Introduction

Modern translation is in a transition from a comparative structural type of ontology to an activity-based type. This transition is going through a phase of self-reflection expressed in the circulation of academic knowledge about itself. Self-reflection allows us to review the main categories and concepts of translation on other grounds and thus find their place in a broader context of humanities. One of the basic concepts of substitutive transformational translation studies (V.N. Komissarov, I.I. Revzin, Y.I. Retsker, V.Y. Rosenzweig, A.D. Schweitzer), which requires deep study in terms of philosophical and methodological knowledge, is the notion of academic text translation strategy.

The concept of strategy in substitutive transformational translation studies was used as a part of translation competence, and it meant the process of making translation decisions on individual levels of language. The strategy was defined as the development of a translation program of action and implementation of this program into practice, namely the performing of rational operations expressed in the choice of literal, free, exact translation types [1: 24], following a series of principles such as the principle of identifying successive sections of text and consecutive interpretation in the original text [2]. This view of strategy is due to linguistic concepts that form the basis of translation as an academic discipline.

Comparative-historical linguistics and structuralism course influence

Historically translation was formed under the influence of comparative-historical linguistics and structuralism courses. As a part of compara-
tive-historical linguistics characterized by the desire to identify family ties and correspondence between the languages by comparing phonemes (J. Grimm), roots (G.F. Leibniz, F. Bopp), single words (I.Y. Scala, M. Lituanus, A.H. Vostokov) and grammatical forms (F. von Schlegel, R. Rusk), a typology of languages was created that pointed to the existence of certain regularities between languages. The comparison principle as the identification of the general and the particular in the lexical and grammatical aspects of the language and the principle of historicism as the evolution of linguistic forms, requiring the search of correspondences at a certain historical moment, had a decisive influence on the theory of translation, because in comparing the languages word-by-word subscript or literal translation was used as linguistic analysis. This type of translation, according to D.R. Firth, was often absurd and helpless, because linguists had no answers to the questions “how” and “what” they were translating due to the lack of appropriate philosophical generalizations [3].

The use of a wrong translation type to convey the original author’s thought is demonstrated in the following example:

<table>
<thead>
<tr>
<th>Original text</th>
<th>Literal translation</th>
<th>Adequate translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>These conditions do not fit the requirements, to begin with</td>
<td>Эти условия не соответствуют требованиям, чтобы начать с</td>
<td>Начнем с того, что данные условия не соответствуют требованиям</td>
</tr>
</tbody>
</table>

As we can see, this is a mechanical translation of original text words in the order in which they appear in the text, without regard to their syntax and logical connections. This translation often leads to nonsense and should be resolutely expelled from practice.

**Substitutive transformational theory of translation**

Structuralists such as F. de Saussure, A. Seshe, C. Bally, L. Hjelmslev, V. Brendal, and H.J. Uldall studied the language as an immanent system having its own order and relations, characterized by the dominance of form, rather than substance. The central concepts were the concepts of the structure as a way of existence and language description, the value as content of speech in relation to the signified object and the importance of word relation (syntagmatic and/or paradigmatic) to other words in the language system. Substitutive transformational translation, originating within structuralism, borrowed its method of operating language units in the form of an analysis of their structure and content, as well as invariant search, limited by the variation range of linguistic signs.

A distinctive feature of the substitutive transformational theory of translation is the use of phenomenological explanation expressed by putting
the fact of translation under the empirical law, i.e. the observed is explained by the observed, through words, phrases, syntax, and others.

The linguistic and cognitive theory of translation (L.M. Alekseeva, N.L. Galeeva, I.E. Klyukanov, Y. Sorokin, T.A. Fesenko) uses a teleological explanation type that is expressed in the interpretation of the observed facts through the unobserved - a cognitive purpose, i.e. determination of what the author wanted to say. The linguistic and cognitive theory of translation recognizes the personal nature of the text and the asymmetry of non-linguistic knowledge and linguistic values. Text becomes text in the interaction of participants in communication, in the process of generating text and text-perception, objectification and disobjectification. Content of the text reflecting the author's dominant is recognized as the objective content of the text in the axiological aspect [4: 29]. The asymmetry of the non-linguistic knowledge and linguistic values appears in the fact that knowledge is fixed, not only through linguistic meaning, but also through images, actions, emotions, combined in propositions in the human mind. Therefore, in linguistic and cognitive translation theory the linguistic process is subordinate to the cognitive.

Here we should mention that literal translation with proper transfer of thoughts of the source text seeks to reproduce as closely as possible the syntax and lexical structure of the text.

In cases where the syntactic structure of a sentence can be translated and expressed in the translated text with similar means, literal translation can be considered the final version of the translation that does not require any further processing, for example:

<table>
<thead>
<tr>
<th>Original text</th>
<th>Literal translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The substance was dissolved in ether</td>
<td>Вещество было растворено в эфире</td>
</tr>
</tbody>
</table>

However, such a coincidence of syntactic means in two languages is relatively rare; more often there is a violation of the syntactic rules of the Russian language in a literal translation.

