

# The Phenomenon of Loan Translation and Its Influence on the Processes of Standardization of the Terminology System of the Kazakh Literary Language

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**Abstract**—In Kazakh linguistics and Turkology, the loan translation method is examined from the perspective of structural linguistics, where it is viewed as both a means of enriching the vocabulary and a significant aspect of word formation. This study is particularly relevant in the context of language policy aimed at developing a comprehensive terminology system for the Kazakh language and preserving its vitality. Specifically, the research explores the impact of highly active word-building and word-transforming suffixes involved in loan translation on the internal laws of Kazakh. The application of general linguistic methods and the survey method helps identify differences in the use of lexicographic works and native speaker preferences. The study examines the peculiarities of these suffixes, comparing and evaluating them in relation to the internal linguistic laws of Kazakh, while integrating insights from global linguistics, Kazakh linguistics, and Turkology. Based on a thorough analysis of empirical data, the study proposes effective standardization models for improving the terminology system. Additionally, it draws scientific and practical conclusions regarding the role of productive word-building and word-transforming suffixes in shaping one of the internal laws of the language – the compaction process. The paper also outlines conclusions on the standardization of these suffixes as part of the process of establishing Kazakh as a language for term formation in alignment with its internal linguistic laws.

**Index Terms**—loan translation, word-building and inflectional suffixes, term formation, standardization, normalization

## I. INTRODUCTION

The impact of linguistic units arising from language contact on the natural rules of the host languages has not been previously considered. The study of this issue holds particular significance in Kazakh linguistics for two main reasons. First, the growing use of the Kazakh language in official and state contexts (Koptleuova et al., 2023) has revealed clear shifts in the natural dynamics of the language. Second, there has been a positive change in the societal attitude towards the Kazakh language, with increasing recognition of its cultural and communicative importance and a growing commitment to ensuring its continued vitality. New research was conducted that combined the principles of language systems with methodologies from anthropolinguistics and psycholinguistics, with special emphasis placed on developing the Kazakh terminology system and enhancing the communicative quality of Kazakh linguistic culture. All of these factors necessitate the incorporation of foreign words into the Kazakh literary language and reevaluation of the processes

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of loan translation. This is crucial because the dynamics of language preservation, change and revitalization are central to the vitality of any language (Zhanalina et al., 2024).

Loan translation is one of the most productive methods in Kazakh term formation. The word-building and word-transforming suffixes of the Kazakh language unlike semantic loan translation actively participate in the creation of abstract nouns and term phrases related to scientific, cultural, and technical fields.

The loan translation method is one of the optimal methods for agglutinative languages, which differ in word formation and word combining. The most standardized, systematized, and designed as a model of word-formation cliché, the main productive suffixes in modern Kazakh terminology are word-building and word-transforming suffixes  $-l\dot{i}k / -l\dot{i}k / -d\dot{i}k / -d\dot{i}k / -t\dot{i}k / -t\dot{i}k$  (further –  $\{+L^3\dot{I}^2K^2\}$ )<sup>1</sup>. Linguistic units formed by these suffixes enrich the vocabulary of the Kazakh literary language by introducing new terms. The meaning of these suffixes corresponds exactly to the loan translation equivalents of the Russian morphemes *ость*, *-ной / -ный* and *-ский*, which denote a certain quality. Full correspondence ensures the integrity of both form and content within the term systems of two languages, while also ensuring conceptual clarity and comprehensiveness in the other language. Moreover, it also depends on the template formed in the minds of native speakers due to the equal use of two languages in the Kazakhstani society. Here we note that the active function of word-building and word-transforming suffixes  $\{+L^3\dot{I}^2K^2\}$  has been evaluated in Kazakh linguistics only from this point of view.

In recent years, a new approach to the conceptual foundations of the language has been formed in Kazakh linguistics. Anthropocentric linguistics methods, prominent in world linguistics, have been applied to the study of the Kazakh language. The restoration of the internal laws inherent to the Kazakh language system, stemming from the interplay between languages, national identity, and culture, has become a central focus of both scientific and practical research.

Differentiating the impact of other languages on the vocabulary, including the use of loan translation in modern Kazakh language, revealed which levels of the language were most affected, where these changes were most dominant, and how they influenced the laws of the language system.

The problem that needs to be identified and systematized is related to the peculiarities of the word-building and word-transforming  $\{+L^3\dot{I}^2K^2\}$  suffixes in the formation of loan translation linguistic units. These peculiarities are as follows:

- the factors that contribute to productivity of word-building and word-transforming  $\{+L^3\dot{I}^2K^2\}$  suffixes of the Kazakh language in the loan translation method;
- one of the internal natural laws of the language – the impact of the compaction processes on the peculiarities of the spelling of suffixes;
- ways of unifying the word-building and word-transforming function of suffixes.

