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El uso de transformaciones de traducción en los diferentes estilos del idioma inglés para la enseñanza de la traducción escrita

The use of translation transformations in different styles of the English language for teaching written translation

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Resumen

El objetivo del artículo fue estudiar la eficacia de las transformaciones de la traducción en la formación de traductores para que realicen traducciones escritas de los diferentes estilos. La investigación involucró el método de evaluación de expertos. Para el análisis de los datos estadísticos se utilizaron los siguientes métodos: se realizó el análisis de correlación, se calculó la desviación cuadrática media y el coeficiente de correlación lineal. El coeficiente de correlación fue el siguiente: para el criterio cognitivo — 0,88; para el criterio de actividad — 0,84; para el criterio personal — 0,91; para el criterio discursivo — 0,89. Los coeficientes obtenidos en base a la tabla de Chaddock superan el 0,7, por lo que la fuerza de correlación entre los parámetros analizados es alta. Se encontró que la desviación cuadrática media de la raíz sx era 1,63. La desviación cuadrática media sy para el criterio cognitivo fue 0,26, para el criterio de actividad — 0,17, para el criterio personal — 0,16, para el criterio discursivo — 0,25. Durante el estudio se estableció el impacto positivo de aplicar casos complejos en las transformaciones de traducción para el rendimiento académico de los estudiantes.

Palabras clave

educación filológica, técnica de la traducción, educación superior, competencia profesional, estudios de traducción.

Abstract

The aim of the article was to study of the effectiveness of translation transformations when training translators for written translation in different styles. The research involved the method of expert evaluations. The following methods were used for the analysis of statistical data: correlation analysis was carried out; the mean square deviation and the linear correlation coefficient were calculated. The correlation coefficient was as follows: for the cognitive criterion -0.88; for the activity criterion -0.84; for the personal criterion -0.91; for

the discursive criterion — 0.89. The coefficients obtained on the basis of the Chaddock's table exceed 0.7, so the strength of correlation between the analysed parameters is high. The root mean square deviation sx was found to be 1.63. The root mean square deviation sy for the cognitive criterion was 0.26, for the activity criterion — 0.17, for the personal criterion — 0.16, for the discursive criterion — 0.25. The positive impact of working with complex cases of the use of translation transformations on the students' academic performance was established in the course of the study.

Keywords

philological education, translation technique, higher education, professional competence, translation studies.

I Introduction

The relevance of the study is determined by the growing interest in the English-speaking environment. This interest raises the issue of quality training of translation specialists for various areas of social life. That is why it became necessary to develop professional competences in future translators to work with different styles of the English language. This necessitated finding an effective method of building such competencies in future translators (Jääskeläinen & Lacruz, 2018).

In the current context, translation activities are associated with the semantic processing of information, the value of which is determined by socio-economic and legal categories. Translators are considered as entities that ensure national security in the informational field. Training of highly qualified translators who successfully fulfil professional tasks becomes one of the priority strategies of the state in the development of modern linguistic education. The importance of theoretical and methodological justification and the search for effective methods of providing quality translation training and evaluating it is currently a priority (Pokorn et al., 2020).

Current pedagogical studies have a clear anthropocentric focus on personality development (Osaulchyk, 2019). In this regard, the subject of the methodology of teaching written translation involves the interaction of the subjects of purposeful processes aimed at facilitating the realization of needs for self-actualization. In the context of the methodology of teaching written translation, we should talk about the process of building professional translation competence in the course of student's professionalization (Azevedo, 2018).

Translation is a creative process, the result of which is the creation of works in another language. The emergence, existence and development of translation is accompanied by the development of social, cultural and other processes. If we add the complex external and internal interactions embedded in translation, it becomes clear that it is wrong to simplify a one-sided approach to translation. This is why it is impossible to unambiguously interpret the definition of translation (Sherzodovich & Kizi, 2020).

The translator's activity is defined and limited by the sphere of professional or everyday communication. Texts to be translated — source texts — in one or another sphere of professional or everyday communication are very diverse and differ in terms of genre and stylistic characteristics. This results in many differences in the features of translation transformations of texts of different styles (Morón & Calvo, 2018).