In such cases we have a known gap between form and content: the author's idea is clear, but the form of its expression is not appropriate for the Russian language, for example:

<table>
<thead>
<tr>
<th>Original text</th>
<th>Literal translation</th>
<th>Adequate translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The isolator includes a 3 mm minimum opening distance between contacts</td>
<td>Изолятор включает в себя 3 мм минимум открытого расстояния между контактами</td>
<td>Изоляционное расстояние между разомкнутыми контактами разъединителя должно быть не менее 3 мм</td>
</tr>
</tbody>
</table>

Despite the fact that literal translation often violates the syntax rules of the Russian language, it can be used in the first, rough step of the text,
because it helps to understand the structure and the difficult sentence form of the original.

Then, however, literal translation with structures that do not fit the Russian language must necessarily be processed and replaced by an adequate option.

Translation of lexical units in the translation can be done in three ways:
Via equivalents, i.e. direct correspondences that do not depend on the context;
Using analogues, i.e. words of synonymous row with the most relevant context;
By descriptive translation, i.e. the free translation of semantic content of original text words or phrases.

**Concept of strategy**

One of the main problems in linguistic and cognitive translation studies is the choice of the original knowledge translation method that determines the translation strategy.

The concept of strategy was borrowed by modern science from the art of warfare, in which strategy is defined as the study of the best location and use of military forces to achieve a goal. Military strategy was implemented by tactics, directing the activities of strategy subjects, determining strategic behavior, in particular the choice of action plan based on the criteria of optimality. Strategy interpretation and tactics in philosophy, as it seems, most closely conform to the requirements of contemporary translation studies, which recognizes the importance of analytical thinking transforming the individual in the process of understanding and interpretation of the original text. Through analytical thinking the translator is able to reconstruct the “procedure” embedded in the original text and matched the dominant typology of the original text. It is the well-known opinion of P.H. Torop, who believed that the original translation of text is due to the translation dominant, expressed in the transfer of translated text typological parameter [5: 12]. In terms of academic text translation such a kind of dominant may be regarded as conceptualization of a logical-semantic design of academic knowledge. Thus, when translating an academic text the translator creates and operates special constructions, which is the means of mental work, he/she provides access to academic knowledge. Such constructs in academic knowledge are represented by logical relations (propositions), whose totality allows us to represent the object as an integral phenomenon.

The methodology states that the formation of a strategy is possible on the basis of a person’s representation of the whole, and on this basis the presentation data will be merged [6: 282] and implemented in accordance with a specific technique. G.P. Schedrovitsky notes that “the concept of
strategy in general occurs only after we are able to achieve a goal or solve a problem in various ways and methods” [6: 478]. Therefore, the development of strategy is the result of thought and action of the individual, involving the use of both theoretical and practical data.

The goal of using a translation strategy for academic text is to create a successful translation of academic text, which expresses the author’s model of knowledge.

Choosing the academic text translation strategy depends on both objective and subjective factors. The former includes text type, type of communication and the type of knowledge [7, 8]. The latter includes the professional competence of the interpreter, implying not only foreign language skills, but also the ability to understand and interpret the original academic text, as well as the ability to use special knowledge in accordance with the rules of the target language.

Logical relations, acting as a means of relation type of model components, are “international substance”, repeating the course of the author’s thoughts. Language embodiment of logical relations takes place on the basis of analogy, which allows us “to attach a similar conceptual framework to the similar form language embodiment” [9: 331], whereby the logical relations in the academic text are explicit in nature and cause its topological parameter - consistency.

Academic communication depends on several factors: addresser, addressee, the specifics of their interaction, communication character code, features, etc. Academic text translation as a type of scientific communication includes the steps of intrapersonal and interpersonal communication (Lotman’s term). In the first stage (intrapersonal communication) the translator understands new academic knowledge, expressed in the original text. The result is to build the translator’s understanding of the original author’s model of knowledge. Achieving understanding is possible by interpretation of the academic text by means of language comprehension and cognitive units in order to recreate a complete model of the author’s knowledge on the basis of logical relations of original text. In the second stage (interpersonal communication), the translator is interpreting the special knowledge that he/she obtained from the original text by means of the other language in the translated text. L.M. Alekseyeva said that “the idea of the two-stage model of academic translation is caused by two different thought processes in nature: the perception of the text, based on the coagulation of the original text, the translation and the creation of the text, based on the deployment of the meaning of identification and understanding of scientific concepts” [7: 13]. The first stage is the lead, as the degree of understanding of the original meaning of academic knowledge special independent objectification in a language culture.

The purpose of academic text translation in the aspect of communication is to gradually move from the position of interpreter as a mediated communicant to a position of direct communicant. To achieve this goal, the
translator performs the following tasks: mastering the special knowledge and translating it into the target language. A solution to these problems is achieved by adapting and socializing the translator in academic translation.