## II. LITERATURE REVIEW

Loan translation units and methods in a certain language have been studied from multiple perspectives in world linguistics, with evaluations differing across approaches. Weinreich (1972) and Haugen (1972) focused on code-switching and interference phenomena. E. Haugen describes this phenomenon as “the transfer of the structure of one language to another along one line” (Haugen, 1972, p. 351). There is also an opinion that defines interference as “linguistically partial correspondence, overlapping of two languages with each other, and further change of the second language under the influence of another language” in the works of E. Haugen. Moreover, this scientist concluded that “a person who has mastered two languages tends to imitate the skills acquired in his native language and copy them into the second language” (Haugen, 1972, p. 351). All these views are directly related to the loan translation and loan translation method.

Russian scientist Zemskaya (2004) in her later work expressed her opinion as follows: “Loan translations are less noticeable than borrowings. This is, so to speak, a secret enemy in disguise, and not an obvious robber who is breaking into the house” (Zemskaya, 2004, p. 421). In addition, the opinion of prominent researchers that “semantic loan translation is ‘false closeness’ (Zemskaya, 2004) is also important. A. Zaliznyak noted that “loan translation threatens the identity of the national language” (Zalizniak, 2013, p. 114).

Loan translation in world linguistics, including Russian linguistics, has been explored from the works of Charles Bally to the research of outstanding Russian scholars. It is viewed as: a) a source of vocabulary enrichment in a given language; b) language units examined within the framework of linguistic translation theory; c) a result of language contact; d) a phenomenon characteristic of the synchronic phase of language, with borrowing primarily analyzed as empirical material.

The perspectives of Russian linguists are echoed in later research on emerging directions, and the conclusions in world linguistics regarding the loan translation phenomenon arising from language contact have become established as an axiom, serving as a theoretical foundation for subsequent studies.

In recent years, there has been a growing focus on the method of loan translation in Russian linguistics. Therefore, this article will limit its scope to an overview of subsequent studies. This emphasis is due to two key reasons: a) it is crucial for this article to explore the theoretical insights regarding the phenomenon of loan translation from languages such as Spanish, French, Chinese, and others with distinct typological structures into Russian; b) it also relates to demonstrating

<sup>1</sup> The international Turkic alphabet in the work of *The Turkic Languages* published in 2022 under the editorship of Lars Johanson and Éva Á. Csató was used to keep the authenticity of language facts in the Kazakh language in the article as well as curly brackets of the type  $\{ \}$  are used for morphophonemic formulas (The Turkic Languages, 2022).

the differences in the application of the loan translation method in the Kazakh language, which has an agglutinative structure.

The works of Professor E.V. Senko, M.R. Lenchina, and A.A. Gorbov offer valuable insights into the phenomenon of loan translation from other languages into Russian. Their findings on semantic calque between the English and Russian are particularly significant (Utegulova et al., 2024). Researchers have noted, first and foremost, that the works of J. Baghana, A.A. Gorbov, A.A. Zaliznyak, K.S. Zakhvataeva, L.P. Krysin, E.V. Marinova, and D.N. Shmelev provide evidence that the phenomenon of loan translation has long been a subject of study in Russian linguistics. Secondly, the authors highlight that the method of loan translation in contemporary Russian language usage remains underexplored: "... foreign language influence on the Russian language is not limited to direct borrowing of vocabulary: loan translation processes also play an important role, the analysis of which is given much less attention" (Sen'ko & Lenchina, 2020, p. 129). Gorbov expresses the same opinion: "much less attention is paid to the analysis of loan translation processes than to consideration of issues related to direct lexical borrowing" (Gorbov, 2015, p. 96). Thirdly, according to the authors, the goals of determining language units created through loan translation method are also not clear. E.V. Senko and M.R. Lenchina suggest the opinion of L.P. Krysin as follows ...compared to the number of direct borrowings, ... the difficulty of identifying the loan translations due to the lack of clear criteria by which one or another new formation should be considered as the result of foreign language influence, and not the process of language development in accordance with its internal laws (Sen'ko & Lenchina, 2020, p. 129). This quote was repeated by A.A. Gorbov as well (Gorbov, 2015, p. 96). J. Baghana and I.V. Treshcheva focus on the problems of morphological loan translation and syntactic loan translation and assess that "the form and syntactic structure of another language is adopted and it is carried out through imitation" (Baghana & Treshcheva, 2010, p. 104).

The following conclusions can be drawn from a review of research in world linguistics:

- a) The theoretical foundation of the loan translation phenomenon, resulting from external linguistic factors such as intercultural communication and language contact, has been established;
- b) Contradictions are noted between the impact of loan translation units on expanding the vocabulary of the literary language and their effect on the natural state of the recipient language; however, this issue remains inadequately defined;
- c) Most research focuses on the nature of semantic loan translation, specifically the changes in the semantic structure of recipient language words influenced by the semantics of the source language, a process known as semantic induction;
- d) Morphological loan translation, particularly the peculiarities of morphemes equivalents in the recipient language, has not been sufficiently addressed.

