Translating Linguistic Terms from English into Kazakh: Direct and Indirect Ways

Aigul K. Zhumabekova*

Abai Kazakh National Pedagogical University
Almaty, Kazakhstan

Abstract. The research aims to study methods of translating linguistic terms from English into Kazakh based on two newly translated textbooks for translation quality assessment. Linguistic-translation study of the source and translation texts of two linguistic textbooks used comparative and contrastive method, methods of structural and semantic analysis, definitional comparison, contextual analysis, back (reverse) translation, and statistical method. Analysing the translation strategy, it was found that paid less attention to such important stages as pre-translation text analysis and correlation of the original terminology system with the national terminology system. The following factors could have contributed: tight deadlines for translation, involvement of unqualified personnel or lack of experience in teamwork. As a result, the translation process was carried out without regard to the author's intentions, thus ignoring the interests of the target audience. In our analysis of the translation methods used for linguistic terms in Kazakh, particularly those that introduce linguistic gaps, we draw upon the distinction between primary and secondary translation methods. A direct translation of the "Introduction to Linguistics" textbook fails to uphold the crucial principle of maintaining terminological consistency between the glossary and the text itself. In translating terminological gaps within the textbook, the translators effectively employed both single-word and double-word equivalents. In the indirect translation of the textbook on linguistics from English, the translators' choice of techniques was based on Russian version. The translation techniques were made automatically to Kazakh, including transcription, calquing, description, and the selection of equivalents. Literal translation of some linguistic terms from the glossary was made from Russian, which led to factual errors.

Keywords: translation quality assessment, linguistic terms, translation error, translation strategy, direct translation, indirect translation.

Research area: Theory and History of Culture and Art (Cultural Studies).

* Corresponding author E-mail address: aigzhum@gmail.com

Перевод терминов лингвистики с английского на казахский язык: прямой и опосредованный

А. К. Жумабекова

Казахский национальный педагогический университет имени Абая
Казахстан, Алматы

Аннотация. Целью исследования стало изучение способов перевода терминов лингвистики с английского на казахский язык на материале двух новых переведенных учебников в аспекте проблемы оценки качества перевода. Для лингвопереводческого исследования текстов оригиналов и переводов двух учебников по лингвистике использовались сравнительно-сопоставительный метод, методы структурно-семантического анализа, сопоставления дефиниций, контекстуального анализа, обратного перевода, статистический метод. При «вскрытии» стратегии переводов установлено, что таким важным его этапам, как предпереводческий анализ текста, а также соотнесение терминосистемы оригинала с национальной терминосистемой, не было уделено достаточно внимания. Причинами могли послужить краткие сроки выполнения перевода, привлечение переводчиков без соответствующей квалификации и опыта командной работы. В итоге процесс перевода был осуществлен без учета как авторских интенций, так и интересов целевой аудитории. При анализе способов перевода на казахский язык лингвистических терминов, представляющих собой лингвистические пробелы, учитывался такой фактор, как первичность/вторичность перевода. В прямом переводе учебника по введению в языкознание не соблюден принцип соответствия терминов глоссария и терминов текста учебника. При переводе терминологических лакун в тексте учебника переводчиками удачно были подобраны однословные и двусловные эквиваленты. В опосредованном переводе с английского языка учебника по лингвистике выбор приемов переводчиков не являлся самостоятельным. На казахский язык приемы перевода были «перенесены» автоматически (транскрипция, калькирование, описание, подбор эквивалентов). Буквальный перевод некоторых лингвистических терминов из глоссария осуществлен с русского языка, что привело к фактическим ошибкам.

Ключевые слова: оценка качества перевода, термины лингвистики, переводческая ошибка, стратегия перевода, прямой перевод, опосредованный перевод.

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Introduction

Historically, Translation Studies in Kazakhstan emerged as a practice, followed by the development of a theory of literary translation. Translations from foreign languages were mainly carried out indirectly, via Russian translations.

A certain breakthrough in this field can be the publication of 100 textbooks for universities in humanities (philology, sociology, cultural studies, political science, etc.) from foreign (mainly English) languages by the National Translation Bureau Foundation since 2018. All these textbooks have been handed over to the libraries of Kazakh universities, and their translations in electronic form are available to all readers. A huge corpus of translated texts has appeared, which was not subjected to systematic scientific linguistic-translation analysis, although they passed the stages of reviewing and editing in the process of preparation for publication. They have been implemented in the educational process of all universities of the country since 2018, but the pragmatic effect of the produced translations is still unknown neither to the professional translation community nor to the general public. Meanwhile, in the interests of the target audience, it is important to improve the quality of subsequent textbooks planned for publication in the coming years.

Five textbooks in philology were translated within the framework of the above project: three in linguistics, one in intercultural communication and one in literary studies. Four of them were translated from English (one of them indirectly from a published Russian translation), and one from Russian. Since this material has not yet been the subject of specialized linguistic-translation studies, the novelty of our research is obvious. Two of the five textbooks contain glossaries of linguistic terms, so the original textbooks and their translations (Corpus Materials) became the object of the study.

