocrine glands to site of action. – Кровь переносит гормоны от эндокринных желёз к месту их действия.

The term “hormone” is transliterated as “гормон”. Term “endocrine gland” can be translated with a help of technique which combines both transliteration and calque. Word “endocrine” is transliterated as “эндокринная”, and word “gland” is calqued as “железа”. So, we translate this term as “эндокринная железа”.

6. Human heart is located between the lungs in thoracic cavity. – Человеческое сердце расположено в грудной полости между лёгкими.

The term “lung” is translated with calque technique (“лёгкое”). The term “thoracic cavity” is calqued as well (“грудная полость”).

7. 4-chambered heart has two atria and two ventricles. – Четырёхкамерное сердце имеет два предсердия и два желудочка.

Each of the three terms used in this sentence are calqued. “4-chambered heart” translated as “четырёхкамерное сердце”, “atria” is translated as

“предсердие” and “ventricle” is translated as “желудочек”.

8. Cyclic menstruation occurs between menarche and menopause. – Менструальный цикл возникает между менархе и менопаузой.

Every term in this sentence is translated with the help of transliteration technique. So “menstruation” is translated as “менструация”, “menarche” is translated as “менархе” and “menopause” is translated as “менопауза”.

9. When an injury is caused to a blood vessel, bleeding starts, which is stopped by a process, called blood coagulation. – При повреждении кровеносного сосуда возникает кровотечение, которое прекращается с помощью процесса, названного коагуляцией.

In this sentence, term “vessel” is calqued as “сосуд”, and term “coagulation” is transliterated as “коагуляция”.

10. Blood transports oxygen from respiratory organs to tissues and carbon dioxide from tissues to respiratory organs. – Кровь переносит кислород от органов дыхания к тканям и углекислый газ от тканей к органам дыхания.

The term “respiratory organ” can be translated in two different ways. We can use calque technique, so it can be translated as “орган дыхания”, or we can use combination of calque and transliteration techniques, where the term “respiratory” is transliterated as “респираторный”, and “organ” is calqued as “орган”. In this case it can be translated as “респираторный орган”). Term “tissue” is just calqued as “ткань”.

Conclusions. Thus, we studied translation peculiarities of biological terminology from English into Russian analyzing terminological units taken from biological and medical texts published in Biology Today journal (issued in August 2020) [3]. Having identified and analyzed more than 100 terminological units, we came to the conclusion that when translating biological terms, the translator should take into account the differences in the traditions of their use in English and Russian. One should also consider the differences in the volume of meanings of English and Russian terms. Moreover, translator should carefully analyze the context and use special reference literature (monolingual and bilingual dictionaries). Among the most frequent techniques of translation of biological terms we noted: calque (44%), transliteration (34%), and their combination (22%).

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