The word-forming motivation for lexical innovations in the cognitive space (based on ukrainian- and english-speaking sources)

СЛОВОТВІРНА МОТИВАЦІЯ ЛЕКСИЧНИХ ІННОВАЦІЙ У КОГНІТИВНОМУ ПРОСТОРІ (НА УКРАЇНОМОВНОМУ ТА АНГЛОМОВНОМУ МАТЕРІАЛІ)

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Abstract

The cognitive space where lexical innovations have semantic content and are formed by word-formation innovations opens a broad research field. However, lexical innovations have their creation mechanisms, are sometimes not regular, and cannot carry semantic content outside of contexts and conventions. For this reason, it is relevant to consider effective means of working with both Ukrainian- and English-speaking materials during learning. It also requires appealing to present-day findings in cognitive science, communicativism, and pragmatics. This research is aimed at establishing the effective use of motivational models as achievements of cognitive science while using innovative approaches to learning English and Ukrainian languages. This is an analysis of the effectiveness of involving word-formation motivation in the foreign languages' learning process to create lexical innovations from the standpoint of linguocognitivism theories. The research methodology is based on a complex approach:

Anotация

Когнітивний простір, у якому лексичні інновації мають семантичний зміст та формуються за рахунок словотвірних інновацій, відкриває широке поле для досліджень. Проте лексичні інновації мають власні закономірності творення, часом не є регулярними, не можуть нести семантичного змісту поза контекстами та конвенцією. Саме тому актуальним є розгляд ефективних засобів роботи з україномовним та англомовним матеріалом під час навчання. Це також потребує звернення до сучасних відкриттів у галузі когнітивістики, комунікативістики, прагматики. Метою дослідження є встановлення ефективності використання мотиваційних моделей як здобутків когнітивістики у світлі використання інноваційних підходів до вивчення англійської та української мови. Це аналіз ефективності залучення до процесу вивчення іноземних мов словотвірної мотивації, до створення лексичних інновацій з позицій теорій

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survey, observation, descriptive method, analysis, and synthesis. The experiment is a principal method. However, the evaluation of the new method’s effectiveness was carried out using a survey at the final stage of the research. The leading research hypothesis assumes that using scientific achievements of modern cognitive science in foreign language teaching is an effective learning practice; applying models of word-formation motivation in lexical innovations translation is necessary for foreign language teaching.

Keywords: word formation, lexical innovation, cognitive science, motivation, higher education, EFL.

Introduction

First of all, it is necessary to establish the main positions used in cognitive science when we talk about foreign language learning methods. These are the terms "lexical innovation", "occasionality", and "neologism". In many methodological guidelines and projects, they can be interchangeable and are used to denote words that are not a regular and generally accepted part of the lexical composition of the language. Markers of the type "lexical innovations" also have two interpretations. One refers to absolute neologisms, individual and literary neologisms, and the other is often used to denote semantic unfamiliar, unsuccessful, unaccepted language usage in several expressions. These are different objects for analysis, and our study is concerned with the first option. In translation tasks, we should take into account the innovative component presented at the semantic level, which may also be the result of the speaker's word-formation experiments. Some researchers argue that such formations are not part of the current lexicon, and do not carry semantic content as a conventional formation, where the semantic content of lexical expressions is formed from linguistic conventions. However, there are two views on this thesis in contemporary linguistics. The first one conventionality does not accept that lexical innovations carry semantic meanings (Arbol del, 2018). There is also the view that the dynamics of conventional presupposition, the representation of improvised re-expressions initiates a constant increase in the semantic language resources, and the content examples' creation as a result of regular updating at the semantic, word-formation language level (Brøgger, 2017). The last thesis explains the existence of the speaker's motivation for word-forming innovations. Scientific issues in this aspect look like coverage of the "work" of word-forming models as pro-lexical innovations, symbolic means of speech in a foreign language study.

According to research and methodological developments (Kostikova, Miasoiedova, Razumenko, Chernenko, & Pochuieva, 2019), translation skills and text formation of different stylistic orientations are important in communication processes in a professional environment, where it is necessary to use English regularly and frequently. Some researchers (Gilakjani, 2016) are working towards the techniques' development aimed at improving communication skills, which are necessary for further professional activities of a modern specialist, who must know the language of international communication - English.

Noon-ura (Noon-ura, 2008) noted that proficiency in English is a prerequisite for a professional to enter the global labor market. Motivating Ukrainian-speaking students to work with English, to a creative approach to lexical innovations, viewing within the cognitive field of text-forming traditions involves addressing the practice of language use in live communication and the creative process.