Research objectives:

– to identify ways of transferring linguistic terms representing lexical gaps into Kazakh on the material of two translated textbooks;

– to compare the ways of translation of linguistic terms in the two translated textbooks with the available equivalents in the Kazakh language

Based on the above, the following research question was addressed in this study:

– Do the ways of translating linguistic terms from English into Kazakh affect the quality of translated textbooks in direct and indirect translation?

Theoretical framework

Of all the branches of translation studies, scientific translation is the youngest and most rapidly developing field. Within the traditional approach of dividing translation types by text genres, it was for a long time considered a part of technical and scientific translation (Newmark, 1988). Therefore, it seems justified to single out the problem of translating humanitarian texts as a separate subsection (Anisimova, 2011).

In linguistics, there is a discussion about differentiation or, on the contrary, unification of academic and scientific style of speech (Khurshid, 2002; Vedyakova, 2016), respectively, different or common goals are set for academic and scientific translation. Taking into account that the material of the study is textbooks for universities, we consider these scientific texts as units of scientific discourse, an important part of which is the didactic component.

It is also worth of noting the ambiguity of opinions about the concepts of 'translation strategy' and 'translation quality assessment'. We attempt to consider them in close interrelation. Many researchers understand the strategies in a narrow sense, as translation methods (Tregubova, Lavrishcheva, 2022), the opposition of free and literal translation, for example, L. Venuti distinguished strategies of domes-

tication and forenization (Venuti, 2008), his concept is widely used by contemporary researchers (Razumovskaya, Valkova, Koptseva, 2023), but they are more applicable to fiction translation. M. Ordudari convincingly points out the difference between the terms if *procedures, strategies and methods of translation* (Ordudari, 2007).

G. Toury contrasted goal-oriented translation and source-oriented translation (Toury, 1995).

H. Krings was one of the first to formulate a definition of translation strategies, understood broadly: they are "potentially conscious plans of the translator aimed at solving a specific translation problem within a specific translation task" (Krings, 1986: 274). Sharing this point of view, in this study, by translation strategy (a concept that is absent in Kazakh translation studies) we mean a consistent plan of translator's actions aimed at achieving equivalence in the transfer of a scientific text, which involves the following stages:

– preliminary analysis of the original text (identification of objective and subjective components; extralinguistic and intralinguistic characteristics);

– systematization of terms and reasonable selection of their equivalents;

– selection of specific translation methods and techniques for a particular text;

– self-assessment of translation quality.

This study explores how expert evaluation of translated texts may discover the translators' chosen strategies and analyze their effectiveness in achieving desired results. By reflecting on these stages alongside detailed linguistic analysis of both source and translated texts, we gain deeper insights into the translation process and its outcomes.

While the English-language scientific discourse is described in scientific literature from various aspects (Tognini-Bonelli, 2005; Brand 2008, etc.), the Kazakh-language scientific discourse is characterized only in the most general terms (Sadirova, 2019; Aliszhan, 2015), and is not studied in the comparative aspect and in terms of translation (for the Kazakh-English language pair). Meanwhile, in our opinion, translators should start pre-translation analysis

of a scientific text with understanding the common and distinctive features of these concepts.

The most comprehensive overview of the trends in the field of translation quality assessment (hereinafter referred to as TQA) was made by J. House, who pointed to the need for an interdisciplinary approach and noted the special place of the linguistic model of translation quality assessment as the only theoretically grounded one (House, 2014).

Meanwhile, S. Lauscher stated that there is a gap between theoretical approaches – scientific models – and the practical needs of translators, noting that a reductionist view of translations as products and neglecting the conditions in which translations are produced ultimately leads to evaluation criteria that cannot take into account the individuality of the target texts (Lauscher, 2000).

C. Han substantiates the position that despite the availability of various TQA models and many different evaluation methods tested and used in different contexts, the methodological aspects of TQA practice remain understudied (Han, 2020).

The procedure of internal quality assessment of translation quality of the texts in the above textbooks should include such an important stage as identifying the scope and ways of transferring industry terms into Kazakh.

N. N. Gavrilenko notes among the new specialties demanded in the labour market such as translator-editor, terminologist (Gavrilenko, 2021: 51), V. D. Tabanakova believes that when choosing the strategy and tactics of term translation it is necessary to actualize the professional competencies of a specialist with knowledge in related fields: translator-linguist, translator-terminologist, translator-specialist (Tabanakova, 2014).

The choice of a single methodological concept is somewhat complicated by different approaches to the problem of translation of terms in general, and in particular, the linguistic terms, in the English-, Russian- and Kazakh-language scientific literature. In this sense, it seems preferable to take into account recent work in the field of comparing national and English terminological systems (i.e. on the material of the global language and small lan-

guages) in order to identify common and distinctive features; at the same time, the role of the Russian language in the Eurasian scientific and educational space cannot be ignored.

One of the important objectives of scientific discourse translation is the equivalent translation of terminological units. The main problem here is the mismatch of national terminological systems and different levels of their formation. Therefore, each specific sphere of knowledge requires their preliminary analysis.