Linguistic units formed through the method of loan translation have been categorized as linguistic facts related to the activation of specific suffixes in word formation, primarily within the framework of structural linguistics in earlier stages of Kazakh linguistics and Turkology. It is regarded as a progressive influence on the enrichment of the Kazakh literary language and Turkic languages in general, as discussed in lexicological studies.

In Kazakh linguistics and Turkology,  $\{+L^3\dot{I}^2K^2\}$  suffixes have been studied in the aspects of clarifying their functional activity and word formation. The earliest perspective in Kazakh linguistics can be found in the works of A. Baitursynov, the esteemed Teacher of Nation. A. Baitursynov defined the main and productive function of  $\{+L^3\dot{I}^2K^2\}$  suffix used to name an object, concept, notion (for instance, *arka-līk* – beam); to measure one concept and notion for another concept and notion (for instance, *aya-līk* – brotherhood) (Baitursynov, 1992, pp. 212-213).

The conclusions drawn in research on Kazakh morphology and word formation are distinctive: "suffix *-лық* is a very fertile suffix capable to create new words" (Yskakov, 1974, pp. 34-35); "a productive suffix that forms concrete and abstract nouns; for example, *bel-dīk* – belt; *orīn-dīk* – chair; *batīr-līk* – heroism; *kažīyan-dīk* – fatigue (Oralbai et al., 2014, pp. 211-218).

The meaning and function of the suffix  $\{+L^3\dot{I}^2K^2\}$  are defined in Kazakh grammar: suffix  $\{+L^3\dot{I}^2K^2\}$  is the most useful suffix in creating a noun with a suffix, its ability to create neologisms is considered (Qazaq grammatikasy, 2002, pp. 287-296).

Turkology shows that the  $\{+L^3\dot{I}^2\}$  suffixes with an attributive function and the  $\{+L^3\dot{I}^2K^2\}$  word-forming and word-transforming suffixes have distinct etymologies. Turkologist N.A. Baskakov determined that the main root of the suffix  $\{+L^3\dot{I}^2K^2\}$  is *-līk* (*līk toldī* – full to the brim) (Baskakov, 1952, p. 320). Tatar scientist M. Zakiev also adds: "Tatar words *līk, līkma* – full, filled to the limit are relics of the independent word from which the suffix *-līk* came" (Zakiev, 1995, p. 244). The suffix  $\{+L^3\dot{I}^2K^2\}$  is not mentioned as a productive suffix in Tatar linguistics. Emphasis is placed on the functional activity of suffixes, especially in terms of phrases created by loan translation. According to Tatar scientist F.A. Ganiev, those formed by  $\{+L^3\dot{I}^2K^2\}$  suffixes are called hybrid-based and concluded as following: "functional grammar, based on the achievements of formal grammar, must systematize and classify grammatical meanings, providing each of them with a list of all formal means of its expression" (Ganiev, 2009, pp. 8-9). The models in the normative dictionaries of the Tatar literary language are different from those of the Kazakh language based on such scientific conclusions; the direction of selective development of suffixes prevails.

### III. METHODOLOGY

Word-building and word-transforming suffixes  $\{+L^3\dot{I}^2K^2\}$  in the Kazakh literary language are the most productive suffixes in creating new nominations, in the process of making Kazakh term formation.

As shown in the studies reviewed above, the establishment of loan translation terms in a language occurs through spontaneous processes influenced by external factors. As a result, these terms quickly integrate into the literary language, particularly within the metalanguage of science and technology. There is a “neutral attitude / recognition / tolerance” towards terms created through loan translation in areas where the Kazakh language is used. The reasons for this are as follows: a) the mechanism for identifying terms that represent new concepts and ideas, and integrating them into a single model, is a key principle of terminology; b) modeling has been established as the optimal method for creating a metalanguage within the terminology system of a particular field; c) the inclusion of terms within the same model is influenced by the communicative strategy aimed at minimizing difficulties in bilingual communication. As a result of these factors, the formation of existing automatism and the automatism in the consciousness of loan translation terms appear to overshadow the term-formation potential of the internal laws of the language. This issue calls for the systematization of word-formation suffixes involved in loan translation and a clarification of their functions.

To determine the spelling and the influence on language compactness rules of terms and term phrases created through loan translation via the suffix  $\{+L^3I^2K^2\}$  in modern Kazakh writing practice, it is essential to consider the works of key figures. These include the Teachers of the Nation – A. Baitursynuly, K. Zhubanov, and academicians M. Balakayev, R. Syzdyk – along with scientists A. Yskakov, Y. Mamanov, S. Isayev, N. Oralbay, and their school representatives such as N. Ualiy, S. Nurkhanov, Zh. Tektigul, A. Zhanabekova. Additionally, the research by Tatar language expert M. Zakiev on the meaning, function, and historical development of grammatical markers, their collocational peculiarities, and their role in language dynamics and adherence to literary language norms is significant. Furthermore, the perspectives of influential figures in world linguistics and Turkology – such as F. de Saussure, U. Weinreich, E. Haugen, T. Kuhn, N.K. Dmitriev, N.A. Baskakov, N.Z. Hajiyeva, E.A. Zenskaya, V.V. Vinogradov, and D.N. Shmelev – on the signs emerging from language interaction and their influence on the recipient language, along with insights from academic studies and encyclopedic reference works, have contributed to formulating proposals on this issue.