Aims

This study aims to establish the effectiveness of using motivational models as cognitive science achievements when using innovative approaches to English and Ukrainian language learning. It is
an analysis of the effectiveness of word-formation motivation to create lexical innovations in the foreign language learning process from the standpoint of linguocognitivism theories. This aim requires the solution of a set of research tasks:

- to establish the evolution of success in mastering the skills of lexical innovations translation;
- to determine the components of lexical innovations formation during translation;
- to determine the participants' evaluation of the learning results using new methods.

The experiment included the identification of ways and step-by-step development of recommendations to improve the effectiveness of training in lexical innovations.

**Materials and Methods**

Data collection was conducted from September 2021 to December 2021 (1 academic semester) at Khmelnytskyi National University (Ukraine). Sixty-two (62) Ukrainian-speaking English language specialty students were involved in the experiment. All participants agreed voluntarily to be involved in the experiment. The students were combined into 4 groups, which were asked to choose a specific course in translation. This course included active use of cognitive linguistics achievements, modern views on word formation, and its place in the formation of lexical innovation. For each group, the initial achievements were measured at each experiment stage.

This study is comprehensive by nature and combines both qualitative and quantitative methods. The study uses a descriptive method that is important for almost all social research. That is because only quantitative approaches are insufficient for social research. After all, without evaluation by certain social groups, the results would only represent a set of numbers. Questionnaires and surveys are the main tools, introduced to find answers to the questions posed in the study.

In general, the study took place within III stages. In the first stage were carried out academic performance evaluation and questionnaires distribution, where personal data was collected. Respondents gave them voluntarily, and the research team guaranteed confidentiality, private information obtained during the study will not go outside the experiment.

In the II stage, observation methods and interviews are used, and researchers collect data and perform their analysis. The data obtained is used as a guide in answering the questions posed in the study.

The III stage was the analysis of the data obtained. It is processed and used to be applied to draw conclusions and answer the problematic questions of the research.

Researchers use some theoretical investigations as references to present a complete and comprehensive understanding of the scientific basis introduced in the experimental methodology. It allows answering the research problems, namely word-formation motivations as a building material for lexical innovations, to consider cognitive science for the foreign language teaching method's development.

The description and presentation results of the questionnaire data are presented as a statistic description.

**Literature review**

The cognitive space of the language's word-formation potential, which influences semantics, is the aim of research by several specialists (Kiki-Papadakis & Chaimala, 2016). Additional factors that modify semantic content according to context may be in focus (Gasparri & Murez, 2021). Formal processes are also considered resources that can endow the sentences content, utterances, texts, etc. (Jackendoff & Jackendoff, 2002). The question of word-formation potential, stemming from the possibility of lexical innovation, and specifically the basis of conventionality and semantics, has also been developed practically (Junining et al., 2021). In this perspective, an important debate has become about the nature of meaning, which can be defined and re-created on new content by activation of regular word-formation patterns specific to a particular language.

Modern pedagogy explores methods of translation teaching mastery, interactive positions of foreign language learning (PACTE, 2018), mechanisms of formation of creative approaches to translation, text formation, and stylistic markers presentation (Junining et al., 2021). A separate area of research is determining the role of information literacy in modern education and the role of administration in innovation (Kuzmina et al., 2020), and the impact of social media opportunities for learning English (Dzvinchuk et al., 2020). Separately, the
foundations of cognitive linguistics are explored from the perspective of their use in foreign language learning (PACTE, 2018).

The role of cognitive linguistics in translation activities is explored (Bruin et al., 2014; Ko et al., 2013), the basics of learning English concerning cultural and mental characteristics of students (Rababah, 2020). The application of methods based on the cognitive linguistics concept determines the ways of word-formation motivation of lexical innovations as part of a comprehensive approach to language learning (Koktürk, 2012).

In the future, research should be conducted on the word-formation models features, which are characterized by the property of forming word-formation innovations. Discovery and new methodological developments created in the plane of cognitive and pragmatic linguistics can seriously facilitate the language learning process.

**Results**

The submission of experimental data and the new approaches to English studying at Ukrainian universities should be based on several theoretical positions, the main ones of which are presented below.

The cognitive science theory presents the components that should form the basis for lexical innovation formation and word creation. These components can be easily integrated into the language creation and contribute to the lexical presentations at the frame creation level. Thus, an algorithm for the translation of such innovations is born. It should consider all the components and conditions of the emergence and existence of such an innovation.

![Figure 1. Components of lexical innovation formation during translation (author's elaboration)](image)

For translations that require the ability to navigate a foreign language and work with lexical innovations, it is necessary to: consider the cultural contexts and the set of meanings that can be put into statements (encyclopedic knowledge), understand the goals and intentions of the statement uttered (intentions and illocutions); the situation and conditions in which they speak; the structural components, conventions, and traditions (discourse structure); the importance and popularity of the expression of collective communication (social value). For example, considering several idioms with the meaning "by and large," which is not a sample of classical grammar: The man envied him his fortune.