The terms of the source language, which are new for the target language and therefore have no correspondences, are labelled by researchers as lexical gaps. Thus, it has been proposed to distinguish *accidental gaps* words that do not exist but could be reasonably expected to exist) and *systematic gaps* (words that are not even expected to exist since they violate the rules of what is a "good" word is (Chomsky, 1965, Chomsky and Halle (1965).

Different approaches in the definition and typology of lexical gaps are highlighted in the article by S. Rajendran. The author conducted an exploration into the lexical gaps in English and Tamil with reference to their cause and consequence in translation and notes that the non-comparable level of scientific and technical vocabulary of these languages becomes a big challenge for translators. The author has revealed that the appropriate filling of lexical gaps adds fresh expressions to the vocabulary (Rajendran, 2018).

Heshmatifar and Biria, after studying the translation strategies used to translate economic terms from English to Persian found that the most commonly used translation strategies for translating scientific text are literal translation and calque (Heshmatifar, Biria, 2015).

H. Heidari Tabrizi & M. Pezeshki (2015) note that in translating scientific texts to bridge lexical gaps, loan translation has the highest usage rate (68.5 %) among other techniques, and it is widely preferred in scientific contexts. Researchers (Raeisi, Dastjerdi, Raeisi, 2019) come to the same conclusion by analysing the translation of chemical terms from English into Persian.

Traditionally, Kazakh researchers emphasize such ways of translating terms as the search for equivalents close in meaning, transliteration and transcription, synonymic substitution, and calquing (Kuzar, Kuldeeva, 2023). Studies in recent years have increasingly noted such a trend in Kazakh terminology as hybridization of terms (Nessipbay, 2022; Kulmanov, Kordabay, Yesskendir, Ashimbayeva, Bissengali, 2022).

Kazakh linguistic terminological system due to socio-political factors developed under the influence of the Russian linguistic terminological system, borrowing from other languages was carried out mainly through the Russian language. This is evidenced, for example, by statistical data obtained in the course of analysing the terminological fund of the Kazakh language on the material of the 30-volume terminological Russian-Kazakh dictionary of terms of various branches, published in 2014, namely in the 26th volume, covering terms of linguistics out of 28,536 (100 %) terms 14,542 (50.96 %) were Kazakh-language terms, 13,938 (48.84 %) were borrowed from foreign languages (mainly through Russian), 38 (0.13 %) were borrowed from Russian, and 18 (0.07 %) were hybrid terms (Kulmanov, 2021: 56)

The contrastive study of linguistic terminological systems of English and Kazakh languages is still limited to contrastive description of word formation patterns (Behkkozhanova, 2019).

The available multilingual industry dictionaries (Orynbaev, Shmanova, Sarybaj, 2005; Suleymenova, 1998) only state the presence of correspondences of basic terms borrowed overwhelmingly through the Russian language. Meanwhile, as D. Khvorostin rightly notes in the preface to his English-Russian Dictionary of Linguistic Terms, "in the construction of bilingual specialized dictionaries, the author can start either from the native terminological system or from the foreign one" (Khvorostin, 2007: 6). No English-Kazakh dictionary based on English linguistic terms has been created yet. As a result of this state of affairs, translators of the above-mentioned textbooks, apparently, had to make independent decisions when choosing one or another way of transferring units new to Kazakh terminology.

Methods and Materials

The method of collecting the initial information was a continuous sampling from the actual material (sources) – original texts from textbooks and their translations. The object of the study was linguistic terms excerpted from glossaries and texts of two translated linguistics textbooks:

1) V. Fromkin, R. Rodman, N. Hyams «An Introduction To Language» (hereinafter – the first source text, **ST1**). Its 10th edition, published in 2014, was translated into Kazakh by M. Zhanabekova, B. Mizamkhan, U. Islyamova in 2018 (hereinafter – the first translated text, **TT1**);

2) S. Pinker's The Language Instinct, 2007 edition (hereinafter – the original text, **OT2**;) and its translations: into Russian by E. V. Kaidalova in 2004, the source edition of 1994 or 2000 (hereinafter – the second source text, **ST2**), into Kazakh by translators: Sh. Kurmanbayuly, S. Abdrasilov, S. Imanberdiyeva, 2019 (hereinafter – the second translated text, **TT2**).

For the linguistic study of the texts of the originals and translations of these two linguistics textbooks we used the comparative and contrastive method, methods of structural and semantic analysis, definitional comparison, contextual analysis, back (reverse) translation, and statistical method. In doing so, we sought to consistently identify the reflection of the stages of the translation strategy described above in the translated texts, comments, and notes, by revealing the presence or absence of a connection between the stage of choosing ways of translating linguistic terms and other sections of the strategy.