Methods of selection, systematization, description, orthology analysis, comparative analysis, online survey, and modeling were used in the study.

Linguistic facts were collected from lexicographic works (Orfografiyalıq sozdik, 2013; Qazaq adebi tilining sozdigi, 2011; Qazaqsha-orysha orysha-qazaqsha terminologiyalyq sozdik, 2000) and the National Corpus of the Kazakh language (Qazaq tilinin ulttyq korpusy). The collected materials were compared with the linguistic facts in official business texts and modern written communication. Linguistic facts (a total of 132 language units) obtained from lexicographic works using the selection method show the normalization processes of word-building and word-transforming suffixes. The empirical material (a total of 1,546 entries) collected from the Kazakh-Russian, Russian-Kazakh terminological dictionaries approved by the State Terminological Commission under the Government of the Republic of Kazakhstan, along with language units from the National Corpus of the Kazakh language, illustrate the standardization of various language units and the stages of internal linguistic and regulatory processes affecting this group of linguistic units.

Orthological analysis is a full-fledged, complex linguistic method that ensures the systematization of structurally identical language units in accordance with the natural laws of the language. The method of online survey conducted through social network for native speakers of different education, profession, age indicators (total number – 72 people) made it possible to collect information on pre-prepared questions.

The online survey revealed the differences between the language laws and existing patterns of language units created by loan translation. A comparative analysis of linguistic facts in lexicographic works and writing practice showed that there are changes in the word-building and word-transforming functions of the specified suffixes. More than 50 basic models of target suffixes were analyzed in the study.

#### IV. RESULTS AND DISCUSSION

The peculiarities of the suffix  $\{+L^3I^2K^2\}$  related to standardization and normalization of terminology:

- it is added to the root word and forms a substantive noun, but there are not many substantive nouns formed with these suffixes: *žaw-lıķ* (ethn., headgear), *samal-dıķ* (air conditioner), *söz-dıķ* (dictionary);
- it is added to the root word and abstract nouns are formed, the conclusion fertile suffix or productive suffix is related to this function: *žaksı-lıķ* (good), *žaman-dıķ* (evil), *dos-tıķ* (friendship), *sulw-lıķ* (beauty), *ädilet-tıķ* (justice);
- an obvious function that shows that it is a productive suffix is that it is attached to a derivative root to form abstract nouns: *sät-tı-lıķ* (luck, *sätti* – lucky), *mädeniet-tı-lıķ* (civility; *mädeniätti* – civilized), *tözim-dı-lıķ* (tolerance, *tözimdi* – tolerant), *aķıl-dı-lıķ* (wisdom; *aķıl-dı* – wise), *ädilet-tı-lıķ* (justice), *ädilet-sız-dıķ* (injustice, *ädiletsiz* – unjust), *ķabilet-tı-lıķ* (capability; *ķabilet-ti* – capable), *köpmaýına-lı-lıķ* (polysemy, *köpmaýınalı* – polysemic), etc.
- it is attached to the preceding component of term phrases that serves as an attribute, while the preceding component can be a direct speech and a transliterated borrowing: *älewmet-tıķ želi* (social network), *dıbbis-tıķ žazw* (sound recording), *baydarlama-lıķ zertew* (program research), *tıl-dıķ kedergı* (language barrier), *avtor-lıķ kúķik* (copyright), *normativ-tıķ taldaw* (governing document), *psixologiya-lıķ taldaw* (psychological analysis);
- it is attached to the derived adjective that is the preceding component of term phrases: *ädilet-tı-lıķ kayıdatı* (principle of justice; *ädilet-tı* – just), *mädeniet-tı-lıķ belgisi* (sign of civility; *mädeniet-tı* – civilized).

There are problems that displace the internal laws of the Kazakh language from these peculiarities.

*The first problem.* There is a number of options in the process of standardization of Kazakh terminology. The appearance of option series depends on the addition of the suffix  $\{+L^3I^2K^2\}$  to the root word and the derived adjective. Suffixes are attached to the root word (orthogram 1), suffixes are added to derived adjectives (orthogram 2).