The specifics of the translation of a text of a certain style is determined, on the one hand, by its place among other types of translation, and by its relationship with the original stylistics on the other hand. For example, literary translation deals with language not only in its communicative (socially connecting) function: the word acts here as the primary element of literature, that is, with an aesthetic function (Liu & Yu, 2019). That is why the problem of written translation has a direct relationship with the object of translation (Lewis et al., 2020).

The main goal of translation shall be distinguished among all the goals: achieving adequacy to the source text. The main task facing the translator to achieve the necessary adequacy is the skilful use of translation transformations. With the use of transformations, it is necessary to fully convey all the information of the original text without violating the norms of the translation language. Translation transformations can be described as transformations used to transfer from units of the original text to units of the target text (Ishchenko et al., 2022). However, the concept of "transformation" should not be perceived literally, as the original text cannot be transformed, since it does not change in essence (Pintado Gutiérrez, 2021).

The original text certainly remains unchanged, but it prepares the ground for the creation of another text in a completely different language. Translation transformations should be attributed to a special type of paraphrasing (interlingual), which has significant differences with transformations within the same language (Serdiuk, 2022). When defining the concept of "translation transformations", it should be noted that the phrases have differences in terms of grammatical structure, lexical content, etc. (Darling-Hammond et al., 2019).

It is worth noting when comparing the original text and its translation that some phrases are subject to literal translation, while others differ significantly from the original. The passages where the translated text is completely different from the original especially attract attention. So, there are some cross-linguistic correspondences in linguistic consciousness, deviations from which are perceived as cross-linguistic transformations.

I.I Unexplored Issues

The theoretical background of translation semantography have not been generalized despite the deep experience in the application of translation transformations and the availability of theoretical and empirical descriptions in relation to particular language combinations. The techniques accumulated in the world translation practice have not been arranged, nor have they been updated in to match the realities of training translators under the current conditions. In terms of the theory and teaching methods, no technological models have been developed for the integration of translation transformation into the process of building translation competence in the field of written translation.

It should be noted that the issues associated with the formation of a deontological position, the development of professionally significant psychophysiological properties, the diagnostics of individual psychological characteristics of future translators and the organization of career guidance work remain poorly studied. The identified gaps should be filled with an integrated methodical concept that conditions the effectiveness of teaching written translation in the system of higher linguistic education. The study of the peculiarities of the use of translation transformations is one of the optimal solutions for the theoretical and methodological justification of teaching written translation. The aim of the work was to establish the relationship between the use of translation transformations in different styles for teaching written translation and the students' academic performance.

I.2 Objectives

- I. Establish the most common translation transformations applied for educational texts.
- 2. Study the dependence between the use of translation transformations technique and the development of future translators' professional competence.
- 3. Establish the effectiveness of the use of translation transformations in the educational process.

2 Literature Review

There is a persistent opinion in the modern discourse of translation studies that the translation teaching methodology is one of the youngest directions. Indeed, most schools that train professional translators have been opened relatively recently — after World War II. However, the translators were trained long before, as contacts between peoples created a need for translators at all times (Horda & Pushyk, 2021).

Liu et al. (2020) discuss the technical aspect of teaching translation. Emphasis is placed on the use of electronic sources, new information and digital technologies: tablets, software products, digital pens, voice recorders, etc. Special attention is paid to the possibilities of remote teaching and learning translation by means of tele- and video-conferences. The topic of didactic research is reduced to consideration of such issues as the stages and principles of teaching, the specifics of translation skills, the system of exercises, the structure of educational materials, etc. This is discussed in the work of Egalite and Kisida (2018). For example, the issues of rendering cohesion or numerals in simultaneous translation, overcoming interference are considered.

The review of studies shows that there is an active search for methods and techniques for teaching written translation, taking into account the students' professional focus. From this perspective, special attention should be paid to the work of Osaulchyk (2019). It is recognized that the curriculum limits the scope of teaching oral translation in favour of written translation. In the international pedagogical discourse, there is a growing interest in modern means of teaching translation, in particular, in information technologies and electronic resources, in game technologies and in the system of training assignments. The work of Lwin (2020) should be mentioned here. In addition to solving the methodological and didactic problems of the organization of translation training, the attention of researchers is focused on the modelling of pedagogical conditions for the professional development of future translators. This is stated in the work of Yakubov (2021). A broad problem area is making specialists ready for translation activities, professional orientation, vocation, self-determination, image of future translators.