Results and Discussion

The direct translation from English into Kazakh of the textbook ST1 was one of the first to appear in Kazakhstan as part of the above-mentioned state project. The importance of the textbook can hardly be overestimated since the subject Introduction to Linguistics is compulsory in all Kazakh universities at philological faculties and is studied in the first year. Students of Kazakh departments have been widely using textbooks on Introduction to Linguistics

created by famous Kazakh linguists (Akhanov, 2010; Kaliuly 2007), as well as monolingual and multilingual dictionaries of linguistic terms.

As V. V. Sdobnikov points out, «the pivotal aspect in translation is translator's ability to determine the communicative intention of the author and the nature of the communicative impact on the recipient of the source text» (Sdobnikov, 2023: 1157–1158).

ST1 aimed at English-speaking readers (evidenced by quotes and visuals), assumes a specific knowledge base and language proficiency not necessarily shared by target audience students. Notably, the direct translation from English lacks equivalents for many crucial terms, creating additional barriers. Furthermore, the large volume and academic writing style, which even challenge translation students, pose significant difficulties for Kazakh language majors. Therefore, addressing these issues is crucial for effective learning.

The translation of OT2 was most likely made via Russian translation ST2 (although there is no indication of this in the text of the translation). The style of the original can be characterized as popular science (this is evidenced, in particular, by the author's own indication: «This book, then, is intended for everyone who uses language, and that means everyone» (Pinker, 2007: 8), and the inscriptions on the cover of the book: in the original – "national bestseller," in Russian translation – «world popular science bestseller» (hereinafter the translation from Russian into English is made by us – A. Zh.). Despite the seemingly easier-to-read style of the textbook, its Russian abstract contains a significant note: «To fully understand the book, knowledge of basic English grammar is desirable» (Pinker, 2004: 2). This textbook can be used in teaching different linguistic disciplines throughout the whole cycle of university education. There are several reviews of the Russian translation of the book, which reflect criticism and sometimes polemics of its authors – scholars of different fields: biology (Friedman and Friedman, 2006), psycholinguistics (Naumov, 2012) – with Pinker. Only in the review by linguist M. Krongauz there is a note referring to the quality of the

Russian translation as a whole: «We should note a rather good and professional translation by Y. V. Kaidalova. In many cases the translator finds analogies in the Russian language and sometimes gives necessary explanations to the English language material. Among the shortcomings of the translation, we should note the sometimes controversial transcription of proper names, which violates the already established tradition» (Krongauz, 2005). In the Kazakh translation, the transcription used by the Russian translator has been reproduced in full.

Pinker compiled 448 notes, a glossary, and an index of terms. The Russian translation adds 155 notes made by the translator and editor, reflecting extensive work in pre-translation analysis (all notes are translated into Kazakh without attribution). Two of them refer to terms in the glossary, reflecting the difference in English and Russian terminological systems, while they are absent in the Kazakh translation, although the same difference can be stated in English and Kazakh terminological systems: "In Russian, a *modifier* very often corresponds to a circumstance of time, place or mode of action" (Pinker, 2004: 537); "The term *phrase* often corresponds to the term *word combination*, but may have a broader meaning. For example, in English, a *phrase* would be a combination of an article and a noun: *She is afraid of THE WOLF*" (Pinker, 2004: 539). The Kazakh translation lacks translators' and editors' notes.

Thus, we did not find any traces of pre-translation analysis made by Kazakh translators.

Let us proceed to the disclosure of the following stages of translation strategy related to the systematization of terms, reasonable selection of their equivalents; and selection of methods of translation of terms.

Translation of a scientific text begins with the establishment of equivalence of terms, and comparison of national terminologies. Traditionally, scientists distinguish three types of conceptual equivalence of terms (full coincidence, partial coincidence, full mismatch), and two main translation methods are defined, to which translators resort when working with terms: 1) literal translation; 2) indirect (substitution) (Vinay, Darbelnet, 1995). A. G. Ani-

simova notes that when choosing a method of translating terms, it is necessary to comparatively study the terminological systems of two languages rather than to compare individual pairs of terms; in this case, the functional-semantic level of equivalence is fundamental (Anisimova, 2011).

In the analysed translations of the two textbooks into Kazakh, literal translation prevails, while the method of substitution is more complex and requires knowledge of the subject area, as well as significant intellectual effort to identify the structural relationships of terms in the terminological systems of a particular field of knowledge.

When translating terms, translators must identify available equivalents and their absence, i.e. matching and non-matching elements of national terminological systems. The glossary is the most didactically important section of the textbook. Unjustified omission (zero translation) of terms led to the fact that, for example, 451 of 781 terms in the glossary of ST1 are translated into TT1 (some of which are not equivalent to Kazakh linguistic terms), and there is no index of terms at all. The terms in the TT1 glossary are not presented in alphabetical order, but in the sequence in which they were presented in the ST1 glossary, moreover arbitrarily abbreviated by the translator. It is impossible for a reader unfamiliar with the original to understand this. Besides, in TT1 the inter-article references are not taken into account and partially distorted, i.e. the very principle of organization of the author's glossary is violated. For example, in ST1 the term *acronym* has a synonym *alphabetic abbreviation*, which is indicated, in addition to the definition text, by the reference *See*. In the Kazakh glossary of TT1 we find an indication of an inter-article reference: *acronym ... Әріптік аббревиатураларға қараңыз (See the letter abbreviations)*. Meanwhile, there is no terminological article *Әріптік аббревиатуралар* in the TT1 glossary.