TABLE 1  
ORTHOGRAMS OF SUFFIXES  $\{+L^3I^2K^2\}$

In the spelling dictionary (Orfografiyalıq sozdik, 2013)		In Terminological Dictionaries Series (Qazaqsha-oryssa orysha-qazaqsha terminologiyalyq sozdik, 2000)		National Corpus of the Kazakh language (Qazaq tilinin ulttyq korpusy)	
<i>orthogram 1</i>	<i>orthogram 2</i>	<i>orthogram 1</i>	<i>orthogram 2</i>	<i>orthogram 1</i>	<i>orthogram 2</i>
ädiletтік (justice)	ädiletтілік		ädiletтілік	ädiletтік	ädiletтілік
küpiyalıq (secrecy)	küpiyalılıq	küpiyalıq	küpiyalılıq	küpiyalıq	küpiyalılıq
köregendik (ingenuity)	köregendilik	köregendik	köregendilik	köregendik	köregendilik
konakžaylıq (hospitality)	konakžaylılıq		konakžaylılıq	konakžaylıq	konakžaylılıq
mädenietтік (civility)	mädenietтілік		mädenietтілік	mädenietтік	mädenietтілік
nemқuraylıq (indifference)	nemқuraylılıq			nemқuraylıq	nemқuraylılıq

Orthograms are formed by adding suffixes to the root word and derived adjective in the process of term formation: *ädiletтік* vs. *ädiletтілік*. It draws attention to the digital frequency of orthograms in the National Corpus of the Kazakh language:

TABLE 2  
FREQUENCY OF USE OF  $\{+L^3I^2K^2\}$  SUFFIX ORTHOGRAMS IN THE NATIONAL CORPUS OF THE KAZAKH LANGUAGE  
(QAZAQ TILININ ULTTYQ KORPUSY)

Orthogram 1	Frequency of use	Orthogram 2	Frequency of use
<i>ädiletтік</i>	84	<i>ädiletтілік</i>	686
<i>küpiyalıq</i>	73	<i>küpiyalılıq</i>	100
<i>köregendik</i>	317	<i>köregendilik</i>	28
<i>konakžaylıq</i>	77	<i>konakžaylılıq</i>	75
<i>mädenietтік</i>	27	<i>mädenietтілік</i>	151
<i>nemқuraylıq</i>	38	<i>nemқuraylılıq</i>	141

The frequency of language units presented in the table, as used in written communication, often reflects the level of automatism in the application of the suffix  $\{+L^3I^2K^2\}$  in writing (e.g., *mädenietтілік*, *ädiletтілік*, *nemқuraylılıq*).

In some cases (e.g., *konakžaylılıq* and *konakžaylıq*) in written communication, native speakers' neutral attitude toward the use of these suffixes is evident.

Orthograms are formed as a result of adding the preceding component of the term phrases, which serves as an attribute, to the direct speech and the transliterated borrowing. The frequency of their occurrence is shown in the table below (Table 3):

TABLE 3  
ORTHOGRAMS OF THE SUFFIX  $\{+L^3I^2K^2\}$  IN PHRASES

In series of terminological dictionaries (Qazaqsha-oryssa orysha-qazaqsha terminologiyalyq sozdik, 2000)		
<i>orthogram 1</i>	<i>orthogram 2</i>	<i>orthogram 4</i>
<i>absolyuttı oylaw</i> (absolute thinking)	<i>absolyuttık oylaw</i> (absolute activity)	<i>absolyut oylaw</i> (absolute value) <i>absolyut beyimdelim</i> (absolute adaptation)
<i>abstraktılı oylaw</i> (abstract thinking)		
<i>nominaldı baya</i> (nominal value)		<i>nominal baya</i>
<i>normativtı kužat</i> (governing document)	<i>normativтік kužat</i>	
<i>küpiyalıq režimı</i> (secret mode)	<i>küpiyalılıq režimı</i>	<i>küpiya režim</i>
<i>säykestik principı</i> (certification mark)	<i>säykestilik belgisi</i>	
<i>funktionaldı stil</i> (functional style)	<i>funktionaldıқ stil</i>	

Several lines are formed in lexicographical works in making Kazakh the terms using suffixes: *küpiyalıq režimı* vs. *küpiyalılıq režimı* vs. *küpiya režim*. Since standard dictionaries are considered to be codifiers, the models shown in writing practice are used.

The objective reasons for the presence of the orthograms shown in Tables 1 and 2 are as follows: a) Kazakh terminology is still in the process of development; b) the similarity of grammatical meanings, expression planes, and contextual planes between the suffix  $\{+L^3I^2K^2\}$  and the suffixes  $\{+L^3I^2\}$ , both of which function as attributes in Kazakh; c) one of the internal laws of the Kazakh language involves processes of simplification, where the additional attachment of morphemes with similar external forms and content planes, influenced by the phenomenon of loan translation, complicates both the

non-verbal and verbal representation of linguistic units. As a result of this, orthograms appear in writing practice. The models given in standard dictionaries are recognized as dispositive norms.

To identify the issue, an online survey was conducted with 72 native speakers, all of whom have higher education and are between the ages of 22 and 40. The online survey is divided into 2 tasks. In the first task, the parallel use of suffix attachments to the root word and the derived adjective, as seen in dictionaries and writing practices, is grouped, with the aim of determining the native speaker's preferred version. In the second task, three variations of term phrases related to the attributive function of suffixes are provided, and participants are asked to select their preferred version. Linguistic facts for the online survey were selected from standard and terminological dictionaries (Qazaqsha-oryssa orysha-qazaqsha terminologiyalyq sozдіk, 2000), written versions of the National Corpus of the Kazakh language (Qazaq tilinin ulttyq korpusy).