The methods of building and developing qualities related to cognitive activity and interest were elaborated in a number of studies, including Popel et al. (2020). The study notes the need to adapt the obtained scientific results to different levels of linguistic education, ensuring its consistency and continuity. An important issue in the training of future translators is the search for effective teaching methods. This issue is elaborated in the work of Fabrychna (2021). The author analyses existing methods and techniques for training translators, and identifies the strengths and weaknesses of popular methods.

The work of Gafurovna (2021) is interesting for this study. The article raises the issue of the translator's deontological position. The personal qualities of the teacher and the student, problems of professional behaviour, moral and ethical components of the profession from the perspective of the philosophy of ethics and legal science are discussed. The issue of effective interaction with partners regarding the communicative situation is considered.

Transformation is the basis of most translation techniques, which involves changing the formal or semantic components of the source text while preserving the meaning. As Tyshchenko and Tsiokh (2022) noted, transformations are supposed to mean interlanguage transformations that require restructuring at the lexical, grammatical or textual level.

It is necessary to turn to the analysis of the subject-object level to determine the status of the method of teaching written translation as an independent area of pedagogical science and practice. Attention should be paid to the application of translation transformations in different styles as a theoretical source for scientific reflection in this direction. The conducted scientometric analysis gives grounds to assert that the methodology of teaching translation can be considered as a new independent academic direction. It reflects the specifics of the professionally oriented pedagogical process in the field of training future translators. The specifics of any academic discipline is primarily reflected in the object and subject of research.

Depending on the major, the process of learning (translation, types of activities), building (competencies, qualities) or professional training (of translators) are the object of research on the translation teaching methodology. It should be noted that the learning process is considered as an object of research most often in works on the theory and methodology of learning and education.

3 Methodology

3.1 Design

The aim and objectives of the research involved the resolution of two issues. First, there was a need to study the typical translation transformations used. Second, the need to identify the impact of the use of translation transformations in the translator training on students' academic performance when learning written translation. The research was conducted in several stages presented in Table 1.

Table 1. Stages of the study of the use of translation transformations in different styles of the English language
when learning written translation.

Research Stage	Period	Stage Description
Summative	2021	Studying the peculiarities of the use of translation transformations in different styles of the English language through statistical and content analysis of educational texts. The method of continuous statistical analysis was applied at this stage. Selection of criteria for the effectiveness of the use of translation transformations. Determining research variables. Preparation for the research.
Formative	February - May, 2022	Carrying out research
Final	June - October, 2022	Summary of research results. Publication of the results in the article

3.2 Participants

The study was conducted at Kyiv National Linguistic University among 149 students of the 2nd-3rd years of study of different majors: 66 female students and 83 male students. Students of the Faculty of Germanic Philology and Translation, Department of English Language and Translation participated in the study. Those students were divided into two groups of respondents: 79 students in the main group and 70 students in the control group. The distribution was made by a double blind lottery. This number of respondents enabled conducting a representative survey. It was possible to conduct a comparative analysis between the two groups of respondents. A group of 30 experts from among the teachers of the Department of English Language and Translation was formed to establish the dynamics of academic performance.

3.3 Instruments

Respondents were able to take part in the study using Google Forms and with the help of opportunities provided by messengers and social networks (Instagram, Facebook). The data were processed using Microsoft Excel and SPSS Statistics 18.0. All data are given in relative (% of the number of respondents) values.

3.4 Data Collection

1. Method of expert evaluations. The experts studied the variables presented in Table 2 in order to identify the level of professional competence of future translators.

Table 2. Variable characteristics of professional competence of future translators when learning written translation.