More examples related to antonymy terms. In the ST1 glossary article *antonyms* (main term) we find references to the related terms *gradable pair, complementary pair, relational opposites*. The last three term com-

binations have their own articles and mutual references. In the Kazakh glossary of TT1 the terms *антонимдер* (main term), *бөліктелген жұп, қосымша жұп* (related terms) seem to correspond to them at first sight. The third term combination is not translated. Meanwhile, there are no definitions of related terms in the Kazakh glossary. In turn, the term combination *complementary pair* (main term) is related to the term combinations *gradable pair, relational pair* (related terms). In the Kazakh glossary, a completely different term combination acts as the main term: *салыстырмалы жұп*, and as related terms it mentions *дәйектелген жұп, салыстырмалы антоним*. The last two term combinations as the main ones are again absent in the Kazakh glossary of TT1, which indicates the unsystematic nature of the translation. Thus, it becomes clear that the terms in the glossary of TT1 were selected arbitrarily, translated literally, without checking the inter-article references of the original, as a result of which the same term combination *complementary pair* is translated differently: as *қосымша жұп* (*complementary pair*), or as *салыстырмалы жұп* (*comparative pair*), and both translations are incorrect. The term combination *gradable pair* is translated either as *бөліктелген жұп* (*split pair*) or as *дәйектелген жұп* (*proved pair*), both translations are incorrect. In the glossary, the translation of the term combination *relational pair* is *салыстырмалы антоним* (*comparative antonym*) is also incorrect.

Moreover, in the TT1 in question, the glossary, as we show below, is not only a literal translation, which is often erroneous, but the terms in the glossary are not related to the terms and their interpretations in the textbook itself (mostly correctly translated). This is a gross error on the part of the translator who translated the glossary (it is not possible to find out which of the three translators did this work, as there is no information about it in the translated textbook). Some terms in the glossary are transcribed, whereas in the textbook they are given equivalents, and where the glossary uses a translation method, we observe a literal, meaningless translation. As evidence, let us present the terms and their translations in the glossary of TT1, as well as their back transla-

tion from Kazakh to English (hereinafter the back translation is made by us – A. Zh.). For comparison, let us also present the terms we extracted from the textbook text and their back translations (Table 1).

Thus, we found out that we cannot rely on glossary terms in our analysis of TT1, but need to analyse the terms and their interpretation based only on the text of TT1 itself, which requires considerable time and constitutes a separate study. The analysis also shows that the self-assessment of translation quality, which includes the final reconciliation of the source text and the target text as the final stage of translation work, has not been performed.

We have identified terms that have not been previously used in Kazakh linguistic terminology (they are absent in both single- and multilingual dictionaries: Suleimenova, 1998; Kaliyev, 2005; Orynbaev, 2005), in particular, they are phonetics terms denoting English sounds (Table 2).

Thus, out of the eight terms, four are given one-word equivalents, three are described as two-word equivalents, and one is transcribed. In our opinion, the equivalents are well chosen, reflecting the essence of the terms.

As already noted, TT2 was most likely translated not from the original (OT2), but from its Russian translation (ST2). This is evidenced, in particular, by the glossary of TT2 that we analyse. Unlike the glossary of TT1, this glossary, like its Russian original, is organized on the basis of the readers' native language, although it is slightly smaller (141 terms in the original one, the same number in the Russian translation, and 137 in Kazakh). All definitions are made not from the English original, but from the Russian translation, in the vast majority of cases – it is a literal translation from the Russian language. Let us give illustrative examples: in Table 3 we have highlighted those text passages that are not in the original; they are the result of transformations made by the Russian translator (as a rule, additions, explanations, made, in our opinion, reasonably, taking into account the target audience) or the highlighted words are a choice of several variant correspondences in Russian. In the Kazakh translation all of them are translated verbatim.

Table 1. Translation of English terms in the glossary and in the text (TT1)

English glossary term in ST1	Term in the translated Kazakh glossary in TT1	Reverse translation	Term derived from TT1	Reverse translation
maxim of quality	*максималды сапа*	*maximum quality*	*сапа постулаты*	*quality postulate/ premise*
maxim of relevance	*максималды релеванттылық*	*maximum relevance*	*қарым-қатынас постулаты*	*relationship postulate/ premise*
bottom-up processing	*бастан-аяқ өнделу*	*being processed from the beginning to the end*	*сөйлемді төменнен жоғарыға… қарай талдау*	*analyse the sentence bottom up*
active sentence	*негізгі етісті сөйлемдер*	*basic verbal phrases*	*ырықты сөйлем*	*active sentence*
aspirated	*қырылдап айтылу*	*hoarse pronunciation*	*қарқынды*	*intense*
clipping	*шертілген*	*clicked*	*сөздің қысқаруы*	*word shortening*
loan word	*калька сөзі*	*calque word*	*кірме сөз*	*borrowed word*
parsing	парсинг	*parsing*	*синтаксистік талдау*	*syntax analysis*
d-structure	*д-құрылым*	*d-structure*	*күрделі құрылым*	*complex structure*
comlementary pair	*салыстырмалы жұп*	*relative pair*	*бір-бірін толықтыратын жұп*	a pair that complements each other