The purpose of this survey is to assess the frequency with which native speakers use certain words and phrases that are written differently in modern writing conventions and have undergone changes in pronunciation.

The content of task 1 in the main part of the survey included the following variants consisting of one root: *akkönildik* – *akkönildilik* (good nature); *bayiptik* – *bayiptilik* (seriousness); *žariyalik* – *žariyalilik* (publicity); *žarişpalilik* – *žarişpalik* (parallelism); *kamköñildik* – *kamköñildilik* (vulnerability); *mayñnalik* – *mayñnalilik* (significancy); *nemküraylik* – *nemküraylilik* (indifference); *sabirlik* – *sabirlilik* (patience); *konakžaylik* – *konakžaylilik* (hospitality); *kupiyalik* – *kupiyalilik* (secrecy).

One of the variant series presented in task 1 is the version in which the suffix  $\{+L^3I^2K^2\}$  is directly attached to the root, and the second one is the version in which the suffix  $\{+L^3I^2K^2\}$  is attached to the derived root.

The following variant versions with phrases were included in the content of 2<sup>nd</sup> task in the main part of the survey: *absolyuttik šama* – *absolyutti šama* – *absolyut šama* (absolute value); *avtomattik kural* – *avtomatti kural* – *avtomat kural* (automatic tool); *beyindik mektep* – *beyindi mektep* – *beyin mektep* (profession-oriented school); *diplomdik žumis* – *diplomdi žumis* – *diplom žumis* (diploma work); *integraldik bölsek* – *integraldi bölsek* – *integral bölsek* (integral part); *magnittik taspа* – *magnitti taspа* – *magnit taspа* (magnetic tape); *nominaldik baya* – *nominaldi baya* – *nominal baya* (nominal value); *normativtik kužat* – *normativti kužat* – *normativ kužat* (governing document); *saraptamalik žüye* – *saraptamali žüye* – *saraptama žüye* (expert system); *funkcionaldik kažettilik* – *funkcionaldi kažettilik* – *funkcional kažettilik* (mission need); *elektrondik nuška* – *elektrondi nuška* – *elektron nuška* (soft copy). Three versions were proposed in this task, the first one is the version with the suffix  $\{+L^3I^2K^2\}$  attached to the root, the second one is the version with the suffix  $\{+L^3I^2\}$  attached to the root, and the third one is postpositional attributive group. The results of the online survey allow us to make the following conclusions.

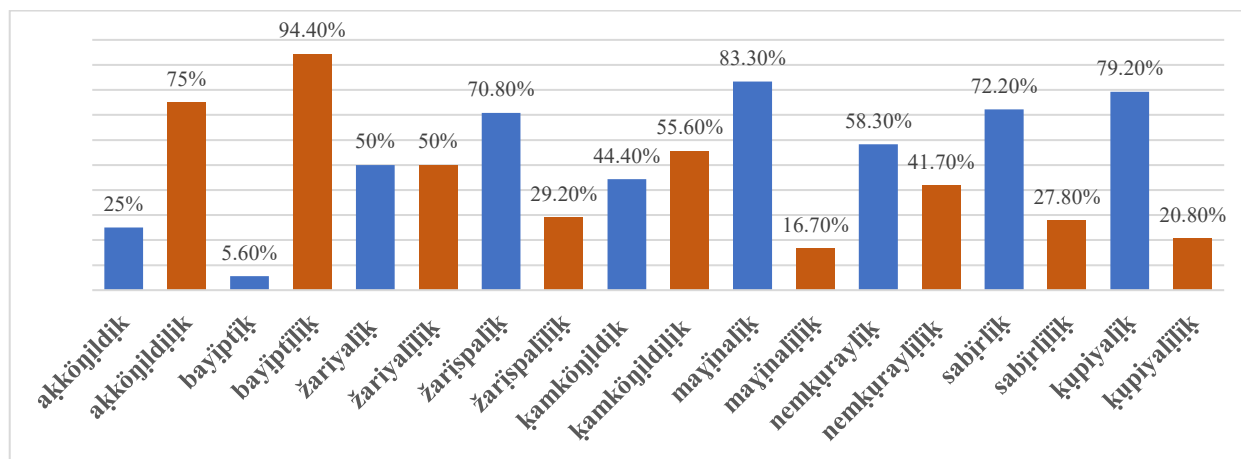


Figure 1. Percentage of Results Obtained for Task 1, %

The results of the online survey for task 1 showed the following differences in the responses of the respondents:

- the versions of word-building suffix  $\{+L^3I^2K^2\}$  overlaid to the derived adjective (attached by suffix  $\{+L^3I^2\}$ ) are chosen: *akkönildilik* and *nemküraylilik* – 58 %; *bayiptilik* – 90%; *kamköñildilik* – 55%. This result is due to two spontaneous factors: a) the native speakers know the norms specified in the lexicographical works; b) recognition of the linguistic unit established in the subconscious as correct; c) automatic marking;
- respondents also recognize the direct attachment of suffix  $\{+L^3I^2K^2\}$  to the root word: *žarişpalik* – 70 %; *mayñnalik* – 80 %; *kupiyalik* – 80 %; *sabirlik* – 70 %; *nemküraylik* – 42 %;
- or both options are equal: *žariyalik* and *žariyalilik* – 50%. This result reflects the observation of suffixes with the same plane of expression in native speakers' usage, which complicates communication strategies and demonstrates the influence of the law of simplification in the subconscious.

