

**ON THE ROLE OF ASSOCIATIVE PERCEPTION IN THE PROCESS OF
SCIENTIFIC LITERATURE TRANSLATION**

***SOBRE O PAPEL DA PERCEÇÃO ASSOCIATIVA NO PROCESSO DE TRADUÇÃO
DA LITERATURA CIENTÍFICA***

***SOBRE EL PAPEL DE LA PERCEPCIÓN ASOCIATIVA EN EL PROCESO DE
TRADUCCIÓN DE LA LITERATURA CIENTÍFICA***

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ABSTRACT: The purpose of this article is to discuss the possibilities of the method of associative perception of terminology in the process of translating scientific and technical literature. In the process of work, authors used traditional research methods along with experimental ones. Translation of scientific and technical texts requires certain skills and competencies from specialists of this type of activity. Perfect command of the terminology of a particular language, knowledge of its features and structure enables the translator to convey the content of the original text as accurately as possible without distorting the meaning. Authors conclude that it is necessary that the translator of scientific and technical texts must be aware of the latest technical innovations and discoveries in a particular field of technology.

KEYWORDS: Associative perception. Scientific terminology. Ultimate comprehension. Erroneous borrowings.

RESUMO: *O objetivo deste artigo é discutir as possibilidades do método de percepção associativa da terminologia no processo de tradução da literatura científica e técnica. No processo de trabalho, os autores usaram métodos de pesquisa tradicionais juntamente com os experimentais. A tradução de textos científicos e técnicos exige certas habilidades e competências de especialistas desse tipo de atividade. O domínio perfeito da terminologia de um determinado idioma, o conhecimento de suas características e estrutura permite ao tradutor transmitir o conteúdo do texto original com a maior precisão possível, sem distorcer o significado. Os autores concluem que é necessário que o tradutor de textos científicos e técnicos esteja atento às mais recentes inovações e descobertas técnicas em um determinado campo da tecnologia.*

PALAVRAS-CHAVE: *Percepção associativa. Terminologia científica. Compreensão final. Empréstimos errôneos.*

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RESUMEN: *El propósito de este artículo es discutir las posibilidades del método de percepción asociativa de la terminología en el proceso de traducción de literatura científica y técnica. En el proceso de trabajo, los autores utilizaron métodos de investigación tradicionales junto con métodos experimentales. La traducción de textos científicos y técnicos requiere ciertas habilidades y competencias de los especialistas de este tipo de actividad. El dominio perfecto de la terminología de un idioma en particular, el conocimiento de sus características y estructura permite al traductor transmitir el contenido del texto original con la mayor precisión posible sin distorsionar el significado. Los autores concluyen que es necesario que el traductor de textos científicos y técnicos esté al tanto de las últimas innovaciones y descubrimientos técnicos en un campo particular de la tecnología.*

PALABRAS CLAVE: *Percepción asociativa. Terminología científica. Comprensión definitiva. Préstamos erróneos.*

Introduction

Communication in society and translation activity in particular, involves the use of the most effective techniques and skills, the competence of specialists, translators in a specific field of science and technology.

The process of scientific and technical translation is presented primarily as a kind of mental activity and acquires a particularly important role at the present stage of intensive globalization of international relations and cooperation in the field of neo-technologies. At the same time, the problem of the psychological structure of language, its role in communication and the functioning of consciousness is perhaps the most important section of psychology (LURIA, 2020).

The word "translation" itself is associated with the words "transmission" and "broadcast". It means the transmission of information embedded in the text by means of another language so that this information reaches the addressee without losing its integrity and authenticity (meaning laid down by the author). The system of translation correspondences is not just a pair of correlated units, but a way to find an equivalent even in cases where it is impossible to use standard translation methods (ABRAMOVA, 2018; VLASOVA, 2016).