Table 2. Translation of English phonetics terms in the TT1 text

English glossary term in ST1	Equivalent (single or multiword)	Transcription
aspirated	қарқынды	
click	шертпе	
coda		кода
flaps (FLIP)	ызың	
stops	үзілмелі дауыссыз дыбыстар	
glide	жартылай дауысты (жылжымалы)	
liquids	жұмсақ	
trills	дірілді	

Mismatching elements of national terminological systems are presented in Table 4, they reflect the methods of translation from English of terminological lacunas, which is the case for the Kazakh language. As for English-Russian correspondences, due to the genetic proximity of languages and commonality of meta-linguistic description, most of the terms presented in the Table are not lacunas for the Russian language. Thus, the choice of trans-

lation techniques into Kazakh is of secondary nature, i.e. these techniques were chosen not by Kazakh, but by the Russian translator. The translation techniques were automatically 'transferred' into Kazakh, for example, the transcription chosen by the Russian translator was also used in Kazakh (since the Kazakh alphabet is Cyrillic, the transcription is the same in ST2 and TT2, therefore after the English term comes the Russian equivalent, and

Table 3. Comparison of definitions of terms in the original (OT2), Russian (ST2)
and Kazakh (TT2) translations

definitions of terms in the original OT2	definitions of terms in the Russian translation of ST2	definitions of terms in the Kazakh translation of TT2
deep structure (now d-structure). The tree, formed by phrase structure rules, into which words are plugged, in such a way as to satisfy the demands of the words regarding their neighboring phrases. […]	***глубинная структура*** (в настоящее время *д-структура).* Дерево, образованное по правилам **структуры непосредственно составляющих,** в которое слова загружаются так, чтобы удовлетворить требования слов относительно соседних с ними **синтаксических групп** […]	***терең құрылым*** (қазіргі уақытта *d-құрылымы*) – **тікелей құраушылардың ережелері** бойынша жасалған ағаш. Онда сөздер көрші **синтаксистік топтармен** салыстырғанда, сөздердің талаптарын қанағаттандырарлықтай жүктеледі […]
X-bar theory; X-bar phrase structure. The particular kind of phrase structure rules to be used in human languages, according to which all the phrases in all languages conform to a single plan. In that plan, the properties of the whole phrase are determined by the properties of a single element, the head, inside the phrase.	**Х-штрих-*теория;*** структура **непосредственно составляющих** Х-штрих **синтаксической группы.** Правила структуры **непосредственно составляющих синтаксических групп** определенного вида, которые, **как считается,** используются в человеческих языках, и согласно которым все **синтаксические группы** во всех языках соответствуют единому плану. В этом плане свойства всей **синтаксической группы** в целом определяются свойствами одного-**единственного** элемента в этой группе – ядра	**Х-штрих *теориясы*; синтаксистік топтың Х-штрихын тікелей құрайтын** құрылым – белгілі бір түрдің **синтаксистік тобын тікелей құрайтын** құрылым ережелері. Бұл ережелер адам тілінде пайдаланылады **деп есептеледі**. Соған сәйкес барлық тілдегі **синтаксистік топтар** бірыңғай жоспарға сай келеді. Бұл жоспарда **синтаксистік топтың** қасиеттерін, тұтастай алғанда, осы өзек топтағы **жалғыз** бір элементтің қасиеттерін анықтайды

Table 4. Techniques for translating terminological lacunas in ST2 and TT2

Transcription	Calque, semi-calque	Description	Equivalent (one- or two-word)
adjunct = modifier / *адъюнкт=* *модификатор*	*specifier –* *спецификатор/* *айрықшалағыш*		
axon – *аксон*	*white matter– белое* *вещество/* *ақ зат*		*gyrus –* *извилина /* *қыртыс*
argument– аргумент	*X-bar –* *Х-штрих*		*intransitive –* *непереходный глагол/* *ауыспалы емес етістік*
			transitive – *переходный глагол/* *ауыспалы етістік*
	AI, artificial intelligence – *ИИ, искусственный интеллект/ ЖИ, жасанды интеллект*		*movement –* *передвижение/* *ауысып қозғалу*