	Variables and their Description	Competencies	Scores/Maximum Score	
Linguistic	Knowledge of vocabulary, grammar, stylistics of native and foreign languages	CI	5	
Informational	Skills of using ICT and tools when making written translation	C2	5	
Subject	A clear idea of the field of knowledge for which the text is being translated	C3	5	15

2. A comprehensive statistical analysis of translation transformations of educational texts. This method was used to identify the most common translation transformations used in educational texts. The texts were further divided into groups by difficulty for CG (average) and EG (higher complexity). The Cronbach's alpha reliability coefficient for this method is 0.70, which indicates its reliability.

3. Method of analysis of academic performance. The method was used to identify dynamics and qualitative differences in academic performance between respondents of the control and experimental groups. The Cronbach's alpha reliability coefficient for this method is 0.73, which indicates its reliability.

3.5 Analysis of Data

1. A correlation analysis of the average value was carried out to establish a statistical relationship between the effectiveness of the presented method and the obtained research results. The following formulas were used:

$$\overline{x} = \frac{\sum x_i}{n}; \ \overline{y} = \frac{\sum y_j}{n};$$

where: n - sample size equal to the number of involved groups; xi - the extent of application of the methodical system;

 y_j – assessment of the level of proficiency in written translation;

 \overline{x} – the average value of the extent of application of the methodical system;

 \overline{y} – the average value of the level of proficiency in oral translation.

2. The root mean square deviation is determined by the formula:

$$s_{x} = \sqrt{\frac{1}{n-1} \sum_{i=1}^{n} (x_{i} - \overline{x})^{2}}; \quad s_{y} = \sqrt{\frac{1}{n-1} \sum_{j=1}^{n} (y_{j} - \overline{y})^{2}}$$

3. The linear correlation coefficient is calculated by the formula:

$$r_{xy} = \frac{1}{n-1} \sum_{i=1}^{n} \left(\frac{x_i - \overline{x}}{s_x} \right) \left(\frac{y_i - \overline{y}}{s_y} \right);$$

The strength of correlation was shown through the Chaddock scale:

 Table 3. Representation of the strength of correlation in the form of the Chaddock Scale.

Value of Correlation	Interpretation	
below ±0.1	Negligible	
±0.1 – ±0.3	Weak	
±0.3 – ±0.5	Moderate	
±0.5 – ±0.7	Salient	
±0.7 – ±0.9	Strong	
±0.9 - ±0.99	Very strong	

4. The Cronbach's alpha reliability coefficient indicates the internal consistency of the test items. The Cronbach's alpha is calculated by the formula:

$$\frac{N}{(N-1)\left(\frac{\sigma_x^2 - \sum_{i=1}^N \sigma_{Y_i}^2}{\sigma_x^2}\right)}$$

where σ_x^2 – total test score variance;

 $\sigma \;_{Y_i}^2 \text{--} i$ element variance.

3.6 Ethical Criterion

Methods of conducting research, collecting and processing data comply with the criteria of academic integrity, professionalism, unbiasedness, and verifiability. The test assignments have high reliability indicators, correspond to the aim and objectives of the study. The chosen methods correspond to the goals of the research, are proven and reliable, traditional methods, the effectiveness of which is confirmed by the practice of conducting similar studies. The Cronbach's alpha reliability coefficient of the used

methods meets the requirements for pedagogical research and is in the range of values from 0.68 to 0.75. The respondents were informed about the aim of the study in advance and gave their informed consent to the processing and publication of its results. All respondents agreed to personal data processing without the right to their further publication.

4 Results

In view of special requirements for the translations, they require considerable attention in terms of achieving equivalence and adequacy of rendering meanings from the source language to the target language. It is important for the translator to preserve the formal connection of the original, because it combines the text into a single whole, makes it logical and consistent. In addition to cohesion, that is, formal coherence, the text is also characterized by coherence. Figure I shows the results of a comprehensive statistical analysis of translation transformations used in English educational texts of different styles.

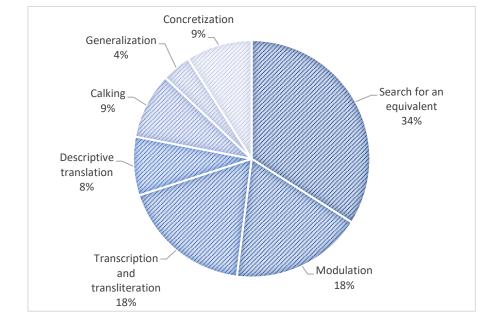


Figure 1. Results of comprehensive statistical analysis of translation transformations used

in educational texts.