In the initial stage (Stage I), a set of interactive teaching methods was introduced into the learning process. Their effectiveness at the end of the work had to be evaluated by the respondents.

1. Organization of work in pairs or small groups. An important condition is an active dialogue in search of the right meaning, stylistics, form, and the most appropriate equivalent in Russian. Communication is constantly going on between the participants.
2. Literary translation as a factor of interactives is a conscious part of language competence. Consideration of innovation as stylistic and literary techniques, which are used differently in different cultures and can cause problems in understanding the text and its intentions.
3. Performing real-time translation on a topic or series of topics presented by the teacher. During such translation there is no ready
text, the translation is instantaneous, not elaborated and automatic. Time constraints can dictate conditions to the translator, making it difficult to plan the formation of the message and speech control. It builds skills of rapid perception and conversion of information, making the translation short and simple. Understanding the main content of the text is facilitated in this way. This translation can be clearer and simpler because there is no time for complex and confusing constructions.

At the end of the I stage, there was a control of knowledge and translation skills.

### Table 1.
Assessment of the mastery of lexical innovation translation skills *(author’s elaboration)*.

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>7 %</td>
<td>36 %</td>
<td>45 %</td>
<td>16 %</td>
</tr>
<tr>
<td>Group 2</td>
<td>9 %</td>
<td>32 %</td>
<td>43%</td>
<td>16 %</td>
</tr>
<tr>
<td>Group 3</td>
<td>8 %</td>
<td>38 %</td>
<td>45%</td>
<td>13 %</td>
</tr>
<tr>
<td>Group 4</td>
<td>9%</td>
<td>30%</td>
<td>43%</td>
<td>17%</td>
</tr>
</tbody>
</table>

It means that exercises that activate translation abilities also provide the ability to translate in a limited time frame. It allows students to develop creative translation skills and facilitates the process of mastering the skills. The use of insertion words, established expressions, as well as the development of skills to self-correct translation errors and, if necessary, paraphrasing with repetition, help to cope more freely with the formation of the text. All used cognitive teaching methods make a foreign language learning more effective.

At the II stage, several methods were added to the teaching process, which introduced creative approaches to translation, considered models, and forms of word-formation motivation of lexical innovations. This stage aims to teach new stylistics and creativity, allow reconstruction knowledge, and develop professional and translation skills.

An important part of this method is an ongoing discussion of translations and analysis of errors, the development of different translation options, and the detailed processing of texts composed in a foreign language. Thus, students can use these activities to improve their grades.

### Table 2.
Assessment of communication skills in the experimental groups at the II stage *(author’s elaboration)*.

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>6 %</td>
<td>28 %</td>
<td>46%</td>
<td>20 %</td>
</tr>
<tr>
<td>Group 2</td>
<td>8 %</td>
<td>34%</td>
<td>48%</td>
<td>10 %</td>
</tr>
<tr>
<td>Group 3</td>
<td>7 %</td>
<td>26 %</td>
<td>52%</td>
<td>15 %</td>
</tr>
<tr>
<td>Group 4</td>
<td>8 %</td>
<td>30%</td>
<td>49%</td>
<td>13 %</td>
</tr>
</tbody>
</table>

As we can see, overall performance improved by 9%, the number of unsatisfactory grades decreased by 4%, and the highest number of "good and excellent" grades was 12%. This indicator is quite good because the ability to work with lexical innovations in translation creation is a very hard job, requiring a high level of language knowledge and writing talent or stylistic flair.

The final (III stage) was designed to show how positively the respondents perceived the new methods for teaching translation skills. Students were offered a questionnaire where they had to assess the truthfulness of the statements presented in the questionnaire.

Through monitoring and evaluating what the student had learned and learned in the previous steps. Answering the questionnaire would help students give an informal assessment of their abilities, preferences, required amounts of language material, learning activities that contributed to improved knowledge, and further prospects for improved learning.