Table 4. Continued

Transcription	Calque, semi-calque	Description	Equivalent (one- or two-word)
	top-down –сверху-вниз/ Жоғарыдан төменге		*copula* – *глагол-связка/ байланыстырушы етістік*
	bottom-up – снизу-вверх/ төменнен жоғарыға		*stop consonant* – смычный согласный/ *жабысыңқы дауыссыздар*
determiner– детерминатор	*sexual recombination – половая рекомбинация/ жыныстық кері комбинация*		*indirect object – косвенное дополнение/ жанама толықтауыш*
dislexia – дислексия		*finite-state devic – устройство с конечным числом состояний=генератор цепочек слов/ жағдайдың соңғы санымен байланысты құрылғы=сөздер тізбегінің генераторы*	*larynx – гортань/ көмей*
listeme – листема	*strong verb – сильный глагол/ күшті етістік*		*auxiliary – вспомогательный глагол/ көмекші етістік*
Markov model – модель Маркова/ Марков моделі	*surface structure, s-structure – поверхностная структура/ үстіңгі құрылым*		*concord, agreement –* согласование/ келісу
			content words – полнозначные слова/ көп өрістік мағынасы бар сөздер
	ASL, American Sign Language – АЯЖ, Американский язык жестов / АЫТ, Америкалық ым тілі		*function word – функциональное слово/ функционалды сөз*
Turing machine – машина Тьюринга/ Тьюринг машинасы		*clause – элементарное предложение, часть сложного предложения/ қарапайым ғана сөйлем, күрделі сөйлем бөлігі*	*aspect – вид глагола/ етістіктің түрі*
			cortex – кора головного мозга / ми қабығы

Table 4. Continued

Transcription	Calque, semi-calque	Description	Equivalent (one- or two-word)
	mentalese мыслекод/ Ойтаңба		
	SLI, Specific Language Impairment – СНР, специфическое расстройство речи [более соответствует аббревиатуре СРР – А.Ж.]/ СЕБ, сөйлеудің ерекше бұзылысы		*conjunction – сочинительная конструкция / ойдан жасалған құрылым*
	natural kind естественный вид/ табиғи түр		*relative clause – относительное придаточное предложение/ салыстырмалы бағыныңқы сөйлем*
	deep structure, d-structure – глубинная структура (в настоящее время d-структура)/ терең құрылым (қазіргі уақытта d-құрылымы)	*perisylvian – околосильвиева область / Сильвиус маңы аймағы*	
			parsing – синтаксический анализ/ синтаксистік талдау
			preposition – предлог/ өзалды көмекші сөз
		chain device – генератор цепочек слов/ сөз тізбегінің генераторы	
		finite-state device – устройство с конечным числом составляющих/ құраушылардың түпкілікті саны бар құрылғы	
		INFL – внешняя флексия/ сыртқы флексия	*complement – распространенное дополнение/ толықтауыштың таралуы*
		phrase structure – grammar грамматика непосредственно составляющих/ тікелей құраушылардың грамматикасы	

Table 4. Continued

Transcription	Calque, semi-calque	Description	Equivalent (one- or two-word)
		X-bar phrase structure – структура непосредственно составляющих X-штрих синтаксической группы / синтаксистік топтың X-штрихын тікелей құрайтын құрылым	

then, after the / sign (slash) comes its Kazakh translation or common for Kazakh and Russian languages transcription); and single and multi-word equivalents and calques in Russian were literally translated into Kazakh.

A total of 8 (16 %) out of 49 terms (100 %) were transcribed, 13 (27 %) were calqued, 8 (18 %) were described, and 18 (39 %) were given with single or multiword equivalents, as shown in the chart (Fig. 1).

We found in the process of analysing TT2 that the use of literal translation (instead of searching for equivalents) led to errors. Thus, some linguistic terms have equivalents in Kazakh; moreover, they have long been used in scientific and educational literature (Table 5).

The reasons for such errors, in our opinion, were an ill-conceived translation strategy and insufficient pre-translation analysis of the text. The result was misleading the Kazakh reader, the main audience of which represents students of Kazakh departments of philological faculties.

In TT2, the consistency of terms sometimes was not preserved, reflected both in inter-article references and in definitions. For example, Pinker notes the synonymy of the terms *argument* and *role player* through the inter-article reference *see*, as well as in the text of the definition. The author's intention is fully preserved in the Russian translation: *ролевой исполнитель. См. аргумент (role player. See argument)*. There is no term *role player* in the Kazakh glossary, although it is mentioned in the article *аргумент: рөл ойнаушы*. There is a case when the Russian translation of the ST2

■ transcription (16%) ■ calque (27%) ■ description (18%) ■ single or multiword equivalent (39%)
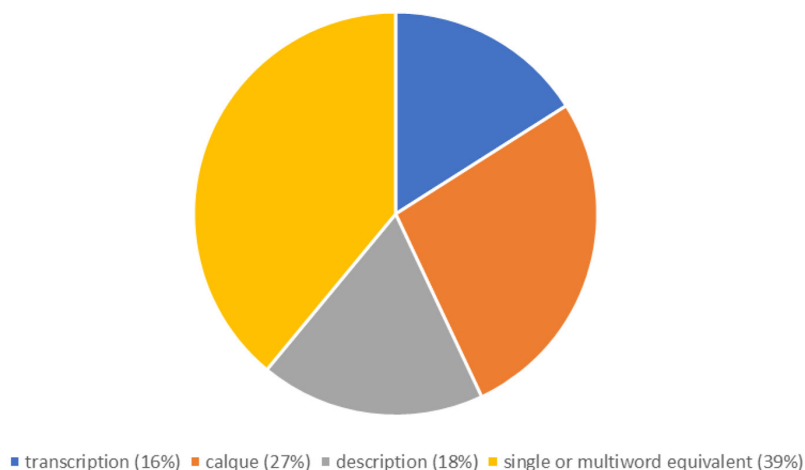
Fig. 1. Quantitative correlation of the ways
in which terminological lacunas are conveyed in ST2 and TT2