Statistical analysis of educational texts selected and translated by an expert group in different styles revealed that the search for an equivalent is the most frequent transformation and translation technique. The obtained data give grounds to conclude that it is necessary to apply all types of translation translation transformations in order to achieve translation adequacy. For example, the use calking is appropriate when translating terminological phrases, while it is necessary to resort to transcription and transliteration to create a neologism term. Descriptive translation is used when it is impossible to convey a concept in one word or if some concept requires an explanation in the target language. The apt use and combination of all kinds of translation transformations ensures the pragmatic potential and adequacy of the translation. Based on the data of the study of translation transformations in educational texts of different styles, the expert group created two groups of educational texts — for control and experimental groups. Texts for the control group require an average statistical use of translation transformations. The texts for the experimental group had higher complexity.

The group of experts further analysed the dynamics of students' academic performance in the control and experimental groups. For this purpose, the professional competence of future translators was assessed according to the variables specified in the Methods. Table 4 presents the results of the study.

Study Category	Groups	Average Score
Data of a students' test of in Translation Theory	CGI	10.4
	CG2	10.9
	EGI	14.4
	EG2	14.9
Translation of specialized texts	CGI	8.5
·	CG2	9.0
	EGI	10.1
	EG2	10.8
Results of the final assessment	CGI	11.4
	CG2	9.9
	EGI	14.7
	EG2	15.01

Table 4. Data on the analysis of students' academic performance of the control and experimental groups according to the experts' assessment

The educational experiment carried out during the study shows that in EG1 and EG2 higher indicators of the initial level of students' translation competence were found. An educational experiment on building students' written translation competence helps to develop more effective methods of teaching translation.

The average scores for four criteria (cognitive, activity, personal, discursive) in each group of students were summarized and visualized using a petal diagram (Figure 2).

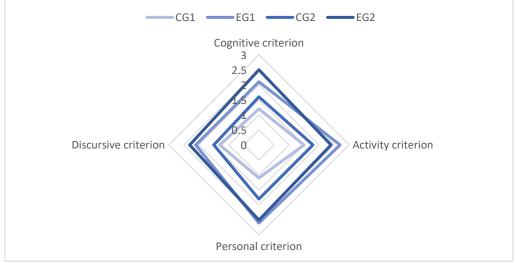


Figure 2. Comprehensive evaluation of the results of experimental study.

The extent of implementation of the methodical system xi was estimated from 0 to 4 depending on the conditions:

- 0 integration was not carried out (for CGI and CG2);
- I –integration elements were tested (for EGI);
- 2 integration was carried out in one direction (vertical succession for EG2);
- 3 integration was carried out in two directions (vertical succession and horizontal intersubjectivity for EGI);
- 4 integration was carried out in three directions (vertical succession, horizontal intersubjectivity and radial expansion for EG2).

The results of the calculations show that x equals 1.67, for the cognitive criterion -2.09, for the activity criterion -2.18, for the personal criterion -2.29, for the discursive criterion -2.14. It was established that the root mean square deviation sx was 1.63. The root mean square deviation sy for the cognitive criterion was 0.26, for the activity criterion -0.17, for the personal criterion -0.16, for the discursive criterion -0.16.

0.25. So, the correlation coefficient between the extent of implementation of the methodological system and the level of proficiency in oral translation for each of the four criteria was as follows:

- for the cognitive criterion 0.88;
- for the activity criterion 0.84;
- for the personal criterion 0.91;
- for the discursive criterion 0.89.

Given that the obtained coefficients exceed the value of 0.7, the strength of correlation on the Chaddock Scale between the analysed parameters is characterized as high. This proves the effectiveness of the proposed methodical system. Therefore, it can be stated that the developed system was most effective in EG2, where the method was fully implemented in all three directions.