In this (creative) painstaking work, the translator, as a rule, is helped not only by common sense, but also by competence, experience acquired in the course of practical activity. The concept of language is also connected with translation, as a sign structure, a form in which the original thought is clothed. In other words, the translation process cannot be carried out without observing clear grammatical rules through such types of mental activity as perception, comprehension (understanding) and interpretation at the level of authentic presentation of the original text. To do this, the translator must know the features of the structure of the languages

I (foreign language) and I (translation language), including both the morphology of individual words and semantic connections within a particular sentence, taking into account the context (VEDENSKAYA, 2010).

So,

the translator's communicative activity is connected, firstly, with the perception of the text of written or oral speech in the original language(s), secondly, with the translation of this text from one language system to another, and thirdly, the reproduction of an authentic text in another language(s) (NIKULINA, 2012, p. 271).

Methods

The authors of the study chose methods – descriptive, semantic-stylistic, semantic field, as well as modern approaches to linguistic research – cognitive and linguoculturological. The study used various sources of information to formulate and solve the research topic: research papers, monographs and articles, including those published in journals indexed by Scopus and Web of Science.

Also, an experimental study was conducted. Within the framework English-speaking students who participated in this experiment were asked to memorize Russian words using the keyword method and without it.

Results and discussion

When studying a language, we proceed from the fact that it is a sign system of perception, the use of which is associated with mental activity. The process of perception of the sign system includes the work of visual and auditory analyzers (NIKULINA, 2012).

Psychologists agree that when understanding the visual and sound series, an important role is played by the attitude and attitude to the perception of the proposed objects and phenomena. For example, the reproduction of the author's thought is largely carried out on the example of already accepted phrases and stereotypes, established terminological combinations on similar topics (related sciences). Using the example of words such as gap, sell, etc.

Often, we can hear in English "I see" instead of "I understand". The use of "I see" reflects the result of comprehension, both the perception of the visual form of the object, and the tracking of an associative series of comparisons, the search for analogues, characteristics of scientific phenomena. The dictionary of S.I. Ozhegov gives an interpretation of the concepts of "association", "associate". So "association" means a connection between individual

representations, when one of the representations is revealed, it causes another, for example, by similarity of forms, by analogy when comparing phenomena (OZHEGOV; SHVEDOVA, 2010).

At the same time, an analogy is a similarity in some respect between objects. For example, the roundness of forms and the generality and outlines in the associative chain; English – "cup" and Russian – cabbage, drop, Capitol. In scientific and technical translation, at the level of perception, the starting point of the emergence of an associative series can be the keywords included in the title of a scientific text, as well as illustrations of basic concepts, such as diagrams, drawings, and sometimes advertising techniques that include a number of bright, intelligible images.

For example, an image of a man and a fish is placed on one advertising stand located on the territory of the institute and informing about the possibilities of learning foreign languages. Moreover, they are addressed to each other, as if to establish contact.

Associatively, this "as it were" contact is associated for the viewer with the concept of "mute" – mute, because there is a well-known saying: "Dumb as a fish." The inscription under the picture reads: "Even if you are mute, study and you will be your own!", that is, you will enter into a dialogue and begin to communicate in the learned language (and as a result of communication, it will be possible to achieve mutual understanding).

Such an associative series caused (initiated) by the perception of an artistic (visual) image was embodied as a stable phrase. Such an associative train of thought is familiar to everyone who has mastered the ABC truths based on the drawing in the primer.

This mechanism of associative perception also works at a more advanced (high) level of learning, and the starting point can be an image of an already familiar keyword or a turn of speech using a basic term. In addition, it is known that the perception of a speech utterance in the language of the addressee (s) is carried out by comparing words and phrases with generally accepted normative standards in the language of the addressee (s).