Statistical data showed that there are differences in the standardization and normalization of the term linguistic units created by word-building suffixes. These differences are due to the fact that the standardization of Kazakh terminology is at a mature stage and, most importantly, the function of word-building suffixes in terminology is not fully defined.

Three variants of term phrases related to the attributive function of suffixes are given for the 2<sup>nd</sup> task and it is suggested to choose the native speakers' own variant. Variants are approved by the Republican Terminology Commission.

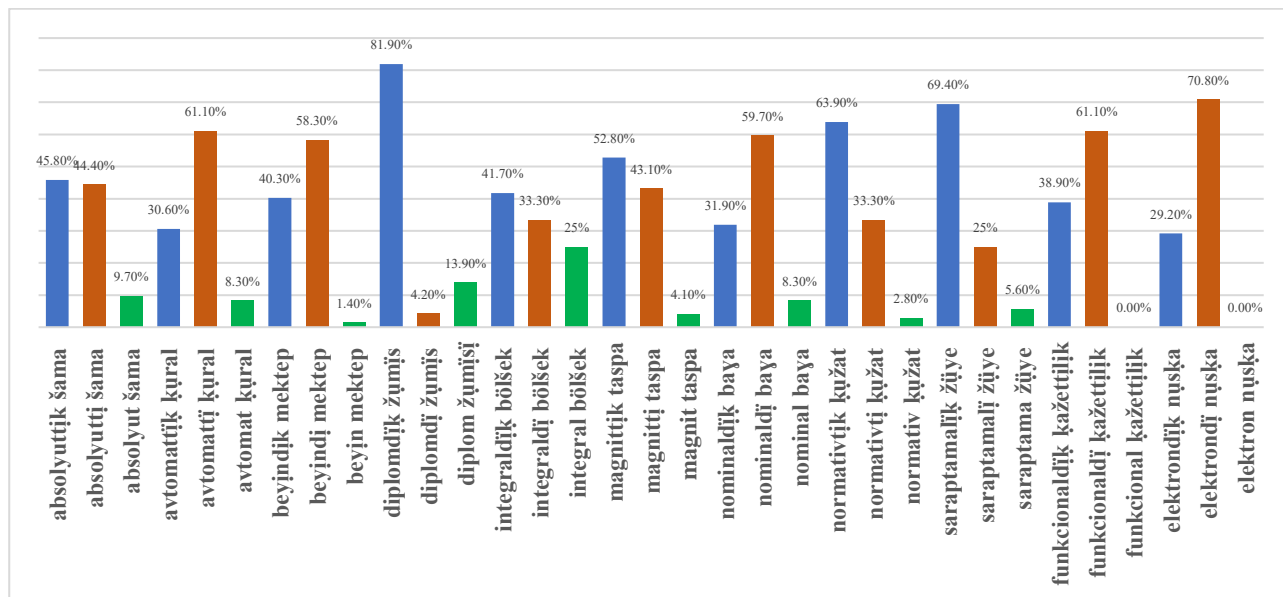


Figure 2. Percentage of Results Obtained for Task 2, %

The results of the online survey for task 2 showed the following differences in the responses of the respondents:

- respondents preferred options formed by adding a derived adjective suffix ( $\{+L^3I^2\}$ ) to the word-building suffix  $\{+L^3I^2K^2\}$ : *absolyuttı şama* – 40%; *avtomattı kural* – 60%; *beyındı mektep* – 60%; *nominaldı baya* – 60%; *funkcionaldı kažettıjlik* – 60%; *elektrondı nuşka* – 70 %;

- term phrases created by postpositional attributive phrases make the respondents think: a number of respondents ticked the phrases *absolyut şama*, *magnit taspa*, *saraptama žüye*. This fact proves that the internal laws of the language oppose the automatic copying the pattern of the language with another typological structure;

The following conclusions and recommendations are drawn based on the statistical data of linguistic facts obtained from standard and terminological dictionaries, as well as the National Corpus:

- the existence of such variants as *funkcionaldı kažettıjlik* and *funkcionaldıj kažettıjlik*; *kognitivti lingvistika* and *kognitivti lingvistika* are due to the suffixes with the same etymological basis that are attached indiscriminately according to the similarity of the plane of expression and plane of content;

- the suffixes  $\{+L3I2\}$  denote the quality of the word defined in the attributive relationship in Kazakh linguistics: *körnekti yalıım* (eminent scientist), *aqqwlı köl* (lake, where there are many swans), *ormandı alqap* (forestland). The suffix  $\{+L3I2K2\}$  is attached to the first component of the term phrase and means the type of the attributed word: *psixologiyalıj zerttew* (psychological research) – a type of research; *memleketтік kizmet* (state service) – one of the types of services;