5 Discussion

The model of the methodical system of teaching written translation, which represents the methodical component of the concept of using translation transformations, was created for an orderly presentation of the content, methods, means, and forms of education. As Savka et al. (2021) noted in their research, it includes three blocks: content-target, organizational-procedural, result-evaluative. On the contrary, Hargaieva and Artiushevska (2022) note the inadequacy of using only one method for training future translators. The authors emphasize the need for a complex use of various methods when teaching written translation.

The target component of the content-target block of the methodological system is the global goal of education, which involves building professional translation competence as indicated by Schleiermacher and Bernofsky (2021) and Hilliard et al. (2016) in their studies. According to the researchers, at the preuniversity stage the target setting is aimed at forming the motivation and awareness of potential applicants. The aim of undergraduate studies is building basic professional translation competencies, in particular, the ability to perform written translation during various discursive events. As Bassnett and Johnston (2019) stated, the aim of the Master's degree is building professional competence in the field of theory and practice of translation. Colusso et al.(2019) found that the content component consists of cognitive, activity, personal and discursive constituents of professional translation competence in the field of written translation. The cognitive component focuses attention on the translator's skills and abilities. The personal component of the education is interpreted by the authors as a set of personal qualities and abilities necessary for performing written translation, awareness of the motives and goals of this activity, understanding of professional significance, compliance with deontological principles and norms. The discursive component of the education includes a set of communicative situations and discursive events.

According to Cantarero Muñoz (2022) and Cantor et al. (2019), the existing methodical systems are verified in the course of research and experimental work at professional guidance and basic translation levels. Quantitative and qualitative analysis of the research results revealed positive dynamics in the scope of knowledge (cognitive criterion) and motivational interest (personal criterion) of the students involved in the experimental research. The results obtained in the experimental groups in the study of Furey (2020) for the cognitive, activity, personal and discursive criteria were compared with the data of the control groups, in which the experimental methodical system was not implemented. The highest results were recorded in the experimental group, in which integration was carried out in all directions. Correlation analysis established a statistical relationship between the effectiveness of the developed methodical system and the obtained results of experimental training. On the other hand, Yakubov (2021) attributed a significant role in the training of translators to experimental methods. Along with this, the study of Popel et al. (2020) indicate insufficient dynamics of academic performance as a result of the introduction of the latest methods.

There were two main types of limitations of the study. The first is related to the research methodology of the application of translation transformations, which cannot be measured directly. The students' academic

performance was analysed as a variable in the study. The second limitation related to the probability of the personal factor of expert evaluations follows from the first one.

The theoretical significance of the research is the actualized importance of translation transformations in the process of training students for written translation. The paper analyses the problem of translation transformations in the context of its didactic significance. The practical significance of the research is the development of the indirect method of determining the effectiveness of translation transformations in the course of teaching students.

The main limitations of the study were related to the methodology of determining reliable tools for researching the effectiveness of the application of a certain pedagogical condition. In general, there are no direct variables, the dynamics of which would allow us to assert the effectiveness or lack of effectiveness of a particular pedagogical condition. Thus, in the study, it was necessary to use methods that would measure tangential indicators to the main variable.

Further research should focus on finding optimal tools and methods for teaching translation. Attention should also be paid to the role of horizontal and vertical translation transformations on the formation of written foreign language competence.

6 Conclusions

The relevance of the study is determined by the need to solve the problem of building the professional competences of future translators to work with original English texts in different styles. Conclusions based on the obtained results. The concept of training in written translation created within the scope of the general methodology of teaching translation is represented by a set of methodological, regulatory, theoretical and methodical components. The main instrumental approach that provides the unity of the methodological framework of the concept is the use of translation transformations. The use of translation transformations in different styles of the English language ensures the integrity and continuity of learning at all stages and levels of higher linguistic education. As the research results showed, the use of texts with different levels of complexity and frequency of translation transformations had a positive didactic effect. Applications. The results of the study may be of interest to anyone who is looking for an effective method of teaching translation. In particular, the research will be of interest to teachers of philology and philological students, who directly face with the need to study the peculiarities of translation transformations. The study will also be of interest to everyone who is engaged in the preparation of educational and methodological programmes for teaching written translation. Prospects for further research. Further research should be aimed at studying the role of horizontal and vertical translation transformations in teaching written translation. The search for effective methods of teaching written translation will also be relevant.

7 Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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