Each group rated the importance of each criterion. Responses are presented as percentages for each group.
Table 3.  
Assessment of the new implementation of the participants’ experience method (author’s elaboration)

<table>
<thead>
<tr>
<th>Statement</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
</tr>
</thead>
<tbody>
<tr>
<td>English is an international language that helps improve professional skills</td>
<td>22%</td>
<td>22%</td>
<td>25%</td>
<td>36%</td>
</tr>
<tr>
<td>English becomes a tool to improve your knowledge of the Ukrainian language</td>
<td>19%</td>
<td>25%</td>
<td>22%</td>
<td>12%</td>
</tr>
<tr>
<td>The ability to make high-quality translations into English and Ukrainian is a proof of writing skill</td>
<td>25%</td>
<td>29%</td>
<td>34%</td>
<td>25%</td>
</tr>
<tr>
<td>It is possible to gain knowledge of culture, traditions, and mentality of native English speakers</td>
<td>10%</td>
<td>12%</td>
<td>34%</td>
<td>14%</td>
</tr>
<tr>
<td>Learning the basics of translation happens faster in the process of active and problem-based learning</td>
<td>62%</td>
<td>62%</td>
<td>56%</td>
<td>50%</td>
</tr>
<tr>
<td>Skills and knowledge of phraseology, word formation, paramiology, grammar, vocabulary influence the ability to translate</td>
<td>80%</td>
<td>85%</td>
<td>84%</td>
<td>81%</td>
</tr>
<tr>
<td>Constant translations from English and Ukrainian contribute to the development of translation skills</td>
<td>21%</td>
<td>25%</td>
<td>28%</td>
<td>16%</td>
</tr>
<tr>
<td>Translation work promotes understanding of the sociolinguistic and sociocultural constants of the language</td>
<td>14%</td>
<td>21%</td>
<td>19%</td>
<td>12%</td>
</tr>
</tbody>
</table>

According to the survey results, the respondents consider translation skills, influencing skills, and knowledge of phraseology, word formation, paramiology, grammar, and vocabulary (82%) as the most valuable. Knowledge of the translation basics occurs rather in the process of active and problem-based learning (57%).

The cognitive space of lexical innovations in the learning process will contribute to the effective learning of a foreign language, as shown by the respondents, improves the ability of creative literacy activities, activates intellectual work, and expands knowledge about the culture and traditions of countries. It is the view of language learning as a multilayered synthetic process, where the cultural component is important and the ability to express clearly and create texts understandable to the audience.

Discussion

The importance of cognitive linguistics in the learning and formation of high-level professionals has been identified by a group of studies (Salgur, 2013; Gilakjani, 2016). Translation skills of lexical innovations, knowledge of word-formation patterns, and the ability to interpret them correctly are of great importance for successful interaction at all levels of communication in English and Ukrainian. The effective activity of a translator is considered a way of realizing one's potential and the ability to work in a group (Aronin, Singleton, 2018). In fact, according to the data from our study, translation skills are important. Influencing skills and knowledge of phraseology, word formation, paramiology, grammar, vocabulary (82%), and translation basics knowledge occurs rather in an active and problem-based learning process (57%). Students need to be motivated to learn English with clear and understandable learning algorithms, so you can encourage students to use their translation skills in practice. Bayram-Jacobs (Bayram-Jacobs, 2015) noted that students often ignore traditional methods of learning a foreign language, preferring innovation. Goh & Burns (Goh & Burns, 2012), in their research studies, described a speech activities’ teaching method in English language learning, where the main components are the following:

- the ability to make high-quality translations;
- focus on the language, constant consolidation;
- repetition of what has been learned and creativity in text formation.

The conducted experiment proved the efficiency of such a methodology, which helps implement complex educational tasks:

- improving translation skills;
- constantly preparing students for creative work;
- participation in cultural and education work, and awareness of modern linguistic theories.

In today’s globalized world, many use the language of international communication - English. This language has long been a means of intercultural and business communication, and it enables people around the world to understand each other and facilitate interaction while working and learning (Leong & Ahmadi, 2017).
Despite the importance of translation activities, foreign language learning should be comprehensive. Communication skills and understanding of the English language should be fostered.

Conclusion

As a conclusion to the experiment, the research team made several conclusions.

The use of motivational models in translation activities as achievements of cognitive science can be represented through the involvement of innovative approaches to the study of languages. An important part of the successful and high-quality translation of lexical innovations is the understanding of word-forming motivation as one of the manifestations of speakers' cognitive activity and pragmatics of expression.

The main components of the lexical innovations formation during translation are encyclopedic knowledge, elocutionary and intensional meaning, the context of the use of expressions, the structure of discursive practice, and the social value of the text.

The study found that students' success in mastering translation techniques relies on the use of interactive methods of foreign language learning and modern advances in cognitive linguistics. It contributed to a 9% increase in student achievement overall.

Innovative teaching methods of translation theory, which have the goal to make effective and professional learning of English in Ukraine, should take into account the modern achievements in the field of cognitive linguistics, namely in the plane of the acquisition of translation skills, understanding, and interpretation of the text in the implementation of various discursive practices. It should be taught to perceive lexical innovations as a creative process and the translation from English even of authorial novelties as the norm for university education.

Bibliographic references