- differences in grammatical meaning of suffixes with common etymology have not been comprehensively studied in Kazakh linguistics. This problem also causes confusion in the standardization of Kazakh terminology for this reason;

- there is an experience of selectively using the method of loan translation in the creation of term phrases in the Kazakh language and Turkic languages. Linguistic theorist K. Zhubanov clearly states that “It is inappropriate to add the adjective ending of the Kazakh language to the adjective ending of the international terms that appear as an adjective” (Zhubanov, 2010, p. 361), and the scientist rarely uses suffixes  $\{+L3I2K2\}$  in the linguistic facts recorded due to this conclusion, instead he suggests postpositional attributive phrases or shortens: *sıbaya sınıım* (specific refraction), *sentral* (central), *elementar* (elementary), *gorizontal* (horizontal), *irrattional* (irrational) (Zhubanov, 2010, p. 361). This opinion of the scientist defines the importance of preserving the internal laws of the Kazakh language.

- The postpositional attributive phrases are used more in the term formation system of the Tatar literary language: such forms as *avtomatik toltırw*; *elektron versiya*, *socialь чeltәр*, *social’ idealı*, *lingvistik tekşerenwlar*, *eksperimental’ tekşerenwlar*, *yuridik kizmet standard* (Zakiev, 1995).

- It will be proposed to form as *absolyut şama*, *absolyut beyımdelım*, *magnit taspa*, *diplom žumışı*, *nominal baya*, *funkcional kažettıjlik*, *elektron nuşka*, *kognitiv lingvistika*, *kırış mälımet*, *saraptama žüye* in the standardization of Kazakh terminology. Rationale for the proposal: a) orthographic variants such as *normativti kuzat* / *normativtik kuzat*, *elektrondı nuşka* / *elektrondıj nuşka*.

- The connection between word-building suffixes and attributive relations, sharing a common plane of expression and content, will be regulated, leading to an improvement in the terminology system through unification; b) the use of nominal phrases does not alter the semantics of term phrases borrowed from the original language; c) replacing suffixes,

which have become automatic through loan translation, with nominal phrases aligns with internal laws of the language and demonstrates its strong potential in developing a metalanguage for science and technology.

– Taking into account the grammatical and functional differences of suffixes  $\{+L^3\}$  and  $\{+L^3\}^2\}$  improves the normalization, standardization, and codification of the terminology.

## V. CONCLUSION

Terminological units in the vocabulary of the Kazakh literary language, formed through loan translation, are the result of prolonged bilingualism in Kazakh society, as well as the social-cultural and political-historical relations between states.

In the middle of the last century, the phenomenon of direct borrowing and copying from another language was traditionally assessed as a progressive influence of another language on the Kazakh language in the context of intercultural communication, bilingualism, and mutual relations between languages.

The borrowing of foreign lexemes from languages with different typological structures, particularly the phenomenon of loan translation, has become a significant issue in recent years, necessitating new conclusions. This factor is linked to the strategy of showcasing the internal potential of the Kazakh language, enabling it to function as a scientific language while preserving its vitality during the period of globalization. Therefore, a new study on the impact of the loan translation method on the internal structure of the language holds particular linguistic significance.

The method of loan translation is widely used in the formation of the Kazakh literary term system. The loan translation linguistic units may completely or partially correspond to the lexeme in the source language both in content and in formality. As a result of complete correspondence in terms of formality, word-building and word-transforming suffixes have been formed in the modern Kazakh language, which are very productive for the method of loan translation. To determine the formal and substantive correspondence of these suffixes, the following key issues were identified in the study, and conclusions were drawn from them:

– the key perspectives presented in theoretical and practical studies on the method of loan translation were analyzed. The analysis revealed its influence on the lexical-grammatical relationships of the language, as well as its role and place within the language system;

– the semantic peculiarities of word-building and word-transforming suffixes, as well as those forming attributive relationships in Kazakh terminology, have been demonstrated. Through analysis, specific models were proposed to regulate the spellings that arise in contemporary terminology and contribute to confusion in the standardization of the terminological system;

– the use of word-building and word-transforming suffixes in Kazakh terminology meets the fundamental requirements for terms and supports effective communication. However, the transformation of these suffixes into automatism diminishes their potential within Kazakh terminology. As a result, a comparison of the frequency of various variants in lexicographic works and writing practices has demonstrated the potential of nominal phrases in standardization of terminology.

The direction of the research and the results of the analyses do not deny the importance of the direct translation of lexemes of other languages and the adoption of loan translation method in enriching the Kazakh terminology, particularly in expanding the vocabulary of the Kazakh literary language. The contradictions between the target problems, the overlaid addition of suffixes with common plane of expression and plane of content through the method of loan translation and the saving phenomenon characteristic of the internal laws of the language, require deep research in Kazakh linguistics and Turkology.

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