Adaptation is the identification of the original academic text logic, which allows you to recreate the holistic model of author’s knowledge. In the academic translation detection of logic construction of the author’s concept is expressed in the conceptual subordination of translator to the author, i.e. in the pursuit of a resistive transfer strategy [10]. Socialization is manifested in the creation by an interpreter of successful text translation, i.e. such a type of foreign language text which is able to objectify new scientific knowledge created in a different language environment. One of the prerequisites for the objectification of new scientific knowledge in a different language environment is recreated through an interpreter on the basis of logical relation conceptualization of the original text. Successfully recreated conceptualization allows recipients of translated text to understand the original author’s concept.

Scientific knowledge is a complex process that involves the mechanisms of assimilation and accommodation [11]. Assimilation is expressed in the knowing subject’s interpretation of a fact/object parallel to its deciphering by the use of mathematical logical “framework” (the establishment of the adjacency or separation, the attribution of quantifiers “more” or “less”). As a result of the assimilation schemes with facts/objects are developed. When the facts/objects and assimilated schemes are developed, accommodation takes place, i.e. adaptation to the characteristics of the objects under “outside influences”. In academic text translation assimilation corresponds with knowledge schematization, or with the establishment of logical relations that do not depend on the specific language of scientific presentation and accommodation - the individualization of scientific knowledge, which is reflected in the author’s metaphors.

A translator of academic texts has the task of producing an accurate translation of the model of academic knowledge with support on the logical relations, as they are part of the cognitive assimilation mechanism inherent in all human beings [Ibid.], as well as provide insight into new scientific knowledge of foreign language recipient. Ignoring the nature of academic knowledge and academic type of the text could lead to a translator’s incorrect translation of logical links of the author’s model of knowledge.

The venative technique or method of “support” for basic words and associative explicative developed by L.M. Alekseyeva contributes implementation of the academic text strategy, based on the conceptualization. These units represent the main slots of the author’s model of knowledge. Adequate language units search described in the original text, as well as setting the correct logical relation between them shape the understanding of the author’s model of knowledge, which in turn allows the interpreter to translate it as accurately as possible.
L.M. Alekseyeva interprets academic understanding of the text as “the ability to build a working model of an object or phenomenon” [12: 6]. The underlying idea of the flexibility of concepts and characters of relative interpretational signs. The original verbal sign - an academic text, is perceived by the translator as “a possible trace of thought” [Ibid.: 7].

Lack of understanding of an academic text is the result of misinterpretation of the original specialized knowledge. The translation of an academic text is a reflection of linguistic units and concepts with the aim of recreating the author’s model of knowledge based on the principle that sets the original type of the text, its logic. The translation of an academic text is to identify linguistic units (basic words, explications and associations) and relations between them. The purpose of the translation of academic text is to understand the special text based on an individual model of knowledge. In contrast to the interpretation of a literary text, involving a multiplicity of interpretations due to the fact that this type of text is culturally driven and designed for “general” audience, the interpretation of academic text is limited to certain logic of scientific knowledge and scientific knowledge in general. The logic of academic knowledge appears in ordering and objectification of the scientific knowledge results [6]. Thereby, the base of the academic text translation is the principle of moving from the old to the new knowledge, from “basic” to “constructible” [12]. On the basis of this principle translator organizes and constructs the original special knowledge.

Conclusion

Traditionally, the basis of the interpretation of an academic text is the principle of linguistic interpretation. This led to the fact that the special words, the basis of academic text, “escaped” from the text, and the integrity was attributed only to terminological systems. However, some language units do not fully actualize the author’s concept, so the language interpretation of an academic text often led to a certain loss of scientific knowledge.

An important role in the translation and understanding of academic texts goes to a cognitive component, as the academic text shows the result of cognitive activity of a scientist, expressed in the creation of an integrated model of special knowledge and concepts of the system. R.I. Pavilenis believes that to internalize a concept means to build some structure [13: 102]. Construction of the structure should be “the fundamental principle of translation” - a sequence of learning and the continuity of the concept design [Ibid.: 106].

This principle of interpretation applies both to the construction of a single concept structure and the construction of the entire conceptual system, which is a kind of “context” of interpretation. Therefore, “the understanding of linguistic expression <...> is regarded as its interpretation of a certain conceptual system, rather than in terms of a certain set of semantic objects cor-
related with linguistic expressions, and generators of ‘semantics of language’ [13: 116]. Hence, the interpretation of academic text is a reflection of linguistic units and concepts based on the logic of the development of knowledge.

Thus, the feature of the academic text translation strategy, due to objective and subjective factors, is a recreation of the translator’s original model of knowledge embedded in the original text, based on the interpretation and understanding of the conceptualization of scientific knowledge in the original text.

References


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Resived 15.08.2016.