Table 5. English-Russian-Kazakh terminological equivalents and their reflection in TT2

English term	Russian equivalent	Kazakh equivalent in TT2 and its reverse translation	Available Kazakh equivalent and its reverse translation
complement	*распространенное дополнение*	*толықтауыштың таралуы – expanded distribution of complement clause*	*үйірлі толықтауыш – object-complement clauses.*
conjunction	*сочинительная конструкция*	*ойдан жасалған құрылым – fictional structure*	*салаласа байланысқан сөйлем құрылысы – compound-complex sentence structure*
relative clause	*относительное придаточное предложение*	*салыстырмалы бағыныңқы сөйлем – comparative subordinate clause*	*қатысты бағыныңқы сөйлем – related subordinate clause*
concord, agreement	*согласование*	*келісу – the state of being in accord*	*қиысу – agreement*

Table 6. Selection of terminological equivalences in translated textbooks

ST1 and OT1 term	TT1 term	Reverse translation of the TT1 term	TT2 term	Reverse translation of the TT2 term
determiner	*анықтауыш*	*qualifier*	*детерминатор*	*determiner*
deep structure, d-structure	*күрделі құрылымдар*	*complex structures*	*терең құрылым*	*deep structure*
surface structure, s-structure	*туынды құрылым*	*derivative structure*	*үстіңгі құрылым*	*upper structure*
stops	*үзілмелі дауыссыз дыбыстар*	*interrupted consonant sounds*	*жабысыңқы дауыссыздар*	covered consonants

glossary contains both members of the antonymic terminological pair *актив – пассив* (as in OT2: *active – passive*), while the Kazakh glossary of TT2 contains the *passive* (*белсенді емес құрылым*), the antonymic term *active* (*белсенді құрылым*) is absent.

The analysis revealed English linguistics terms that appear in two textbooks, ST1 and OT1, but they are translated differently (Table 6), mainly because the original texts for them were different: the English-language one for TT1 and the Russian-language one for TT2:

Such translation variants negatively affect the problem of unification of Kazakh terminology, and this should be taken into account by translators who will work on scientific and educational texts in the future.

Conclusion

External evaluation of the quality of the translated text involves 'unveiling' the translators' strategy and tactics.

The strategy of translating a scientific and academic text, in its turn, represents several interrelated stages, the first of which is the pre-translation analysis of the text. We found that this stage was either ignored by the translators of both textbooks or was carried out very carelessly. The main stage of translating a scientific/academic text is related to the establishment of the original terminological system and its correlation with the national terminological system. In our opinion, this stage was neglected by the translators as well. It seems that due to certain factors (short deadlines for transla-

tion, involvement of people with no experience in teamwork, etc.) the main task for the translators was the translation process itself, without taking into account both the author's intentions and the interests of the target audience.

When analysing the ways of translation into Kazakh of linguistic terms that represent linguistic gaps in the material of newly translated textbooks, one should take into account such a factor as primary/secondary translation. In the direct translation of the textbook on Introduction to Linguistics we analysed, the principle of correspondence between glossary terms (arbitrarily selected and translated mostly literally and erroneously) and textbook terms (translated mostly with the help of equivalents and correctly) is not observed. When translating terminological gaps, the translators successfully selected one-word and two-word equivalents.

Special attention should be paid to the problem of reflecting the systematicity of terminology in glossaries, paying attention to inter-article references and authors' instructions.

In the indirect translation of the linguistics textbook from English, the choice of translation techniques was not independent. The translation techniques were 'transferred' to Kazakh language automatically (transcription, calquing, description, selection of equivalents). Lit-

eral translation of some linguistic terms from the glossary was made from Russian, which led to factual errors.

The final stage of the translation strategy is the translator's self-assessment of the quality of the work he/she has done, for which a final reconciliation of the source and the translation is carried out. Given the results of our analysis in the area of translating terminological lacunae, this aspect of the activity, which is important for the final result, should be given a separate place and time.

Taking into account all of the above, we can conclude that the ways of translating linguistic terms from English into Kazakh definitely affect the quality of translated textbooks both in direct and indirect translation. The reasons for the translation errors are considered to be the lack of thought-out translation strategy, unreasonable choice of certain ways of translating linguistic terms.

We hope that our results will be taken into account in the future, it seems relevant in the light of the ongoing campaign to translate works of different genres from foreign languages into Kazakh and back. It is necessary to indicate whether the translation of scientific/academic text is direct or indirect, as well as to reflect the role and amount of work done by each translator if the translation is collective.

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