To more accurately represent the meaning of the word "term", let us turn to Ozhegov's explanatory dictionary, which gives the following definition: a term is a word or phrase that is the name of a certain concept from some special field of science, technology and art (OZHEGOV; SHVEDOVA, 2010). Regarding the development of terminology in general and individual terminological units, it should be noted that the emergence of new scientific and technical terms and concepts stimulates the emergence and introduction of neologisms, which in turn affect the evolution of the language as a whole (DENISOVA, 2010; LITVINOVA, 2016; ZINCHENKO, 1997).

In this regard, it is logical to consider more clearly the peculiarities of the perception of individual, newly emerging lexical units and focus on the typical features of the perception and use of new terms in scientific content. One of the mechanisms of mental activity in this area is the associative perception of new lexical units, comparing them with existing ones and a critical look at the validity of their implementation in translation practice.

When considering associative connections, according to some experts, associations help to remember various information, and methods of teaching foreign languages are based on this pattern.

Associative thinking is characterized by the presence of a higher speed compared to such a type of thinking as logical. This is largely due to the inclusion of directly unconscious memory mechanisms and the amount of experience, the reproduction of associative chains by a person instead of building an algorithm of sequential logical steps. Therefore, the perceiver connects the information with the image the meaning that, from his point of view, corresponds to the systemic meaning, on the one hand, and the speech and language context on the other (SELIGEEVA, 2017).

Accordingly, in one specific period of time, with the help of associations, a person can do more extensive mental work than someone who uses only logical construction of steps. There are a number of diagnostic techniques aimed at the study of creative activity and creative thinking of the student. Of particular note is the test of verbal creativity.

So, the description of one of the first scientific studies devoted to this method is found in Atkinson's articles under the name of the keyword method ("keyword method").

The experiment conducted showed a high efficiency of using this method in comparison with ordinary memorization. A rational attitude to this method can be useful both when memorizing lexical units and grammatical constructions. For example, you can use the versatility of the verb form "provided" when using this word in an unusual union function in a conditional sentence (in a subordinate clause).

When learning, the effect of both visual and auditory memory can be used. Associative communication can be based on obvious similarities and differences between words or constructions, as well as on the student's personal experience. This method can be used as an impulse (starting point) in the formation of the skill of perception and memorization of terminological groups of words related to a single topic, the context of the text being studied. For educational purposes, students can be asked to create logical situations using the key vocabulary of the lesson themselves. For example, the teacher gives each student 5-6 words or phrases and asks them to make a situation out of them at their own discretion. 5-10 minutes are

allocated to complete this task. The results obtained are discussed and compared at the same lesson. This work with words is effective for fixing vocabulary and contributes to the compilation of your dictionary (glossary) for the accumulation of thematically related lexical units, and later in working with scientific and technical terminology.

The acquisition of skills in working with scientific and technical terms contributes to the transfer of the meaning of specific terminologically presented concepts in a specific research area. The language of science is characterized by the accuracy of formulations (BOYARSKAYA, 2016; VEDENSKAYA, 2010).

Conclusion

The well-known saying "he who thinks clearly sets out clearly" reflects the main condition for a successful process and result of translation activity.

That is why the translator must observe certain grammatical and ethical norms and rules in his work on the text. At the same time, he should read the vernacular as much as possible and be well aware of the latest trends and discoveries in the field of specific scientific and technical terminology.

In achieving the goal of competent translation, a conscious approach of a specialist is required, including not only knowledge, skills, competencies, but also his clear motivation, focus on the topic of translation and a sufficient level of awareness in it.

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How to reference this article

ZHURAVLEVA, V.; ZHARKOVA, L.; KOTRIKADZE, E. On the role of associative perception in the process of scientific literature translation. **Rev. EntreLínguas**, Araraquara, v. 8, n. esp. 2, e022068, 2022. e-ISSN: 2447-3529. DOI: <https://doi.org/10.29051/el.v8iesp.2.17483>

Submitted: 15/04/2022

Required revisions: 28/05/2022

Approved: 12/09/2022

Published: 10/11/2022

Processing and publication by the Editora Ibero-Americana de Educação.
Correction, formatting, standardization and translation.

